



## MIND THE GAP

Private Power, Online Information Flows and EU  
Law

Angela Daly

Thesis submitted for assessment with a view to obtaining  
the degree of Doctor of Laws of the European University Institute

Florence, February 2015 (submission)



European University Institute  
**Department of Law**

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## SUMMARY

This thesis examines how European Union law and regulation address concentrations of private economic power which impede free information flows on the Internet to the detriment of Internet users' autonomy. In particular, competition law, sector specific regulation (if it exists), data protection and human rights law are considered and assessed to the extent they can tackle such concentrations of power for the benefit of users. Illustrative case studies - of Internet provision, search, mobile devices and app stores, and the cloud – are chosen to demonstrate the gaps that exist in current EU law and regulation when applied to concentrations of private power online. It is argued that these gaps exist due, in part, to current overarching trends guiding the regulation of economic power, namely neoliberalism, by which only the situation of market failures can invite ex ante rules, buoyed by the lobbying of regulators and legislators by those in possession of such economic power to achieve outcomes which favour their businesses. Given this systemic, and extra-legal, nature of the reasons as to why the gaps exist, some 'quick fixes' from outside the system are proposed at the end of each case study, namely the potential for applying regulation and/or applying 'self-help' solutions, which are mainly technical measures using peer-to-peer design.



## ACKNOWLEDGEMENTS

The genesis of this thesis can be found in the (almost) 2 years I spent working as a policy adviser for Ofcom in London. Dissatisfied with the narrow confines in which communications regulation, and the discussions around it, in the UK were taking place, I found my way back to academia as a place in which more radical ideas could be explored. Five years' later, and now living about as far away from Western Europe as is possible, there are many people in many parts of the world to acknowledge and thank for their help along the way.

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## CHAPTER 1 INTRODUCTION

The phenomenon of the Internet is widely believed to have been a revolution in society akin to that of Gutenberg's printing press 600 years ago. One aspect of this revolution initially was perceived to be the ungovernable, indomitable nature of the Internet, especially as compared to the control that could be exerted over previous communications technology, such as television, print media and the telephone, due to the decentralised nature of the 'network of networks'.

However, after twenty years of the Internet being widely available as a public medium, this thesis will examine the rise of private economic power online, in the form of for-profit corporations, which control the flows of information between Internet users. As will be explored in greater detail in the thesis, this private power has manifested in concentrations of power which do not promote and facilitate an optimally free flow of information online for users. Existing law and regulation in the European Union, in particular antitrust/competition law,<sup>1</sup> sector-specific regulation, data protection and human rights will be considered as to the extent to which they can remedy problems identified with this concentration of private power over Internet data flows. Absent any ex ante regulation, mono- and oligopolies are prima facie governed by competition law (as the 'legal regime of last resort'<sup>2</sup>) and so competition law and its 'head' of abuse of dominance or misuse of market power will accordingly occupy a prominent role within this thesis's analysis. Indeed, in only one of the case studies which make up the substance of this thesis is ex ante regulation present, namely telecoms markets, and is a legacy of the privatisation and liberalisation of this sector from the 1980s rather than a response to the new challenges set by the Internet. Given the Internet is used as a communications medium going beyond a mere economic marketplace, EU data protection law and fundamental rights - in particular privacy and free expression - are also relevant to the thesis' discussion.

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<sup>1</sup> 'Antitrust' is the US term, whereas 'competition' is used in most other jurisdictions, including the UK and European Union. In this thesis, 'competition' will be the primary term used, except when referring to the American system, in which case 'antitrust' will be used.

<sup>2</sup> Alfonso Lamadrid, 'On Privacy, Big Data and Competition Law (2/2) On the nature, goals, means and limitations of competition law' (*Chillin' Competition*, 6 June 2014) <<http://chillingcompetition.com/2014/06/06/on-privacy-big-data-and-competition-law-22-on-the-nature-goals-means-and-limitations-of-competition-law/>> accessed 14 August 2014

Each chapter of the ‘substantive’ part of this thesis forms a case study provides an example of where existing law and regulation in the EU - namely competition, sector-specific regulation, data protection and fundamental rights - leave a ‘gap’ where Internet users’ interests, encapsulated in the idea of ‘autonomy’ explained below, are not protected and indeed left exposed to the negative effects of concentrations of private economic power affecting online information flows.

It is argued that these gaps exist due, in part, to current overarching trends guiding the regulation of economic power, namely neoliberalism, by which only the situation of market failures can invite ex ante rules, buoyed by the lobbying of regulators and legislators by those in possession of such economic power to achieve outcomes which favour their businesses. Given this systemic, and extra-legal, nature of the reasons as to why the gaps exist, some ‘quick fixes’ from outside the system are proposed at the end of each case study, namely the potential for applying regulation and/or applying ‘self-help’ solutions, which are mainly technical measures using peer-to-peer design.

## **1.1 Research question**

This thesis explores how information flows on the Internet are controlled by for-profit corporations at various important ‘choke-points’, and whether existing law and regulation in the EU can operate and be applied to ensure that these flows occur in an ‘optimal’ way. As will be explained in more detail throughout the thesis, in practice the corporate ‘gatekeepers’ of these online information flows at the choke-points are private, for-profit undertakings which have a monopolistic or oligopolistic character.

Optimal free information flows from an Internet-user-centric perspective will be defined, with a particular focus on facilitating users’ capacity for autonomous conduct online. Although competition law and regulation for that matter are more familiar with ‘consumers’ (and occasionally ‘citizens’), for various reasons which will be explained later, Internet users cannot be fully equated with the ‘consumer’ of competition law, and for them the Internet is more than just an economic marketplace. Why these free flows are valuable for individuals and society, and thus desirable goals of a legal and regulatory system, will be explained.



Then, once establishing free information flows for the benefit of Internet users' autonomy is desirable, the focus will move to considering the ways in which this free flow is threatened by private economic power, namely by acting as gatekeepers and controlling certain important choke-points for information flows. The case studies of the thesis each concern a particular choke-point, encompassing the network infrastructure providing Internet access to users, search engines organising web content, mobile Internet ecosystems (including the devices and application platforms) and cloud providers.

The discussion in the thesis then examines how far the current legal and regulatory system in the EU addresses the interference with the free flow of online information by these axes of private economic power, for the benefit of Internet users. Competition law and pertinent sector-specific regulation concerning concentrations of economic power, namely that for telecommunications, will be considered primarily as the parts of the system which are designed to address the problems that economic power can cause, since the corporations under consideration may be considered to be abusing their positions of power in contravention of the rules. Data protection and fundamental rights, especially free expression and privacy, are also considered as subsidiary parts of the legal and regulatory system which might provide some remedy to the interference with free information flows, although, as will be explained below in greater detail, these legal regimes have their deficiencies, particularly given their aims are not primarily to address these concentrations of private power.

Each case study establishes that the current legal and regulatory system in the EU does not address fully the negative impact that concentrations of private economic power have over the free flow of information online and thus Internet users' autonomy. Why that is the case, that is to say why these 'gaps' in current law and regulation exist is discussed and explained, with the neoliberal critique of EU competition law and economic regulation considered in particular as a possible factor accounting for these gaps in practice.

## **1.2 Focus of research**

The focus of the research is on Internet markets whose subject matter (in terms of product or

service) concerns online information flows. While the Internet is transnational by its very nature, the EU is the principal jurisdictional locus of the thesis since it is one of the two most advanced competition and regulatory regimes in the world, as well as having a highly complex and developed Internet infrastructure, both physical and virtual, the majority of which is privately-owned (as opposed to being the property of the State). The analysis contained within the thesis is comparative in part, drawing as well from the experience of the United States of America where relevant, given its position as having the other most advanced competition and regulation regime globally, as well as the (even more) highly developed Internet sphere there. In addition, many of the Internet corporations managing online information flows considered in this thesis are transnational entities, which operate in both the EU and the US. This also triggers a comparative analysis since what happens to such a corporation in one jurisdiction in terms of competition investigations and regulatory action can have spillover effects in the other jurisdictions in which that corporation operates.<sup>3</sup>

The Internet has been chosen as the partial focus of this research for various reasons. Firstly, the novelty and complexity of the Internet as a social, political and technical phenomenon also makes it an interesting contemporary object of study in related or applied disciplines such as law. Secondly, the Internet is conceptualised as comprising highly innovative markets subject to a very fast pace of change, with certain additional complexities such as two-sided natures. Furthermore, claims have been made about the freedom-enhancing nature of the Internet: initially by the ‘cyberlibertarians’ of the 1990s who denied the ability and authority of the nation-state to control the Internet,<sup>4</sup> and believed they were seeing a ‘freeing’ of culture and information in the online environment;<sup>5</sup> and subsequently, the advent of Web 2.0 and the birth of social media was also supposed to usher in a new era of freedom for users.<sup>6</sup> However the freedom-enhancing nature of the Internet is not clear cut:<sup>7</sup> aside from the overall success of repressive regimes such as China to contain their citizens’ Internet access to ‘permitted’ practices, it seems that so-called ‘liberal democracies’, led by the US, have engaged in mass

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<sup>3</sup> Jack L Goldsmith, ‘Unilateral regulation of the Internet: a modest defence’ (2000) 11 (1) *European Journal of International Law* 135, 142-145

<sup>4</sup> John Perry Barlow, ‘A Declaration of the Independence of Cyberspace’ (*Electronic Frontier Foundation*, 8 February 1996) <<https://projects.eff.org/~barlow/Declaration-Final.html>> accessed 9 February 2015

<sup>5</sup> Esther Dyson and others, ‘Cyberspace and the American Dream: A Magna Carta for the Knowledge Age’ (*Progress and Freedom Foundation*, August 1994) <<http://www.pff.org/issues-pubs/futureinsights/fi1.2magnacarta.html>> accessed 14 August 2014

<sup>6</sup> Yochai Benkler, *The Wealth of Networks: How Social Production Transforms Markets and Freedom* (Yale University Press 2006)

<sup>7</sup> James Curran, ‘Reinterpreting the internet’ in James Curran and others (eds), *Misunderstanding the Internet*, (Routledge 2012)

surveillance of their citizens' online activities as well as the online activities of citizens (and leaders) of other countries, including supposed allies.<sup>8</sup> While it could be said that some 'ungovernable' (or very difficult to govern) parts of the Internet remain at the edges with decentralised initiatives such as Tor, cryptocurrencies and other activities 'under the radar' in the deep web,<sup>9</sup> governments' attempts and successes in controlling their citizens' Internet experiences would at least dampen how freedom enhancing the Internet actually is. In addition to this, the twenty years of the publicly available Internet has seen the emergence of large Internet corporations such as Google and Facebook, and the fact that the Internet traverses virtual and physical realms entails too that relations in the physical world have a bearing on the amount of freedom available in the virtual.<sup>10</sup>

As regards the type of Internet corporations under consideration, the research focuses on those involved in the management and facilitation of online information flows, by providing either physical or virtual infrastructure through which this information flows between Internet users. These corporations can be termed 'gatekeepers of information' online since through their infrastructure they channel information to users, and they also have the power to switch on or off these flows, as well as manipulate the flows in other ways: thus, they exert control over the information flows.<sup>11</sup> Online information flows have been selected for study due to their social and economic importance in developed societies, given the data they contain may be the 'new currency'<sup>12</sup> of the information economy provoking the 'third industrial revolution',<sup>13</sup> with the 'raw material' of data and information a business input which may be

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<sup>8</sup> See *The Guardian's* Snowden Files <<http://www.theguardian.com/world/series/the-snowden-files>> accessed 14 August 2014

<sup>9</sup> Peter Biddle and others, 'The Darknet and the Future of Content Protection' in Eberhard Becker, Willms Buhse, Dirk Gunnewig and Niels Rump (eds), *Digital Rights Management: Technological, Economic, Legal and Political Aspects* (Springer 2003); Jerry Brito, quoted in: Danny Bradbury, 'Whether or Not Bitcoin Needs it, Regulators are Going to Regulate' (*CoinDesk*, 18 November 2013) <<http://www.coindesk.com/whether-bitcoin-needs-regulators-going-regulate/>> accessed 14 August 2014; Primavera De Filippi, 'Bitcoin: a regulatory nightmare to libertarian dream' (2014) 3(2) *Internet Policy Review* <<http://policyreview.info/articles/analysis/bitcoin-regulatory-nightmare-libertarian-dream>> accessed 14 August 2014; Lawrence J Trautman, 'Virtual Currencies: Bitcoin & What Now after Liberty Reserve, Silk Road, and Mt. Gox?' (2014) 20(4) *Richmond Journal of Law and Technology*.

<sup>10</sup> JM Pedersen, 'Conclusion: Property and the Politics of Commoning' (2010) 14 *The Commoner* 290

<sup>11</sup> Karine Barzilai-Nahon, 'Toward a Theory of Network Gatekeeping: A Framework for Exploring Information Control' (2007) 59(9) *Journal of the American Society for Information Technology* 1493

<sup>12</sup> William D Eggers and others, 'Data as the new currency: Government's role in facilitating the exchange' (2013) 13 *Deloitte Review* 18; David Zax, 'Is Personal Data the New Currency?' (*MIT Technology Review*, 30 November 2011) <<http://www.technologyreview.com/view/426235/is-personal-data-the-new-currency/>> accessed 14 August 2014

<sup>13</sup> *The Economist*, 'The third industrial revolution' (21 April 2012) <<http://www.economist.com/node/21552901>> accessed 14 August 2014

as important as capital and labour.<sup>14</sup> The rise of ‘Big Data’ (ie the collection and analysis of large volumes of information) - and the associated hype around it –<sup>15</sup> reinforces the importance of data in the information economy, and the crucial role of the entities which control that information and data.<sup>16</sup> Indeed, the transition to the ‘Internet of Things’, whereby a plethora of objects beyond computer and mobile devices will be Internet-enabled (such as clothes and accessories, coffee machines, smart energy meters, and so on), is likely to cement data gathering and analysing as key functions of the economy – yet the problems that are generated by control of information are also likely to be amplified as a result of this development too.<sup>17</sup> Moreover, while this thesis focuses on online information flows, the proliferation of devices connected to the Internet culminating in the ‘Internet of Things’ and the amount of activities in our lives in developed Western societies which take place involving the Internet in some way or other blurs the online/offline distinction – in the sense that more of what used to be ‘offline’ is now also ‘online’ – and makes this thesis and the issues it interrogates all the more timely.

Such corporations operating in markets in which data- and information-gathering is of paramount importance may challenge conventional EU competition and regulation analysis, due to facts such as the nature of their products and services being highly complex and technical, the fact that users may pay nothing to access the services or products which make up examples of two- or multi-sided markets,<sup>18</sup> the rise of peer production and free/open source to (part) produce informational products and services, and the increased role of consumers as producers and users, as explained further in the second chapter of the thesis. These factors may challenge traditional applications of competition law, as well as competition’s paternalistic attitudes towards passive consumers and a failure to see or deal with the ‘non-economic’ aspects of the issues that are raised.

This thesis looks at available law and regulation to address the issues brought about by the

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<sup>14</sup> The Economist, ‘Data, data everywhere’ (25 February 2010) <<http://www.economist.com/node/15557443>> accessed 14 August 2014

<sup>15</sup> Stephen Fox and Tuan Do, ‘Getting real about Big Data: applying critical realism to analyse Big Data hype’ (2013) 6(4) International Journal of Managing Projects in Business 739

<sup>16</sup> danah boyd and Kate Crawford, ‘Six Provocations for Big Data’ (A Decade in Internet Time: Symposium on the Dynamics of the Internet and Society, Oxford, September 2011)

<sup>17</sup> Vincent Ryan, ‘The Internet of Things: Data Goldmine and Social Nightmare’ (*CTO*, 20 May 2014) <<http://ww2.cfo.com/it-value/2014/05/internet-things-data-goldmine-social-nightmare/>> accessed 14 August 2014

<sup>18</sup> Stephen King, ‘Governing the ungovernable: the market, technology and you’ (2014) 15 Insights 55

control of online information flows by concentrations of private economic power. Absent specific regulation, as will be seen in the substance of the thesis, competition law is the main legal player, operating as a residual regime to address accumulations of economic power through its sanctions for abuse of dominance. There are other legal and regulatory regimes which intersect with parts of the Internet and its information flows – for example, the network infrastructure is governed by sector-specific telecommunications regulation, and intellectual property law and data protection law cover many online interactions, alongside more general regimes such as contract and consumer protection law being pertinent to online transactions. However, these regimes leave gaps where Internet corporations involved in online information flows are concerned, opening up room for the residual operation of competition law. These laws also are not designed primarily to tackle corporate dominance resulting from concentrations of private economic power, and for this reason too cannot be relied upon to deal with this issue. Furthermore, it is posited here that their objective is not always to protect the consumer/user, or to work positively in favour of overall welfare - this seems especially true of contract and intellectual property law.<sup>19</sup>

These other legal regimes will be considered throughout the thesis and the extent to which in practice (regardless of their stated aims) they can work to solve problems of corporate control of online information flows in the interest of users. As mentioned above, data protection laws in the EU, and fundamental/constitutional rights to free expression and privacy are highly pertinent to the governance of online information flows, in a normative sense at least if not also in terms of legal enforceability, and so are the areas of law outside of competition which are principally considered in this thesis in terms of addressing economic power over online data flows. Furthermore, the objectives of these other areas of law converge with the idea of user autonomy which is central to the argument of this thesis. Data protection law has the objective of protecting individuals' privacy, which itself protects individuals' autonomy.<sup>20</sup> In Europe, the right to free expression is conceptualised as centring on the individual, and being based on the ideas of autonomy and human dignity.<sup>21</sup>

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<sup>19</sup> Although others such as Posner would probably disagree, given his assertion that virtually all areas of private law are concerned with efficiency. See: Richard Posner, *Economic Analysis of Law* (Little, Brown 1973)

<sup>20</sup> Paul Bernal, *Internet Privacy Rights: Rights to Protect Autonomy* (Cambridge University Press 2014) 9-15; Helen Nissenbaum, *Privacy in Context: Technology, Policy and Integrity of Social Life* (Stanford University Press 2009)

<sup>21</sup> Eric Barendt, *Freedom of Speech* (2nd edn, Oxford University Press 2005); Vincenzo Zeno-Zencovich, *La Liberta d'espressione Media, mercato, potere nella società dell'informazione* (Il Mulino 2004)

There are various related areas which are outside the scope of this thesis. Firstly, the discussion concentrates on exercises of *private economic power*, and thus excludes state-only control of online information flows, such as for the purposes of preventing crime (eg child pornography, fraud), addressing copyright infringement and restricting ‘adult’ material. While, as will be discussed in greater detail below, sometimes the state and private economic power will cooperate with each other for mutual benefit and this is of relevance to the discussion in the thesis, purely state conduct is excluded from this discussion as being outside the concentration on private economic power online.

Secondly, the thesis’s discussion centres on whether *current* law and regulation in the EU is capable of addressing the problems caused by the control of online information flows by private economic power, and thus ensure that users’ autonomy is preserved and protected. Accordingly, this thesis has another limit inasmuch it does not consider in great detail possible conceptual reforms to this law and regulation to promote user autonomy. The omission of such discussion in this thesis is due in part to concerns of space – a consideration of the prospects for reform and what shape this reform might take for each area of law and regulation considered are each likely to comprise a stand-alone doctoral thesis. However, this discussion’s omission is also due, it is submitted, to the fact that such conceptual reform is also likely to be a longer-term project in terms of time as well. Instead, a more pragmatic approach is taken to the problems that exist now with these large concentrations of private power online manifesting in commodified information gatekeepers and how they may be resolved in the short term with existing law, regulation and extra-legal methods. Nevertheless, the reform of existing law and regulation in ways which would promote user autonomy online, and perhaps autonomy for citizens in other areas of life as well may be a much larger project, part of a broader and more profound societal change which embraces more radical, heterodox, schools of economic theory such as participatory economics (and participation beyond just the economic sphere).<sup>22</sup>

Thirdly, this thesis contains *illustrative* examples of the gaps left by the current legal and regulatory system in terms of addressing the adverse effects on online information flows for Internet users resulting from concentrations of private economic power. For reasons of inter alia space, it does not attempt to cover all such examples. Indeed, for instance, the domain

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<sup>22</sup> See: Michael Albert and Robin Hahnel, *The Political Economy of Participatory Economics* (Princeton University Press 1991)

names and root server system overseen by the Internet Corporation for Assigned Names and Numbers (ICANN) is outside the scope of this thesis, even though ICANN may fall into the definition of an online private gatekeeper, or at least a ‘public-private gatekeeper’.<sup>23</sup> The reason for this is multifaceted: ICANN and the system it oversees can be seen as *sui generis* in various respects.<sup>24</sup> Despite its global reach and the ‘public’ nature of some of the power it wields, in terms of legal structure ICANN is currently a private, not-for-profit organisation incorporated under Californian law. The extent to which the law of other jurisdictions, for instance European law, applies to ICANN in any way is far from a settled point,<sup>25</sup> and indeed could be worthy of another doctoral thesis devoted just to this point. Furthermore, even in the US, ICANN has claimed that antitrust law does not apply to its activities so even in its ‘home’ jurisdiction it is unclear what aspects of the legal system govern its activities.<sup>26</sup>

### 1.3 The Internet and user autonomy

One of the overarching themes of the publicly-available Internet from the early 1990s was the perceived difficulty if not impossibility in exercising centralised control over it, due to the decentralised nature of the network’s design, as well as its transnational character and the 1960s countercultural values that underpinned the initial development of publicly-available online services.<sup>27</sup> While the commercialisation of the Internet from the late 1990s onwards has put private corporate power into the ascendance online, Web 2.0 applications and services engendering ‘user-generated content’ have also opened up collaborative possibilities to many Internet users, all of which will be discussed in more detail in the following chapter.

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<sup>23</sup> Christopher M Bruner, ‘States, Market, and Gatekeepers: Public-Private regulatory Regimes in an Era of Economic Globalization’ (2008) 30 *Michigan Journal of International Law* 125, 132

<sup>24</sup> Erich Schweighofer, ‘A Review of the Uniform Dispute Resolution Policy of the Internet Corporation for Assigned Names and Numbers (ICANN)’ (2001) 6 *Austrian Review of International and European Law* 91, 100

<sup>25</sup> International or European human rights law would seem not to apply to ICANN: Monika Zalnieriute and Thomas Schneider, ‘ICANN’s procedures and policies in the light of human rights, fundamental freedoms and democratic values’, report prepared for the Council of Europe DGI (2014) 12. However, EU data protection law may apply to the WHOIS database operated by ICANN, particularly the parts of the database compiled and managed by the European Regional Internet Registry RIPE NCC which is headquartered in Amsterdam. See also: Article 29 Data Protection Working Party, Opinion 2/2003 on the application of the data protection principles to the Whois directories WP 76 10972/03

<sup>26</sup> See: Lily Blue, ‘Internet and Domain Name Governance Antitrust Litigation and ICANN’ (2014) 19(1) *Berkeley Technology Law Journal* 387; Justin T Lepp, ‘ICANN’s Escape from Antitrust Liability’ (2012) 89(4) *Washington University Law Review* 931

<sup>27</sup> James Curran, ‘Rethinking internet history’, in James Curran and others (eds), *Misunderstanding the Internet* (Routledge 2012)

Suffice it to say, the Internet, at least vis-à-vis previous communications mediums, has the potential to uphold and enhance the autonomy of its users.<sup>28</sup> This is due to the many-to-many nature of Internet communications (as opposed to the one-to-one nature of the telephone, or the one-to-many nature of broadcast and print media), the very low cost of copying and disseminating data via the Internet (once Internet access and equipment have been bought), and the rise of the ‘prosumer’ or ‘user’ ie individuals with the capacity to create online as well as consume the creations of others.<sup>29</sup>

The idea of autonomy in this thesis is inspired by Raz’s conception of personal autonomy, which sees it as an end in itself ie deontologically:

The ruling idea behind the ideal of personal autonomy is that people should make their own lives. The autonomous person is a (part) author of his own life. The ideal of personal autonomy is the vision of people controlling, to some degree, their own destiny, fashioning it through successive decision throughout their lives.<sup>30</sup>

Raz’s conception of personal autonomy is not antithetical to state action: indeed, he sees a role for the government to ‘take positive action to enhance the freedom of their subjects’, (while warning of the dangers of concentrating power in the hands of the few).<sup>31</sup> This idea of autonomy involves the importance of meaningful choice in individuals’ lives as being a facet of their freedom:

To be autonomous, therefore, meaningful choices have to be present and one needs to be given the opportunity to make those choices, appropriately informed and free from coercion, restraint, or excessive or undue influence. This means not only choices must be available, but that these choices must be meaningful... Accordingly, for autonomy to function it is necessary to ensure that choice exists, that there is an opportunity to exercise choice and often more to the point in our modern, seemingly choice-filled society, that these opportunities are appropriately informed and free from coercion, restraint, and excessive or undue influence... Freedom from manipulation is as

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<sup>28</sup> In this thesis, ‘user’ is the preferred term to refer to the human individuals both creating and consuming via the Internet, above ‘citizen’ (which may exclude non-citizens) and the aesthetically clunky ‘prosumer’.

<sup>29</sup> Yochai Benkler, ‘From Consumers to Users: Shifting the Deeper Structures of Regulations Towards Sustainable Commons and User Access’ (2000) 52 Federal Communications Law Journal 561

<sup>30</sup> Joseph Raz, *The Morality of Freedom* (Oxford University Press 1988) 369

<sup>31</sup> *ibid* 427



importance in this context as freedom from coercion.<sup>32</sup>

This idea of autonomy, then, entails that individuals should have real choices as to what happens in their lives and should have the freedom to make those choices – and the state should act to facilitate this. This kind of action would go against the minimal state advocated by Nozick for instance, who argues that anything beyond ‘the narrow functions of protection against force, theft, fraud, enforcement of contracts, and so on’ is an unjustified interference in individuals’ freedom.<sup>33</sup> While Nozick’s state would go some way to protecting individuals against coercion, it would seemingly not protect against manipulation – nor necessarily set up the conditions in which there is an opportunity to exercise choice, such as by addressing societal inequalities which impede that choice from being exercised in the first place via the redistribution of resources.

It would seem that autonomy also ought to resist the undue influence of concentrations of power which may manipulate or coerce choices and choice-making. Dissenting from Nozick’s view, it is submitted that these concentrations of power can have both public (ie state-controlled) and private (ie corporate) characters, and so the malign influence of power with either of these provenances on individuals’ autonomy ought to be viewed as suspect.

Choice is a concept which also features in competition law with the idea being that competition law, or competitive markets, should operate to give consumers a choice of products. This is obviously a far more limited idea of choice and choice-making than that envisaged by Raz above, since there is no great concern with the background conditions against which the choice is made, such as imbalances in power, inequalities of resources and other deficiencies in how that choice is facilitated, so long as there have been no recognised violations of the competitive process, such as the formation of a cartel. In any event, even this narrow conception of choice is not dominant within competition analysis, as will be seen later in the thesis – in general, contemporary competition law, in theory anyway, operates to maximise ‘consumer welfare’ as an objective, and not to preserve the competitive process per se in order to offer choice to consumers. The accumulation of market power to arrive at a monopoly situation, as long as it has not been acquired illegally eg via participating in a cartel, is not in itself a target for competition law.

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<sup>32</sup> Bernal (n 20) 25

<sup>33</sup> Robert Nozick, *Anarchy, State and Utopia* (Basic Books 1974)

It is submitted that, the idea of ‘user autonomy’ is also a departure from the traditional value of ‘consumer welfare’ which is generally accepted as the objective of contemporary competition law, via the process of securing competitive markets.<sup>34</sup> While this is a goal shared by both EU and US competition law due to the influence of Chicago School neoclassical economic theory on both systems,<sup>35</sup> the EU variety diverges in also having the creation and maintenance of the Single Market as an additional goal.<sup>36</sup>

Although ‘consumer welfare’ itself is a highly disputed term, open to differing interpretations,<sup>37</sup> competition authorities on both sides of the Atlantic carry out their analyses of whether consumer welfare is harmed primarily through the prism of the price for goods and services (including the effect of hypothetical increases and decreases in price on consumers) in order to define markets in the first place and determine how competitive they are. While other factors can be included in this analysis, such as a decline in quality of goods or services, or restrictions on innovation in a sector, competition analysis uses primarily quantitative methods which are adept at measuring price, and is not so well suited to assessing these other, less easily quantifiable values.

Furthermore, it is submitted that consumer welfare does not usually encompass the entirety of values that might make up user autonomy. This topic is discussed in more detail in Chapter 2; suffice it to say here that user autonomy comprises both economic and non-economic elements and is more expansive than the economically-inclined idea of consumer welfare as currently used in competition analyses. It is submitted that conventional competition analysis is not well-suited to measuring and protecting user autonomy in its entirety. Conceptually, user autonomy encompasses a different idea of the relevant actor compared to consumer welfare ie the user versus the consumer (which is also discussed in greater detail in the

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<sup>34</sup> The objective of welfare was introduced by Robert Bork in *The Antitrust Paradox* (1<sup>st</sup> edn Free Press 1978) and has subsequently become generally accepted as the goal of competition law and policy. ‘Consumer welfare’ has been the view of welfare adopted by European and American competition authorities, but Bork himself referred to ‘social welfare’. See: Oliver Black, *Conceptual Foundations of Antitrust* (Cambridge University Press 2010) 33

<sup>35</sup> Clifford A Jones, ‘Foundations of competition policy in the EU and USA: conflict, convergence and beyond’ in Hanns Ulrich (ed), *The Evolution of European Competition Law: Whose Regulation, Which Competition?* (Edward Elgar 2006)

<sup>36</sup> Sigfrido M Ramirez Perez and Sebastian van de Scheur, ‘The Evolution of Law on Articles 85 and 86 EEC [Articles 101 and 102 TFEU]: Ordoliberalism and its Keynesian Challenge’ in Kiran Klaus Patel and Heike Schweitzer (eds), *The Historical Foundations of EU Competition Law* (Oxford University Press 2013)

<sup>37</sup> Joseph F Brodley, ‘Economic Goals of Antitrust: Efficiency, Consumer Welfare and Technological Progress’, (1987) 62 *New York University Law Review* 1020, 1032

following chapter). In practice, due to the More Economic Approach which guides contemporary EU competition law, the non-economic concerns at the heart of user autonomy are unlikely to be addressed by its application. Furthermore, as will be demonstrated in the substantive part of the thesis that even if competition law does apply to a given situation it does not address all user autonomy concerns that have been identified.

While it might be argued that competition law and its consumer welfare standard are simply not *supposed* to mirror entirely the interests and concerns of autonomous users, the situation remains that absent sector-specific regulation, competition law acts as the regulator of last resort of these Internet players (as will be seen in the thesis), and the Chicago School's ideological arguments that there should be no government intervention aside from correcting market failures, since the market is presumed to be a more efficient allocator of resources than the state. Yet, as Cohen remarks, '[i]dealized models of market choice cannot provide a useful template for evaluating the dynamics of constrained, path-dependent choice that predominated in markets for networked or network-capable information technologies'.<sup>38</sup>

Perhaps this deficiency with existing competition law has led commentators to discuss explicitly how a more expansive idea of what is termed here 'user autonomy' might be applied to the normative governance of the Internet. For instance, Benkler is of the view that the Internet should be regulated in a way which enables a wide distribution of the capacity to produce and disseminate information.<sup>39</sup> Furthermore, Elkin-Koren and Salzberger advocate that markets on the Internet should be evaluated 'not only like any other market by the criteria of efficiency, but also as a public sphere, commons or mechanism for private and collective actions'.<sup>40</sup> Frishmann has also argued that the Internet should be managed as a 'commons', and the debate should be around the question of what kind of Internet environment is demanded by society as a whole rather than the narrow view of competition and neoclassical economics-driven regulation.<sup>41</sup> Finally, Brown and Marsden have advocated that both human rights and economic efficiency concerns be taken into account when regulating the Internet in order to take account of individuals' productive as well as consumptive functions - what they

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<sup>38</sup> Julie Cohen, *Configuring the Networked Self: Law, Code and Everyday Practice* (Yale University Press 2012) 181-182

<sup>39</sup> Benkler, 'From Consumers to Users' (n 29)

<sup>40</sup> Niva Elkin-Koren and Eli M Salzberger, *Law and Economics of Cyberspace: The Effects of Cyberspace on the Economic Analysis of Law* (Edward Elgar 2004) 27

<sup>41</sup> Brett Frischmann, *Infrastructure: The Social Value of Shared Resources* (Oxford University Press 2012) 317-327

term ‘prosumer law’.<sup>42</sup>

Thus, due to the normative value of personal autonomy, the capacity for Internet users to produce as well as consume and the significance of the Internet beyond a mere economic marketplace for wider social and political activities leads to the adoption of ‘user autonomy’ in this thesis as a key criterion against which the success of law and regulation of ‘gatekeepers’ of online information flows will be judged.

The idea of autonomy is preferred to the consumer welfare standard as encompassing more than a mere consumer-oriented, neoclassical conception of Internet users when it comes to their interactions with the private, for-profit Internet gatekeepers of information in the EU. This thesis will assess the extent to which current laws in the EU, especially competition and existing regulation, are effective in upholding users’ autonomy. An ideal of how user autonomy in terms of optimal online information flows will be conceptualised as a state of affairs in which users are in control of their data and what is done with it, they are not subject to censorship, illegitimate restrictions on what they can send and receive, they have the fullest capacity possible to produce and disseminate information as well as consume it, and they are not subjected to blanket surveillance of their activities, whether for the benefit of the state or the benefit of for-profit corporations.

Although as mentioned above, user autonomy is considered in this thesis according to Raz’s deontological view, user autonomy and free online information flows can also be seen to have significance beyond being worthy objectives to pursue in themselves. Free flows of information fit within the conceptualisation of free speech and expression, either explicitly in terms of Art 10 of the European Convention on Human Rights (ECHR) which encompasses the right ‘to receive and impart information and ideas’, or implicitly in the First Amendment to the US Constitution which protects free speech.<sup>43</sup> Furthermore, free flows of information, or at least political information, for some time has been viewed as a constituent part of a well-functioning (liberal) democracy,<sup>44</sup> and even a hallmark of a more ‘radical’ digital democratic

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<sup>42</sup> Ian Brown and Christopher T Marsden, *Regulating Code: Good Governance and Better Regulation in the Information Age* (MIT Press 2013) 20

<sup>43</sup> Although the US Supreme Court’s First Amendment jurisprudence has not always been consistent with this notion. See: Barry P McDonald, ‘The First Amendment and the Free Flow of Information: Towards A Realistic Right to Gather Information in the Information Age’ (2004) 65(2) *Ohio State Law Journal* 249

<sup>44</sup> Larry Diamond, *Developing Democracy: Towards Consolidation* (John Hopkins University Press 1999)

project such as that of WikiLeaks.<sup>45</sup>

There are, however, some limitations in the idea of user autonomy and its discussion in this thesis. It is submitted that only natural persons ie real human beings and not legal persons ie corporations should be the beneficiaries of user autonomy. Conflicts of autonomy among individuals are also outwith the scope of this thesis –such conflicts might include the use of the Internet to vilify others on the basis of their race, sexual orientation, gender and so on, or the conflict between free speech and privacy which might arise in online defamation or the right to be forgotten. Here, instead, the concentration is on the detrimental effects of private economic power in the form of corporations on online information flows. This is not to belittle the adverse effects of other actors on an individual’s online (or offline) autonomy, but for reasons of space not all of these issues can be addressed in this thesis, hence the need for a particular focus as elaborated here.

## **1.4 Corporate dominance and control online**

While the Internet has its origins in a US military project and in its early years was influenced by scientific and countercultural values and European public service ideals, the commercialisation of the Internet from the mid-1990s ushered in the development of the online marketplace in its initial, somewhat anarchic, version under limited state control.<sup>46</sup> Running parallel to this was the transition to privatised telecoms utilities in the EU from being state-owned enterprises, the liberalisation of these new markets and the generation of competition within them, discussed in more detail in Chapter 3. The results of both processes, spurred on by similar ideological drivers, has been that the Internet and the infrastructure over which it runs in the US and EU are highly privatised spheres, with the majority of key actors being for-profit corporations. There are a few telecoms companies in the EU which retain some state ownership shares, but these are in the minority. Moreover, aside from these telecoms providers, the only online actor of note which is not a for-profit corporation is Wikipedia. In this sense the Internet and online information flows can be said to be ‘dominated’ by for-profit corporations inasmuch as there are not strong state-sponsored,

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<sup>45</sup> Luke J Heemsbergen, ‘Designing hues of transparency and democracy after WikiLeaks: Vigilance to vigilantes and back again’ (2014) *New Media and Society*

<sup>46</sup> Curran, *Rethinking internet history* (n 27) 34-42

charitable or commons-based alternatives to the major ‘gatekeepers’ of online information flows, or at least not very many of these alternatives.

One problem of having a preponderance of for-profit corporations supplying physical and virtual infrastructure for online information flows is that the profit motivation can entail that they do not view it worthwhile to service non-lucrative or otherwise controversial consumers or supply non-lucrative or otherwise controversial content, applications and services, or if they are carried, give little prominence to them.<sup>47</sup> Furthermore, if the corporations depend on advertising as a source of revenue (and some of the gatekeepers of online information flows considered in this thesis are indeed dependent on advertising as a revenue source, most notably Google’s search engine business), then there is the danger of replicating aspects of Herman and Chomsky’s ‘propaganda model’ - namely the bias they found present in ‘old’ media due to the competition among news outlets for advertising revenue and profit, the dependence of the media on the government for information and so the outlets avoided government disfavour (since that could exclude them from future access to government information as well as resulting in financial disadvantage due to losing readers/viewers and advertising), and the favourable coverage of corporations, especially those which advertised in these outlets.<sup>48</sup> Indeed, a good (bad?) example of the propaganda model being replicated in the online sphere can be found in the controversy surrounding WikiLeaks’ release of US embassy cables and the accompanying withdrawal of online services from WikiLeaks.<sup>49</sup> These corporations ceased to provide WikiLeaks with various services under pressure from the US government and politicians yet without any legal authority ordering this to happen – the corporations seemed to bow to the political and governmental pressure due to the ‘controversial’ nature of WikiLeaks’ activities, demonstrating their risk-aversion lest it somehow saddle them with liability, damage their relationship with the government and other contractors such as advertisers - and thus hurt their profits.

The corporate dominance of the Internet in this sense of services only being offered by for-

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<sup>47</sup> Lincoln Dahlberg, ‘The Corporate Colonization of Online Attention and the Marginalization of Critical Communication?’ (2005) 29(3) *Journal of Communication Inquiry* 160

<sup>48</sup> Edward S Herman and Noam Chomsky, *Manufacturing Consent The Political Economy of the Mass Media*, (1<sup>st</sup> edn, Pantheon Books 1988)

<sup>49</sup> See: Angela Daly, ‘Private Power and New Media: The Case of the Corporate Suppression of WikiLeaks and its Implications for the Exercise of Fundamental Rights on the Internet’, in Christina M Akriopoulou and Nicolaos Garipidis (eds) *Human Rights and Risks in the Digital Era: Globalization and the Effects of Information Technologies* (IGI Global 2012) 81

profit corporations rather than state, charitable or commons-based entities may amount to Illich's 'radical monopoly': a monopoly not in the conventional sense of 'the exclusive control by one corporation over the means of producing (or selling) a commodity of service' which 'restrict the choices open to the consumer', but 'the dominance of one type of product rather than the dominance of one brand', a type of standard product Illich sees only 'large institutions' being able to provide rather than individuals or small groups of people.<sup>50</sup> Illich views a radical monopoly as being dangerous or undesirable because it 'imposes compulsory consumption and thereby restricts personal autonomy'. Although Illich acknowledges what constitutes 'compulsory consumption' is difficult to determine in practice, it certainly goes beyond coercion by the law to do something, and includes the more subtle social norms or cultural hegemony which exclude alternative possibilities and views of doing things. Radical monopolies of thought in capitalism might exclude the possibility that other structures than highly centralised private for-profit corporations can provide certain products and services, and individuals can only consume these products and services, rather than innovate themselves – given they do not have the tools to do so – or are not permitted to have them.

This idea can be enforced by Horkheimer and Adorno's view that choice in consumer capitalist societies is illusory: even though consumers may be able to choose among products that differ in shape, colour and design but all of these products have the same basis or set of fundamental assumptions.<sup>51</sup> Indeed, this illusory choice produces the spectacle of competition, even if there is not a true alternative to what is on offer, and individuals may also be unable to choose an entirely new category of product and service ie those that they produce themselves. By engaging in this illusory choice, individuals perpetuate the existing system and its deficiencies.

The idea of user autonomy used in this thesis takes account of these concepts, that the choice produced in capitalist consumerist societies may well not be a 'true' choice given the conformity, at a fundamental level, of products and services on offer, and that users also need the tools of production such that they can create information as well as consume and receive the information created by others rather than be subject to radical monopolies in the Internet space.

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<sup>50</sup> Ivan Illich, *Tools for Conviviality* (Harper & Row 1973) 52

<sup>51</sup> Max Horkheimer and Theodor W Adorno, *Dialectic of Enlightenment: Philosophical Fragments* (Stanford University Press 2002) 97

This can be contrasted with the narrower idea of ‘dominance’ from competition law. Competition law, in its attempt to maximise consumer welfare through securing competitive markets, attempts to ensure that a measure of ‘market power’ amounting to a ‘dominant position’ cannot be wielded by firms (especially monopolists) to the detriment of consumers. This could be manifested in the firm charging higher prices for goods and services while still making a profit, but could also be limiting output, suppressing innovation or depriving consumers of choice (defined in a similar limited way to how Adorno and Horkheimer see it).

The accumulation of market power by a company or group of companies to form a “dominant position” is not in itself illegal, but when that dominant position is “abused” it is sanctioned under legal regimes such as that of the European Union, where an “abuse” of a dominant position is prohibited by Article 102 TFEU. This is also reflected in American antitrust law in the reference to “monopoly power” in Section 2 of the Sherman Act, which has been interpreted to mean that a dominant position in itself is not illegal, but an abuse of that position is, and, accordingly will be sanctioned.

Dominance in these circumstances is analysed economically,<sup>52</sup> which involves defining the relevant market (mainly based on demand substitutability), and then making an assessment as to whether a firm or group of firms within that market possess substantial market power or a dominant position. This definition exercise is not without controversy, especially given the more narrowly defined the market, the more likely a finding of market power.<sup>53</sup> Market shares are an important prima facie way of determining a firm’s market power, but they are not conclusive since they do not reveal anything about the influence of potential competitors nor the bargaining strength of customers. However, a dominant position in EU law is presumed when a firm or group of firms possesses 50% or more of the market,<sup>54</sup> and usually a higher market share is necessary for dominance to be found in the US.

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<sup>52</sup> Indeed, the CJEU in *United Brands* and *Hoffmann-La Roche* termed dominance as ‘a position of economic strength’ which is ‘enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers’. Case 27/76 *United Brands v. Commission* [1978] ECR 207, para 65; and Case 85/76 *Hoffmann La Roche v. Commission* [1979] ECR 461, para 38.

<sup>53</sup> Patrick Massey, ‘Market Definition and Market Power in Competition Analysis: Some Practical Issues’ (2000) 31(4) *The Economic and Social Review* 309

<sup>54</sup> Case C-62/86 *AKZO Chemie v Commission* [1991] ECR I-3359, para 60.



It is the contention of this thesis that in the context of communications technology such as the Internet, there are also consequences of a dominant position or even just corporate control whether there is a monopoly, oligopoly or not. Communications technologies do not only exist solely as commodities to be bought and sold in markets – they also have an important social role in facilitating communication between people and organisations for innumerate purposes, some of which are linked to the functioning of capitalist markets and some of which are definitely not. In addition, control over communications by an entity can lead to that entity using that control in a way that is advantageous for it financially (which, depending on the circumstances, might be characterised as an abuse of a dominant position in violation of competition law), or in a way which may be prejudicial to the interests of the users of the particular communications technology but in a way which is not quantifiable: such as censoring information coming from a particular (legitimate) political group or individual to which no revenue is attached (and so is unlikely to be characterised as an abuse of a dominant position). Since, as will be explained in more detail below, fundamental and civil rights regimes tend to be largely inapplicable to private entities, and the ascendancy of neoliberalism with its corresponding doctrine of 'light touch' regulation of private entities, as well as the capture by corporate interests of public regulatory bodies has meant that governments in liberal democracies have been loath to extend regulation and competition policy to private entities especially for seemingly 'non-economic' purposes with the mantra that the market will provide.

The current legal and regulatory framework which applies to concentrations of private economic power can in some circumstances produce beneficial results for users' interests as a whole, both the economic and non-economic. However, any beneficial effects for users' 'non-economic' interests which flow from the framework's application are incidental to the framework's main focus on the economic issues. Unless the non-economic can be framed as economic, users may be left without legal recourse when there is an abuse of power which prejudices users' non-economic interests. Furthermore, a lack of competition in the market can worsen the conditions for users and their non-economic activity online since they cannot turn to alternatives - however inadequate from the radical monopoly perspective these alternatives may be. Nevertheless, even markets which would be deemed competitive according to the paradigm of contemporary EU competition law, such as those examined in Chapter 6 on cloud computing, can give rise to unsatisfactory results for users' ability to manage and control their devices and information flows.

As mentioned above, for reasons of length and scope the discussion in this thesis does not extend to a full consideration of the possibilities of conceptual reform of the law and regulation applicable to concentrations of private economic power in the EU, and in particular an examination of whether competition law and its operation could be reconceptualised to encompass more ‘non-economic’ values in its analysis and results. Instead, what is conducted here is a study of the extent to which current law and regulation, however imperfect in its formulation and application, can operate to uphold users’ autonomy vis-à-vis the concentrations of private economic power which act as online gatekeepers of information.

## **1.5 Methodology**

This thesis takes an overall ‘law in context’ approach to the subject of corporate dominance over Internet data flows, taking into account perspectives from other disciplines, notably Internet studies.<sup>55</sup> More specifically, the thesis is comparative in part between the EU and US for the reasons explained above. Furthermore, the thesis is influenced by legal realism/critical legal studies to give further attention to the context in which the laws considered in this thesis – principally competition law and sector-specific telecoms regulation, as well as data protection law and fundamental rights. The subset of critical legal studies relevant to the discussion in this thesis is that which emphasises the political economic and socio-economic context of the legal decisions and issues applicable to the operation of law vis-à-vis the Internet gatekeepers under consideration.

The thesis is divided into theoretical and empirical parts. The theoretical part of the thesis can be found in Chapter 2 which presents the backdrop to the empirical part by discussing the emergence of private economic power online, the position of consumers and the application of competition to online markets. The empirical part of this thesis follows this theoretical chapter, and utilises a qualitative method encompassing document analysis of primary (legislation, case law) and secondary legal sources (principally academic scholarship and policy output) encompasses in four case studies (Internet provision, search engines, mobile devices and the cloud).

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<sup>55</sup> William Twining, ‘Law in Context movement’ in Peter Cane and Joanne Conaghan (eds), *The New Oxford Companion to Law* (Oxford University Press 2008)

The empirical analysis in these case studies comprises two parts:

1. a descriptive element (which can be seen as closer to a ‘traditional’ black letter law approach) which demonstrates how existing EU law and regulation apply to the circumstances at hand;
2. a normative element encompassing whether EU law and regulation’s application to the circumstances at hand adequately promotes the normative value of user autonomy.

The hypothesis of this thesis is that existing EU law and regulation does not adequately address concentrations of private economic power adversely affecting online information flows to the detriment of Internet users’ autonomy due to the neoliberal basis of the existing law and regulation. Neoliberalism has been a guiding current in EU policy (and accordingly the law and regulation produced by this policy) over at least the last 20 years if not longer,<sup>56</sup> and competition and sector-specific regulation have been influenced by its ideas.<sup>57</sup>

According to Harvey,

Neoliberalism is in the first instance a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets and free trade. The role of the state is to create and preserve an institutional framework appropriate to such practices. The state has to guarantee, for example, the quality and integrity of money. It must also set up those military, defence, police and legal structures and functions required to secure private property rights and to guarantee, by force if need be, the proper functioning of markets. Furthermore, if markets do not exist (in areas such as land, water, education, health care, social security, or environmental pollution) then they must be created, by state action if necessary. But beyond these tasks the state should not venture. State interventions in markets (once created) must be kept to a bare minimum because, according to the theory, the state cannot possibly possess enough information to second-guess market signals (prices) and because powerful interest groups will

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<sup>56</sup> See: Kurt W Rothchild, ‘Neoliberalism, EU and the Evaluation of Policies’ (2009) 21(2) *Review of Political Economy* 213; Stefan Bernhard, ‘From conflict to consensus: European neoliberalism and the debate on the future of EU social policy’ (2010) 4(1) *Work Organisation, Labour and Globalisation*, 175

<sup>57</sup> Christoph Hermann, ‘Neoliberalism in the European Union’ (DYNAMO Thematic Paper 2005)

inevitably distort and bias state interventions (particularly in democracies) for their own benefit.<sup>58</sup>

Neoliberalism, inspired by neoclassical theories, as a capitalist political movement has promoted economic liberalisation, free trade, open markets and the privatisation of previously nationalised industries and public services and deregulation/regulation in the most unobtrusive way possible vis-à-vis the functioning of the free market.

EU competition law has been critiqued in Europe by Buch-Hansen and Wigger from a critical political economy perspective, who have argued that EU competition regulation has undergone a 'neoliberal transformation' which has been primarily in the interests of transnational globalised capital rather than in the interests of other social groups, challenging the established view that it is consumers who are the main beneficiaries of competition.<sup>59</sup> As already mentioned, consumers are supposed to be the beneficiaries of competition due to competition bringing about lower prices, as well as fostering innovation to improve the quality of products and services, and so on. However, consumers are in fact multi-dimensional human beings, who may be workers suffering from degradation of working conditions and rights, or even the unemployed and must have a certain amount of financial resources before they participate in the market as consumers. Indeed, this recognition of individuals as being more than mere passive consumers leads in part to this thesis' preference for the value of 'user autonomy', as discussed above.

Nevertheless, the relationship between competition and capital is complex, including the neoliberal take on capital. Marx himself considered competition to be the 'inner nature' of capital, and it was realised as the interaction of many capitals with each other.<sup>60</sup> Competition law can thus be seen as the 'rules' to govern the situation of different capitals interacting with each other, with one objective being that no one 'capital' dominates the rest and behaves abusively, and is considered to be one of the few 'permissible' interventions in the functioning of markets.

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<sup>58</sup> David Harvey, *A Brief History of Neoliberalism* (Oxford University Press 2005)

<sup>59</sup> Hubert Buch-Hansen and Angela Wigger, *The Politics of European Competition Regulation A critical political economy perspective* (Routledge 2011). In the US, an empirical study suggested that antitrust policy did not actually improve consumer welfare in practice: Robert W Crandall and Clifford Winston, 'Does Antitrust Policy Improve Consumer Welfare? Assessing the Evidence' (2003) 17(4) *Journal of Economics Perspectives* 3.

<sup>60</sup> Karl Marx, *Grundrisse: Foundations of the Critique of Political Economy* (Penguin 1993) Martin Nicolaus (trans) 414

Yet from a capitalist perspective, it is contested whether these rules of competition should exist, inasmuch as either they are unnecessary regulation of the private sector (the libertarian Chicago School view),<sup>61</sup> or essential for the proper functioning of markets (the liberal capitalist view). This paradox has been recognised by Meiksins Wood, who notes that to achieve dominance, competition must be suppressed but conditions must also be maintained which permit the existence of markets and profit.<sup>62</sup> Neoliberalism seems to sit on the side of still believing some competition law is needed, especially in situations such as breaking national monopolies and opening these liberalised markets up to foreign competition, with a gradual ‘fading out’ of the state when competitive markets have been achieved – ironically mirroring Engels’ ‘withering away of the state’ once true communism has been reached.

Thus, in a neoliberal discourse, competition law may be seen as one of the only acceptable checks on private power (or the remnants of public power when it comes to formerly State-owned companies). However, as will be explored in this thesis, it is submitted that this view is mistaken since competition law as an implementation of this neoliberal belief does not adequately address (nor do the other available legal regimes) the prejudice and harm suffered by users in the situation of corporate dominance of online information flows.

It is submitted that EU competition law’s contemporary neoliberal influence has entailed that values aside from those encompassed by the nebulous goal of consumer welfare cannot be promoted easily within the competition analysis and limitation of private economic power. This is a proposition that will be explored empirically in the case studies, to determine whether the hypothesis elucidated above.

Sector-specific regulation, including of telecoms markets in the EU has also been exposed as following neoliberal principles. Telecoms services were formerly run by state-owned monopolies in each EU Member State, but since the 1980s have been subjected to a process of privatisation, with the liberalisation of telecoms markets which have opened the telecoms

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<sup>61</sup> The Cato Institute is prominent among these libertarian critics. See: Edwin S Rockefeller, *The Antitrust Religion* (Cato Institute 2007); Robert A Levy, ‘Antitrust: The Case for Repeal’ (*Cato Institute*, 11 January 2003) <<http://www.cato.org/publications/commentary/antitrust-case-repeal>> accessed 17 August 2014; Robert A Levy, ‘The Case Against Antitrust’ (*Cato Institute*, 17 November 2004) <<http://www.cato.org/publications/commentary/case-against-antitrust>> accessed 17 August 2014. A critique of this view can be found in: Lawrence Lessig, ‘The New Chicago School’ (1998) 27 *Journal of Legal Studies* 661.

<sup>62</sup> Ellen Meiksins Wood, *Empire of Capital* (Verso 2005) 157

incumbent up to competition, reflecting neoliberal ideology.<sup>63</sup> Thus the state has gone from having a very large amount of control over telecoms by owning and operating the monopoly provider, to a much-reduced role in their operation, as the arbiter of the conduct of the privatised players. In the wake of these developments, ex ante regulation is only imposed to aid these markets in becoming competitive, such that when they are deemed competitive, market-based solutions to problems will suffice. Accordingly, there is an intertwining of competition and regulation in these areas in line with neoliberal ideas: regulation should only apply when markets are not competitive, and then should ‘fade out’. Competitive markets do not require ex ante regulation unless there is a market failure, and regulation can be introduced only to address that failure – and not for other reasons, for instance of social policy. It is submitted that the triumphalism of neoliberalism in promoting minimalist ‘light touch’ ex ante regulation of private economic power in EU communications markets explains the general lack of anterior regulation in this area.

While fundamental rights may be conceptualised as a part of the law which is not inherently (neoliberal) capitalist,<sup>64</sup> their application has also been shaped by neoliberal norms. As will be discussed in more detail later in the thesis, fundamental rights are mainly enforceable vis-à-vis the state despite there being certain transnational accumulations of capital which are more powerful than certain countries, and also despite the very real violation of individuals’ rights that these corporations’ business practices can entail in certain circumstances.<sup>65</sup>

Data protection stands out as an area of EU law which has its theoretical basis in fundamental rights (namely privacy), yet which applies to private entities and not just the state and its emanations. While data protection, thus, would appear not to fit into the neoliberal paradigm, it could be argued that these ex ante rules exist to correct a market failure, namely the lack of privacy protection of personal information that market forces alone would entail.<sup>66</sup> In any

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<sup>63</sup> Seamus Simpson, ‘Pervasiveness and efficacy in regulatory governance – neo-liberalism as ideology and practice in European telecommunications reorganisation’ (European Consortium for Political Research Standing Group on Regulatory Governance Second Biennial Conference, (Re)Regulation in the Wake of Neoliberalism. Consequences of Three Decades of Privatization and Market Liberalization, Utrecht, June 2008)

<sup>64</sup> Scott Turner, ‘Anarchist Theory and Human Rights’ in Nathan Jun and Shane Wahl (eds), *New Perspectives on Anarchism* (Lexington Books 2010)

<sup>65</sup> See: Surya Deva, ‘Human Rights Violations By Multinational Corporations and International Law: Where From Here?’ (2003) 19 Connecticut Journal of International Law 1; David Kinley and Junko Tadaki, ‘From Talk to Walk: The Emergence of Human Rights Responsibilities for Corporations at International Law’ (2004) 44(4) Virginia Journal of International Law 931

<sup>66</sup> Alessandro Acquisti, ‘Privacy and Market Failure: Three Reasons For Concern, and Three Reasons for Hope’ (2012) 10 Journal on Telecommunications and High Technology Law

event, as will be discussed later, data protection law is narrow in its scope of application: it only applies to ‘personal data’ and is not always well-enforced in practice. Furthermore, neoliberal forces can be seen at work in the large amount of industry lobbying currently underway to influence the proposals for reform of EU data protection law, in a way which would minimise the effect of these reforms on these companies’ business practices.

In conducting this research, this thesis takes a ‘realist’ approach to determining the extent to which the current paradigm’s legal rules and regulation protect and advance user autonomy vis-à-vis concentrations of private economic power performing a gatekeeper function over online information flows through the use of the case studies described above. This perspective centring on user autonomy is important given the potential user-autonomy-enhancing qualities of the Internet, both vis-à-vis the State and private corporations and the increased space for ‘non-market’ production (ie production that does not depend on market strategies and the mechanism of monetary exchange) that the Internet may include – which is currently the ‘immaterial’ production of information, but inventions such as 3D printers open up the possibility of non-market production of many more, tangible things,<sup>67</sup> as opposed to previous forms of mass production requiring the involvement of either the State or the profit-making firm,<sup>68</sup> thus subverting these radical monopolies over the productions of information and objects and placing the tools of production back into the hands of the multitude.

Applicable EU law and regulation, including their neoliberal apparition, have been formulated and developed in a historical epoch prior to non-market, non-State mass production and dissemination of information and information-based products and services. Furthermore, as already mentioned, the communications industry until the dawn of the publicly-available Internet was based on a one-to-many model of disseminating information publicly, as opposed to the many-to-many nature of the Internet. Accordingly, given the more liberated position of Internet users as producers and consumers of information, and the lack of need of recourse to the State or private firms to achieve this production of information, the law and regulation of the Internet should adapt to reflect this new reality. These areas of law and regulation must be viewed critically as to how they respond to this new situation.

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<sup>67</sup> See: Johan Söderberg and Adel Daoud, ‘Atoms Want to Be Free Too! Expanding the Critique of Intellectual Property to Physical Goods’ (2012) 10(1) Triple C Communication, Capitalism & Critique Journal for a Global Sustainable Information Society

<sup>68</sup> Benkler (n 6)

This critical perspective on competition law, sector specific regulation, fundamental rights and data protection regarding the Internet differs from what is standard and believes another world beyond that envisaged by neoclassical economics and its assumptions, as well as their implementations in neoliberal politics is indeed possible, and in fact is present.<sup>69</sup> In legal scholarship and especially scholarship on competition law, the dominant paradigm of neoclassical economics is usually implicitly accepted as being true or good, and the analysis thus follows. In this thesis, assumptions from neoclassical economics and neoliberal political theory which are normally brushed over in other competition and economic regulation analyses are exposed and dealt with critically. This thesis professes an explicitly normative consideration of the issues, in contrast to 'orthodox' or 'conservative' approaches, which in practice also adopt normative perspectives, even if they often purport (explicitly or implicitly) to be neutral. In addition, the explicit normative position in this thesis is taken that users' autonomy is promoted above the interests of the centralised state and capital.

In each of the case studies, where it is seen that the existing law and regulation is unable adequately to uphold users' autonomy, technical solutions are instead proposed. This is not done on a technodeterministic basis (that 'code' is a better regulator of human conduct than law, markets, norms etc) but on the basis that these particular technical solutions, often designed explicitly with ideas of privacy, expression and decentralised commons infrastructure in mind, better uphold the normative value of user autonomy and so form pragmatic alternatives to the offerings of the poles of private economic power under consideration in each case study.

## **1.6 Intended contribution**

With the Internet now increasingly the subject of law enforcement and regulatory interventions by governments, including competition investigations, as well as the growing concentration of private for-profit power in the jurisdictions under consideration - while dialectically the Internet holds the potential for more liberated activity by individual users than previous communications media - this thesis aims to contribute to the academic (and, it

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<sup>69</sup> Following and attempting to further the initiation of a theory which 'would actually be of interest to those who are trying to help bring about a world in which people are free to govern their own affairs'. David Graeber, *Fragments of an Anarchist Anthropology* (Prickly Paradigm Press 2004) 9.



is also hoped, the digital rights activist) discussion in various ways.

Firstly, the thesis aims to demonstrate the limits of the current legal and regulatory approach in the EU to addressing private economic power in a gatekeeping function over online information flows. The discussion and analysis in the thesis is based upon Buch-Hansen and Wigger's critical political economy approach to EU competition policy, which was originally directed at merger control, and expands upon it by applying it to how the current system in the EU addresses concentrations of private economic power in Internet markets.

The discussion in the following chapters will show that the Internet is capable of being captured by for-profit corporations (including - and especially - ones that claim to do no evil), with the associated accumulation of market power and concentration in online markets, and that this is harmful for not just the 'welfare' of 'consumers' but also users and their autonomy. Except in the case of Internet Services Providers considered in Chapter 3, there is no ex ante regulation which applies to concentrations of for-profit corporate power exercised online, and it is competition law, in its sanctioning of abuses of dominance, which operates residually to address these accumulations of power.

While competition law can solve some of the problems created by this concentration of private for-profit corporate power through its sanctioning of abuses of dominance, is not a panacea for all issues involving such an accumulation of private economic power on the Internet, and that the approach to thinking of competition law as the only or one of the only permissible checks on this private economic power is misguided. Indeed, it can be seen that an accumulation of market power to form a dominant position in an Internet market can have consequences which are prejudicial to Internet users, but are not adequately captured by competition law. Due to EU competition law's current More Economic Approach, its inability to take account of the changed identity of the consumer into user, competition law cannot adequately respond to all of the issues created by such accumulations of private power. Furthermore, this thesis will also display that in situations where there is no dominant position in a given market, the profit-seeking characteristic of online corporations entails that all players in a given market may compete with each other on price and other features, but may all still be acting in a similar way which is prejudicial to users' interests – and thus users lack a 'real choice' of alternatives, in accordance with Adorno and Horkheimer's view of the illusory choice.

Furthermore, it will be shown that certain other legal regimes may be applicable to these situations where users' autonomy is being eroded by accumulations of private power, namely fundamental rights and EU data protection law. However, as will be explained in greater detail, their operation alongside competition law still does not address the entirety of the prejudice and harm suffered by Internet users. In the case of fundamental rights, this is mainly due to the fact they operate primarily vis-à-vis state action rather than that of private entities, and data protection law applies to a small subset of information, namely that which can be classified as 'personal', and, as mentioned above, it is also not always strongly enforced. As a result, the operation of these existing laws and regulation leaves 'gaps' - where the system does not promote autonomy for Internet users vis-à-vis concentrations of private economic power.

The thesis aims to show that these 'gaps' in the legal and regulatory system exist because the system does not promote autonomy for users, and is still focussed on their character as consumers vis-à-vis corporations (and citizens vis-à-vis the State). A blending of these identities along with cognisance of the new nature of the user and her autonomy online is necessary in order to address the harm that users suffer from an accumulation of economic power. However, this thesis is also critical of the law itself in being able to provide such an adequate outcome, especially where new technologies are concerned, given their very quick rate of change and development, and so any legal/policy/regulatory solution, aside from potential substantive inadequacies, may also procedurally be too little, too late. In addition, corporate regulatory capture gives rise to scepticism as to the possibility of regulation being mooted in the first place and its successful adoption and implementation. Moreover, the 'Invisible Handshake' and the nation-state's interest in the surveillance of Internet users, particularly through privately-owned infrastructure,<sup>70</sup> entails that in practice, fully public/state control over the Internet is undesirable, let alone unlikely to happen (eg via expropriations) given the neoliberal currents at play in the EU and beyond.

While this thesis identifies the need for a new approach in addressing the problems caused by

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<sup>70</sup> Michael D Birnhack and Niva Elkin-Koren, 'The Invisible Handshake: The Reemergence of the State in the Digital Environment' (2003) 8 *Virginia Journal of Law & Technology* 6. Birnhack and Elkin-Koren's invisible handshake would seem to correspond to the alignment of Colander's 'invisible hand' (economic forces) and 'invisible foot' (legal and political forces). See: David Colander, *Neoclassical Political Economy: The Analysis of Rent-Seeking and DUP Activities* (Ballinger 1984)

concentrations of private economic power acting as online information gatekeepers for Internet users, it also does not see advocating for new laws and regulation as an easily-accomplished solution. This is due to the deep penetration of neoliberal ideas in competition law's 'More Economic Approach' and 'light touch' sector-specific regulation in the EU, the regulatory capture of institutions and the lobbying which the intended targets of regulation engage in to avoid being regulated in the first place. Thus, the thesis advances the view that the short-term promotion of user autonomy may be better accomplished by users taking matters into their own hands and designing non-hierarchical, non-exploitative online tools and infrastructure, possibly operated on a cooperative basis, rather than requesting more state intervention such as ex ante regulation. Indeed, peer-to-peer commons-based alternatives are suggested in the substantive case studies of this thesis as pragmatic options for users unwilling to wait for the benevolence of state and for-profit corporate power to protect and promote their autonomous interests.

## **1.7 Structure of research**

This thesis is structured into five chapters followed by a concluding chapter. Of the six chapters making up the body of the thesis, the first expands upon the themes of this introductory chapter in examining the position of competition and consumers on the Internet and sets the background for the following four chapters which each provide a case study comprising a situation of online information gatekeeper performed either by a single for-profit entity with a dominant position according to competition law or by a few for-profit entities providing an illusory choice between their offerings. These case studies have been chosen as they illustrate the issues at the core of this thesis, namely the gaps that the current legal and regulatory system in the EU produces when protecting and promoting users' autonomy vis-à-vis private economic power online, and are representative of these issues occurring in other parts of the Internet.

Prior to the substantive case studies, Chapter 2 ('Competition and Consumers in Cyberspace') outlines the dialectical nature of the Internet by providing a historical account of the rise of privatised power on the Internet and the conditions for competition, before detailing the development of consumers' position, from passivity to activity in information production. The

chapter shows that, despite the Internet in the West being a largely commodified space, it has a radical potential to augment the autonomy of Internet users. However, the legal and regulatory system in the EU, and in particular competition law, is not well-placed to take into account ‘other’ values like user autonomy – its application on any given occasion may promote these values incidentally but does not necessarily do so on every occasion. The ability of competition law to take ‘other’ values beyond those contributing to ‘economic efficiency’ and ‘consumer welfare’ is considered in order to determine whether the current system could promote user autonomy, especially its non-economic aspects, more effectively. It is argued that given the More Economic Approach in EU competition law, as well as regulatory forbearance advanced by neoliberal theories, entails that the accommodation of ‘other’ values in competition analysis is unlikely to occur in practice, and that thus certain ‘gaps’ are created where accumulations of private economic power act in prejudicial ways towards users which are not recognised by the current system.

The following four chapters form case studies of situations in which there are concentrations of private economic power in the EU which perform a gatekeeper function over a certain ‘choke-point’ for online information flows going to and from Internet users. As mentioned above, these case studies are illustrative of what, it is submitted, are broader trends in both how Internet markets are set up, and also the gaps left by the application of current law and regulation in the EU. An assessment is made in each chapter of the extent to which these accumulations of private for-profit power online harm user autonomy, and the extent to which pre-existing EU law and regulation can address these issues. In each case, it is found that while current law and regulation go some way to addressing user autonomy concerns, they still leave some aspects of these concerns unaddressed, so there is a ‘gap’ in the law and regulation where user autonomy is not protected vis-à-vis private power, and that this is an undesirable state of affairs, yet one which is unlikely to be remedied easily within the current system.

The case studies consist of an examination of Internet provision, search engines, mobile device ecosystems, and cloud computing. These case studies encompass both the physical and virtual infrastructure facilitating Internet users’ communications and other activities online, and each form a point at which a gatekeeping function can be performed over the information that users send and receive over the Web and Internet. They are illustrative of concentrations of online private power whose negative consequences for Internet users are not fully

addressed by existing law and regulation in the EU, and demonstrate greater trends in the commodification of the Internet, particularly the contemporary and forward-looking chapters on mobile devices and apps, and the cloud, given these are directions that are being pursued with new devices developed as part of the Internet of Things.

In particular, Chapter 3 ('Dominance and Internet Provision') looks at issues of dominance in how Internet access services are provided to users. Internet Service Providers (ISPs) offering this access perform a gatekeeping function over online information flows, particularly in the 'last mile' to and from users: they are in a position to censor or otherwise manipulate what users send and receive. These ISPs under consideration are almost all private for-profit corporations, although some of the European ones have emerged out of what used to be state-owned telecoms monopolies, which underwent a process of privatisation and market liberalisation from the 1980s. The *ex ante* sector-specific regulation of these entities is a legacy of that process, accompanied by competition law. However, as is explored in more detail in the body of the chapter, these have been insufficient to address the rise of 'net neutrality' as an issue for Internet provision which is born of corporate dominance and encompasses both competition concerns and digital rights issues. While in both the EU and US, net neutrality has been a subject of regulatory activity, it can be seen that this activity, where it exists, is 'too little, too late', and so demonstrates the inadequacies of the system in instituting *ex ante* regulation to address pre-existing legal and regulatory 'gaps'.

Chapter 4 ('Dominance and Internet Search') turns the attention to search engines, which perform a major gatekeeping function over information available to users on the Web. They also represent an important example of almost total dominance by one single entity, namely Google, especially in the EU. Google's functioning has been subject to competition investigations for alleged abuses of dominance in both the US and EU, which will be analysed, along with the extent to which the results of these investigations alongside the operation of other relevant areas of law uphold online user autonomy.

Chapter 5 ('Dominance, Devices and App Stores') charts the transition to Internet-enabled mobile devices, namely tablets and smartphones, providing a more 'closed' Internet experience to user. The position of gatekeeping that device vendors and app store operators possess vis-à-vis users is considered, which again raises the, by now familiar, issues of competition and users' digital rights. There have been some competition investigations in this

field, which again are examined to determine whether they have resulted in gains for users' autonomy online.

Finally, Chapter 6 ('Dominance and the Cloud') is more forward-looking than its predecessors, in examining the migration of various previously offline functions of data storage, software and applications to centralised Internet-enabled cloud providers. Again, cloud providers occupy a gatekeeping position regarding the information users send and receive. The prospective application of competition law and the other relevant areas of law will be examined to determine whether these gatekeeping issues can be addressed adequately to protect and promote users' autonomy.

The ultimate chapter will summarise the outcomes of the case studies vis-à-vis how dominance of online information flows by concentrations of private economic power is addressed in the interests of user autonomy by the available legal tools in the EU. It will be seen that the case studies add up to presenting a situation in which gaps exist in the application of current EU law and regulation to concentrations of private power. What possible next steps could be for law and regulation will be discussed, while acknowledging that these gaps arise from more deep-seated currents in society that are likely to be too profound to be addressed in the short-term.







## **CHAPTER 2 COMPETITION AND CONSUMERS IN CYBERSPACE**

This chapter presents an overview of the situation regarding competition and consumers in the Internet realm, setting out the background conditions against which the following substantive chapters, each representing a case study of corporate dominance over online information flows, can be observed. The rise of private economic power and the conditions for competition in online markets will be explored in the first part of this chapter – highlighting the break with early cyberlibertarian theories that the Internet, due to its decentralised nature, could not be dominated in either the sense of the ‘radical monopoly’ or the competition law conception of market power, nor regulated by state power. In parallel to the rise of private corporate power online is the development of consumers’ position in cyberspace, from passivity in consuming the products and services of other, to a more active, information-producing function, via social networks, other user-generated content platforms as well as software-building initiatives – an idea explored in the second part of this chapter. Both of these lines of progression have a direct bearing on the themes of this thesis: while consumers in Internet markets might be more accurately conceptualised as ‘users’ with both consuming and producing functions, the rise of private economic power online poses new threats to the autonomy of these users, encompassing both ‘consumer welfare’ in the competition law sense, but also their sense of a ‘real’ choice among offerings and in ways which enhance and protect their rights and freedoms beyond the economic. Furthermore, the ability of competition law to include such other values beyond economic efficiency in its analysis and enforcement is explored. While this is not an issue confined to the Internet realm, the emergence of user autonomy as a desirable value, whether constituted by free expression, privacy and data protection or going beyond those other norms, prompts an evaluation of the suppleness of competition law in adapting to pursue other goals in this sphere.

### **2.1 The emergence of private power online**

This section explores the development of the Internet and the rise of private online power over information flows. Early perceptions of the Internet were that it was a space free of state or corporate influence. Even if this had been the case at one point, the commodification of the Internet has put paid to the idea that the Internet was somehow ‘different’ from the offline world in these senses. Indeed, recent years have seen not only the entry and assertion of private for-profit entities but also their concentration and functioning as somewhat centralised ‘gatekeepers’ of information.

### **a) Technical origins**

The Internet can be defined as:

the global information system that –

- (i) is logically linked together by a globally unique address space based on the Internet Protocol (IP) or its subsequent extensions/follow-ons;
- (ii) is able to support communications using the Transmission Control Protocol/Internet Protocol (TCP/IP) suite or its subsequent extensions/follow-ons, and/or other IP-compatible protocols; and
- (iii) provides, uses or makes accessible, either publicly or privately, high level services layered on the communications and related infrastructure described herein.<sup>71</sup>

Essentially the Internet is a global network of interconnected computer networks (hence the ‘network of networks’ as it is often known) that use the standard Internet Protocol (TCP/IP) to link several billion devices throughout the world together.

There are many developments since the end of World War II which have contributed to what we know today as the Internet, arguably starting with the development of electronic

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<sup>71</sup> This is the definition adopted by the US Federal Networking Council on 24 October 1995 which ‘Fathers of the Internet’ Robert E Kahn and Vint Cerf consider to be ‘the best definition currently in existence’. See: Robert E Kahn and Vint Cerf, ‘What Is the Internet (And What Makes It Work)’ (December 1999) <[http://www.cnri.reston.va.us/what\\_is\\_internet.html#A%20DEFINITION%20FOR%20THE%20INTERNET](http://www.cnri.reston.va.us/what_is_internet.html#A%20DEFINITION%20FOR%20THE%20INTERNET)> accessed 12 February 2015

computers in the 1950s. In the 1960s, packet switching networks - whereby all transmitted data regardless of content, type or structure is grouped into blocks called packets - were developed separately by Paul Baran at the RAND Corporation in the US (whose network design was decentralised and distributed) and Donald Davies at the National Physical Laboratory in the UK. These packet switching networks were developed by the end of the 1960s and in the early 1970s in the US, UK and France using a variety of protocols.

Retrospectively, the most prominent of these networks was ARPANET, arguably the forerunner of the contemporary Internet, which was a US government-sponsored (ie publicly funded) project run by the US Department of Defense with corporate and academic partners. Researchers working on ARPANET developed an architecture to facilitate the seamless interconnection of separate, pre-existing computer networks without changing these networks. In doing so, they developed the TCP/IP protocol, to which ARPANET officially transitioned in 1983.

Alongside ARPANET, the US National Science Foundation (NSF) founded the Computer Science Network (CSNET) to connect universities. (Other networks such as USENET and BITNET provided similar proto-Internet services.) The NSF then developed a larger network called NSFNET for science and education organisations which complemented ARPANET, using the TCP/IP protocol.

NSFNET used the ARPANET 'backbone' to carry inter-network traffic, which was eventually decommissioned due to its age, and so ARPANET essentially became part of the NSF network.. NSF's conditions of acceptable use forbade the use of the network for commercial purposes at the backbone level, but actually encouraged regional networks to take on commercial customers so that they would expand their facilities and then use the economies of scale gains to reduce the cost of subscription for all customers.

The privatisation of the Internet happened due to commercial providers 'supplementing the

NSFNET backbone with a separate (though connected) national network capacity',<sup>72</sup> which was the result of encouraging commercial traffic in the local and regional networks but excluding it from the national network, so stimulating the creation of private, commercial long-haul networks.<sup>73</sup> Alongside this development, 'the NSF quietly stepped out of the scene by selling off its assets, a process that was completed by April 30, 1995 at which point the Internet was unequivocally a private entity'.

In addition to the development of the network, private commercial products which implemented the Internet's technology (especially the TCP/IP protocol) also appeared. Private entities such as MCI, the first commercial ISPs (PSINet, Advanced Network Services), the Commercial Internet Exchange, and the London Internet Exchange provided Internet hardware, consumer data transmission, and functioned as Internet service providers (ISPs).<sup>74</sup> Originally the sphere of private and commercial activity online comprised entities providing basic networking products, connectivity and basic Internet services such as those just mentioned. The development of the World Wide Web application by Tim Berners-Lee at the publicly-funded CERN and the release of its code to the public (in its entirety – including legal persons) paved the way for various Web-based companies such as Web browsers and search engines to provide more 'user friendly' infrastructure. The early browser Mosaic in particular 'would help popularize the Web and therefore the Net as no software tool had yet done'.<sup>75</sup>

Rosenzweig situates the Internet's development as 'rooted in the 1960s - in both the "closed world" of the Cold War and the open and decentralized world of the antiwar movement and the counterculture'.<sup>76</sup> ARPANET rose out of a Cold War-era US military program, yet ARPA money also 'supported the "hackers" at MIT's Artificial Intelligence Lab' including Richard Stallman,<sup>77</sup> who would later become a luminary of the free software movement. Arguably this

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<sup>72</sup> Barry M Leiner and others, 'A Brief History of the Internet' (2009) 39(5) ACM SIGCOMM Computer Communication Review 22

<sup>73</sup> *ibid* 27

<sup>74</sup> Martin Campbell-Kelly and Daniel D Garcia-Swartz, 'The history of the internet: the missing narratives' (2013) 28 *Journal of Information Technology* 18

<sup>75</sup> Katie Hafner and Matthew Lyon, *Where Wizards Stay Up Late* (Simon and Schuster 1996) 258

<sup>76</sup> Roy Rosenzweig, 'Wizards, Bureaucrats, Warriors and Hackers' (1998) 103(5) *American Historical Review* 1530, 1531

<sup>77</sup> *ibid* 1542

dialectic between centralised control and antiauthoritarian decentralisation which is rooted in the historical events leading up to the creation of the Internet has persisted throughout the Internet's public emergence from the 1990s until the present day – as will be seen in this thesis.

## **b) Cyberlibertarianism**

By the mid-1990s, the Internet (in the developed West, and particularly in the US) was viewed as 'an open public space which was decentralised, diverse and interactive' with a 'largely uncritical reception given to the commercialisation of the internet'.<sup>78</sup>

Indeed, the absence of government control was lauded, and developed into a socio-political discourse producing various 'cyberlibertarian' manifestos. Due to factors which mostly concerned the content of what was being placed on the Internet (such as the lack of restrictions on what kind of information could be up/downloaded to/from the Internet), its seemingly transnational nature, the lack of de facto government control over the medium (at least the layers of it which were more 'visible' to users), and the initial lack of prominence of large corporate entities at these layers more visible to users (or at least the absence of them acting in a way which impeded users seeing and doing what they wanted on the Internet), it appeared that the Internet represented an autonomous space in which users had control over their actions and online destiny (or at least more control as compared to previous mass mediums such as television or the press).

The most prominent of these manifestos are John Perry Barlow's *A Declaration of the Independence of Cyberspace*,<sup>79</sup> which denied the sovereignty of nation-states over the Internet, and asserted the ability of the Internet community to self-govern, as well as defining the Internet as the place where 'whatever the human mind may create can be reproduced and

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<sup>78</sup> Curran, 'Rethinking internet history' (n 27) 41

<sup>79</sup> Barlow (n 4)

distributed, infinitely at no cost', thereby claiming the Internet's capacity to collect and disseminate to a potential mass global audience any and all ideas. Dyson and others' somewhat less utopian article *Cyberspace and the American Dream: A Magna Carta for the Knowledge Age* nevertheless proclaimed the death of 'bureaucratic' (ie governmental) power and the 'demassifying' or 'freeing' of institutions and culture (given financial costs were being driven towards zero in cyberspace),<sup>80</sup> which would implicate a lack of necessity for economic regulation and oversight as well.

Following a more legalistic approach, somewhat analogous arguments appeared in the context of early discussions of free expression online. Free expression was considered to have found its best outlet so far in the Internet. Information could be created and disseminated for a minimal cost to a worldwide audience, entailing a huge increase in the capacity of individuals to express themselves, as compared to the situation with the one-way broadcast media which preceded the Internet. Furthermore, in contrast to the situation with broadcast media in the liberal democracies under consideration, there were no mono-/duo-/oligopolies of large companies providing these information services (or if they did exist, they were not manifestly interfering with the information being conveyed). In addition, the way in which the technology functioned gave users a much greater choice over what they wanted to see as compared to broadcast media: users were no longer passive viewers as they had been in front of the television, but had access to a vast wealth of information at their fingertips, which they actively opted to access. Moreover, due to the Internet being a convergence of telecommunications and media, the legacy regulatory schemes that were platform- or technology-specific did not initially extend to the entirety of the Internet. The telecommunications infrastructure and retail services were still subject to ex ante regulation (as will be seen in greater detail in the following chapter), but at that time there were not specific laws and regulation to deal with purely Internet-based services.

Indeed, the implications of the early Internet for users' free expression were commented on by Volokh, in which he noted the differences between the ways in which the 'speech market' formerly operated in the previous mass media context, and how it now operated given the

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<sup>80</sup> Dyson and others (n 5)

Internet.<sup>81</sup> He asserted that these new technologies would enable all ideas, regardless of the wealth of their proponents, to participate in this ‘marketplace’. The ‘marketplace of ideas’ is a traditional American rationale for free expression, initially attributed to Oliver Wendell Holmes.<sup>82</sup> The changes entailing this assertion were the much lower cost of disseminating information on the Internet as compared to printing, and the much larger (potential) audience for information on the Internet, which was formerly reserved for one-way broadcast media. In addition, this would weaken any justification for positive government regulation of speech (such as the fact various points of view are not disseminated via mass media due to their proponents for whatever reason not having access to these forms of communication), and so accord with some cyberlibertarian ideals of freedom from government. Free expression, thus, had found its best manifestation in the Internet.

The US Supreme Court also gave its view of the state of affairs on the Internet regarding context of free expression in its decision in *Reno v ACLU*.<sup>83</sup> Justice Stevens, delivering the opinion of the Court, stated that 'the Internet is 'a unique and wholly new medium of worldwide human communication', and repeated the District Court's finding that 'it is “no exaggeration to conclude that the content on the Internet is as diverse as human thought”'. Key to the question of dominance on the Internet here, Stevens reiterated the District Court's finding that '[n]o single organization controls any membership in the Web, nor is there any centralized point from which individual Web sites or services can be blocked from the Web', professing the view that the Internet was free from the political, economic and social forces restraining behaviour in the offline world.

This perception may have been informed by the fact that at this time, the Internet even in developed jurisdictions still did not have a high rate of penetration, and the popular view was that it was a more sophisticated and up-to-date toy for the entertainment of computer nerds and teenagers. In addition, corporate involvement at the more ‘visible’ levels was still limited: ‘e-commerce’ has not quite yet matured, due to factors such as this relatively low rate of penetration, online security for credit card payments not being adequate and consumers not

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<sup>81</sup> Eugene Volokh, ‘Cheap Speech and What It Will Do’ (1995) 104(7) Yale Law Journal 1805

<sup>82</sup> *Abrams v United States* 250 US 616 (1919)

<sup>83</sup> *Reno v American Civil Liberties Union* 521 US 844 (1997)

having sufficient trust in online corporations. What for-profit corporate involvement there was, however, was not met with much criticism, ‘accord[ing] with the ethos of the time... a moment of triumphalism when democracy and capitalism had defeated communism’.<sup>84</sup>

While implicit in the narrative around the Supreme Court judgement is the fact that nation-states such as the US were at least attempting to control the Internet by the mid-1990s by enacting legislation, the corporate axis on the Internet until this point was not acting in a way which was manifestly restrictive of user behaviour, nor were there obvious poles of corporate dominance being seen. The user experience of the Internet in the 1990s and the legalistic conception of it would suggest that it was an arena without centralised control either from dominant corporate bodies or nation-states, a truly public sphere for debate, culture and human flourishing.

### **c) The commodification of cyberspace**

However, all was not quite as rosy a picture as the cyberlibertarians painted. Various authors acknowledged their hyperbole or at least normative utopianism rather than descriptive accounts of what was actually happening online. As Goldsmith and Wu have observed, governments of both liberal democracies and authoritarian regimes, instead of fading out of cyberspace, have in fact managed to assert political and legal control over the medium in various ways.<sup>85</sup> Furthermore, Solum notes that, while during the 1990s states and markets had not fully acknowledged the importance of the Internet, ‘[g]overnments and large multinational firms now have pervasive presences in cyberspace’.<sup>86</sup>

Indeed, Lessig declared the ‘change from a cyberspace of anarchy to a cyberspace of control’, with this control being exercised through the means of code, leading to his proclamation that

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<sup>84</sup> Curran, ‘Rethinking internet history’ (n 27) 41.

<sup>85</sup> Jack L Goldsmith and Tim Wu, *Who Controls the Internet? Illusions of a Borderless World* (Oxford University Press 2006)

<sup>86</sup> Lawrence Solum, ‘Models of internet governance’ in LA Bygrace and T Michaelsen (eds), *Internet Governance: Infrastructure and Institutions* (Oxford University Press 2009) 58



‘code is law’ (given that code for him is the primary form of regulating behaviour on the Internet).<sup>87</sup> Lessig observes that the ‘first generation’ of Internet architecture was built by a noncommercial sector of programmers and universities, whereas the ‘second generation’ was built by commerce, responding to the demands of users, an example of which he gives being the development of IP mapping services to permit geographically-targeted advertisements. These geotargeting developments allowed the reassertion of geography online by identifying particular IP address as being based in particular countries. Furthermore, governments could also regulate what was occurring physically in their territory, and so online companies with assets or physical infrastructure in a certain jurisdiction could be subjected to local laws.<sup>88</sup>

Advertising also rose as a ‘side-effect’ of commercialisation, which contributed to changing the character of the web to being a more market-oriented and commodified space. Another important development contributing to this commodification was the re-assertion of intellectual property rights over both software and content being shared online, and corporate lobbying for their increased enforcement in cyberspace – a process which has been described by Boyle as ‘the second enclosure movement’.<sup>89</sup> This imagery evokes the feudalism of the first enclosure of private property and the dispossession by the masses which that entailed, while this time round the enclosure affects the ‘commons of the mind’. The WIPO Copyright Treaty from 1996 and its implementations in the Digital Millennium Copyright Act in the US and via a series of EU Directives are examples of this attempt to ‘beef up’ intellectual property rights and their enforcement when faced with disruptive new information technologies, for the benefit of large corporate copyright holders.<sup>90</sup> The rise in importance of intellectual property rights – in terms of them being asserted by these online corporations, and the corporate pressure to update these rights and enforce them more strongly in the online environment – proved an initial motivation to force government intervention into the online space in the West.<sup>91</sup>

Furthermore, many online business models introduced an element of user surveillance into

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<sup>87</sup> Lawrence Lessig, *Code and Other Laws of Cyberspace* (Basic Books 1999)

<sup>88</sup> Goldsmith and Wu (n 85)

<sup>89</sup> James Boyle, ‘The Second Enclosure Movement and the Construction of the Public Domain’ (2003) 66 *Law and Contemporary Problems* 33

<sup>90</sup> See: Angela Daly and Benjamin Farrand, ‘SABAM v Scarlet: evidence of an emerging backlash against corporate copyright lobbies in Europe?’, in D DeVoss and M Rife (eds), *Cultures of Copyright* (Peter Lang 2015)

<sup>91</sup> See: Lessig (n 87); Lawrence Lessig, *The Future of Ideas* (Random House 2001)

the equation: in providing products or services for no financial cost to users, the product and service providers instead gathered data on those users and their conduct in using the products and services. Various search engines and social networks represent examples of this trend. While the purpose of this data gathering for the corporations concerned is primarily to use it for their own economic purposes or sell it on to advertisers or other firms, these large pools of data about users' conduct has proved useful also to law enforcement and espionage agencies in both liberal democracies and authoritarian regimes, particular in the aftermath of 9/11 and the 'War on Terror'. States access this data gathered by corporations either by obliging them to comply with their demands (through using legislative means) or by offering incentives for these entities to do so voluntarily. Although this is not abnormal behaviour from states in their regulatory character, until the 2000s such approaches had not been seen overtly on the Internet. The latter method of informally incentivising corporations to act in ways the governments want also places such action firmly outside the scope of any administrative law checks on power. Birnhack and Elkin-Koren have termed this collaboration between states and large online corporations 'the Invisible Handshake' since the average citizen is not usually aware of the extent of this cooperation between the two axes of power, which is often fairly clandestine and 'beyond the reach of judicial review'.<sup>92</sup> Cohen has also remarked on these 'architectures of control' emerging where state and private interests - already deeply and inevitably intertwined - emerge.<sup>93</sup>

#### **d) Conglomeration and concentration**

Aside from the increasing interest of the state in surveillance of Internet users' activity and its reassertion of power over that sphere, the Internet in the 2000s started maturing as a locus of economy activity, particularly after the dotcom bubble burst in 2000, and began to exhibit, in certain places anyway, the kind of conglomeration and concentration that did not seem possible according to the cyberlibertarians' rhetoric from earlier in the Internet's public life.

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<sup>92</sup> Birnhack and Elkin-Koren (n 70)

<sup>93</sup> Cohen,(n 38) 177

Yet among all the 1990s hype, there were dissenting voices.<sup>94</sup> One dissent relevant to the discussion in this thesis was Graham, who argued that resources were still important for success on the Internet regarding the creation and marketing of high-quality content, with the consequence of more, not less, concentration than ‘old media’ due to economies of scope and scale – essentially, due to the existence of network effects.<sup>95</sup> The Internet has both seen the rise of enormous new conglomerate corporations, often out of small ‘start-up’ origins, such as Google, Facebook and Amazon, as well as the ascendancy of some pre-Internet corporations such as Apple and Microsoft which adjusted well to the new circumstances.

Furthermore, as regards the content available online, it seems that legacy content providers such newspapers or large corporations holding copyright of popular music, TV shows and films, which at the beginning of the 21<sup>st</sup> century had become highly concentrated themselves due to economies of scale, still hold influential places in cyberspace. While there might be a much greater availability of content compared to broadcast media on the Internet, ‘premium’ content is still popular and the capacity to make such content is not in the hands of all – indeed, resources still matter.<sup>96</sup> In addition, as Wu recognises, the Internet, although itself founded on open principles, has run over the telecoms network, an industry prone to monopoly and oligopoly (as will be seen in Chapter 3 on dominance and Internet provision).<sup>97</sup>

Moreover, the greater availability and diversity of content (and other services) online has also given rise to the importance of ‘gatekeepers’ of this information, which ‘structure access to increasingly populated and complex markets’ for users.<sup>98</sup> So despite the plethora of content

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<sup>94</sup> Other dissenting voices included: Sunstein, who argued that the Internet may weaken democracy (at least in the US) as it permitted citizens to associate with others who shared their views and cut themselves off from those with opposing views which may challenge their beliefs; Garnham critiques the technodeterminism inherent in much of the cyberlibertarian discourse and pointed to the ‘offline’ limits which constrained cyberspace; and Kelemen and Smith also argued that cyberlibertarians neglected the role of corporate capitalism in shaping 1990s virtual communities, and had over-relied on the role played by like-minded individuals. See: Cass Sunstein, *Republic.com* (Princeton University Press 2001); Nicholas Garnham, *Emancipation, the Media and Modernity: Arguments about the Media and Social Theory* (Oxford University Press 2000); and Mihaela Kelemen and Warren Smith, ‘Community and its ‘virtual’ promises: a critique of cyberlibertarian rhetoric’ (2001) 4(3) *Information, Community and Society* 370

<sup>95</sup> Andrew Graham, ‘Broadcasting Policy and the Digital Revolution’ (1998) 69 *B The Political Quarterly* 30

<sup>96</sup> Stephen Ward, ‘Introduction - Parties and Election Campaigning Online: A New Era’ in Stephen Ward and others (eds), *Making a Difference: A Comparative View of the Role of the Internet in Election Politics* (Lexington Books 2008) 5

<sup>97</sup> Tim Wu, *The Master Switch: The Rise and Fall of Information Empires* (Knopf 2010) 209

<sup>98</sup> Des Freedman, ‘Web 2.0 and the death of the blockbuster economy’ in James Curran and others (eds), *Misunderstanding the Internet* (Routledge 2012) 91

and services available online, these corporate gatekeepers (and they are almost all for-profit corporations, as will be seen in the following chapters) ensure that the ‘traditional mechanisms for ensuring the viability of cultural commodities in a capitalist market – of oligopolies, bottlenecks and manufactured scarcity – are as relevant to the new digital economy as they were to the one it has allegedly replaced.’<sup>99</sup>

These gatekeepers, also termed ‘intermediaries’ as they mediate the relationship between users of the Internet by channelling data and information flows that pass through their ‘gates’, are useful also for the state, as mentioned in the previous section. They can be used as surveillance apparatus with no need for the state to build a separate infrastructure, and fulfil a key role in actively policing user activity for purposes including but going beyond national security – such as defamation and copyright. Regulation that governments impose on these entities for these surveillance and policing purposes also may contribute to market concentration given they increase barriers for potential new entrants into that particular market – which also has the effect of making them easier for governments to regulate given smaller numbers of companies able to operate in a particular market.<sup>100</sup>

In addition, Wu notes a tendency to centralisation and ‘closed’ design in previous communications technologies to the Internet, after starting out with similar decentralised and ‘open’ ethos, with the warning that the Internet may also go this way. Some drivers towards more closed ecosystems include desires for increased quality and safety of products and services. Apple’s mobile devices (explored in more detail in Chapter 5 of this thesis) present a good example here of a system designed taking into account these values, eschewing the more chaotic openness of the original Internet yet at the expense of individual freedom. Furthermore, the move to the cloud, discussed in Chapter 6, can be seen as ‘another round of “enclosure” which is prejudicial for users and rolls back on the increased autonomy, control and freedom over their digital wanderings that they have experienced with the Internet thus far’.<sup>101</sup>

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<sup>99</sup> *ibid*

<sup>100</sup> Birnhack and Elkin Koren (n 70)

<sup>101</sup> David Lametti, ‘The Cloud: Boundless Digital Potential or Enclosure 3.0?’ (2012) 17(3) *Virginia Journal of Law & Technology* 190, 193

Thus, despite the origins of the Internet in a publicly-funded project and the cyberlibertarian claims from the 1990s regarding the Internet's enhancement of economic and political freedom for users, the reality is that the Internet has become a heavily commodified space which has seen the emergence of certain, almost all for-profit actors performing a 'gatekeeping' function over data flows – both for their own economic benefit as well as for the state's surveillance capabilities.

## 2.2 Consumers and the commons

Yet alongside this march towards commodification of the Internet and the various points of centralisation of power in the form of gatekeepers, it remains the case that individuals using the Internet interact with it in a different fashion to the way in which they interacted with previous media and communications technologies. Benkler has documented this phenomenon, and argues for a reconceptualisation of the labelling of such individuals: '[t]echnology now makes possible the attainment of decentralization and democratization by enabling small groups of constituents and individuals to become *users*— participants in the production of their information environment—rather than by lightly regulating concentrated commercial mass media to make them better serve individuals conceived as passive consumers'.<sup>102</sup> Internet users, according to Benkler, are 'an ambiguous category from the perspective of an information environment composed of (a small number of professional) producers and (a large number of passive) consumers' since they can occupy both the role of producer and consumer as regards information. The progression from this binary producer-consumer dichotomy to the concept of user in the Internet environment has come about due to 'the radical reduction in the cost of processors and the flat, distributed design of the Internet' entailing that 'relatively cheap end points in a network – computers – can produce quite sophisticated communications, access the Internet, and disseminate them more or less everywhere'.

This section examines the dynamics of the emergence of "users" for the Internet ecosystem,

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<sup>102</sup> Benkler (n 29)

in terms of assessing their role in constructing alternatives to information production and consumption based on state or for-profit models, and thus in furthering their own autonomy online.

#### **a) Web 2.0 and commons-based peer production**

Those in the free software movement have existed as both consumer and producers of their works for some time, with the fruits of their works have subsisting in a non-commodified knowledge commons where rights of attribution are retained yet exclusive economic rights normally given by intellectual property protections are ceded. However, for ‘normal’ Internet users without much in the way of technical knowledge, the turning point for their transition to ‘prosumers’ came with the advent of Web 2.0. Sometimes described as the ‘second generation’ of the World Wide Web, Web 2.0 involved both the running of software programmes online on the Web rather than offline on a computer desktop, and increased and easier access for Internet users to publishing information online (and often the two combined). While there is no authoritative definition of Web 2.0, Batelle and O’Reilly defined it as the ‘Web as Platform’ where software applications were built on the Web rather than on the computer desktop, and this facilitated users’ generation of content to create value for the platform owners.<sup>103</sup> These Web-based applications allowing information sharing, interoperability, user-centred design and collaboration, catalysed the phenomenon of mass user collaboration on the Internet, especially content generated by users, which opened up to a wider category of people the possibility of creating, participating and disseminating their creations to a vast global audience. From the advent of Web 2.0, users now did not need to be equipped with any programming knowledge to share information in a public fashion on webpages.

The development of Web 2.0 gave rise to new categories of online initiative. Firstly, there are platforms such as Facebook or YouTube, which are privately-owned and profit-making.

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<sup>103</sup> Tim O’Reilly, ‘What is Web 2.0 – Design Patterns and Business Models for the Next Generation of Software’ (30 September 2005) <<http://www.oreilly.com/pub/a/web2/archive/what-is-web-20.html>> accessed 15 February 2015

These have an enabling function for users, who can share information such as news about themselves and photos. Secondly, there are open source projects, such as Open Office, over which no traditional intellectual property right is exerted. The collaboration on such projects encompasses individuals as well as corporations, such as Sun Systems in the specific case of Open Office. Although no right is asserted over the software, not all participants in the initiative are equal, and the corporations involved often invest significant sums of money in them (with the motivation usually being that they are able to make profit through [proprietary] associated products and services eg user manuals, support etc).<sup>104</sup> Thirdly, there are peer collaborative projects such as Wikipedia, where individual users work together for no fee to create the end-product. These are also copyleft initiatives, over which no traditional intellectual property right is asserted, but could be termed more egalitarian endeavours than those where there are corporations involved.

The third category of Web 2.0 initiative has also been documented by Benkler, who coins the term 'commons-based peer production' to describe it.<sup>105</sup> This phenomenon encompasses individuals on a decentralised basis collaborating together to produce information and cultural outputs over which no traditional intellectual property right is asserted and so the product is free to access and use. Furthermore, this kind of production is usually not explicitly exclusionary regarding who is entitled to participate in its creation, and is non-hierarchical inasmuch as individuals participating in the project are all on the same level and there is no official manager or owner dictating what must happen. Thus the process is free to join, and the product of the process is free to use and access (ie no payment or permission is necessary). In addition, the cooperation among the individuals participating is not dependent on 'either market signals or managerial commands' and so, according to Benkler, elements of hierarchy are not present.

Benkler recognises that the market and non-market, and the proprietary and non-proprietary co-exist in reality, and that one significant benefit of these alternative platforms is that they decrease the extent to which individuals can be manipulated by the owners of the facilities on

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<sup>104</sup> G Robles and others, 'Corporate Involvement of Libre Software: Study of Presence in Debian Code over Time' in J Feller and others (eds), *Open Source Development, Adoption and Innovation* (Springer 2007)

<sup>105</sup> Benkler (n 6)

which they depend for communication. Thus, the non-market and non-proprietary enhance an individual's freedom and autonomy.

Benkler's characterisation of Web 2.0 as giving rise to the prosumers and their participation in alternative projects to those that are either state- or corporate-run at least in the immaterial production of information, ideas and knowledge represents a phenomenon that is outside the usual private-public power binary upon which, it is submitted, the current legal and regulatory system is based, since the system has been formulated in an epoch prior to this decentralised, non-proprietary and non-hierarchical information production and thus contains certain assumptions about the state of the world which no longer necessarily hold true.<sup>106</sup> A lack of acknowledgement of these changes is, it is submitted, one reason behind the 'gaps' in the current legal and regulatory system when it comes to addressing concentrations of private economic power for the benefit of Internet users' autonomy.

Yet while the Internet has opened up these possibilities for users to collaborate on such projects, true, non-hierarchical, non-market commons-based peer production initiatives remain few and far between. Benkler seems overly-optimistic in his proclamations of individuals freed from the constraints of the industrial information society. In fact, these initiatives aside from a few successful exceptions such as Wikipedia (which also now has a large managerial class and so may not be entirely non-hierarchical) have not been strong and numerous enough to counter the resurgence of power from corporate and state quarters.

Commons-based peer production itself depends on arrangements in the 'physical' world, which itself continues mostly to be based on property rights rather than commoning arrangements.<sup>107</sup> Furthermore, many of the web-based platforms, including the most popular among users such as Facebook, Google's services and Twitter, are free for users to use in terms of no financial cost, but are actually for-profit corporations which make money by monetising the content that these users create using their platforms and services. In addition,

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<sup>106</sup> Angela Daly, 'Free Software and the Law. Out of the Frying Pan and Into the Fire: How Shaking Up Intellectual Property Suits Competition Just Fine' (2013) 3 *Journal of Peer Production*

<sup>107</sup> Pedersen (n 10)



in participating in these corporately-owned web-based platforms and services, users and their behaviour generating a large amount of data which is stored, analysed and sold on to third parties (especially advertisers) by the platform owner or service operator, with this process constituting Fuchs' 'economic surveillance'.<sup>108</sup> Finally, even within purported commons-based peer production, hierarchies form,<sup>109</sup> and there is often some kind of corporate involvement as mentioned above, which detracts from the truly 'peer' element of the production.

Accordingly, it is impossible to divorce cyberspace from the capitalist reality in which it is grounded – and so commons-based peer production may not enhance user autonomy as much as Benkler suggests given in practice it does not exist as an island apart from these other socio-economic forces.

### **b) Regulation and peer to peer alternatives**

Thus, while it is true that the Internet in theory gives rise to the possibility for truly commons-based peer production, the reality is that the pre-Internet world and offline activities are still relevant in the face of technodeterminism.

Indeed, Benkler himself acknowledges the imperfect nature of the Internet ecosystem, and believes that government regulation is warranted, in a way which enables a wide distribution of the capacity to produce and disseminate information. He sees the new task of regulatory policy to be 'identifying resources necessary for the production and exchange of information and fashioning regulatory policies that make access to and use of these resources equally and ubiquitously available to all users of the network'.<sup>110</sup>

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<sup>108</sup> Christian Fuchs, 'Critique of the Political Economy of Web 2.0 Surveillance' in Christian Fuchs and others (eds), *Internet and Surveillance: The Challenges of Web 2.0 and Social Media* (Routledge 2011)

<sup>109</sup> K Crowston and J Howison, 'Hierarchy and Centralization in Free and Open Source Software Team Communications' (2006) 18(4) *Knowledge, Technology and Policy* 65

<sup>110</sup> Benkler (n 6)

However, given the state's evident interest in the surveillance of users, and the constitutional convenience of this surveillance being carried out by private entities (particular in the US where they also enjoy the constitutional right to free speech in the First Amendment), as well as the corporatism that Western states seem to display towards accumulations of capital, then Internet users may also need to look elsewhere for alternatives.

While true non-hierarchical, non-market 'commons-based peer production' may not be a dominant mode of production and is still dependent on capitalist relations, 'its logic radically contradicts that of capital' – especially the capitalist division of labour - and thus should still be looked to as an alternative to the status quo.<sup>111</sup> In building this alternative, Bauwens acknowledges different schools of thought around the commons, including those approaches which are compatible with capitalism, but instead of opposing those approaches per se, advocates 'efforts to make the commons more autonomous from profit-maximizing entities and the system as a whole'.<sup>112</sup> In making the commons more autonomous from the current (neoliberal capitalist) system, it is submitted that this has the follow-on effect of making individuals more autonomous from both state and corporate power, and so is an approach to be encouraged within this thesis, both through applications of the existing law and regulation which would facilitate this approach, as well as the proposal of true peer to peer solutions to problems of corporate dominance over online information flows, given the autonomy gains for individuals such design encompasses over either state or corporate intervention.

This goes beyond the 'infrastructure as a commons' argument advanced by Frischmann, who advocates commons *management* (although not ownership) for the Internet and communications networks. As mentioned early, this commons management is a resource management principle which entails that the resource is available to all within a community on a non-discriminatory basis. Individuals' autonomy, however, can (it is submitted) be better served by infrastructure which is not only managed on a commons basis but also owned and

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<sup>111</sup> Jakob Rigi, 'Peer Production as an Alternative to Capitalism: A New Communist Horizon' (2012) 1 Journal of Peer Production

<sup>112</sup> Michel Bauwens, 'From the Theory of Peer Production to the Production of Peer Production Theory' (2012) 1 Journal of Peer Production

controlled by the peers themselves on a fragmented, decentralised basis.<sup>113</sup> Mesh networks and community clouds are technical solutions offered, respectively, in Chapters 3 and 6 which can operate both under commons management and under commons ownership and control.<sup>114</sup>

## **2.3 Applying competition law to the Internet**

Certainly, the problems of private power on the Internet can at least in part be subjected to the jurisdiction of competition law as a way of solving them. The following chapters in this thesis will identify the precise problems which have manifested and how current EU competition law has been, or might be, employed to solve them, successfully or unsuccessfully, along with other relevant laws and regulation. This section, however, looks at the more general application of competition law to the online space in light of the preceding sections of this chapter, along with the particular circumstances it faces in these kinds of markets, as well as an examination of the ability of competition law to take into account values relevant to the Internet context other than solely economic efficiency – such as user autonomy or subsets thereof ie free expression, privacy and data protection.

### **a) Characteristics of online markets**

Internet markets exhibit some idiosyncratic features which place them outside of mainstream competition analysis (although are not necessarily fatal to an adapted or more thorough competition analysis).

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<sup>113</sup> Although this may be difficult to conceptualise for Western legal systems which attribute property ownership to sole individuals or formalised legal persons. See: Melanie Dulong de Rosnay, 'Peer to Peer as a Design Principle for Law: Distribute the Law' (2015) 6 Journal of Peer Production

<sup>114</sup> See: Primavera De Filippi and Felix Treguer, 'Expanding the Internet Commons: The Subversive Potential of Wireless Community Networks' (2015) 6 Journal of Peer Production

Firstly, Internet markets are characterised by high rates of innovation. These high rates of innovation may result in dominant positions not being a cause for concern, since there will soon in any event be a new disruptive technology which overthrows the dominant incumbent in a Schumpeterian manner, ending in its creative destruction. Thus dominant position may only be short-term. It is widely acknowledged that innovation in general is not taken account of well by neoclassical economic theory, and it may just be that the problem is exacerbated in highly innovative markets such as these.<sup>115</sup> Furthermore, the high rate of innovation can complicate exercises in competition law procedure such as market definition and market power. Due to this high rate of innovation, as well as the complexity of many online products and services, ‘non-experts’ (such as lawyers, judges and regulators) may find it difficult to determine whether substitution is possible among the highly complex technological products and services. The consequence of this is that the traditional means of defining markets and assessing market power may result in markets that are too narrow, and market power which is overestimated.<sup>116</sup> However, this does not seem to be entirely fatal for traditional competition analysis: so long as it adapts somewhat to the difficulty in understanding the products and services at hand then it can still survive. A way this can happen may be to include technology experts in regulatory teams conducting competition law assessments. Also, one more socio-legal consequence that the high rate of innovation can have for competition law is that given the time taken to conduct competition investigations, they may ultimately be rendered obsolete by the time they conclude, or at least their remedies may be ineffective or too little too late. This can be seen in the antitrust litigation involving Microsoft in the US: Microsoft was found to have engaged in anticompetitive conduct in bundling its Internet Explorer browser with its Windows operating system, yet by the time the litigation had ended, Microsoft’s browser competitors had already exited the market.

Secondly, in many Internet markets operate with a zero monetary price to be paid by users for the service or product – Anderson’s ‘radical price’ of free.<sup>117</sup> This can be challenging to traditional competition analysis which is primarily based upon a price being charged for goods and services, and uses tests such as SSNIP (Small but Significant Non-transitory

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<sup>115</sup> Tim Wu, ‘Network Neutrality, Broadband Discrimination’ (2003) 2 *Journal of Telecommunications and High Technology Law* 141, 149

<sup>116</sup> Christopher Pleatsikas and David Teece, ‘The analysis of market definition and market power in the context of rapid innovation’ (2001) 19(5) *International Journal of Industrial Organization* 665

<sup>117</sup> Chris Anderson, *Free: The Future of a Radical Price* (Hyperion 2009)

Increase in Price) in order to define markets, calculate market shares as well as characterising anticompetitive conduct, such as price-fixing or the various pricing practices which constitute an abuse of dominance (eg predatory pricing, rebates and margin squeezing). However, zero price will also not torpedo a competition analysis – while price is a key element to these activities, anticompetitive conduct can also encompass affecting the quality of products and reducing output and innovation – although measuring the extent to which innovation or quality has been negatively affected by anticompetitive conduct may be more difficult to measure than whether prices are at an anticompetitive level. Indeed, even when a price is being charged for the product or service, in high technology markets it may well be that price changes are not the focus of competitive efforts and instead performance (quality, service, reliability) is where competition takes place.<sup>118</sup> In any event, a price of zero is often indicative of there being a ‘companion’ product or service, or the free product or service being one part of a two- or multi-sided market, where the companion product or other side of the market subsidises the ‘free’ product or service.<sup>119</sup> Thus competition analysis should consider the free product or service with its companion and/or the other ‘side’ of the market as is appropriate in the situation at hand. Instances of free products or services that have been before competition authorities include the Microsoft litigation,<sup>120</sup> the investigations into Google’s search and advertising business (which will be discussed in greater detail in Chapter 4) and the Oracle Sun Systems merger which involved Sun’s MySQL free software database with its money-making companion products including additional functionality, licences to embed the database and technical support.<sup>121</sup>

Thirdly, and following the previous paragraph, a combination of network effects and two- or multi-sided markets characterise many Internet markets. Network effects mean that the value of the Internet as a medium, and various services on it, increases as more as more people use it. Elkin-Koren and Salzberger consider that these may have a competition-limiting effect by increasing the cost of entry since ‘[t]hey provide a significant advantage to first comers, who may establish their products as the standard for future goods’.<sup>122</sup> Two- or multi-sided markets encompass scenarios in which an entity provides a ‘meeting places’ for

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<sup>118</sup> Pleatsikas and Teece (n 116)

<sup>119</sup> David S Evans, ‘Antitrust Economics of Free’ (2011) *Competition Policy International* 17

<sup>120</sup> *United States v. Microsoft Corporation* 253 F.3d 34 (2001); *Microsoft* (Case COMP/C-3/37.792) Commission Decision 2007/53/EC [2007] OJ L32/23

<sup>121</sup> *Oracle/Sun Microsystems* (Case No COMP/M.5529) Commission Decision of 21 January 2010

<sup>122</sup> Elkin-Koren and Salzberger (n 40)

two (or more) groups of customers and facilitates the interaction of these groups, thus minimising transaction costs.<sup>123</sup> These platforms often exhibit network effects inasmuch as the larger the group of customers on one side of the platform is, the more attractive that may be to customers on the other side of the platform, and vice versa. The two- or multi-sided nature of platforms may or may not be important for competition analysis depending on the case at hand, but certainly an appreciation of how the platform operates and the characteristics of both sides is necessary before proceeding to any next step in analysis lest the full picture be missed.

### **b) Consumers as users in competition analysis**

As mentioned in the previous chapter, the basis for competition law sanctioning an excess of market power or ‘dominance’ when it has been ‘abused’ (since this power or dominance in itself is not illegal per se)<sup>124</sup> is that consumer welfare is harmed by such abuses, ie consumers as a result pay more for products or services, or buy goods or services of a lesser quality and less innovative.

The idea of ‘consumer welfare’ even within the confines of mainstream competition law is a problematic concept. A precise definition of ‘consumer welfare’ is difficult to come by, and at first blush it also makes the assumption that consumers are an amorphous mass with the same needs and interests, which does not reflect the diversity of consumers in reality. It is true that the conception of ‘consumer’ in EU law is inclusive of ‘customers’ and so encompasses intermediate customers as well as final consumers even if in practice ‘customer welfare’ does not always coincide with ‘consumer welfare.’<sup>125</sup> Attempts have been made to distinguish between different kinds of consumers, such as ‘marginal’ (ie consumers which value the product in a way which is approximate to its current price, and so very sensitive to price fluctuations) compared to ‘infra-marginal’ consumers (ie those whose value of the product is

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<sup>123</sup> David S Evans, and Richard Schmalensee, ‘Markets with Two-Sided Platforms’ (2008) 1(28) *Issues in Competition Law and Policy* (ABA Section of Antitrust Law)

<sup>124</sup> Although acquiring such power may be illegal under the merger rules and via participation in a cartel.

<sup>125</sup> Pinar Akman, ‘‘Consumer’ versus ‘Customer’: The Devil in the Detail’ (2010) 37(2) *Journal of Law and Society* 315

a lot higher than its original price and so are relatively insensitive to price fluctuations) or even ‘ignorant’ and ‘knowledgeable’,<sup>126</sup> but consumers as a whole are even more heterogeneous than these attempts suggest. Furthermore, although as mentioned in the Introduction, the objective of competition law is now generally accepted to be the maximising of consumer welfare through competitive markets, there is a gaping lack of empirical evidence to suggest that competition or competition law actually achieves a greater measure of consumer welfare however defined.<sup>127</sup>

In addition to this critique is the possible paradigm shift that the Internet brings to the very idea of passive consumers of a commodity. The nature of digitised information and the more active and autonomous character of Internet users as compared to their previous position as passive consumers of media should, it is submitted, force some kind of re-conceptualisation of the supposed beneficiaries of competition law, even if true commons-based peer production is not as widespread as Benkler suggests. Nevertheless, from the perspective of competition law, Internet users are a different category of actor than mere consumers, around whom competition law is constructed. Consumers and users/producers may well have overlapping but also different needs and desires, and so the concept of ‘consumer welfare’ that is used in competition analysis may not capture this. The user does not only care about characteristics of products such as price and quality, but also whether the product comprises more capacity for the user to produce as well as consume. Furthermore, what happens to what the user produces is of high importance – whether it is enclosed as the intellectual property of the web platform used by the user, whether it is shared in a commons or whether it remains under the user's individual control.

Indeed, as mentioned Benkler advocates the Internet being regulated in a way which enables a wide distribution of the capacity to produce and disseminate information.<sup>128</sup> While some of this may be captured by the competition regime, user autonomy is not identical to consumer

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<sup>126</sup> William S Comanor, ‘Vertical Price-Fixing, Vertical Market Restrictions, and the New Antitrust Policy’ (1985) 98 (5) *Harvard Law Review* 983, 991-2. The author posits that it is the preferences of marginal consumers which are more important to suppliers of goods and services since they are more sensitive to changes, yet overall societal gains or losses from changes in the product or service depend on the preferences of all consumers, and so changes which reflect the preferences of marginal consumers may well not reflect those of other kinds of consumers such as the infra-marginal.

<sup>127</sup> Black (n 34)

<sup>128</sup> Benkler (n 6)

welfare. Indeed, competition law takes a paternalistic attitude towards consumers, who are characterised as largely passive and without the capacity for production (although the same individual which is a consumer may well have a productive role due to her employment, although if a worker she will not own the products of her labour). It is true that consumers are considered not to be entirely passive in competition analysis inasmuch as their ability to switch to competitors' products and services is considered, as well as the barriers they face to exit, however it is submitted that this kind of activity encompasses a very small area of autonomy for individuals and does not go far enough to conceptualise them as having the ability to create as well as consume. Competition law's regard paid to individuals' ability to choose and switch to the alternative products and services from competitors may well be considered one of Illich's radical monopolies inasmuch as this may constitute one type of product which competition law does not envisage consumers making themselves. In contrast, the idea of user used in this thesis is a more empowered individual, with the capacity for consumption and production, as well as ownership and control over that production.

Since the consumer welfare standard currently in use will only look at values from a consumer point of view, a standard such as user autonomy will go beyond this and look at values from both the consumer's *and* the user's point of view, as well as showing concern for the extent of control the user will be able to assert, and the interference from other entities, such as the state and vestiges of private power. Thus, the extent to which competition law with its objective of maximising consumer welfare is a reflection of the maximisation of user autonomy is the crux of the issue of whether competition law is still an appropriate legal regime in this environment.

Given the changed benefits to consumer welfare, and the introduction of user autonomy as a real and important value to individuals operating online, if market-based analysis is to be applied to the Internet, Elkin-Koren and Salzberger advocate that as a result of initiatives such as commons-based peer production and open source, markets on the Internet should be evaluated 'not only like any other market by the criteria of efficiency, but also as a public sphere, commons or mechanism for private and collective actions'.<sup>129</sup> Some notion then of the

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<sup>129</sup> Elkin-Koren and Salzberger (n 40) 27



issues beyond the purely economic at play in instances of corporate dominance, concentration or the proposal of mergers may be desirable to take into account in order to regulate Internet markets and activities well and for the benefit of consumers' welfare and users' autonomy.

Examples of where the traditional view of consumer welfare and user autonomy diverge can be found within the case studies of this thesis. One instance is the tentative conclusion of the European Commission's investigation into Google's search practices whereby some changes may be made to the results page (which may enhance consumer welfare) but users will remain none the wiser about the inner machinations of Google and its search algorithm (and so their autonomy will not be fully advanced).

### **c) 'Non-economic' values in competition**

Taking into account 'other' 'non-economic' values in competition analysis may be easier said than done. This issue has been raised in practice by the recent intervention of the European Data Protection Supervisor (EDPS), who generated the beginnings of a public debate on the role of data in competition analyses of online markets in the EU.<sup>130</sup> It is true that data plays a role of pivotal importance in the Internet ecosystem. It is an input and output of computer processing, and flows of data are what the network carries. Thus, control over the data inputs, outputs and flows has competition consequences as well as those for free expression and privacy.

The EDPS considered that the collection and control of very large amounts of personal data are a source of market power for large players in European Internet markets, and may even constitute 'essential facilities' in certain circumstances, such that a refusal of access to such data may constitute an abuse of dominance. However, this is not a new issue as such – access to a dominant competitor's data, protected by intellectual property, has been addressed

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<sup>130</sup> European Data Protection Supervisor, 'Privacy and competitiveness in the age of big data: The interplay between data protection, competition law and consumer protection in the Digital Economy' (Preliminary Opinion) EDPS/2014/06

already in certain cases such as *Magill* and *IMS Health*.<sup>131</sup> The EDPS also considered that it may be necessary to incorporate violations of the right to data protection into the concept of consumer harm in the context of competition enforcement, such as when a dominant entity is restricting users' freedom of choice and control over their personal data, such as when they are offered a product for zero monetary price yet 'pay' with the collection of their data and data about their behaviour.<sup>132</sup>

This suggestion of incorporating other values such as data protection – and, for the purposes of this thesis, the idea of user autonomy – into competition analysis, and 'consumer welfare' in particular, is not novel. Indeed, the sole use of the 'economic' approach including vis-à-vis consumer welfare has been critiqued as omitting other valuable societal goals because they are 'too difficult' to quantify.<sup>133</sup> Stucke, for instance, believes that competition policy can go beyond promoting economic efficiency, and in fact disperse economic and political power and promote individual freedom (which would seem to be something analogous to user autonomy, depending on its interpretation), and argues for a 'blended approach' to competition goals.<sup>134</sup> Yet Stucke does not explain very adequately what this would mean across the board of competition investigations and issues, and seems just to be a different interpretation of economic policy objectives in the scope of competition law, such as protecting small and medium businesses.

Furthermore, competition law has not always been underpinned by the neoclassical economic thought leading to this 'economic' or quantitative analysis. Even within the history of competition law, accumulations of private power has been put under suspicion for reasons beyond what the final product or service looks like and costs. For instance, ordoliberalism was a German economic movement which believed that it was the state's role to ensure that the (otherwise) free market fulfils its theoretical potential, and competition as opposed to mere exchange was pivotal in achieving this. If the state does not act in this way, then ordoliberals believed that not only would the market economy suffer and not produce optimal

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<sup>131</sup> Joined Cases C-241 & 242/91 *Radio Telefis Eireann and Others v Commission* [1995] ECR I-743; Case C-418/01 *IMS Health v NDC Health* [2004] ECR I-5039

<sup>132</sup> EDPS (n 130) 32

<sup>133</sup> Christopher Townley, 'Which Goals Count in Article 101 TFEU?: public policy and its discontents' (2011) 9 *European Competition Law Review* 441

<sup>134</sup> Maurice Stucke, 'Reconsidering Antitrust's Goals' (2012) 53 *Boston College Law Review* 551, 590

results, but that private corporate power was also to be checked due to its potential to undermine the (democratic) political process and government, since they believed that economic power could translate into political power. They saw the threat to individual liberty as not only emanating from the government, but also from powerful economic institutions. Competition law here had then a different role from the current mainstream conception, which is not aimed at achieving optimal consumer welfare or efficiency, but instead at preserving individual freedom against threats from private power, and competition in itself is crucial, an end in itself rather than a mere means to an end.<sup>135</sup>

Foucault himself drew parallels between the ordoliberalism and the Frankfurt School of critical theory, since both were influenced by Max Weber and both tackled the ‘irrational rationality of capitalist society’, but they differed in how they treated the problem. The Frankfurt School tried to define the new social rationality that could cancel out the economic irrationality, whereas the ordoliberals concentrated on the redefinition of the economic rationality that would enable the cancelling out of the social irrationality of capitalism.<sup>136</sup> The Frankfurt School is regarded as Marxist or neo-Marxist, and its members were critical of both capitalism and Soviet socialism, with their alternative being a further path to social development (ie that which would cancel out the economic irrationality of capitalism). The ordoliberals were not anti-capitalists critical of all sorts of private power, but something more along the lines of critics of unchecked private power and proponents of a social market economy,<sup>137</sup> with a ‘strong state’ that would be effective in its ability to discharge effectively its duties and responsibilities regarding inter alia the economy such as providing order and facilitating competition.<sup>138</sup> For ordoliberals, thus, competition is not something that occurs naturally in markets, but a process that must be created and maintained by the state.

In addition to ordoliberalism, the development of antitrust law in the US especially prior to

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<sup>135</sup> Massimiliano Vatiello, ‘The Ordoliberal Notion of Market Power: An Institutional Reassessment’ (2010) 6 (3) *European Competition Journal* 689

<sup>136</sup> Michel Foucault, *The Birth of Biopolitics: Lectures at the College de France 1978-1979* (Palgrave Macmillan 2008) 105-6

<sup>137</sup> Michael A Peters, ‘Foucault, biopolitics and the birth of neoliberalism’ (2007) 48(2) *Critical Studies in Education* 165

<sup>138</sup> Nils Goldschmidt and Hermann Rauchenschwandtner, ‘The Philosophy of Social Market Economy: Michel Foucault’s Analysis of Ordoliberalism’ (2007) *Freiburg Discussion Papers on Constitutional Economics* 07/4, 8-9

World War II, and in particular President Franklin D Roosevelt's antimonopoly message in 1938, pointed to a distrust of the accumulation of private power beyond merely economic reasons, since this could become stronger than the democratic state itself (this situation was termed 'Fascism'), and the danger was identified in contemporary American society as the concentrated economic power which had arisen since the Great Depression and included cartels.<sup>139</sup> Presidential predecessor and distant cousin Theodore Roosevelt was also strongly in favour of the control and break up of monopolies, which formed part of his 'Square Deal' programme in the early years of the 20<sup>th</sup> century.

The ordoliberal view of competition law and its place in the social order (as well as the similar view from Roosevelt) would seem to give it more of a 'political'/politicised role than that of the current, neoliberal conception of competition law (as explained in the previous introductory chapter). Private economic power would be checked for not only being damaging to the economy but also to the political system and the freedom of individuals. In practice, this could mean that competition law would intervene in the market on more occasions than it does now, and for reasons that were not strictly economic, or on the basis of other, non-quantitative evidence. However, critics could point to such tests being less predictable and more arbitrary than those which are currently used, giving less legal certainty to market players. Yet, as Endicott notes, law is necessarily vague – because it necessarily uses abstract terms, and here such abstract terms may be these qualitative values that competition law should tackle.<sup>140</sup>

In any event, as mentioned in the Introduction, in Europe (and the US for that matter) neoliberalism - not ordoliberalism or anti-corporatism - is the dominant tendency in competition law and policy, and so the critique of private economic power within the competition discourse for being problematic for democracy and individual ('political') freedom as well as for what consumers pay and the quality of products and services is no longer prominent, nor incorporated into the current More Economic Approach.

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<sup>139</sup> Tony A Freyer, *Antitrust and Global Capitalism, 1930-2004* (Cambridge University Press 2006) 22

<sup>140</sup> Timothy Endicott, 'Law is Necessarily Vague' (2001) 7(4) *Legal Theory* 379

In the likely event of no major changes being made to competition law's methodology in the near future, the current version of competition law is not so well-equipped to take into account more qualitative factors, as a regime which operates using mainly quantitative data – to establish relevant markets, market shares and other phenomena. Measuring the extent to which user autonomy or some subset of that such as data protection or personal freedom, is promoted or harmed would seem to be a more qualitative than quantitative exercise, and generally one that will not be measured in financial terms. For non-economic objectives it may be more expedient to use law and policy aside from competition law to achieve them, since using competition law to do so can be costly and ineffective.<sup>141</sup> Competition law has a particular ideology and aims,<sup>142</sup> which may well not be sufficiently conceptually supple to bend to these situations.

Competition law may be looked to in situations where there is an accumulation of private economic power that threatens individuals' 'political' as well as 'economic' freedom merely because it is the one regime *available* in the circumstances, but not because it is a wonderfully *appropriate* part of the law for dealing with such situations. It is true that there are sometimes 'non-economic' effects of anticompetitive behaviour on the Internet (as well as in other markets) – such as impinging on users' free expression and privacy rights. For this reason, there may be calls to include a consideration of them in the competition law analysis such as that of the EDPS for competition authorities to consider data protection as a value. This call has been echoed on the other side of the Atlantic from Federal Trade Commissioner Julie Brill, that privacy may be considered in competition analyses.<sup>143</sup> Competition law may go some way to alleviating these non-economic effects of anticompetitive conduct as well as the economic ones, yet in other cases governmental (ex ante) regulation may be more appropriate to secure users' capacity to produce and disseminate information rather than an attempted difficult incorporation of other values, such as 'data protection', 'freedom' or even 'user autonomy' into a competition law analysis.

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<sup>141</sup> Christopher Townley, *Article 81 EC and Public Policy* (Hart Publishing 2009)

<sup>142</sup> William H Page, 'Ideological Conflict and the Origins of Antitrust Policy' (1991) 66(1) *Tulane Law Review*

<sup>143</sup> See: Julie Brill, 'Weaving a Tapestry to Protect Privacy and Competition in the Age of Big Data' (European Data Protection Supervisor's Workshop on Privacy, Consumer Protection and Competition in the Digital Age, Brussels, June 2014)

Nevertheless, regardless of judicial and administrative bodies' wishes, in both Europe and the US they are under duties to apply the law in ways which are not incompatible with fundamental rights (Europe)<sup>144</sup> and the Constitution (the US).<sup>145</sup> Indeed, fundamental rights and the Constitution have primacy over other laws in their respective legal systems.<sup>146</sup> This would seem to entail that the judiciary or administrative body cannot ignore these rights when investigating or adjudicating competition cases, or at very least should not produce an outcome which is incompatible with these rights. Since rights are not solely economically-based, then this would inevitably involve dealing with non-economic values. However taking account of rights may prove institutionally difficult given the 'explicitly technocratic remit' of many EU telecoms regulators (some of which also have competition investigatory powers) and even for those with no legislative impediment to taking account of human rights, their organisational culture may preclude the consideration of rights in practice – or at least take those responsible out of their professional comfort zone.<sup>147</sup>

Indeed, there are some indications of what this kind of approach in competition law would look like from the 'constitutionalisation' phenomenon in some EU Member States' domestic private law – namely the UK, Netherlands and Germany.<sup>148</sup> This has involved the application of fundamental rights in certain disputes between private parties in contract and tort, such as in situations where there are several possible interpretations of these laws, the court should follow the interpretation which best upholds the parties' fundamental rights. To the extent that the promotion of user autonomy would include the promotion of rights such as free expression, privacy, freedom of assembly etc then it may be advanced through similar means in competition law. By analogy, if there are several possible applications of competition law to a particular scenario, then the competition authority should proceed with the application

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<sup>144</sup> Due to the European Convention on Human Rights and the Charter of Fundamental Rights of the European Union. See: Christopher Kuner and others, 'When two worlds collide: the interface between competition law and data protection' (2014) 4(4) *International Data Privacy Law* 247

<sup>145</sup> See Roberts CJ at 31-32 in *National Federation of Independent Business v Sebelius* 567 U.S. \_\_\_\_ (2012), 132 S.Ct 2566

<sup>146</sup> Douglas H Ginsburg and Daniel E Haar, 'Resolving Conflicts between Competition and Other Values: The Roles of Courts and Other Institutions in the U.S. and the E.U.' in Philip Lowe and Mel Marquis (eds), *European Competition Law Annual 2012: Public Policies, Regulation and Economic Distress* (Hart Publishing 2014) (forthcoming)

<sup>147</sup> Brown and Marsden, (n 42) 142

<sup>148</sup> See: Thomas Barkhuysen and Siewert Doewe Lindenbergh, *Constitutionalisation of Private Law* (BRILL 2006); Stefan Grundmann (ed), *Constitutional Values and European Contract Law* (Kluwer Law International 2008); and Chantal Mak, *Fundamental Rights in European Contract Law: A Comparison of the Impact of Fundamental Rights on Contractual Relationships in Germany, the Netherlands, Italy and England* (Kluwer Law International 2008).

which best upholds data protection, or free expression, or autonomy.

While this method could be incorporated into competition analyses without, it is submitted, too much legislative upheaval (although possibly some practical issues that could be solved by closer coordination between eg data protection authorities and competition authorities), as will be seen in the following chapters, the problem may be in the fact that competition law does not apply to a given circumstance in the first place: either there is no finding of dominance, or even if there is dominance, there is not a recognised abuse – even if those circumstances harm user autonomy, free expression, privacy, data protection etc.

Thus, a finding of anticompetitive abuse – which absent a merger situation necessitates either a dominant position or evidence of collusion – is still a necessary prerequisite for triggering a competition investigation and analysis, regardless of what other values may be incorporated into that analysis. For this reason, it may remain that this is not the most effective way of securing data protection, or any other desirable (non-economic) value, regardless of any move to ‘constitutionalise’ competition law. In any event, Feretti notes that ‘the pursuit or consideration for other non-economic goals under competition law is at odds with neo-liberalism’,<sup>149</sup> and so likely to give rise to much regulatory tension if competition bodies find themselves under press to apply non-economic values that may be encompassed by human rights.

## **2.4 Regulation**

The dominance of the More Economic Approach in contemporary EU competition law, underpinned by quantitative analyses of consumer welfare and premised on neoclassical economics, entails that reform to encompass the non-economic aspects of user autonomy would not be simple, and indeed, as already mentioned, a discussion of the possible paths competition law reform could take is outside the scope of this thesis. Aside from the possible

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<sup>149</sup> Federico Feretti, *Competition, the Consumer Internet, and Data Protection* (Springer 2014) 94

constitutionalisation of competition law through applications and interpretations in accordance with the protection of fundamental rights, any further move towards the incorporation of ‘non-economic’ values, such as those promoting user autonomy, individual freedom and/or democracy, into the current competition law analysis of consumer welfare is likely to be difficult if not impossible in practice.

There are different existing approaches to Internet regulation which can broadly be grouped into three categories: ‘traditional’ state-led regulation; industry self-regulation; and multistakeholder co-regulation.<sup>150</sup> As will be seen, however, these different regulatory approaches remain inadequate to address the problems of private economic power over online information flows in the interests of user autonomy.

Industry self-regulation is the process ‘whereby an industry-level (as opposed to governmental or firm-level) organization sets rules and standards (codes of practice) relating to the conduct of firms in the industry’ either on a ‘voluntary’ basis (ie independent of direct government involvement) or with some degree of government mandate (either or both of rule-making and enforcement are left to the particular sector).<sup>151</sup> While self-regulation can be more ‘efficient’ than state-led regulation, it has been heavily critiqued for the unlikelihood that market participants will actually act in the best interests of society overall rather than their own business interests. As Braithwaite puts it, ‘[s]elf-regulation is frequently an attempt to deceive the public into believing in the responsibility of an irresponsible industry [and s]ometimes ... a strategy to give the government an excuse for not doing its job’.<sup>152</sup>

However, state-led regulation may be seen as more democratically legitimate inasmuch as the public interest may be better represented by the state rather than just the self-interest of business, and the regulators may be democratically accountable to the legislature or even directly to the electorate. In theory, thus, ex ante state-led regulation of private economic

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<sup>150</sup> Brown and Marsden (n 42) 2

<sup>151</sup> Neil Gunningham and Joseph Rees, ‘Industry Self-Regulation: An Institutional Perspective’ (1997) 19(4) *Law and Policy* 364-365

<sup>152</sup> John Braithwaite, ‘Responsive Regulation for Australia’ in Peter Grabosky and John Braithwaite, *Business Regulation and Australia’s Future* (Australian Institute of Criminology 1993) 93



power may be seen as another means of promoting user autonomy in Internet markets, and may be preferred to a reform of competition law and leaving chance to ‘the market’. However, state-led regulation also has its weaknesses, and in the EU its application to concentrations of private economic power, particularly in the communications sector, has been influenced by neoliberalism, as mentioned in the previous chapter - and is also very much entwined with contemporary competition law, in theory applying only where ‘market failures’ are produced. Indeed, there are many arguments advanced *against* regulation where there are no ‘market failures’ and even counsel to forbear from regulation even where there *are* market failures, because of, for instance, the adverse impact regulation may have on innovation particularly in high tech markets.

One systemic problem of state-led regulation is the possibility of ‘regulatory capture’ – that the regulator does not regulate in some notion of the ‘public interest’ but is subject to ‘capture’ by the economically powerful and so its regulatory output reflects those interests.<sup>153</sup> While it is true that regulatory theory has moved beyond a ‘pure interest-group driven analysis’ to take account of institutional design for instance,<sup>154</sup> regulatory capture is still attempted (and can be successful) in practice, including in the EU.<sup>155</sup> Indeed, Brown and Marsden note ‘widespread’ capture of regulators and legislators in the field of copyright law, especially as applied to the Internet – as well as other ‘government failures’ in regulating the Internet such as the ‘overregulation’ of censoring content.

These identified problems detract from the likelihood of *ex ante* state-led regulation being successful in advancing Internet users’ autonomy in the face of accumulations of private economic power which are likely to lobby to ensure that such regulation is not enacted, imposing further obligations on them and curtailing lucrative business practices. A further illustration pertinent to the discussion in this thesis is the proposed reforms to EU data protection law (discussed in more detail later), a prime example of the lobbying capacity and

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<sup>153</sup> See: Ronald Coase, ‘The Economics of Broadcasting and Government Policy’ (1966) 56(1/2) *The American Economic Review* 440; George J Stigler, ‘The Theory of Economic Regulation’ (1971) 2 *Bell Journal of Economics and Management* 3

<sup>154</sup> See: Robert Baldwin and others, ‘Introduction: Regulation – the Field and the Developing Agenda’ in Robert Baldwin and others (eds), *The Oxford Handbook of Regulation* (Oxford University Press 2010)

<sup>155</sup> See: Corporate Europe Observatory, ‘The record of a Captive Commission: The ‘black book’ on the corporate agenda of the Barroso II Commission’ (2014)

rent-seeking mobilisation by large Internet corporations against measures which would protect users' interests.

Furthermore, even where ex ante state-led regulation may be enacted which *would* go some way at least to enhancing users' autonomy, the time taken to arrive at this stage may be so long that the regulation becomes too little, too late. This is precisely the case with net neutrality regulation currently under discussion in the EU (which will be explored in more detail in the following chapter). Net neutrality was first raised as a possible policy issue in the early 2000s, yet it has taken more than 10 years to arrive at the point where ex ante regulation might be imposed on ISPs. Business practices and technology have moved on considerably in the last 10 years while the proposed regulation does not address them fully. It is submitted that the 'light touch' model of economic regulation has created a situation in which there is extreme caution on the part of European organs aside from the Parliament to introduce such ex ante regulation vis-à-vis concentrations of private economic power, and so in practice it may not be a very efficacious route to protecting and promoting user autonomy.

Yet there is still a third approach to online regulation, the multistakeholder co-regulatory model. Co-regulation can be conceptualised as a 'third way' which is neither state-led regulation nor industry self-regulation, and which explicitly involves consumers as part of the institutional setting for regulation, for which it claims more legitimacy as compared to these other forms of regulation.<sup>156</sup> In practice, co-regulation can take various forms, but what they have in common is 'the fact that the regulatory system is made up of a complex interaction of a general framework of legislation and a self-regulatory body'.<sup>157</sup>

Multistakeholder co-regulation, as Brown and Marsden's third approach to Internet regulation, encompasses states, industry as well as other stakeholders, typically from the 'technical community' and civil society. While this may aid the legitimacy of the regulatory process, the presence of these participants in the regulatory process may also be critiqued – particularly those from civil society not being representative of the citizenry more generally

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<sup>156</sup> Christopher T Marsden, *Net Neutrality: Towards a Co-Regulatory Solution* (Bloomsbury Press, 2010) 164

<sup>157</sup> *ibid*

and thus raising questions of effectiveness, accountability and legitimacy, or civil society groups only being included as a window-dressing exercise, a criticism which has been levelled at the multistakeholder process in ICANN.<sup>158</sup> Furthermore, the multistakeholder fora currently in existence tend to emphasise ‘governance’ rather than ‘regulation’ or ‘legislation’ as such and form more of a ‘conversation’ around the issues under consideration rather than the formation of enforceable norms, with a notable example of this being the annual Internet Governance Forum whose impact (or lack thereof) can be called into question.<sup>159</sup> The extent to which these multistakeholder processes may represent user autonomy is limited in two dimensions: the deficiencies in representation these stakeholders encompass; and the lack of enforceable norms these processes may produce in practice – or that the enforceable norms which are produced may reflect government and business interests more than civil society’s.

As a result of the deficiencies in these regulatory approaches, this thesis considers that user autonomy, when faced with concentrations of private economic power performing gatekeeping functions over online information flows, may best be pursued and advanced outside of legal and regulatory structures. The alternative methods suggested in this thesis are ‘code-based’ ie infrastructure, software, online intermediaries and other tools. Unlike Lessig, ‘code’ in this sense is not considered in a technodeterministic fashion, which arguably has its own roots in neoliberal/neoclassical ideas of economic rationality.<sup>160</sup> Instead, the technical solutions suggested are designed with a particular view of society and technology in mind, one which adheres to the idea of user autonomy in this thesis, by preserving privacy, enabling expression and resisting both corporate and state control. The code-based solutions suggested, as will be seen, are embodiments of users’ own autonomy through peer production on a commons-basis as well as are designed to promote their own autonomy – particularly through the use of peer to peer design.

## 2.5 Conclusion

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<sup>158</sup> See: Milton Mueller, *Networks and states: The global politics of Internet governance* (MIT Press 2010)

<sup>159</sup> *ibid*

<sup>160</sup> See: Viktor Mayer Schonberger, ‘Demystifying Lessig’ (2008) *Wisconsin Law Review* 713, 737

This chapter has explained in more detail the conditions for competition and consumer in cyberspace, ranging from a historical account of the rise of private corporate power and its concentration in Internet markets, to a consideration of the remaining autonomy-enhancing aspects of the Internet, finishing with an examination of whether and how ‘non-economic’ values relevant to the Internet experience such as user autonomy might be incorporated into competition analyses, and the shortcomings of turning to existing approaches to regulation.

From the discussion, it is clear that the Internet is a commodified space where points of centralisation and concentration can be observed. Dialectically, it is also clear that the Internet has enhanced the autonomy of its users, at least vis-à-vis previous technologies, and represents a more radical potential in its enabling of peer to peer contact and production than commodification entails. Thus, while for-profit corporations play a gatekeeping function over online information flows, the potential of peer production gives hope for a more user-autonomy-friendly Internet – an idea which will be borne in mind throughout the following chapters.

As for competition law, given the general neoliberal forbearance in introducing ex ante regulation of economic power online, it is one legal regime that prima facie applies to these concentrations. However, competition’s current neoclassical economical orientation is not well placed to take into account other values, such as user autonomy – while the application of competition law may go some way to promoting these values, it would seem unable to do so on every occasion, even if these are desirable objectives which are hampered by manifestations of dominance, either in the neoclassical sense or in the ‘radical monopoly’ sense. Ex ante regulation also suffers from the systemic flaws of regulators’ susceptibility to regulatory capture as well as the time taken for regulation promoting user autonomy, the involvement of industry in the case of self-regulation and the deficiencies of co-regulation, to come into force and so cannot be relied upon to provide a strong alternative to the operation of competition law to preserve and promote user autonomy.

Thus, against this backdrop, the following chapters will examine instances of the corporate dominance of information online in the form of gatekeeping and look at the adequacy of the

current European legal and regulatory system in dealing with them, with a consideration of the extent to which competition law can facilitate user autonomy through consumer welfare, the prospects for regulation, and the application of fundamental rights and data protection. If this is too much of a tall order for the system, and so the tools for enhancing user autonomy must be found elsewhere, then the possibility of users turning to self-help methods – principally with a peer to peer design - outside of law and regulation will be examined.



## **CHAPTER 3: DOMINANCE AND INTERNET PROVISION**

Internet connectivity for users in the EU (and US) is usually bought from a retail provider, either an Internet Service Provider (ISP - usually a telecommunications or cable provider) for ‘fixed’ access via a personal computer or laptop, or mobile operator for use via a tablet or smartphone - although with the development of mobile broadband services, the distinction between mobile and fixed Internet access continues to blur. Some of these entities also own the physical infrastructure such as copper telephone lines, fibre optic cables and mobile telephony equipment over which the data is transmitted while others must lease capacity from wholesale providers which are either wholesale fixed-line broadband providers (in Europe these are often the telecoms incumbent) or mobile network operators. These providers in the EU since telecoms liberalisation commenced a few decades ago have transitioned from being state-owned monopolies to the incumbents being privatised and subject to competition, especially at the user-facing retail level.

Internet providers, whether fixed or mobile, occupy a position of control over information flows going to and from their customers, the users. The Internet was originally set up as a ‘dumb’ network using ‘end to end connectivity’ in its design, which did not interfere with the packets of information passing over the network, with the ‘intelligence’ being built into the starting- or end-point of the data ie the device on which the information originated or for which it was destined. However, developments such as deep packet inspection (DPI), which allows network operators to monitor in real time the content of the data packets passing over their infrastructure, and content delivery networks which allow large content providers to bypass the once-hierarchical Internet backbone networks when sending their content to users, have ushered in profound changes to how data flows over the Internet, with evident consequences for these users and their autonomy.

This chapter will examine Internet access providers, their markets and will have a particular focus on the net neutrality debate, which concerns the extent to which Internet access providers should be able to ‘manage’ traffic travelling through their networks. The net neutrality debate implicates issues of competition particularly for vertically integrated Internet access providers which also have content-producing/-distributing subsidiaries but also has other potential consequences for users’ ability to impart and receive information online, the invasions of their privacy and lack of data protection that are incidental to the use

of DPI in particular, and the concentration of Internet content in large players which can afford to use content delivery networks and/or make deals with Internet access providers, to the potential detriment of smaller/non-commercial content providers. In this chapter, the technical and market developments leading up to the net neutrality debate will be discussed, followed by an outlining of the issues brought up by this state of affairs for online information flows and users' autonomy. Net neutrality is borne of competition issues but has implications beyond competition for users' rights and free information flows, which will be outlined. While some commentators have considered that existing competition and sector-specific telecoms regulation, particularly in the EU, would be sufficient to address net neutrality concerns, others have argued that only new ex ante regulation will solve the problems, and indeed there have been proposals in the EU and US for such regulation, which will be detailed in this chapter. Both the existing situation and the proposed regulation will be considered to determine whether they address the problems identified in a way which best promotes and protects Internet users' autonomy.

Net neutrality constitutes a rare instance of further ex ante regulation being considered to address problems of private economic power online with an adverse effect on users' autonomy, and indeed is the only case study in this thesis where further ex ante regulation has been seriously considered by policy-makers. While in theory this might be a development to be welcomed, in practice the time taken to arrive at this point may render the regulatory measures ineffective or at least only partially effective, as will be explored further in this chapter. Here it is argued that the experience with the further regulation of Internet provision in particular to address net neutrality concerns demonstrates the shortcomings of regulation as discussed in the previous chapter, and suggests systemic problems in turning to regulation as a means of protecting users' autonomy. Accordingly, at the end of this chapter alternatives to law and regulation are suggested in the form of technical solutions.

### **3.1 Technical and market developments in Internet access provision**

The technical and market developments observed in Internet access provision over the last ten or more years implicate various problems of competition, openness, free expression and data privacy which will be discussed in greater detail in the following section. These developments



themselves are the subject of this section, which also explains how ‘the Internet’ as users experience it works in the US and EU.

As mentioned above, Internet users buy access to the rest of the network from a provider, which is usually a telecommunications company (whether mobile or fixed line or both) but can also be a cable TV operator, and Internet access via fibre optic cables has been growing in prevalence. In the EU, Internet access via DSL (ie fixed line telecoms) is the most popular technology, although in certain Member States, cable Internet has retail market shares of around 40%.<sup>161</sup> The situation in the US differs inasmuch as cable has been the main form of Internet access, followed by DSL, and while fibre optic access remains a small part of the market, its share is growing.<sup>162</sup>

While users may wish to access content and programs from other Internet customers of the same provider, they are also highly likely to wish to access data from the customers of other providers, including in other countries beyond their own. In order to access that data, Internet access providers make agreements with each other, negotiated in private, to send and receive data from their customers, and the customers of the other providers with which they have agreements. This results in individual users experiencing ‘universal connectivity’ to all parts of the Internet.

The following subsections will detail developments in the topography of the Internet based on advances in technology and how the market has incorporated them, in order to provide a better understanding of how data flows across the Internet from its originator to its recipient, and the role of network providers in facilitating these flows.

### **a) The Internet as hierarchy**

Formerly, the web of connection among Internet providers took a hierarchical form, with the

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<sup>161</sup> Liyang Hou and others, ‘Can open internet access be imposed upon European CATV networks?’ (2013) 37(10) Telecommunications Policy 970

<sup>162</sup> IHS Technology, ‘Broadband Internet Penetration Deepens in US; Cable is King’ (9 December 2013) <<https://technology.ihs.com/468148/broadband-internet-penetration-deepens-in-us-cable-is-king>> accessed 30 August 2014

largest networks interconnecting with each other in the form of ‘peering’ arrangements,<sup>163</sup> while they charged smaller networks for data transit. The large networks which were capable of peering with each other became known as the ‘Internet backbone’. This more or less represented the topography of the Internet at the time of two major mergers concerning Internet backbone providers in the late 1990s which raised concerns over competition in the Internet backbone and how smaller networks interconnected with it. These concerns in particular involved the ‘bottleneck’ position that these ‘Tier 1’ backbone providers occupied with the associated competition concerns regarding how they could influence the transmission of data and accordingly the prices paid by smaller networks which were not large enough to peer with them.

The first merger concerned MCI and WorldCom, two American telecoms companies which were both active in various telecoms markets, especially the market for long distance telecoms in the US in which they both had particularly strong positions. The proposed merger was scrutinised by both the Federal Communications Commission (FCC) and the Department of Justice (DoJ) in the US and the European Commission, since WorldCom had subsidiaries in various EU countries and was constructing fibre links in various EU capital cities.<sup>164</sup> The FCC approved the merger subject to the divestiture of MCI's Internet business, since without the divestiture, the merger of the two companies would have combined the two leading providers of the US-wide Internet backbone service.<sup>165</sup> The European Commission considered the merger in detail, and came to the conclusion that MCI should divest its Internet businesses and services relating to Internet access as an operating entity, since post-merger the companies would have a combined share of over 50% of the market for top-level Internet

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<sup>163</sup> Nicholas Economides, ‘Chapter 9: The Economics of the Internet Backbone’ in S Majumdar and others (eds), *Handbook of Telecommunications Economics Volume 2* (Elsevier 2005) 380

<sup>164</sup> The backbone infrastructures have been US-centric, which is a historical legacy of the Internet’s inception: Paolo Buccirossi and others, ‘Competition in the Internet Backbone Market’ (2005) 28(2) *World Competition*. This legacy has proved controversial in recent times with revelations in 2013 that the US National Security Agency (NSA) had been secretly and possibly illegally monitoring a huge amount of Internet traffic, some of which did not originate in the US nor was destined for the US, by *inter alia* tapping into the fibre cables of Internet backbone networks. See: James Ball, ‘NSA’s Prism surveillance program: how it works and what it can do’ (*The Guardian*, 8 June 2013) <<http://www.theguardian.com/world/2013/jun/08/nsa-prism-server-collection-facebook-google>> accessed 30 August 2014. Despite the growth of Internet exchange points and backbone networks in other parts of the world, a significant amount of global traffic still passes through networks which are geographically located in the US. There have been calls from Germany in particular to ensure that traffic which originates in Germany and is destined for Germany remains within Germany in its path over the Internet, and so is less susceptible to interception by foreign agencies.

<sup>165</sup> US Department of Justice, ‘Justice Department Clears WorldCom/MCI Merger After MCI Agrees to Sell its Internet Business’ (press release, 15 July 1998) <[http://www.justice.gov/atr/public/press\\_releases/1998/1829.htm](http://www.justice.gov/atr/public/press_releases/1998/1829.htm)> accessed 30 August 2014

connectivity, creating a new network ‘of such absolute and relative size that the combined entity could behave to an appreciable extent independently of its competitors and customers’ and as a result could raise rivals’ costs and/or price selectively to attract customers from competing networks’.<sup>166</sup>

In its analysis, the European Commission implicitly accepted that the Internet was arranged in a hierarchy, with top tier Internet backbone providers at the top of the pile since it defined a separate market for these backbone providers with comprehensive networks whose services were substitutable. ‘Secondary’ ISPs or ‘resellers’, with smaller networks, were not considered to be active in this market, nor were they considered to provide a competitive constraint on the prices charged by top-level networks for their Internet connectivity services. In defining the geographical reach of the market for top-level Internet connectivity as global, the Commission also accepted the hierarchical nature of the Internet by considering that ISPs anywhere in the world were dependent on the terms on which they could obtain transit from the top-level providers, either through direct agreements or indirectly via resellers.

The second merger involved the entity emerging from the previous one, MCI WorldCom, and Sprint, but it was opposed by both the US and European authorities. WorldCom subsequent to its merger with MCI operated the largest Internet backbone network in the US and the world, and Sprint operated the second largest network. The US DoJ considered that this merger would substantially lessen competition in the market for Internet backbone provision in the US by eliminating the second largest player in that market and would give the combined entity the incentive and ability to charge higher prices and/or provide a lower quality of service for customers, as well as giving the entity the incentive and ability to impair the ability of its rivals to compete by inter alia raising its rivals costs and/or degrading the quality of its interconnections with its rivals.<sup>167</sup> The DoJ was concerned that the size of the merged entity compared to the other top-tier or Tier 1 providers would reduce the incentives for efficient interconnection arrangements with these rivals to peer traffic with them, and so weaken the bargaining position of other networks as well as diminishing the incentives of the merged entity to charge reasonable prices for transit.<sup>168</sup> Furthermore, the DoJ considered that the merged entity would be able to control and inhibit the successful entry of new entrants

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<sup>166</sup> *WorldCom/MCI (II)* (Case IV/M.1069) Commission Decision 99/287/EC [1999] OJ L116/1, 29.

<sup>167</sup> *United States v WorldCom and Sprint*, Compl. 62, No.00-1526 (D.D.C. 2000), 32-35

<sup>168</sup> *ibid* 41-43

and/or the expansion of its existing rivals into the Internet backbone market by refusing to interconnect with them or limiting these connections.<sup>169</sup> The DoJ considered that the merger would violate the antitrust laws by reducing competition in many telecoms markets. The DoJ formally opposed the merger in the form of a lawsuit, which led to the merger being eventually abandoned by the parties.

Meanwhile, in Europe the Commission declared that the merger was anticompetitive for similar reasons to the DoJ and so did not allow it to go ahead.<sup>170</sup> The Commission considered that the merger would result in the creation of a single entity with a dominant position of more than 35-45% in the market for top-level universal Internet connectivity (the same relevant market it had previously defined in the MCI WorldCom merger above, although this time it considered as players only those entities which peered with each other privately and not also through public network access points),<sup>171</sup> and that the parties' proposal to divest Sprint's Internet business was insufficient to address satisfactorily the competition concerns arising from the merger. The Commission's investigation into that market prior to its decision found that the merger would have resulted in the creation of such a large and powerful entity that its competitors and customers would have been dependent on it to obtain universal Internet connectivity and this would have allowed the merged entity to behave independently of these competitors and customers, including in Europe given the global scope of the market.<sup>172</sup> It would be able to control the prices its competitors and consumers paid due to its capacity to discipline the market by threatening to degrade selectively its competitors' Internet connectivity offerings and through its influence over any technical developments in this area.<sup>173</sup> Furthermore, the Commission found that the merger would generate a significant barrier to entry into the market for top-level Internet provision since a new network would have to have a sufficient customer base and sufficient geographical reach in order to peer settlement-free to obtain universal connectivity, and as the top level networks grow, it became increasingly more difficult for new entrants to match their size and reach.<sup>174</sup> Regarding the proposed divestiture, the Commission considered that such an action would not re-establish competition in the market for top-level Internet connectivity.

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<sup>169</sup> *ibid* 47-49

<sup>170</sup> *MCI WorldCom/Sprint* (Case COMP/M.1741) Commission Decision 2003/790/EC [2003] OJ L 300/1

<sup>171</sup> *ibid* para 130

<sup>172</sup> *ibid* para 145

<sup>173</sup> *ibid* para 146

<sup>174</sup> *ibid* para 141

As a result of these regulatory positions, the merger between MCI WorldCom and Sprint was abandoned.

Implicit in the merger authorities' analysis here again is the idea of the Internet as a hierarchy. Whether the Internet was hierarchical formed the major difference in opinion between the European Commission, and MCI WorldCom and Sprint: the Commission believed this was indeed the case given the existence of peering between top level providers as the only way that they achieved connectivity while smaller providers had to purchase transit from these top-level networks to achieve the same global connectivity. This hierarchical nature of the Internet was a view shared by some commentators such as D'Ignazio and Giovannetti.<sup>175</sup>

Although there were some dissenting voices such as Economides in the aftermath of these decisions regarding the hierarchical nature of the Internet backbone being based on top tier networks that peer with each other being at the top of that hierarchy,<sup>176</sup> technical and commercial developments in the years since those merger decisions have altered this characterisation of the network of networks and the hierarchical arrangement and terminology is no longer an accurate picture of the Internet,<sup>177</sup> if it ever was in the first place.<sup>178</sup>

## **b) A more complex network topography**

In the interim, certain developments have changed the Internet's topography from a hierarchy to a more complex picture of relations among the interconnected networks which make up the Internet. This has salient consequences for online information flows in terms of identifying where bottlenecks, and thus gatekeepers, now lie, which would seem no longer to be with the backbone providers (as feared in the context of the mergers discussed in the previous section), but instead with retail access providers as they have a valuable commodity, namely their

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<sup>175</sup> Alessio D'Ignazio and Emmanuele Giovannetti, 'Antitrust Analysis for the Internet Upstream Market: A Border Gateway Protocol Approach' (2006) 2(1) *Journal of Competition Law and Economics*, 2

<sup>176</sup> Economides (n 138)

<sup>177</sup> Laura De Nardis, 'Governance at the Internet's Core: The Geopolitics of Interconnection and Internet Exchange Points (IXPs) in Emerging Markets' (40<sup>th</sup> Research Conference on Communication, Information and Internet Policy, Arlington, September 2012) 4

<sup>178</sup> Clark and others suggest that in fact peering took place between networks of a similar size to each other, rather than just between the largest networks. See: David D Clark and others, 'Interconnection in the Internet: The Policy Challenge' (39<sup>th</sup> Research Conference on Communication, Information and Internet Policy, Arlington, September 2011)

customers, whom content and services providers want to reach. Accordingly, this has been driven by the transition to broadband Internet from slower dial-up access, and the new real-time services that could be delivered over it such as Voice over IP (VoIP) and video streaming as well as the emergence of certain Web 2.0 user-generated content aggregators which wish to access users. All of this has contributed to three principal developments which have changed the network topology from the previous hierarchical model.

Firstly, ‘multihoming’ has become more prevalent, which entails smaller ISPs (which would not be able to provide ‘universal connectivity’ themselves and so under the hierarchical model would have to pay the top tier providers for data transit) entering into agreements which allow them to use more than one backbone provider. In this way, the ISP can control how traffic will be routed over these networks, such as by sending the traffic over the route that costs the least or is the quickest at that point in time. Furthermore, many large websites/online content or service providers also ‘multihome’ by using more than one ISP in order to transmit their websites/content/services, as well as deploying their own content delivery networks discussed below. In addition to these multiple agreements with backbone providers, smaller ISPs have also been observed to interconnect and ‘peer’ with each other rather than relying solely on buying transit from top tier providers, particularly in Europe.<sup>179</sup>

Secondly, the rise of ‘real-time entertainment’ such as video on demand or VoIP services being delivered over IP networks (ie the Internet) and the corresponding desire to ensure a certain quality of service for customers in terms of the timing of data packets arriving at their destination and the avoidance of losing packets has been a driver of the development of content distribution networks (CDNs). Implicit in this development too are the emergence of consolidated large online content or service providers in the US and EU, such as Google, Yahoo, Facebook, and Amazon.<sup>180</sup> These desires have generated incentives for major online content providers to seek to gain access to users by deploying their own CDNs at both top tier and lower tier networks, and accordingly content deployment networks have become important players at Internet exchanges.<sup>181</sup> These networks may or may not own their own

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<sup>179</sup> Jonathan Liebenau and others, ‘European Internet Traffic: Problems and Prospects of Growth and Competition’ (London School of Economics White Paper 2013) <<http://eprints.lse.ac.uk/50930/>> accessed 30 August 2014, 3.

<sup>180</sup> Indeed, all of these companies feature in Alexa’s top 20 websites globally and in the top 20 websites in the US, UK, France, Germany, Italy and Spain. See: <<http://www.alexa.com/topsites/global>> accessed 30 August 2014

<sup>181</sup> Liebenau and others (n 153) 21

network infrastructure: if they do not have infrastructure, they typically operate virtually by means of servers deployed within ISPs which host cached content, and in doing so introduce an additional layer of ‘intelligent’ routing by selecting the server that will respond to an end user’s request for content from that provider, such as selecting a server which is geographically close or which will send data over the least congested route.<sup>182</sup> One consequence of the deployment of CDNs is that content providers which are large, rich and popular enough can ensure the speedy provision of their data to users through deploying their networks via agreements with ISPs, while less-visited sites use slower, traditional Internet hosting for the delivery of their content.<sup>183</sup> Another consequence is that certain providers of smaller lower tier networks have a stronger bargaining position for peering or even paid peering arrangements because of the desire of content providers to connect more directly to users,<sup>184</sup> which they would not have had when the Internet was hierarchically arranged.

The growth of this kind of prioritised traffic has increased the prevalence of peering among ISPs and agreements between CDNs and ISPs, thus diminishing the strictly hierarchical structure of the network that was defined in the merger decision discussed above.<sup>185</sup> As a result, concerns about dominance can no longer be limited to network providers at the top of the hierarchy ie the top tier networks, and in fact it is the ‘access networks’ at the edge which should be the focus since a lack of competition in that market can lead to unfair interconnection practices as well as more ‘traditional’ abuses such as impacting upon consumer pricing or harmful discrimination.<sup>186</sup> Furthermore, aside from the competition concerns, these networks also perform a ‘gatekeeper’ function between their customers and the rest of the Internet, and so are in a position to censor or otherwise manipulate the information they send and receive.

Finally, the creation of deep packet inspection (DPI) has also signalled a significant change for online data flows. DPI is a technology deployed at the level of Internet provision to determine the content of the data packets that are travelling through the network at a point in the network which is not an end-point (eg user’s computer terminal), and based on that

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<sup>182</sup> Elisabeth M Maisa, ‘The regulation of internet interconnection: assessing network market power’ thesis (SM thesis, Massachusetts Institute of Technology 2013) 26

<sup>183</sup> Manuel Palacin and others, ‘The Impact of Content Delivery Networks on the Internet Ecosystem’ (2013) 3 *Journal of Information Policy*, 319

<sup>184</sup> De Nardis (n 177) 4

<sup>185</sup> *ibid* 16.

<sup>186</sup> *Ibid* 43

information, the network operator can manipulate the route of that packet accordingly (speed it up, slow it down, remove it, introduce other packets). This represents a major development from predecessor technologies since DPI permits the possibility to analyse and discriminate Internet traffic in real time using one piece of equipment.<sup>187</sup> DPI has various uses, some of which may not be objectionable for Internet users: indeed, it might be highly desirable for users to have data comprising real-time footage of a live performance or sports event, or a voice over IP call, to be prioritised over the sending of emails. However, in practice DPI is being used for more contested purposes, by governments including those of liberal democracies to monitor and censor information their citizens are sending and receiving online, and for private entities to target advertising to Internet users according to their web-browsing habits, to detect suspected copyright infringements and for the broad purpose of ‘network management’ by ISPs in the ‘last mile’ of the network between the ISP and its customer (the user).<sup>188</sup> Further controversial applications of DPI in behavioural advertising such as the Phorm fiasco in the UK and its NebuAd counterpart in the US have resulted in some backtracking from the use of DPI, with it being ‘driven out of the market by political pressure’ in these instances.<sup>189</sup> Indeed, Asghari and others noted a decrease in the use of DPI by ISPs and found that high levels of privacy protection in a certain country reduced the use of DPI while the presence of mandatory Internet filtering (whether for social or political content) in a country increased the likelihood of DPI being present.<sup>190</sup>

It is these latter two developments, of content delivery networks and deep packet inspection used for traffic prioritisation, and their impact on online information flows, which have given rise to the ‘net neutrality’ debate. The focus of the debate has tended to be on the proposed regulation of packet prioritisation via DPI rather than the deployment of CDNs, even though both techniques have the same effect of ISPs prioritising certain content by delivering it quicker than online content whose owner has not paid extra for these services.<sup>191</sup> Both techniques contribute to the situation of certain information flowing across the Internet being

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<sup>187</sup> Ralf Bendorath, ‘Global technology trends and national regulation: Explaining Variation in the Governance of Deep Packet Inspection’ (International Studies Annual Convention, New York City, February 2009) 15

<sup>188</sup> Angela Daly, ‘The Legality of Deep Packet Inspection’ (2011) 14 *International Journal of Communications Law and Policy*

<sup>189</sup> Andreas Kuehn and Milton Mueller, ‘Profiling the Profilers: Deep Packet Inspection and Behavioral Advertising in Europe and the United States’ (2012) <<http://ssrn.com/abstract=2014181>> accessed 16 February 2015, 27

<sup>190</sup> Hadi Asghari and others, ‘Deep Packet Inspection: Effects of Regulation on Its Deployment by Internet Providers’ (41<sup>st</sup> Research Conference on Communication, Information and Internet Policy, Arlington, September 2013)

<sup>191</sup> Palacin and others (n 183) 322-3



favoured and certain information being disfavoured or even blocked entirely, thus affecting free information flows online.

The next section will explain what is meant by ‘net neutrality’ before going on to detail these issues that the prioritisation of certain Internet data brings up for optimal online information flows and user autonomy. This will be followed by a consideration of how existing law and regulation in this area applies to network management practices, with an assessment made of how adequate this law and regulation is to address the concerns identified previously.

### **3.2 Net neutrality explained**

Net neutrality, although a contested term, can be said to be a principle proposed for user access to the Internet, which would prevent ISPs from discriminating between different kinds of Internet traffic, regardless of the amount of bandwidth the traffic takes up, and from restricting content, sites or platforms (at least those which are legal).

As mentioned at the beginning of this chapter, due to the Internet being set up using “end-to-end connectivity” as part of its design, and the network not traditionally interfering with the packets of information passing through the network regardless of the kind or category of information, in this way all information sent (and received) was ‘equal’. This is described as being a position of ‘net neutrality’, which was the ‘default’ for the Internet prior to the development of DPI (and CDNs).

Nevertheless, this type of neutrality has had its complexities: IP protocols are neutral among data applications, with a preference for applications which are not sensitive to delay or signal distortion (such as email); however, with the development of time-sensitive applications such as VoIP and video streaming, ‘it is difficult to regard the IP suite as truly neutral as among all applications’.<sup>192</sup> The reason for implicitly favouring data applications is that IP has no Quality of Service guarantee mechanism, and instead adopts the best efforts approach ie delivering the data packets as quickly as possible over the network.

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<sup>192</sup> Wu (n 115) 149

However, this can still be said to be ‘neutral’ inasmuch as different applications and types of information are treated in the same ‘agnostic’ way by network operators, even if ‘better’ treatment for some may have been desirable from the user’s perspective. Perhaps a better criticism of this functioning of the Internet is that it may also be firmly in the interests of users to depart from this position of ‘net neutrality’ for certain applications and types of information, such as video streaming and VoIP, since for these applications, it is important that there is no time delay otherwise what the user views or hears is distorted. Yet, this kind of departure from net neutrality does not seem to coincide with the kinds of departure from net neutrality that are being implemented by ISPs, and also assumes that there is a ‘natural’ scarcity of bandwidth such that time-sensitive applications and content will experience delay.

Non-net neutral behaviour can take various shapes, with differing consequences:

- Firstly, an ISP could refuse to carry content from a certain provider unless the provider pays extra, effectively threatening to block access to that content by its users.
- Alternatively, it could still carry the content but slow it down or interfere negatively with the quality of service that that content receives, while not blocking it entirely.
- Another scenario would be a content provider and ISP voluntarily (ie without coercion or the threats of blocking) coming to an agreement that would prioritise content from that provider over other types of Internet traffic, with the effect being that either other content is delivered more slowly than before, or that other content outside of this agreement is not delivered more slowly than before, but is delivered more slowly in comparison to the prioritised content.
- A further scenario would be an ISP blocking or degrading a particular class of data in the same way, eg all data coming from VoIP services or peer to peer filesharing services.
- Yet another scenario would be an ISP which is vertically integrated with a content or application provider favouring that content by eg speeding it up.
- Finally, in the context of volumetric pricing (by which users pay ISPs for Internet access at a pre-determined speed and have a maximum download quota, with either lower speeds and/or additional charges on a per MB basis if this quota is exceeded), non-net neutral conduct may be considered to be access to certain information, content or applications online which does not ‘count’ towards this quota, thus making this

data more attractive to users. This has been an issue in Australia for some time,<sup>193</sup> and is emerging elsewhere, particularly the African continent with the Facebook-backed Internet.org project.<sup>194</sup>

### **3.3 Problems arising from network management practices**

The practices of the actors involved in the provision of Internet access to users (whether as consumers or producers of information) and engaging in non-net neutral conduct implicates various issues for users' autonomy.

In the following subsections, the effects of such network management practices and the concerns they raise for online information flows will be discussed, encompassing competition, information gatekeeping and privacy and confidentiality.

#### **a) Competition concerns**

Internet provision can be conceptualised as a two- or multi-sided market, as discussed in Chapter 2.<sup>195</sup> Users are on each side of the market, but on one side they are uploading data and on the other side they are downloading data (although in practice they are often doing both simultaneously), with the ISP providing a conduit through which these information flows, regardless of their direction, travel, thus acting as a gatekeeper over these flows. One competition concern with net neutrality is that that ISPs could leverage this power that they have in controlling what data their customers can access by threatening to block or otherwise interfere with the data packets coming from certain content providers unless they pay for this

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<sup>193</sup> See: Angela Daly, 'Net Neutrality in Australia' in Luca Belli and Primavera De Filippi (eds), *2<sup>nd</sup> Report of the UN IGF Dynamic Coalition on Network Neutrality* (Dynamic Coalition on Network Neutrality, 2014)

<sup>194</sup> See: David Meyer, 'Facebook's Internet.org unveils free, limited web access – such opportunity, but at what cost?' (*Gigaom*, 31 July 2014) <<http://gigaom.com/2014/07/31/facebooks-internet-org-unveils-free-limited-web-access-such-opportunity-but-at-what-cost/>> accessed 30 August 2014

<sup>195</sup> See Chapter 2 section 3 a) ('Characteristics of online markets')

special access. Users may suffer harm inasmuch as their choices are impeded by the ISP – they may have to pay more to access it, or it may not be accessible at all.

These concerns would be raised in particular for ISPs which already have a dominant position in the market/significant market power (SMP), since they would have an interest in determining what information is accessible to their customers for their own business purposes. Such network management practices may encompass refusing passage to certain kinds of information coming from certain sources, or favouring the content or application provided by a vertically integrated subsidiary by giving it quicker or otherwise better passage to its Internet access customers.<sup>196</sup>

If there is a competitive market then in theory a consumer with an ISP that is in some way manipulating what she is sending and receiving will switch to another which is not doing so, assuming there is consumer demand for this.<sup>197</sup> However, if the market is not competitive, if all ISPs see this conduct as advantageous for them and/or if it is difficult to switch ISPs, then there is a problem.

Competition concerns regarding a lack of net neutrality regulation have been more prominent in the US than Europe,<sup>198</sup> given that the European broadband market is considered to be more competitive than the American one. The American regulatory approach has led to a duopoly of integrated broadband access providers (Comcast and AT&T) whereas in Europe an approach has been taken which has led to more competitive wholesale and retail broadband markets and ownership of the local path not being a barrier to entry in the retail market. From the user perspective, it is the retail service that is of immediate concern, since a lack of competition there and the possibility of ISPs at this level manipulating information would be felt most. However, what goes on at the wholesale level can also have an effect on the user experience as well as how much users pay.

However, ISPs' non-net neutral conduct has been justified according to the rationales of

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<sup>196</sup> See: Nicholas Economides, ' "Net Neutrality," Non-Discrimination and Digital Distribution of Content Through the Internet' (2008) 4(2) *I/S: A Journal of Law and Policy for the Information Society* 209

<sup>197</sup> Marsden (n 156) 53; Barbara van Schewick, *Internet Architecture and Innovation* (MIT Press 2010) 259-264

<sup>198</sup> Christopher T Marsden, *European Law and the Regulation of Mobile Net Neutrality*, (2010) 1(2) *European Journal of Law and Technology*

competition, to promote investment and consumer welfare: on the one hand, they claim that they need to act in this way to deal with congestion on the network and/or as a way of raising funds for further investment in infrastructure so as to prevent congestion; and, on the other, that a lack of net neutrality regulation will give them the freedom to develop innovative products and services which will be of ultimate benefit to users.<sup>199</sup> Yet innovation is an argument which has cut both ways, with net neutrality proponents also arguing that regulation is actually necessary in order to promote innovation.<sup>200</sup>

As mentioned above, Internet provision is a two-sided market where ISPs provide the 'platform' permitting the interaction of the two sides of the market, namely those providing Internet content and those receiving Internet content, though it should be borne in mind that it can be the same person or entity performing both of those activities. However, often what is happening is that even in their 'producer' mode, users are generating content which is being uploaded to content platforms controlled by corporate online service providers, such as YouTube or Facebook, and so there is an asymmetry in the flow (as can be seen from the identities of the top 20 websites in the US and EU). Nevertheless, both individual users and content and service providers each pay for their own Internet access, which comprises both their uploading and downloading of data.

The default position of net neutrality entails that content providers do not need to pay individual ISPs an additional amount, including ISPs they do not use for their own connection, to access those ISPs' customers in order to deliver them content. However, as seen above, certain content providers wish to have a privileged access to a certain ISPs' customers and so are willing to pay for this quicker and/or better quality connection, either via their data packets being speeded up by the ISP or via a CDN, or both. Nevertheless, these 'non-neutral' pricing practices have been justified as being necessary for ISPs to invest in the network infrastructure and develop new and innovative products and services, as mentioned above.

In addition, there is increasing vertical integration and consolidation in Internet markets,

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<sup>199</sup> See among others: Gregory Sidak, 'A Consumer-Welfare Approach to Network Neutrality Regulation of the Internet' (2006) 2(3) *Journal of Competition Law and Economics* 349; Hal J Singer and Robert E Litan, 'Unintended Consequences of Net Neutrality Regulation' (2007) 5(3) *Journal on Telecommunications and High Technology Law*; and Christopher S Yoo, 'Network Neutrality and the Economics of Congestion' (2006) 94 *Georgetown Law Journal*

<sup>200</sup> See van Schewick (n 197) 270-273, 289-93

between Internet access providers and providers of online content and applications, either in the form of mergers or in the form of existing players entering new markets. An example of the former is the merger currently proposed between Comcast and Time Warner Cable in the US, which if approved would see the first and second largest cable Internet providers combine and also be part of the same corporate grouping as content provider NBC. As regards the latter situation, Google, which originated as an online content and services provider using the application layer of the Internet, has rolled out a fibre optic network in certain US locations. These trends exacerbate competition concerns since they provide even more incentives to players to prioritise content and services from their own subsidiaries and discriminate against competitors providing similar offerings.

## **b) Free expression**

Net neutrality and the debate around it are born of technical developments and changed business practices in the Internet sphere, but also of an increasing recognition of ISPs as performing the function of an information gatekeeper. This recognition has taken the shape of ISPs being ordered by governments such as in the UK to block illegal content such as child abuse images, information related to terrorism and content which (allegedly) infringes copyright. While these are not net neutrality issues per se, ISPs' wish to operate non-net neutral networks for their own business purposes may see them engaged in a greater private enforcement role in these other areas, which they may not find so desirable due to the regulatory burdens that may be imposed.<sup>201</sup>

In any event, the net neutrality debate has been primarily framed as an 'economic' one, with its solution being competitive markets for Internet provision, content, services and applications.<sup>202</sup> This does not paint the full picture of what is at stake.<sup>203</sup> The control that ISPs exert over their customers on the one hand and other players such as content providers which wish to access those customers does not only have 'economic' consequences: it also has a

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<sup>201</sup> Rob Frieden, 'Internet Packet Sniffing and Its Impact on the Network Neutrality Debate and the Balance of Power Between Intellectual Property Creators and Consumers' (2008) 18(3) *Fordham Intellectual Property, Media and Entertainment Law Journal* 633

<sup>202</sup> Jasper Sluijs, 'From Competition to Freedom of Expression: Introducing art. 10 ECHR in the European Network Neutrality Debate' (2012) 12 (3) *Human Rights Law Review*

<sup>203</sup> Marsden (n 156)1

profound impact on what users can send and receive over their Internet connections, and thus is ‘explicitly normative and political’ – affecting users’ autonomy online.<sup>204</sup>

Specifically, one danger lies in ISPs blocking or filtering content which is otherwise legal for purposes which would not be termed anticompetitive. This could include blocking content which is harmful to the ISP’s ‘brand’ without being illegal, or deemed controversial in some way. Indeed, even in developed Western jurisdictions with guarantees of free expression, instances of these scenarios have actually occurred in practice.<sup>205</sup>

Outright blocking of otherwise legal content and services would constitute an egregious impediment to the free flow of information online, and accordingly the freedom to send and receive information, which is usually conceptualised as falling under legal protections of free expression, such as Article 10 of the European Convention on Human Rights. However, as will be discussed in greater detail below, the right to free expression in the EU and US has usually been conceived of as a right enforceable against nation-states rather than private entities such as most ISPs.<sup>206</sup> This leaves at least an uncertainty, and at most a lacuna, in the law when users’ rights to free expression are infringed by private corporations.

Even network management practices which do not amount to the outright blocking of online content or services are of concern for optimal online information flows and users’ free expression. The prioritisation of certain content or services especially via agreements between ISPs and online content/service providers poses particular problems, since unless these can be termed anticompetitive in some way, then they will not otherwise be regulated unless there are some net neutrality rules in place. However, these arrangements, depending on their precise form, could disadvantage other content and services not included in such an agreement either by slowing it down or by creating a different kind of Internet access where it is cheaper (or otherwise more attractive) for users to be restricted to only accessing this

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<sup>204</sup> *ibid* 19

<sup>205</sup> For instance, in Canada, the telecoms company and ISP Telus blocked its users’ access to the Telecommunications Workers’ Union of Canada’s website during an industrial relations dispute between the parties. See: Cory Doctorow, ‘Phone company blocks access to telecoms union’s website’ (*Boing Boing*, 24 July 2005) <<http://boingboing.net/2005/07/24/phone-company-blocks.html>> (accessed 30 August 2014)

<sup>206</sup> Although in Europe there remain some telecoms companies with shares owned by the state which provide Internet access services, but these are a minority.

prioritised content. An example of this comes from 2012, when Comcast in the US was accused of engaging in non-net neutral behaviour by the CEO of Netflix, an online media-on-demand service, who stated that when using the video-on-demand services of competitors, Comcast counted this usage against its Internet data cap, but use of Comcast's own video-on-demand service did not count towards the cap, thus making Comcast's service more attractive to users.<sup>207</sup> The Facebook-backed Internet.org initiative would seem to operate in a similar way, with some content being offered for zero price but users would have to pay to access other content not included. Thus, deep pocketed entities (which will usually be for-profit corporations) will entrench their powerful positions, making it more difficult for alternatives to sustain themselves or to be set up in the first place.

While some of these practices might engender competition concerns, they also raise the spectres of media pluralism and the digital divide. Media pluralism in particular may be considered to be an 'old media' phenomenon, based on limited spectrum for broadcast media and a large amount of resources being required for all media to operate in print or via broadcast, with these impediment to pluralism being removed to a large extent with the arrival of the Internet (as well as low-cost digital cameras etc), which for content creation and dissemination requires much less resources and spectrum is no longer such an issue – although capacity constraints have emerged as one of the justification for implementing non-net neutral traffic management practices. Whether based on technical restrictions (ie limited bandwidth – but the extent to which capacity is actually a problem is contested – and an alternative to network management could be investment from the government or private entities in more network capacity) or commercial advantage, limitations in what users can receive, especially if what they *can* receive are the products and services of large corporations, signals a return for media pluralism as a topic of concern.<sup>208</sup>

Prioritisation of content poses concerns for the digital divide ie the socio-economic inequality relating to the Internet and ICTs, inasmuch as smaller content or service provider will be priced out of the 'fast lanes', and users may be enticed with free or low-cost offers of

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<sup>207</sup> Reed Hastings, 'Comcast no longer following net neutrality principles' (*Facebook*, 15 April 2012) <<https://www.facebook.com/reed1960/posts/10150706947044584>> accessed 30 August 2014

<sup>208</sup> Kari Karppinen, 'Rethinking media pluralism and communicative abundance' (2009) 11 *Observatorio (OBS\*) Journal* 151



restricted Internet access to content and service providers which have paid a premium for their services to be offered in this way, with ‘full’ Internet access costing more, which may be too much for some.<sup>209</sup>

### **c) Privacy and confidentiality**

Users' privacy is an issue raised indirectly in the context of the net neutrality debate since the use of DPI technology in particular allows ISPs to monitor data about users' behaviour on the Internet, including sensitive data.<sup>210</sup> DPI permits the content of data packets travelling across the Internet to be known by network operators, compromising users' privacy and the confidentiality of their communications.

Indeed, as mentioned in brief above, various controversies surrounding DPI involved the perceived invasion of privacy that its use entailed. Prominent in the EU was the use of DPI in behavioural advertising by Phorm, a US-based targeted advertising company which entered in secret subscriber trials with British Telecom, the UK's largest ISP.<sup>211</sup> DPI was used to take a copy of the ISP's customers' web browsing habits in order to target advertising towards them. However users were unaware that these trials were being conducted and their specific consent to these trials was not sought, seemingly in breach of the EU Data Protection Directive (transposed in the UK in the form of the Data Protection Act 1998) and possibly also in breach of other laws including the E-Privacy Directive and the Regulation of Investigatory Powers Act 2000 vis-à-vis its provisions on interception.<sup>212</sup> The coming to light of these practices in early 2008 provoked public outcry, followed by a ruling from the UK's data protection authority, the Information Commissioner's Office, that Phorm's service would only

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<sup>209</sup> Neil Barratt and Leslie Regan Shade, 'Net Neutrality: Telecom Policy and the Public Interest' (2007) 32(2) *Canadian Journal of Communication* 295, 299. For more on contemporary digital divides, see: Andrea Calderaro, 'Framing the Digital Divide: bridging the gap between users and makers of the Internet' (59th International Communication Association Conference, Chicago, 2009); and Nick Couldry, 'Communicative Entitlements and Democracy: The Future of the Digital Divide Debate' in Robin Mansell and others (eds), *The Oxford Handbook of Information and Communication Technology* (Oxford University Press 2007)

<sup>210</sup> Sluijs (n 170) 13

<sup>211</sup> Brown and Marsden, (n 42) 148

<sup>212</sup> Marsden (n 156) 77-80

be legal if it was run on an opt-in basis for users.<sup>213</sup> While its service was not ruled prima facie to be illegal, it seems that the Phorm subsequently exited the UK market, as mentioned above.

Even if privacy is an incidental concern raised by network management practices in the context of the net neutrality debate, the particular use of DPI encompasses an arguably unnecessary monitoring of data including personal information, contributing to a state of data proliferation rather than minimisation which would better uphold users' privacy and the protection of their data. Furthermore, as can be seen with the Phorm example, the privacy-infringing aspects have led to a great deal of public outcry and uncertainty around the legality of certain uses of DPI vis-à-vis privacy laws – contributing to Asghari and others' observation that ISPs used DPI less in country with high levels of privacy protection.<sup>214</sup>

### **3.4 Existing competition law and sector-specific regulation of Internet provision**

Internet access providers to users in the US and EU operate in markets which are subject to ex ante regulation and ex post competition law. This regulation and competition law will be set up in the following subsections to determine the extent to which they are adequate in addressing the concerns raised in the context of the net neutrality debate which have been identified above.

#### **a) Competition and regulation in the EU**

As mentioned earlier, Internet access to users, whether over fixed lines or mobile networks, is mainly provided in the jurisdictions under consideration by telecommunications companies, which have mostly been private entities in the EU since the liberalisation of the telecommunications sector from the 1980s. Internet access is also provided by cable, fibre and

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<sup>213</sup> Information Commissioner's Office, 'Phorm – Webwise and Open Internet Exchange' (8 April 2008) <[http://web.archive.org/web/20080412034139/http://www.ico.gov.uk/about\\_us/news\\_and\\_views/current\\_topics/phorm\\_webwise\\_and\\_oie.aspx](http://web.archive.org/web/20080412034139/http://www.ico.gov.uk/about_us/news_and_views/current_topics/phorm_webwise_and_oie.aspx)> accessed 16 February 2015

<sup>214</sup> Asghari and others (n 190)

satellite, but DSL via telecoms lines remains most popular.

The EU's telecoms regulatory framework, since the Commission's 1987 Telecoms Green Paper,<sup>215</sup> has promoted intra-platform competition in the form of stimulating competition at the retail, consumer-facing level for fixed line telecoms, rather than inter-platform competition between different technologies such as cable and copper wires which has been a feature of the US regulatory landscape. EU telecoms regulation with its law and neoclassical economics basis has also pursued a 'technology neutral' policy, not overly concerning itself with the type of technology used to deliver services, but more the extent to which markets are competitive. If a market is not competitive, then ex ante regulation will be applied, with the idea of this regulation no longer being needed once competition has been achieved, and market-based solutions will suffice. Indeed, neoliberal ideology giving rise to this approach has been a 'deeply pervasive' force in driving European telecoms regulation over the last few decades.<sup>216</sup>

### **(i) Regulation in telecoms networks**

Users in the EU buying fixed line access to the Internet do so via the services of retail ISPs, which are either the subsidiaries of the entity which owns the telecoms infrastructure (pipes/cables/wires) or are entities which lease this capacity from the telecoms infrastructure provider on a wholesale basis. The entities which own the telecoms infrastructure in European countries are the successors to the formerly state-owned monopoly telecoms operators, but from the 1980s onwards these have almost all been privatised. Nevertheless, some public or partially public operators remain,<sup>217</sup> and the privatised incumbents such as British Telecom (BT), and Telefonica still occupy a major position in (fixed) telecoms markets (including that of Internet provision) of their respective countries, in both up- and downstream markets (ie retail and wholesale Internet access).

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<sup>215</sup> European Commission, Towards a Dynamic European Economy, Green Paper on the development of the common market for telecommunications services and equipment' COM(87) 290

<sup>216</sup> Simpson (n 63)

<sup>217</sup> For instance: Belgacom in Belgium (state owns 53.5%); the French government still owns a minority share in France Telecom; Deutsche Telekom is still partially state owned and owns other incumbents in Europe; Telenor in Norway, considered one of the world's largest telecom operators, is still partially state owned; together the Swedish and Finnish states hold a controlling interest in TeliaSonera.

The 2002 reform of EU telecoms regulation mandated the process of ‘local loop unbundling’ as part of the process of privatisation and liberalisation of telecommunications markets in the EU.<sup>218</sup> This allowed multiple operators to use connections from the telephone exchange to the customer’s premises (this physical wire connection is known as a ‘local loop’ or the ‘last mile’), with these connections’ physical infrastructure being owned by such incumbent, with the aim of creating competitive retail markets for telecoms services.

The 2002 reform included a regulation to mandate incumbent operators with significant market power (broadly equivalent to a dominant position) to meet reasonable requests for unbundled access to the local loop.<sup>219</sup> The local loop or last mile can be used by competitors to the infrastructure owner in retail markets to provide telecoms and data services, including Internet access, while the infrastructure owner is also usually active in these markets with its downstream business or subsidiaries, with the notable example of British Telecom which has been ‘functionally separating’ its retail and wholesale businesses after being instructed to do so by Ofcom in 2005.<sup>220</sup>

The suite of instruments adopted in 2002 were amended in 2009 by two further Directives and a Regulation.<sup>221</sup>

The result of this regulatory framework has been that national regulatory bodies are required

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<sup>218</sup> The 2002 reform comprised the following instruments: Council Directive 2002/21/EC of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) [2002] OJ L108/33; Council Directive 2002/20/EC of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive) [2002] OJ L108/21; Council Directive 2002/19/EC of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive) [2002] OJ L108/7; Council Directive 2002/22/EC of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive); Council Directive 2002/58/EC of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (E-Privacy Directive) [2002] OJ L201/37; Council Directive 2002/77/EC of 16 September 2002 on competition in the markets for electronic communications networks and services [2002] OJ L249/21; and Council Regulation (EC) 2887/2000 of 18 December 2000 on unbundled access to the local loop [2000] OJ L336/4

<sup>219</sup> Council Regulation (EC) 2887/2000 of 18 December 2000 on unbundled access to the local loop [2000] OJ L336/4

<sup>220</sup> OFCOM, ‘BT OSS Separation Statement’ (21 June 2007) <[http://stakeholders.ofcom.org.uk/consultations/bt\\_oss/statement/](http://stakeholders.ofcom.org.uk/consultations/bt_oss/statement/)> accessed 30 August 2014

<sup>221</sup> Council Directive 2009/136/EC of 25 November 2009 amending the Universal Service Directive and the Data Protection Directive [2009] OJ L337/11; Council Directive 2009/140/EC of 25 November 2009 amending the Framework Directive, the Access Directive and the Authorisation Directive [2009] OJ L337/37; and Council Regulation (EC) 1211/2009 of 25 November 2009 establishing the Body of European Regulators for Electronic Communications (BEREC) and the Office [2009] OJ L337/1

to impose ex ante regulatory obligations on entities in the electronic communications sector which have significant market power in relevant markets. The Commission has published Recommendations on the relevant product and service markets to be regulated in 2002,<sup>222</sup> with an updated version in 2007,<sup>223</sup> and then again in 2014.

The 2002 Recommendation included six retail telecoms markets, but only one of these (the market for access to the public telephone network at a fixed location for residential and non-residential customers) was still included in the 2007 Recommendation. Wholesale broadband markets have been included in these Recommendations as being markets for which national telecoms regulators should use ex ante regulation to address competition problems, due to high barriers to entry in this market, the market structure not tending towards effective competition and (ex post) competition law alone being insufficient to address market failure.<sup>224</sup> However, user-facing retail broadband markets have not been included in this list of markets which required ex ante regulation, and so competition therein is deemed to be in a healthier state. Also, it seems that this market definition excludes broadband provided over cable networks and so in principle this form of broadband provision is not subject to the ex ante obligations.<sup>225</sup> Furthermore, the 2014 Recommendation does not include the remaining retail telephony market for access at a fixed location, and rearranged the market for wholesale broadband access into three new markets: wholesale local access provided at a fixed location (Market 3a); wholesale central access provided at a fixed location for mass-market products (Market 3b); and wholesale high-quality access provided at a fixed location.

As regards mobile telephony markets, the Commission considered in 2007 that significant market power also existed over voice call termination on individual mobile networks, and so this constituted other market susceptible to ex ante regulation. This market has been retained in the 2014 Recommendation.

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<sup>222</sup> Commission Recommendation of 11 February 2003 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services [2003] OJ L114/45

<sup>223</sup> Commission Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services [2007] OJ L344/65

<sup>224</sup> European Commission, 'Commission acts to reduce telecoms regulation by 50% to focus on broadband competition' (13 November 2007) <[http://europa.eu/rapid/press-release\\_IP-07-1678\\_en.htm?locale=fr](http://europa.eu/rapid/press-release_IP-07-1678_en.htm?locale=fr)> accessed 30 August 2014

<sup>225</sup> Hou and others (n 161)

In any event, there are various provisions from the Telecoms Package relevant to the current discussion on the regulation of Internet provision in Europe and the net neutrality debate in particular.

Firstly, national regulatory authorities must promote competition in the provision of electronic communications networks (which would include Internet providers) by ensuring that users ‘derive the maximum benefit in terms of choice, price and quality, and by ensuring that there is no distortion or restriction of competition, including in the transmission of content, as well as promoting the interests of citizens by encouraging the provision of clear information, particularly about tariffs and conditions for using communications services and by encouraging the ability of users to access and distribute information or run applications and services of their choice’.<sup>226</sup> While this kind of promotion of competition for Internet provisions would be in line with addressing some concerns over a lack of net neutrality, such as seeking to ensure competitive content markets and transparency for users regarding what the service they have purchased entails, it still has been insufficient to guarantee net neutrality in practice in Europe, as will be seen below.

There are also specific instructions in the Access Directive of the Telecoms Package to national regulatory bodies when dealing with an operator with significant market power.<sup>227</sup> This is relevant for Internet provision since, as already mentioned, the European Commission considers wholesale broadband markets to have operators with SMP existing in them, although not retail level markets. A designation of SMP enables national regulatory authorities to impose certain ex ante regulatory obligations on undertakings found to have SMP, including concerning transparency and non-discrimination in relation to interconnection or access, accounting separation, access to and use of specific network facilities, and price control and cost accounting obligation.<sup>228</sup> The Access Directive also contains an obligation for the operators of public communications networks to negotiate access and interconnection with each other,<sup>229</sup> and national regulatory authorities are also empowered to impose access and interconnection obligations even where there is not a SMP designation on undertakings controlling access to users ‘to the extent that is necessary to ensure end-to-end

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<sup>226</sup> Article 8 of the Framework Directive

<sup>227</sup> Articles 14-16 of the Framework Directive

<sup>228</sup> Articles 9-13 of the Access Directive

<sup>229</sup> Article 4 of the Access Directive

connectivity’.<sup>230</sup>

Finally, the Universal Services Directive details various transparency obligations incumbent on communications providers. These comprise the provision of information on the services being contained in contracts made with users including whether there are any conditions limiting access and the use of services and applications (so long as these conditions are legally permitted), the minimum service quality levels offered, any procedures put in place to measure and ‘shape’ traffic and how these procedures could affect service quality.<sup>231</sup> National regulatory authorities also have the power to set minimum quality of service requirements in order to prevent the degradation of service and the hindering or slowing down of traffic over networks.<sup>232</sup>

While some of this existing telecoms regulation in the EU might go some way to protecting net neutrality interests of users, it does not protect against all the prejudicial effects of non-net neutral conduct by ISPs as detailed at the beginning of this chapter. The regulation is highly economics-oriented, its more weighty obligations do not apply to most ISPs, and in any event some of the provisions that might protect against the adverse effects of non-net neutral conduct are optional for national regulatory authorities and seem not to have been enforced in practice.

Firstly, significant market power has only been found to exist in DSL wholesale broadband markets, and not in retail broadband markets. Given that most of the regulatory obligations are triggered by this designation, only ISPs with SMP in the wholesale markets will be encumbered, and only for the wholesale part of their conduct. As a result, competition law is currently the main regime which governs retail ISPs’ conduct in this area, with the exception of the Netherlands and Slovenia where national legislation on this issue has been enacted (which will be discussed below).<sup>233</sup> Indeed, as Sluijs points out, Member States which have pursued the cementing of a net neutrality principle so far have done so via legislative means rather than via the NRA, and, by implication, circumventing the existing European regulatory

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<sup>230</sup> Article 5(1)(a) of the Access Directive

<sup>231</sup> Article 20 of the Citizens’ Rights Directive

<sup>232</sup> Article 22 of the Citizens’ Rights Directive

<sup>233</sup> On the experience with net neutrality legislation in the Netherlands, see: Nico Van Eijk, ‘The Proof of the Pudding is in the Eating: Net Neutrality in Practice, the Dutch Example’ (42<sup>nd</sup> Research Conference on Communication, Information and Internet Policy Arlington, September 2014)

framework.<sup>234</sup> Furthermore, it is unlikely that the Commission would add more markets to those in which it finds SMP since it has stated its aim as progressively reducing this ex ante regulation in line with its neoliberal deregulatory approach, with the view that competition in the markets will develop and electronic communications will ultimately be governed only by competition law.<sup>235</sup>

Nevertheless, as mentioned above the current Telecoms Package does contain an interconnection regime which would go some way to preventing an Internet access provider from blocking or possibly severely degrading their users' access to content.<sup>236</sup> It would seem to apply to Internet providers which both owned the underlying infrastructure and those which did not, and also would apply irrespective of whether an entity has significant market power (and independently of any interconnection obligations under the SMP regime). In the discussion on the Access Directive, national regulatory authorities can impose obligations on such 'undertakings that control access to end-users' including an obligation to interconnect their networks in order to ensure end-to-end connectivity.<sup>237</sup> Part of this end-to-end connectivity would seem to implicate 'network operators [which] restrict unreasonably end-user choice for access to Internet portals and services'.<sup>238</sup> If these interconnection obligations are imposed in a particular Member State on all providers, this may entail that they are not permitted to block their users from receiving certain content. This interconnection obligation could also be applied to Internet access providers which are excessively degrading certain content in a way which is analogous to blocking and inhibiting end-to-end connectivity. It is unclear what an 'unreasonable restriction' of end-user choice might mean, and it seems unlikely that non-net neutral conduct which does not involve the outright blocking of certain Internet content and services would even be covered by these provisions. Furthermore, it seems that in practice national regulators have chosen not to implement them.

Thus current ex ante regulation in the EU is largely ineffective in addressing net neutrality

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<sup>234</sup> Sluijs (n 202)

<sup>235</sup> See, for instance, Recital 5 to Council Directive 2009/140/EC of 25 November 2009 amending Directives 2002/21/EC on a common regulatory framework for electronic communications networks and services, 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities, and 2002/20/EC on the authorisation of electronic communications networks and services [2009] OJ L 337

<sup>236</sup> In Articles 4 and 5 of the Access Directive

<sup>237</sup> Article 5(a) of the Access Directive

<sup>238</sup> Recital 6 of the Access Directive



problems since the SMP regime does not apply to the majority of ISPs (including all retail ISPs) and optional interconnection obligations have not been implemented. While exiting ex ante regulation has the potential to solve some of the net neutrality concerns, the likelihood of the Commission designating the retail broadband market as one exhibiting deficiencies of competition is remote, as is the likelihood of all national regulators implementing the interconnection obligations. Though there have been some moves in some EU Member States to introduce more legislation or regulation addressing net neutrality, this emerging patchwork approach (as well as the Europe-wide net neutrality violations observed by BEREC) may have encouraged action at the supranational level, discussed below.

## **(ii) Competition in fixed line Internet markets**

Although telecommunications are a specifically regulated sector in Europe, the CJEU recognised in 1985 that the competition rules also applied to undertakings in that sector.<sup>239</sup> Moreover, the ‘first generation’ directives adopted at the beginning of the liberalisation process provided that the sector-specific regulation operated without prejudice to the application of competition rules.<sup>240</sup> The CJEU’s decision in *Deutsche Telekom* established that even where a sector specific regulatory structure exists and has been enforced by a regulator, competition law can still operate to deal with a complaint regarding alleged anticompetitive conduct on a similar matter.<sup>241</sup>

Despite the attempts to introduce competition and weaken the market power of the incumbents in the markets for broadband Internet provision and other telecoms services, there have still been significant issues in the domestic markets of certain European Member States involving abuses of dominance in the forms of ‘margin squeeze’,<sup>242</sup> predatory pricing<sup>243</sup> and

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<sup>239</sup> Case 41/83 *Italy v Commission of the European Communities* [1985] ECR 510

<sup>240</sup> Nicolas Petit, ‘Circumscribing the Scope of EC Competition Law in Network Industries – A Comparative Approach to the US Supreme Court Ruling in the *Trinko* Case’ (2004) 5 *Journal of Network Industries* 347, 358

<sup>241</sup> Case C-280/08 P *Deutsche Telekom AG v. European Commission* [2010] ECR I-09555

<sup>242</sup> Margin squeeze is an exclusionary form of abuse of dominant position held by a vertically integrated entity at one level of a supply chain in the context of that entity facing competition or the prospect of competition at another level of the supply chain and has some influence on the prices at that level of the chain. The squeeze happens when the dominant entity is able to influence the relationship between the ‘upstream’ price it sets and the prevailing price in the ‘downstream’ market in a way that forces a competitor or potential competitor out of the downstream market. Notable margin squeeze cases are: *Deutsche Telekom* (n 194); and *Wanadoo Espana v*

the hindering of access to the network<sup>244</sup> by the incumbent vertically integrated telecoms providers.

While these cases show significant market power is still wielded by the owners of the local loop and this does have an effect on the final prices and choice that Internet users in Europe experience, these more ‘classical’ cases of anticompetitive conduct do not go to the heart of the issue of net neutrality. European competition authorities have not been particularly active in investigating ISPs’ network management practices such as blocking, prioritising or degrading access to certain content and applications, while, they have been more alert to more straightforward anticompetitive behaviour in broadband Internet markets, such as the margin squeeze cases. Indeed, to date there has been no case brought before the European Commission or Courts on the basis of Art 102 TFEU which implicates at least the overt competition aspect of net neutrality.

Yet part of the explanation as to why network management practices have not been investigated by competition authorities may well be due to this conduct not necessarily constituting a violation of European competition law. Certain network management practices, if carried out by a provider with a dominant position in the relevant market, might be judged abusive under Art 102 TFEU. If the provider does not have a dominant position, then this conduct is unlikely to be anticompetitive.

Retail broadband markets in the EU are generally competitive, evidenced by the fact that the Commission did not consider this a market which required ex ante regulation to address competition issues, though the extent to which they are competitive, at least based on the market power of incumbents, depends on the Member State in question.<sup>245</sup> In some Member States (especially smaller countries), the market share of the telecoms incumbent in the retail broadband market can be around 50%,<sup>246</sup> which may be considered a dominant position in the EU. Nevertheless, retail broadband access markets in the EU are more competitive than their

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*Telefonica* (Case COMP/38.784) Commission Decision of 4 July 2007 [2007] OJ C86/6

<sup>243</sup> Such as: *Wanadoo Interactive* (Case COMP/38.233) Commission Decision of 16 July 2003

<sup>244</sup> *Telekomunikacja Polska* (Case COMP/39.525) Commission Decision of 22 June 2011

<sup>245</sup> European Commission, Digital Access for Europe Scoreboard ‘Fast and ultra-fast Internet access – analysis and data’ (2013) <<https://ec.europa.eu/digital-agenda/sites/digital-agenda/files/DAE%20SCOREBOARD%202013%20-%20BROADBAND%20MARKETS%20.pdf>>

(accessed 30 August 2014) 58

<sup>246</sup> *ibid*

counterparts in the US, and the likelihood of a retail ISP having a dominant position in a European market is ‘severely reduced’.<sup>247</sup>

If there is no one firm which could be considered to have a dominant position, it is possible that a group of firms acting together in a way which approximates that of a single dominant firm could have a ‘collective’ dominant position. If they have been agreeing with each other explicitly to act in a certain way, then this would be assessed under Art 101 TFEU, but if their coordination has been ‘implicit’ or ‘tacit’ and together they would hold a combined market share approximating a dominant position then if they are acting abusively this conduct may be assessed under Art 102 TFEU. However, collective dominance seems to require the firms involved behaving in a parallel manner to each other on the market. This often involves pricing patterns but in the context of network management collective restrictions in the ‘quality’ of the service would be more relevant, such as all firms which are collectively dominant discriminating, blocking or degrading certain Internet content in the same way. The European Commission has adopted merger decisions on the basis that the characteristics of the market in question (mobile telephony) might lead to tacit collusion,<sup>248</sup> but de Streeel considers that few electronic communications markets will fulfil the conditions for collective dominance.<sup>249</sup> While this remains a possibility, in practice it does not seem that European Internet access markets provide practical examples of collective dominant positions, and even then they may have an ‘objective justification’ regarding network congestion to justify their conduct.

Anticompetitive conduct in the form of an abuse of dominance in the context of network management is most likely to be found in a dominant retail Internet access provider which is vertically integrated with Internet content or applications subsidiaries and is favouring its own content over that of competitors by slowing their content down or blocking it entirely. However, as mentioned, given that European retail broadband markets tend to be reasonably competitive, users may also provide a competitive constraint with their ability to switch to another provider - although this depends on how easy switching is. Users are often locked

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<sup>247</sup> Filomena Chirico and others, ‘Network Neutrality in the EU’ (TILEC Discussion Paper 2007) <<http://ssrn.com/abstract=1018326>> (accessed 30 August 2014) 25

<sup>248</sup> *Vodafone/AirTouch* (Case COMP/M.1795) Commission Decision [1999] OJ 1999 C295/2 and *France Telecom/Orange* (Case COMP/M.2016) Commission Decision [2000] OJ C261/6

<sup>249</sup> Alexandre de Streeel ‘Remedies in the Electronic Communications Sector’, in Damien Geradin (ed), *Remedies in Network Industries: EC Competition Law vs. Sector-Specific Regulation* (Intersentia 2004) 75

into long contracts with their ISPs (usually of at least 12 months but sometimes up to 24 or 36 months and sometimes with automatic extensions if the consumer does not opt out)<sup>250</sup> which may function as an impediment to switching and may weaken the power of consumers as competitive constraints.

In practice, dominant positions are more likely to be found in another market, namely that of wholesale broadband access (which is subject to ex ante regulation under the SMP regime described above). These entities are often vertically integrated with a retail broadband access subsidiary and may also be vertically integrated with a content provider subsidiary as well. Such a firm may try to favour this content by attempting to leverage its dominant position in the wholesale broadband market into the Internet content market by discriminating in favour of its subsidiary, which could constitute an abuse of a dominant position. The complication here, however, is that the ‘interim’ market over which the leveraging takes place is the retail broadband market, on which the vertically integrated provider may not have a dominant position - and if there is no dominant position here, then there may not be a finding of abuse of dominance. However, the scenario is conceivable that all users had an interest in receiving certain attractive content or services from another user (such as an IPTV provider – either connected to or independent of the vertically integrated player) and the vertically integrated ISP managed to use its wholesale network to deliver that data more quickly or with a better quality of service to its retail ISP customers than to the customers of competitors at the retail level which access its wholesale network. In this way, the vertically integrated ISP may be leveraging its dominant position from wholesale into retail Internet access markets.

It is this market for wholesale broadband access that the European Commission had recently been investigating for suspected anticompetitive conduct in the form of abuses of dominance by Orange, Deutsche Telekom and Telefonica in their negotiation of wholesale Internet connections with parties such as large online content providers and Internet backbone providers for international access and interconnection.<sup>251</sup> However in late 2014, the Commission closed the case, stating that the telecoms operators’ conduct did not appear to

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<sup>250</sup> See: Victoria Baltrusch, ‘A Practical Study in Comparative Law and European Private Law – Automatically Renewable Contracts’ (University of Warwick IATL Report)

<sup>251</sup> European Commission, ‘Antitrust: Commission confirms unannounced inspections in Internet connectivity services’ (memo, 11 July 2013) <[http://europa.eu/rapid/press-release MEMO-13-681\\_en.htm?locale=en](http://europa.eu/rapid/press-release_MEMO-13-681_en.htm?locale=en)> accessed 30 August 2014.

breach EU competition law due to excluding competitors from the Internet transit market or Internet content markets (by providing an unfair advantage to the operators' own content services), although it would continue to monitor the sector closely.<sup>252</sup> This closed investigation follows a 2012 decision by the French competition regulator that Orange (then France Telecom) could obtain payments from Cogent Communications Group (a major backbone provider that also provides services to Google), for additional trans-Atlantic capacity without it being an abuse of dominance, since it did not refuse Cogent access to its customers and did not seek to charge for existing capacity which had been provided free of charge.<sup>253</sup>

A vertically integrated broadband access provider (ie combining wholesale and retail broadband functions) which does not have a subsidiary content provider might still wish to offer a better quality of service to an unaffiliated content provider for an extra fee. If the provider has a dominant position on the retail market, then this could be conceptualised as the dominant entity trying to exclude its retail broadband competitors by raising their costs by leading them to give similar treatment to content providers or lose their market share. Thus, it may be found to be an abuse of dominance due to discriminatory practices.<sup>254</sup> Another relevant dominant position may, however, be found over the content itself – for instance if it is 'premium content' such as major sports events or Hollywood blockbuster movies, and there the scenario may be that the vertically integrated entity is abusing its dominance over this content by delivering it more quickly and attractively via its retail ISP.<sup>255</sup>

A retail-only broadband provider in Europe, even with a vertically integrated content subsidiary, is unlikely to have a dominant position in the relevant market, ie retail broadband access to users. Even if it is favouring its subsidiary's content, this will not be an abuse of

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<sup>252</sup> European Commission, 'Antitrust: Commission closes investigation into internet connectivity services but will continue to monitor the sector' (press release, 3 October 2014) <[http://europa.eu/rapid/press-release\\_IP-14-1089\\_en.htm](http://europa.eu/rapid/press-release_IP-14-1089_en.htm)> accessed 17 February 2015

<sup>253</sup> 'Internet Traffic – Peering Agreements' (Autorité de la concurrence press release, 20 September 2012) <[http://www.autoritedelaconcurrence.fr/user/standard.php?id\\_rub=418&id\\_article=1971](http://www.autoritedelaconcurrence.fr/user/standard.php?id_rub=418&id_article=1971)> accessed 30 August 2014

<sup>254</sup> Chirico and others (n 248) 34-35

<sup>255</sup> This is currently the set-up in Australia with Telstra, which is the incumbent telecoms operator, owns wholesale and retail Internet provision, and also owns a 50% share in Foxtel, the exclusive licensee in Australia of a great deal of 'premium content'. Telstra has offered 'unmetered' access to some of this premium content to its own retail ISP customers in the past, while the customers of other ISPs could only access the content on a metered basis, and before 2013 this content was not available via the mobile networks of Telstra's competitors at all. See: Daly (n 193)

dominance unless it is actually dominant in the retail broadband market. A retail-only broadband provider which is not vertically integrated with a subsidiary content provider but which is discriminating in favour of a certain content provider (eg because the two parties have a special agreement whereby the content provider pays for this special service) is unlikely to be abusive as it is unlikely too to have a dominant position in any market.

If an ISP is blocking its users from accessing certain content entirely and this cannot be conceptualised as a form of discrimination (eg blocking certain competing content in order to favour a subsidiary's content) then this could be construed as an abusive refusal to supply. Absent discrimination, the theory of harm would be that the ISP is blocking this content from its users and so the content provider is being excluded from the content market thus depriving users of choice. In order for this to constitute an abuse of dominance, firstly the relevant market must be defined and the ISP must be found to have a dominant position in that market. If the relevant market is that of retail broadband, then yet again it would be unlikely (but not impossible) that the ISP would have a dominant position.

If it does not have a dominant position on that market, then another possibility might be that each ISP has its own content 'termination' market between its users and the rest of the Internet, similar to termination markets for voice calls (which have been found to exist in Europe and regulated according to the SMP regime as mentioned above, with price caps imposed) with each ISP being dominant in its own market. In some ways the two situations are similar, since both voice calls and Internet content must be routed through the provider's access network in order to reach the user who is a customer of the provider, but there is an important difference between the two, namely that the user is insensitive to the prices imposed at the wholesale level for the termination of voice calls while for Internet content, each time an user makes a request for certain content, if it is blocked or has a degraded quality, this is immediately obvious to that user, thus providing some kind of restraint on the conduct of the ISP.<sup>256</sup> Unlike the voice call provider, this entails on the wholesale market the ISP cannot behave independently of its competitors and customers.

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<sup>256</sup> Winston Maxwell, 'Net neutrality and European competition law' (*Lexology*, 28 January 2011) <<http://www.lexology.com/library/detail.aspx?g=8e217437-7d78-44be-800f-d312261543e4>> accessed 30 August 2014

If a dominant position can be found, in either market, then there are other criteria that must be fulfilled as well if the refusal to deal is to be termed abusive conduct. Firstly, the ISP's network must be 'indispensable' for competing in the downstream market (ie Internet content) ie it is an 'essential facility'. Particularly if the relevant market is that for retail broadband access, it is highly unlikely that access to a particular ISP's customers would be found to be 'indispensable' for competing in the Internet content market given the presence of other retail broadband access providers competing in this market through which the content provider could access users (even if they may have to switch provider). Furthermore, even if the market is defined very narrowly as a termination market, Chirico and others posit that it would still not fulfil this requirement of indispensability since the case law, especially *Bronner*,<sup>257</sup> has not found there to be an essential facility where there are other possible distribution methods for the content provider, even if they are not contained within the same termination market.<sup>258</sup>

In any event, in this scenario of a retail broadband provider blocking certain content (but this not amounting to discrimination), the further essential facility requirement of refusal to grant access leading to elimination of effective competition in the downstream market for Internet content may also not be fulfilled since unless the ISP blocking the content has a content subsidiary or is otherwise active in that market, its blocking of that content may not exclude or eliminate competition on the content market.

Another network management scenario would be Internet access providers entering into agreements with certain content providers in order to provide them a certain quality of service, whether in terms of speed or reliability of the connection, to the Internet access provider's users. This market may also be two-sided inasmuch as the Internet access provider may also charge users different prices depending on the quality of service offered for certain content. The way in which this could be done technically could involve various kinds of technologies, but DPI would be one option, as would content delivery networks. A side-effect of permitting this conduct may be that other content for which an extra quality of service is not paid may experience degradation. Such degradation by an Internet access provider may constitute an abuse of dominance if that provider is indeed dominant, since this degradation

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<sup>257</sup> Case C-7/97 *Oscar Bronner v Mediaprint* [1998] ECR I-7791

<sup>258</sup> Chirico and others (n 248) 38

of service may be so severe that the content provider affected is unable to compete. Nevertheless, the access provider may argue that it has an objective justification to degrade in the form of a legitimate business reason (so long as this kind of conduct is not illegal), and the content provider is free to pay more in order to acquire a better quality of service.<sup>259</sup> Also, the Internet access provider may try to argue that charging for a premium quality of service is necessary to ensure sufficient funds for investment in improving the network infrastructure, and that this justifies the conduct (although currently there is no way of ensuring that the extra revenue generated from such services is actually spent on these improvements).<sup>260</sup> If an Internet access provider does not have a dominant position and is degrading traffic from content providers which have not paid extra for an improved quality of service, then if its competitors are behaving in a similar way this conduct may constitute either anticompetitive price fixing contrary to Art 101, or perhaps an abuse of a collective dominant position.

In sum, the operation of competition law regarding network management practices pivots on whether the Internet access provider has a dominant position in the relevant market. In the absence of this dominant position, its network management conduct is unlikely to be anticompetitive, unless collusion with competitors or collective dominance can be shown – or the content or services to which it is giving priority over its network form a dominant position in their own market. It seems that the scenario in which anticompetitive conduct is most likely to be found is when there is a provider with a dominant position in the Internet wholesale market. While it is possible a provider may have a dominant position in a retail market, this is less likely as these markets are generally considered competitive in the EU. While in theory EU competition law could operate to address non-net neutral conduct by dominant entities, it is unlikely to apply to non-net neutral conduct by non-dominant ISPs, and indeed to date it is possibly only the Commission's investigation into Orange, Deutsche Telekom and Telefonica where any non-net neutral conduct by ISPs is being investigated as a possible infringement of competition, and this is not at the retail level. Thus it would seem that many network management practices by retail ISPs are likely to be permissible and that while non-net neutral conduct by wholesale ISPs may not be permissible in theory, in practice it may not be investigated.

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<sup>259</sup> *ibid* 58

<sup>260</sup> *ibid* 62



## **b) Competition and regulation in the US**

Telecoms regulation and policy in the US has also been profoundly influenced by neoliberalism in the last few decades,<sup>261</sup> although it differs in important ways from the European trajectory. Firstly, telecommunications from their inception in the US have been private, corporate entities (as opposed to the state-owned companies which operated in Europe). Furthermore, platform competition has been the policy pursued with regard to fixed-line broadband Internet provision, between cable Internet (provided by Time Warner, Comcast and Cox Communications) and DSL (provided by AT&T). As mentioned above, an effective 'duopoly' is considered to exist between Comcast and AT&T for fixed-line broadband provision in many geographical areas of the US, and the overall situation is considered to be less competitive than in Europe.<sup>262</sup>

### **(i) Regulation in communications networks**

Communications in the US are regulated by the Federal Communications Commission (FCC). The FCC decided in 1999 that it would not impose any regulation on cable provision of the Internet at that time, and subsequently classified cable modem services (ie Internet provision via cable TV) as 'information services' in 2002. The FCC in 2005 extended the same classification to telephone company Internet access services (ie DSL, or wireline broadband Internet access).

Telecommunications services in the US have traditionally been subjected to 'common carrier' obligations which have their origins in special duties the English common law imposed on certain professions to service anyone who sought service, on just and reasonable terms and without discrimination,<sup>263</sup> and in the telecoms context this has resulted in a duty to interconnect with other carriers engaged in similar enterprises.<sup>264</sup> The common carrier

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<sup>261</sup> Barney Warf, 'Oligopolization of Global Media and Telecommunications and its Implications for Democracy' (2007) 10(1) *Ethics, Place and Environment* 89

<sup>262</sup> Chirico and others (n 248) 25

<sup>263</sup> James B Speta, 'A Common Carrier Approach to Internet Interconnection' (2002) 54 *Federal Communications Law Journal* 225, 251

<sup>264</sup> *ibid* 268

obligations for telecoms services can be found in Title II of the Telecommunications Act and oblige all carriers to interconnect pursuant to reasonable terms and conditions, and not to discriminate.

However, initially the FCC did not subject computer data processing service providers to common carrier regulation,<sup>265</sup> and thus these services did not have to abide by the provisions of Title II of the Telecommunications Act. The classification of Internet provision as an information service thus follows this lineage. Yet, the non-application common carrier application to Internet provision has been termed as a ‘radical departure from the deregulatory policies for other transportation and telecommunications network infrastructures’ given common carrier policies’ previous successes in facilitating widespread availability, affordability and reliability, and one motivated by neoliberal ideology rather than a basis of real-world evidence.<sup>266</sup>

Nevertheless, classification as an information service does not entail that there is no regulation at all of that service. Instead, the FCC can regulate the service under its ancillary authority in Title I of the Telecommunications Act (ie if the assertion of jurisdiction is ‘reasonably ancillary to the effective performance of [its] various responsibilities’). It is unclear as to the exact extent of the authority the FCC has under Title I to regulate Internet provision, and this has proved controversial in practice regarding the FCC’s attempts to introduce net neutrality rules, which will be discussed in greater detail below.

One major point of divergence between the European and American regulatory approaches outlined here is the more technology and service neutral approach taken in the EU Telecoms Package compared to the technology-based definitions enshrined in US telecoms law.<sup>267</sup> This provides more flexibility for the European regulatory scheme to deal with new technologies or new uses of technologies in the definition of markets, especially in the context of convergence blurring regulatory categories.<sup>268</sup> It is submitted that this conceptual suppleness

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<sup>265</sup> Jason Oxman, ‘The FCC and the Unregulation of the Internet’ (Federal Communications Commission OPP Working Paper 1999) 9

<sup>266</sup> Barbara A Cherry, ‘Challenges of institutional governance for network infrastructures: Reinstitution and expansion of legal innovations’, in Gerald R Faulhaber and others (eds) *Regulation and the Performance of Communication and Information Networks* (Edward Elgar 2012) 29-30

<sup>267</sup> J Scott Marcus, ‘The Potential Relevance to the United States of the European Union’s Newly Adopted Regulatory Framework for Telecommunications’ (2003) 2 *Journal on Telecommunications and High Technology Law* 111, 128

<sup>268</sup> *ibid* 138

in the European regulatory scheme has led to the regulation of Internet provision/ISPs by the EU and/or national telecoms regulators not being particularly controversial in itself, unlike the situation in the US, whose technology-specific regulatory framework coupled with a pervasive ideology of regulatory forbearance has contributed to it being difficult in practice for the FCC to regulate Internet provision under its Title II common carrier authority.

## **(ii) Operation of competition law**

The relationship between competition and sector-specific telecoms regulation is more complex in the US compared to the position in the EU.

This very relationship between the sector-specific regulation of the Telecommunications Act and the antitrust regime of the Sherman Act was the issue at hand in *Verizon v Trinko*, in which the Supreme Court held that while the Telecommunications Act did not stop the operation of the Sherman Act in this area, it also did not create new claims that went beyond these existing standards.<sup>269</sup> Justice Scalia, delivering the court's opinion, considered that Verizon's alleged insufficient assistance in the provision of services to rivals constituting a breach of common carrier duties under the Telecommunications Act was not a recognised antitrust claim under the existing refusal-to-deal jurisprudence of the Court. Although the Telecommunications Act did not preclude claims that satisfied existing antitrust standards, it also did not create new claims that went beyond those existing standards. On the facts, the Court considered that Verizon's alleged insufficient assistance to competitors was not a recognised antitrust claim according to the Court's precedents.

The case has come to be considered as delineating the boundary between regulation and the operation of antitrust, that they serve as substitutes rather than complements.<sup>270</sup> The decision suggests that antitrust's role is subsidiary in regulated sectors and operates where no sector specific remedies are available.<sup>271</sup> This may differ from the approach in the EU, where, as seen above, sector-specific regulation is considered to operate without prejudice to

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<sup>269</sup> *Verizon Communications v Law Offices of Curtis V Trinko, LLP* 540 U.S. 398 (2004)

<sup>270</sup> Timothy J Brennan, 'Essential Facilities and Trinko: Should Antitrust and Regulation be Combined?' (2008) 61(1) Federal Communications Law Journal 133, 141

<sup>271</sup> Petit (n 241) 357

competition law, and novel categories of abuses of dominance have been found in the margin squeeze cases, even though this is an area where there is ex ante regulation to address significant market power. This differing in approach between the EU and the US may be explained by the fact that sector-specific telecoms regulation is ‘extremely intrusive’ in the US, compared to the EU where national telecoms regulators enjoy more discretion to decide whether to act, and the European Commission may wish to act on the basis of competition rules in circumstances in which the national regulator has failed to act on the basis of sector specific regulation.<sup>272</sup>

Thus, at least when concerning potential non-net neutral conduct by dominant entities or entities which are already subject to ex ante regulation, the European institutions may have more room to manoeuvre when it comes to applying competition law to a certain factual situation. As non-net neutral conduct may not be recognised as an existing standard in US antitrust jurisprudence and would seem not to be included in the current application of telecoms regulation to ISPs, then the decision in *Verizon v Trinko* suggests that a claim brought in antitrust concerning non-net neutral conduct would fail.

### **3.5 Net neutrality regulation**

#### **a) US**

Initial regulatory action specifically on the topic of network management by ISPs was sparked in 2005 by Madison River Communications, a local telephone carrier that had been blocking VoIP services.

The previous year, the FCC Chairman at the time, Michael Powell, had set out a set of non-discrimination ‘Network Freedom’ principles:

1. Freedom to access content
2. Freedom to use applications
3. Freedom to attach personal devices

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<sup>272</sup> *ibid* 361-2

#### 4. Freedom to obtain service plan information<sup>273</sup>

In light of these principles, the FCC opened an investigation into Madison River's VoIP blocking practices. The FCC and Madison River came to a negotiated settlement whereby Madison River agreed to cease hampering their customers' VoIP use and made a \$15000 payment to the US Treasury, while the FCC closed its inquiry.,<sup>274</sup>

This was followed in 2007 by Comcast blocking access to peer-to-peer (P2P) data transfers for its users.. P2P networks have a distributed network architecture in which individual nodes of the network both supply and consume resources, and tasks (such as data storage or processing power) are shared among multiple interconnected peers which each make some of their resources available to other network participants without the need for centralised coordination. The P2P networks that Comcast targeted were BitTorrent, eDonkey and Gnutella, services with a reputation for facilitating illegal file sharing (ie the unauthorised sharing of copyrighted content and applications), but which are also used for perfectly legitimate and legal sharing and provide particularly effective ways of storing and sharing large files since they can be distributed across the network. Nevertheless, P2P traffic can take up a lot of bandwidth due to ongoing file transfers and network coordination packets being sent and received.

It transpired that Comcast was not preventing its customers from downloading files from BitTorrent but it seemed that it was blocking or delaying uploads of complete files from its customers. It appeared that Comcast was interfering with traffic in this way because of concerns around network congestion but also because of the idea that much of what was being shared via these networks was illegal inasmuch as it was infringing copyrights. However it does not seem that any distinction was made in practice between legitimate and illegitimate file-sharing when Comcast was engaging in this conduct.

In response, the FCC ordered Comcast to 'end discriminatory network management practices' since it had 'unduly interfered with Internet users' right to access the lawful

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<sup>273</sup> Michael K Powell, 'The Digital Broadband Migration: Towards a Regulatory Regime for the Internet Age' (Silicon Flatirons Symposium, Boulder CO, February 2004)

<sup>274</sup> *In the Matter of Madison River Communications*, FCC Consent Decree DA 05-543. (2005)

Internet content and to use the applications of their choice'.<sup>275</sup> The FCC also considered that Comcast had an 'anticompetitive motive' in blocking access to P2P applications, since they 'provide Internet users with the opportunity to view high-quality view that they might otherwise watch (and pay for) on cable television', with this posing 'a potential competitive threat to Comcast's video-on-demand service'. The FCC determined that it had the power to make this regulation under its Title I jurisdiction; however, Comcast disputed this and appealed the decision to the Federal Court of Appeals. The Court of Appeal in 2010 held that the FCC did not have the authority to take such regulatory action concerning Comcast's network management practices under Title I ancillary authority.<sup>276</sup> The FCC's Title I authority is more limited than Title II authority: had the FCC classified Internet services under Title II authority then it may have had the legal basis to issue such orders to Comcast, but as it was, Title I authority was an insufficient basis to enforce 'open Internet' principles.

Subsequent to this decision, the FCC issued a regulatory order containing various obligations to be imposed on broadband Internet providers.<sup>277</sup> The main principles of the order are:

- transparency: fixed and mobile providers have to disclose the network management practices, performances characteristics and terms and conditions;
- no blocking: by fixed broadband providers of lawful content, applications, services or non-harmful devices; and by mobile broadband providers of lawful websites or applications that compete with their voice or video telephony services;
- no unreasonable discrimination by fixed broadband providers in transmitting lawful network traffic;
- reasonable network management: which is appropriate and tailored to achieving a legitimate network management purpose, taking into account the particular network architecture and technology of the broadband Internet access service; such legitimate purposes include ensuring network security and integrity, addressing traffic that is unwanted by end users (parental controls, security), and reducing or mitigating the effects of congestions on the network

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<sup>275</sup> Federal Communications Commission 'Commission Orders Comcast To End Discriminatory Network Management Practices' (press release, 1 August 2008) <[http://transition.fcc.gov/Daily\\_Releases/Daily\\_Digest/2008/dd080804.html](http://transition.fcc.gov/Daily_Releases/Daily_Digest/2008/dd080804.html)> accessed 31 August 2014

<sup>276</sup> *Comcast Corp. v FCC* 600 F. 3d 642 (2010)

<sup>277</sup> *In re Preserving the Open Internet* 25 F.C.C.R. 17905 (2010)

Yet, Verizon challenged the FCC's authority to make these rules. In early 2014, the Federal Court of Appeals found that the FCC did not have the authority to impose the above obligations in their entirety due to the fact broadband services were classified under Title I of the Telecommunications Act and so could not be regulated as common carriers.<sup>278</sup> The Court upheld the transparency obligation imposed by the FCC but 'vacated' the other obligations on no blocking and no unreasonable discrimination, although did find that the FCC had 'affirmative authority' under section 708 of the Telecommunications Act to enact measures encouraging the deployment of broadband infrastructure, leaving the FCC with the prospect of introducing revised rules.

In response to this decision against it, the FCC decided not to mount an appeal, and instead made a new proposal of net neutrality rules in May 2014, which at the time of writing are under public consultation.<sup>279</sup> These new proposed rules would maintain the transparency obligation which was not invalidated by the Court, and add a non-blocking obligation, which for fixed line ISPs would forbid them from blocking 'lawful content, applications, services or non-harmful devices' and for mobile providers would prohibit them from blocking 'lawful websites'. There is also a prohibition on ISPs engaging in 'commercially unreasonable practices' – with both this rule and the anti-blocking rule being subject to an exception for 'reasonable network management'. These rules are weaker than their predecessors, particularly in not including at all a non-discrimination obligation, and in the very vague language around what 'commercially unreasonable practices' precisely would be.<sup>280</sup> It would seem that, for instance, ISPs charging large companies for preferential treatment would not be prima facie disallowed.<sup>281</sup>

Nevertheless, in the midst of the litigation and rule-making proposals, the FCC has found more subtle ways of enforcing its position on network management, namely as a condition of

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<sup>278</sup> *Verizon v FCC* 740 F. 3d 623 (D.C. Cir. 2014); 11-1355 (2014)

<sup>279</sup> 'Protecting and Promoting the Open Internet NPRM' (Federal Communications Commission, 15 May 2014) <<http://www.fcc.gov/document/protecting-and-promoting-open-internet-nprm>> accessed 31 August 2014

<sup>280</sup> Mitch Stoltz, 'What on Earth Is Going On at the FCC? A Guide to the Proposed Net Neutrality Rules' (*Electronic Frontier Foundation*, 2 July 2014) <<https://www.eff.org/guide-to-the-fcc-net-neutrality-proposal>> accessed 31 August 2014

<sup>281</sup> April Glaser and Corynne McSherry, 'FCC's New Rules Could Threaten Net Neutrality' (*Electronic Frontier Foundation*, 24 April 2014) <<https://www.eff.org/deeplinks/2014/04/fccs-new-rules-could-threaten-net-neutrality>> accessed 31 August 2014

approving mergers. In its approval of the SBC/AT&T and Verizon/MCI mergers in 2005, the FCC made enforceable a clause which would entail the merged entities adhering to its 2005 Internet policy statement for a two year period.<sup>282</sup> This Internet policy statement consisted of four principles that were not enforceable per se but would be incorporated into the FCC's policymaking, and can be seen as a predecessor to the Open Internet Order from 2010. The principles were: that consumers be entitled to access the lawful Internet content of their choice; consumers be entitled to run applications and services of their choice (subject to needs of law enforcement); consumers be entitled to connect their choice of legal devices that do not harm the network; and consumers be entitled to competition among network providers, application and service providers and content providers – all subject to 'reasonable network management'.<sup>283</sup>

Thus, much of the problem for the FCC in enforcing net neutrality rules has been the initial decisions to class Internet services under Title I authority rather than Title II authority. While the FCC has been quite 'activist' in its attempts to introduce ex ante net neutrality rules, and has managed to do so more effectively via conditions on mergers (although of course this option is only limited to the situation of a merger arising, and so is unlikely to prove a means of ensuring net neutrality obligations incumbent on all ISPs), there has also been a great deal of lobbying by ISPs to ensure that they are not subject to enforceable net neutrality rules and/or their services are not classified under Title II authority.<sup>284</sup>

In any event, the current rules that the FCC has proposed can be contrasted with their counterparts proposed by the European Parliament discussed in more detail below. Mobile providers are subject to much less stringent requirements in the FCC's rules (they must only allow 'lawful websites') which would seem to allow them to block, for instance, rivals' apps which may contain competing products and services to those offered by the mobile provider. Unless the mobile provider has a dominant position, such blocking will not be prohibited by antitrust rules either. More strikingly, the FCC's rules do not include a 'non-discrimination'

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<sup>282</sup> Federal Communications Commission, 'FCC Approves SBC/AT&T and Verizon/MCI Mergers' (news release, 31 October 2005) <[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-261936A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-261936A1.doc)> accessed 31 August 2014

<sup>283</sup> Federal Communications Commission, 'New Principles Preserve and Promote the Open and Interconnected Nature of Public Internet' (news release, 5 August 2005) <<http://www.fcc.gov/meetings/080505/policy.pdf>> accessed 31 August 2014

<sup>284</sup> Jon Brodtkin, 'Congressman bankrolled by ISPs tries to halt Internet regulation' (*Arstechnica*, 31 May 2014) <<http://arstechnica.com/tech-policy/2014/05/congressman-bankrolled-by-isps-tries-to-halt-internet-regulation/>> accessed 31 August 2014



obligation on ISPs (unlike the draft regulation), and does not prevent the establishment of ‘specialised services’ so long as they do not constitute ‘commercially unreasonable practices’.

Thus it seems that the FCC may permit the creation of a ‘two-tier’ system, whereby certain content providers will be able to pay for priority access to users, with those which are less able to afford to pay, such as non-profit, non-market initiatives being relegated to a lower status. As a result, the Internet in the US may end up resembling something more akin to television, where large organisations (public service broadcasters and corporate broadcasters) decide what users see, with a possibly resurfacing of an updated version of Herman and Chomsky’s propaganda model, mentioned at the beginning of this thesis.<sup>285</sup> Given the Internet’s previous record on facilitating free expression of individuals, which was restricted to a much greater extent in the traditional one-way broadcasting world, it would be a great loss if the Internet in the US was to mimic its predecessor, with its associated disadvantages for free expression.

Furthermore, if American users are charged more to access non-favoured content, then this could exacerbate existing “digital divides” in society. Indeed, corporate control over what information users create, disseminate and receive could also entail access to content or programmes which are not commercially lucrative is restricted only to those willing to pay more to the ISP to access it, or not available at all.

Yet the net neutrality saga in the US is far from near a conclusion. In November 2014, President Barack Obama called on the FCC to introduce the following net neutrality rules:

- **No blocking.** If a consumer requests access to a website or service, and the content is legal, your ISP should not be permitted to block it. That way, every player — not just those commercially affiliated with an ISP — gets a fair shot at your business.
- **No throttling.** Nor should ISPs be able to intentionally slow down some content or speed up others — through a process often called “throttling” — based on the type of service or your ISP’s preferences.
- **Increased transparency.** The connection between consumers and ISPs — the so-called “last mile” — is not the only place some sites might get special treatment.

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<sup>285</sup> Herman and Chomsky (n 48)

So, I am also asking the FCC to make full use of the transparency authorities the court recently upheld, and if necessary to apply net neutrality rules to points of interconnection between the ISP and the rest of the Internet.

- **No paid prioritization.** Simply put: No service should be stuck in a “slow lane” because it does not pay a fee. That kind of gatekeeping would undermine the level playing field essential to the Internet’s growth. So, as I have before, I am asking for an explicit ban on paid prioritization and any other restriction that has a similar effect.<sup>286</sup>

Whether the independent FCC will follow President Obama’s suggestions remains to be seen at the time of writing, Furthermore, even if it does, the prospect of more litigation from ISPs regarding the net neutrality rules is highly likely.

## b) EU

In the European Union, the debate around whether specific regulation was necessary for net neutrality gained momentum and has resulted in a proposal on the matter which is part of a new Telecoms Package which was recently voted on by the European Parliament and is at the time of writing being considered by the Council of the EU.

This proposal for a draft regulation comprises something of a *volte face* for the European Commission, which previously had considered the existing Telecoms Package to be sufficient to address net neutrality concerns by providing European consumers with more information about Internet services and more competitive retail broadband markets as well as giving national regulatory authorities the power to set minimum quality of service standards in their territory.<sup>287</sup> However, it does follow European Parliament resolutions supporting net neutrality, such as that of the Parliament’s Industry Committee in 2011 which urged the

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<sup>286</sup> The White House, ‘Net Neutrality: President Obama’s Plan for a Free and Open Internet’ <<http://www.whitehouse.gov/net-neutrality#section-read-the-presidents-statement>> accessed 22 February 2015

<sup>287</sup> European Commission, ‘Agreement on EU Telecoms Reform paves way for stronger consumer rights, an open internet, a single European telecoms market and high-speed internet connections for all citizens’ (press release, 5 November 2009) <<http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/09/491>> accessed 31 August 2014

Commission to take a more active approach towards net neutrality.<sup>288</sup> It also follows data from the Body of European Regulators for Electronic Communications (BEREC), which found that there was widespread interference with P2P networks and VoIP on fixed and mobile networks in the EU.<sup>289</sup> According to BEREC, the most frequently reported restrictions on traffic were the blocking or slowing down of P2P traffic on both fixed and mobile networks, and the blocking of VoIP traffic which mostly took place on mobile networks,<sup>290</sup> which has also been an issue in the US as well.<sup>291</sup>

The proposed draft regulation's provisions on net neutrality seem to create two classes of services: 'internet access services' which are subject to a net neutrality principle but can have a data volume cap or data speed cap; and 'specialised services with an enhanced quality of service' which would seem to result from special agreements between ISPs and online providers of content applications and services ('OSPs') including a defined quality of service or dedicated capacity.<sup>292</sup>

The net neutrality principle behind 'internet access services' is that users should be free to access and distribute (lawful) information and content, run applications and use services of their choice when using the internet access service.<sup>293</sup> Also, ISPs should not block, slow down, degrade or discriminate against specific content, applications or services (or specific classes of these) except if reasonable traffic management measures are needed, and this management should be transparent, non-discriminatory, proportionate and necessary.<sup>294</sup> The circumstances in which this traffic management is permitted are:

- To implement a legislative provision or court order, or prevent or impede serious

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<sup>288</sup> European Parliament, *Resolution on The open internet and net neutrality in Europe*, 7 November 2011, P7\_TA(2011)0511 <<http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P7-TA-2011-0511+0+DOC+XML+V0//EN>> accessed 31 August 2014

<sup>289</sup> Body of European Regulators of Electronic Communications, 'BEREC preliminary findings on traffic management practices in Europe show that blocking of VoIP and P2P traffic is common, other practices vary widely' (press release, 9 March 2012) <[berec.europa.eu/doc/2012/TMI\\_press\\_release.pdf](http://berec.europa.eu/doc/2012/TMI_press_release.pdf)> accessed 31 August 2014

<sup>290</sup> Body of European Regulators of Electronic Commerce, *A view of traffic management and other practices resulting in restrictions to the open Internet in Europe: Findings from BEREC's and the European Commission's joint investigation* (BEREC, 29 May 2012) BoR (12) 30, 8

<sup>291</sup> Kevin J O'Brien, 'Skype in a Struggle to be Heard on Mobile Phones' (*New York Times*, 17 February 2010) <[http://www.nytimes.com/2010/02/18/technology/18voip.html?\\_r=0](http://www.nytimes.com/2010/02/18/technology/18voip.html?_r=0)> accessed 31 August 2014

<sup>292</sup> Article 23 (1) – (3), Proposal for a Regulation of the European Parliament and of the Council of 11 September 2013 laying down measures concerning the European single market for electronic communications and to achieve a Connected Content, and amending Directives 2002/20/EC, 2002/21/EC and 2002/22/EC and Regulations (EC) No 1211/2009 and (EU) No 531/2012, COM (2013) 627 final

<sup>293</sup> *ibid*

<sup>294</sup> COM (2013) 627 final, Article 23(5)

crime;

- Preserve the integrity and security of the network, services provided via the network and end-users' terminals;
- Prevent the transmission of unsolicited communications to end-users who have given their prior consent to such restrictive measures;
- Minimise the effects of temporary or exceptional network congestion provided that equivalent types of traffic are treated equally.

National regulatory authorities are also empowered to set minimum quality of service requirements for internet access services.<sup>295</sup> There are also transparency obligations for ISPs to provide details about the services they offer.<sup>296</sup>

The European Parliament adopted various amendments to the original text of the proposal on net neutrality. Firstly, it adopted a strong definition of net neutrality to which 'internet access services' are subject: all Internet traffic should be treated equally, without discrimination, restriction or interference and independent of its sender, receiver or type. Secondly, the Parliament adopted another amendment which narrowed the definition of 'specialised services' from the original proposal: they must be provided on 'logistically distinct capacity' must not be 'marketed or usable as a substitute for internet access service', and can only be offered if ISPs have enough network capacity to do so without interfering with the quality or availability of normal 'internet access services'. ISPs must also not discriminate between 'functionally equivalent services or applications'. This would seem to entail that ISPs cannot suddenly decide that services currently offered over the Internet is no longer a normal Internet service, or offer these 'specialised services' if doing so would affect normal Internet provision.

Some individual EU Member States have proceeded with law and regulation on network management at the domestic level, arguably leading to a fragmented approach in the internal market,<sup>297</sup> which may also have triggered the European Commission's actions in a harmonisation attempt. The Netherlands in May 2012 became the first country in Europe to

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<sup>295</sup> COM (2013) 627 final, Article 24(2)

<sup>296</sup> COM (2013) 627 final, Article 25

<sup>297</sup> Jasper Sluijs, 'Network Neutrality and Internet Market Fragmentation' (2012) 49(5) Common Market Law Review

mandate a net neutrality principle in the form of a law which prevents ISPs from interfering with applications and services on the Internet, except if necessary, and what is necessary has been narrowly defined as when there is congestion, preserving the integrity and security of the network, service or terminal of the user, restricting the transmission of unsolicited communication to the user when the user has given consent for the ISP to do this, and to give effect to a legislative provision or court order.<sup>298</sup> In 2012 Slovenia also became the second Member State to legislate on net neutrality, prohibiting ISPs from restricting, delaying or slowing down Internet traffic at the level of individual services or applications except in the case of urgent technical measures to ensure the smooth operation of the network (eg to avoid traffic congestion), to preserve the integrity and security of networks and services, for limiting unsolicited communications or in accordance with a court decision.<sup>299</sup>

France has also been active on the subject of net neutrality. It currently does not have enforceable laws on the matter but in September 2010, the communications regulator ARCEP published its ten proposals on net neutrality<sup>300</sup> According to the proposals, ISPs which offer 'Internet access' should give users the possibility to send and receive the content of their choice, the possibility to use services or applications of their choice, the possibility to connect the equipment and use the programmes of their choice (provided these do not harm the network), and there should be a sufficient and transparent quality of service. Also, the general rule should be non-differentiating of the methods of treatment of each individual data flow by the type of content, service, application, terminal or by the IP address of the sender of the receiver, with any deviations from this to be limited – deviations which are too significant are forbidden from being termed by the ISP an offer of 'Internet access'. These too-big deviations are to be termed 'managed services', which ISPs are permitted to offer so long as they do not degrade the quality of Internet access below a sufficient level. ISPs must also be transparent with users about the services and applications accessible via the Internet connection, their quality of service and any limitations and traffic management practices. Furthermore, ISPs which give online service providers Internet access must do so in an objective and non-

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<sup>298</sup> An unofficial translation of the law into English is available in: Daphne van der Kroft, 'Net Neutrality in the Netherlands: State of Play' (*Bits of Freedom*, 15 June 2011) <<https://www.bof.nl/2011/06/15/net-neutrality-in-the-netherlands-state-of-play/>> accessed 31 August 2014

<sup>299</sup> Mitar, 'Net neutrality in Slovenia' (*Wlan Slovenia*, 16 June 2013) <<https://wlan-si.net/en/blog/2013/06/16/net-neutrality-in-slovenia/>> accessed 31 August 2014

<sup>300</sup> ARCEP, *Neutralite de l'internet et des reseaux: propositions et orientations* (2010) <[http://www.arcep.fr/uploads/tx\\_gspublication/net-neutralite-orientations-sept2010.pdf](http://www.arcep.fr/uploads/tx_gspublication/net-neutralite-orientations-sept2010.pdf)> accessed 31 August 2014. All translations from this report into English are author's own (A.D.).

discriminatory fashion, allowing all reasonable interconnection requests aimed at making the OSP's services or applications accessible to Internet users.

The nascent French approach echoes in the European Commission's draft regulation, with each permitting a 'two-tier' model, of general 'Internet access' with the possibility to offer 'specialised' or 'managed' services as well, although the amendments adopted by the Parliament are more restrictive than the French approach, given their increased limitations on when specialised or managed services can be offered.

The net neutrality provisions of the draft regulation currently under discussion in the EU would address some of the gaps left by the existing regulation and competition law vis-à-vis Internet providers' network management. For instance, it would ensure that providers of 'internet access services' are not to block, slow down, degrade or discriminate against specific content, applications or services, and this would apply regardless of whether the provider had a dominant position or not, and a minimum quality of service could be set by the national regulator.

The original proposal from the Commission regarding 'specialised services' would appear to have created a non-net neutrality regime to exist alongside 'internet access services' subjected to these net neutrality obligations, since they would have allowed the prioritisation of certain content, so long as it did not result in a recurring or continuous impairment of the general quality of internet access services. However, the Parliament's amendments have limited further the circumstances in which specialised services can be provided, and it would seem that they would now only be permissible if they do not affect internet access services, are not considered to be a substitute for them, nor can existing services provided by the Internet be moved onto specialised service provision by ISPs. Yet, it is not clear that the Council of the EU will approve these amendments given the widely varying views of the ministers from the 28 Member States on the subject.<sup>301</sup> Also it is likely that the telecommunications industry will continue to attempt to influence the debate and policy-makers, as they had been doing up

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<sup>301</sup> Heini Jarvinen, 'Net Neutrality – What happens next?' (*European Digital Rights Initiative*, 9 April 2014) <<http://edri.org/net-neutrality-happens-next/>> accessed 31 August 2014; 'Will Member States Defend Net Neutrality, in Line with the European Parliament?' (*La Quadrature du Net*, 5 June 2014) <<https://www.laquadrature.net/en/will-member-states-defend-net-neutrality-in-line-with-the-european-parliament>> accessed 31 August 2014

until, and after, the European Parliament vote, arguing that these measures are an undue burden on their businesses which may affect European competitiveness and result in restrictions of user choice.<sup>302</sup> Yet similar arguments are advanced in favour of net neutrality rules, that net neutrality rules would secure users' choice of content and services, and may even make the EU more competitive vis-à-vis the US, with Neelie Kroes arguing that they would aid small businesses such as start-ups.<sup>303</sup>

In any event, the European Parliament's approach seems highly user-centric, even at potential costs to business, and its willingness to impose further obligations on ISPs certainly cannot be termed a neoliberal move. The amendments would provide a strong net neutrality principle and more restricted circumstances in which specialised services can operate compared to the initial Commission proposal, which may have resulted in a two-tiered Internet exacerbating existing digital divides. Yet, it remains to be seen what happens at the Council level, and thus what shape any finalised net neutrality regulation might take – indeed it may well be less strongly pro-user than it is now. Moreover, the proposed regulation as it stands, while it may be of benefit to European Internet users, may also be seen as a step 'too little, too late'. The extent to which it addresses content delivery networks is unclear – even though their use can have a similar effect to non-net neutral conduct by ISPs in prioritising certain traffic using deep packet inspection, their implementation may not be covered by the proposals. This demonstrates some of the failing of regulation as an option for promoting user autonomy online – while net neutrality has been raised as an issue more than ten years ago, it has taken many years for the EU to arrive at this point where ex ante regulation is being considered, meanwhile technology has moved on. In addition, the regulation is unlikely to promote large structural change in how the Internet is provided in the EU – corporate for-profit ISPs are likely to endure the attempt to impose further regulation, and albeit users will have more consumer rights against them, they are still likely to form a 'radical monopoly' over Internet provision.

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<sup>302</sup> European Telecommunication Network Operators' Association, 'European Digital Economy – ETNO: "Parliamentary vote on the Connected Continent a step in the wrong direction"' (ETNO press release, 3 April 2014) <<https://www.etno.eu/home/press-corner/etno-press-releases/2014/280>> accessed 31 August 2014

<sup>303</sup> David Meyer, 'Can Europe really offer start-ups a better deal on net neutrality?' (*Gigaom*, 15 January 2014) <<http://gigaom.com/2014/01/15/can-europe-really-offer-startups-a-better-deal-on-net-neutrality/>> accessed 31 August 2014

### 3.7 Other areas of law and net neutrality

Although the European Parliament's amendments to the draft regulation would go a long way to enacting a strong net neutrality principle and avoiding a 'two-tiered' Internet, the FCC's rules, even if adopted, would fall far short of that situation. In any event, as mentioned above, it is not clear that the Parliament's version of the draft regulation will actually come to pass given the likely opposition from some members of the Council of the EU (and the lobbying in which the European telecoms industry is likely to engage). Thus, this section looks at how other areas of existing laws may comprise alternative means of protecting and promoting net neutrality.

#### a) Free expression

The law around freedom of expression may address some issues raised already, and indeed has been recognised as playing a fundamental part in the net neutrality debate.<sup>304</sup>

Article 10 of the European Convention on Human Rights (ECHR) protects free expression, which is supplemented by constitutional rights at the national level of some Member States. However, Art 10 of the ECHR is an obligation primarily pertaining to contracting States, and is usually conceived of as a negative freedom – although there have been cases in which it has produced a horizontal effect between private parties.<sup>305</sup> While in Europe there remain a few ISPs with (partial) state ownership, most are privately-owned and that is the paradigm promoted by the EU's liberalisation policy in telecoms over the last decades. The application of Art 10 is evidently clearer in the remaining instances of state ownership, but the right to

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<sup>304</sup> Such as by Chirico and others (n 248) in the academic literature, and by the Council of Europe's Committee of Ministers in the policy sphere. See: Council of Europe, Declaration of the Committee of Ministers on net neutrality of 29 September 2010 <<https://wcd.coe.int/ViewDoc.jsp?id=1678287>> accessed on 31 August 2014

<sup>305</sup> See: Hugh Tomlinson, 'Positive obligations under the European Convention on Human Rights' (2012) <[https://www.google.com.au/search?q=Positive+obligations+under+the+European+Convention+on+Human+Rights++HUGH+TOMLINSON+&ie=utf-8&oe=utf-8&aq=t&rls=org.mozilla:en-US:official&client=firefox-a&channel=sb&gfe\\_rd=cr&ei=Iq\\_mVNzSFK\\_u8wf9s4HwCA](https://www.google.com.au/search?q=Positive+obligations+under+the+European+Convention+on+Human+Rights++HUGH+TOMLINSON+&ie=utf-8&oe=utf-8&aq=t&rls=org.mozilla:en-US:official&client=firefox-a&channel=sb&gfe_rd=cr&ei=Iq_mVNzSFK_u8wf9s4HwCA)> accessed 20 February 2015; European Court of Human Rights, 'Positive obligations on member States under Article 10 to protect journalists and prevent impunity' (Research Report, 2011) <[www.echr.coe.int/Documents/Research\\_report\\_article\\_10\\_ENG.pdf](http://www.echr.coe.int/Documents/Research_report_article_10_ENG.pdf)> accessed 20 February 2015



receive information has been found to have some horizontal, positive effect in the case of *Khurshid Mustafa and Tarzibachi v Sweden*,<sup>306</sup> a dispute between tenants and their landlord over a satellite dish the tenants had installed to receive Arabic and Farsi language programmes against the terms of the tenancy agreement, which forbade outdoor antennae from being installed outside the building. In this case, the European Court of Human Rights (ECtHR) found that the applicants' freedom to receive information via satellite broadcast, which formed part of Art 10, had been violated as the State, Sweden, had 'failed in their positive obligation to protect that right'. This was because the applicants had no other way to receive these programmes at that time (presumably now the existence and widespread use of the Internet would have entailed a different decision in this case) and the dish could not be placed anywhere else, yet the domestic courts found for the landlord in accordance with domestic law and the applicants were evicted from their apartment, which the ECtHR found was disproportionate to the protection of the rights of others, and that the domestic courts had failed to take into consideration the importance of the applicants' interest in receiving the information. Thus the ECtHR found that there had been a violation of Art 10, and this case may be a relevant precedent for other disputes between two private parties being admissible before the ECtHR if domestic or EU-level legislation did not provide a remedy.

The ECtHR has also explicitly recognised the right of individuals to send and receive information on the Internet in *Yildirim v Turkey*.<sup>307</sup> It found that the Turkish communications regulator blocking access to the entire Google Sites platform in response to a Turkish court's judgement regarding one site hosted by Google Sites containing illegal content constituted a violation of the applicant's freedom of expression as it was not sufficiently prescribed by law (the relevant Turkish law did not authorise the wholesale blocking of an entire online platform such as Google sites and failed to provide sufficient safeguards against abuse), there was no evidence that Google had been told it was hosting content found to be illegal by the Turkish court and given an opportunity to comply with the judgement, and the regulator (an administrative body) had broad powers conferred on it by the law.

These cases demonstrate in principle that Art 10 may have some horizontal effect in disputes between private parties and may also apply to restrictions on Internet access, or, even more narrowly, access to a certain online platform. It is possible that these decisions may be applied

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<sup>306</sup> *Khurshid Mustafa and Tarzibachi v Sweden* App no 23883/06 (ECtHR, 16 December 2008)

<sup>307</sup> *Ahmet Yildirim v Turkey* App No 3111/10 (ECtHR, 18 December 2012)

to instances of network management in non-net neutral ways which restrict an individual's freedom to send or receive information on the Internet, when the management is being done by a private ISP. Yet whether such network management practices by ISPs would infringe users or content providers' Art 10 rights seems highly context-specific and it is difficult to predict how the ECtHR might rule on such scenarios in light of its precedent.

Certainly, the most egregious network management practices for the right to receive and impart information would encompass blocking, and perhaps the degradation of quality of service of particular content to an extent equivalent to, or approaching, blocking. Sluijs considers that an infringement might only be recognised if *all* expression is blocked by an ISP,<sup>308</sup> and this would be consistent with *Kurshid Mustapa*, when the applicants were in practice not permitted to receive any kind of satellite broadcast at all with the effect that Iraqi and Kurdish programmes were inaccessible to them. However, the *Yildirim* decision demonstrated that the blocking of *some* expression ie that on Google sites could be an infringement of Art 10. A distinction might be made between ISPs' network management and *Yildirim* due to the blocking in the latter case taking place due to State direction, while the former case will usually be blocking directed by ISPs themselves. Also, it is unclear whether a certain class of applications or content or services being blocked (or severely degraded) by ISPs might prompt intervention by the ECtHR, such as P2P filesharing networks. ISPs might argue that they have a legitimate aim in doing so (ie protecting intellectual property rights) but blocking this whole category of applications might nevertheless be found to be disproportionate, such as in *Yildirim*, since P2P networks can be used for non-infringing as well as infringing purposes, and indeed this was an approach taken by a Spanish court in determining that the creator of various P2P apps was not contributing towards copyright infringement.<sup>309</sup>

Other problematic network management practices such as the prioritisation of certain content are also less likely to constitute a breach of the right to receive information given the user is still able to receive information, albeit perhaps at a slower speed, so the ECHR system may not prove to provide users with any additional rights or protection. However, the ECtHR might be willing to intervene if ISPs' network management practices

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<sup>308</sup> Sluijs (n 202)

<sup>309</sup> Heini Järvinen, 'Madrid Court rules P2P legal in landmark case against record labels' (European Digital Rights Initiative, 23 April 2014) <<http://edri.org/madrid-court-rules-p2p-legal-in-landmark-case-against-record-labels/>> accessed 31 August 2014

constituted an interference with media plurality, with the intervention might be in the form of calling on the particular nation-state to stimulate plurality.<sup>310</sup> Despite a perception that the Internet is a highly pluralistic sphere, if the ‘specialised services’ conceptualised in the draft regulation become prevalent, then the issue of media plurality may rear its head again with ‘deep-pocketed’ content being the most accessible, and content from smaller, independent sources becoming less visible and less accessible.

The Council of Europe’s Committee of Ministers made a Declaration regarding net neutrality in 2010.<sup>311</sup> This non-binding document affirmed the Committee of Ministers’ commitment to net neutrality as a principle, while acknowledging that network management practices may be permissible in certain circumstances, relating to quality of service, the development of new services, network stability and resilience, and combatting cybercrime. However, exceptions to net neutrality ‘must be considered with great circumspection and need to be justified by overriding public interests’. Furthermore, the Council of Ministers explicitly links net neutrality to fundamental rights, especially free expression and privacy:

Users and service, application or content providers should be able to gauge the impact of network management measures on the enjoyment of fundamental rights and freedoms, in particular the rights to freedom of expression and to impart or receive information regardless of frontiers, as well as the right to respect for private life. Those measures should be proportionate, appropriate and avoid unjustified discrimination; they should be subject to periodic review and not be maintained longer than strictly necessary. Users and service providers should be adequately informed about any network management measures that affect in a significant way access to content, applications or services. As regards procedural safeguards, there should be adequate avenues, respectful of rule of law requirements, to challenge network management decisions and, where appropriate, there should be adequate avenues to seek redress.

In late 2014, however, the Council of Europe’s Committee of Ministers discussed a Draft

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<sup>310</sup> Such as in: *Centro Europa 7 S.r.l. and Di Stefano v. Italy* (application no. 38433/09)([2012] ECHR 974) See also: Sluijs (n 202)

<sup>311</sup> Council of Europe, *Declaration of the Committee of Ministers on net neutrality of 29 September 2010* <<https://wcd.coe.int/ViewDoc.jsp?id=1678287>> accessed on 31 August 2014

Recommendation which affirmed its commitment to a net neutrality principle but appeared to retreat from its strong support of net neutrality in 2010, particularly in seeming to recognise the possibility of ISPs providing, via contract, a guaranteed quality of service level ‘provided that this does not impair the quality of open Internet access and does not constitute a discriminatory or anti-competitive practice’.<sup>312</sup> This would seem to depart from the European Parliament’s amendments to the draft regulation discussed above which stipulated that such services could only be provided on logically distinct capacity and could not be marketed or usable as a substitute for internet access services.

While Europe has not seen many deals between large content providers and ISPs so far, this may be due to current uncertainty over whether they are legal, regardless of the technology used (ISPs discriminating via DPI or agreements creating content delivery networks). The draft regulation as it currently stands would seem to apply to ISPs wanting using DPI to discriminate between different types of Internet traffic once it is on their networks (which would not be permitted – except in the case of specialised services). However the draft regulation’s application to content delivery networks is unclear as these direct peering and transit agreements concern Internet traffic (ie the content) *before* it gets onto the ISP’s own network, even though in practice they can have similarly ‘non neutral’ effects to prioritisation or discrimination of data packets on an ISP’s network using DPI.<sup>313</sup> Indeed, the FCC’s approach in suggesting that ‘commercially unreasonable practices’ should be permitted would seem to provide a more ‘technology neutral’ approach to the EU’s draft regulation despite the vagueness of the term.

These CDN are now beginning to emerge in Europe, and it may be that many more will be concluded if the draft regulation as it currently stands is enacted. One example so far is that of Netflix, a provider of on-demand media streaming, which entered into an agreement with a Norwegian ISP, Telenor, allowing it to place its video storage servers inside the ISP’s network.<sup>314</sup> This development follows another announcement from Netflix in the US that it

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<sup>312</sup> Council of Europe, *Draft Recommendation CM/Rec (2014) of the Committee of Ministers to member States on protecting and promoting the right to freedom of expression and the right to private life with regard to network neutrality* CDMSI(2014)005Rev9 (20 November 2014)

<sup>313</sup> Tim Berners Lee, ‘Beyond Net Neutrality: The New Battle for the Future of the Internet’ (*Vox*, 2 May 2014) <<http://www.vox.com/2014/5/2/5665890/beyond-net-neutrality-the-new-battle-for-the-future-of-the-internet>> accessed 31 August 2014

<sup>314</sup> Richard Lawler, ‘Netflix reportedly reached another Comcast-style agreement, but with a Norwegian ISP’ (*engadget*, 10 March 2014) <<http://www.engadget.com/2014/03/10/netflix-reportedly-reaches-another-comcast-style-agreement-with/>> accessed 31 August 2014

would pay Comcast for a direct connection to its network.<sup>315</sup> If this does not constitute a ‘commercially unreasonable practice’ then in terms of free expression, the US situation is more straightforward on its legality. As inadequate as it may be for a predominantly privatised, ‘multilateral speech environment’ such as the Internet,<sup>316</sup> the First Amendment essentially rests on a bilateral conception, of individuals’ speech rights being enforced against the state, it would seem difficult if not impossible to enforce an individual’s First Amendment rights against non-net neutral behaviour by a private ISP.

Indeed, the First Amendment provides strong protection of free expression that also encompasses corporations as the recent (and controversial) *Citizens United* case reinforces.<sup>317</sup> This would seem to mean that in practice there could be a First Amendment challenge to attempts to impose net neutrality rules on ISPs. However, it may be difficult to characterise ISPs’ network management as ‘expression’ for the purposes of the First Amendment since it is not sufficiently expressive of the ISP itself, and rather is the facilitation of the expression of others ie users and content providers, at least in the case of ‘basic’ or normal Internet access.<sup>318</sup> Yet, the provision of managed or specialised services may attract First Amendment protection in a way more similar to broadcast media, since it involves some kind of selection of the content that the user receives, and in any event even with ‘basic’ Internet services, the development of DPI gives rise to the possibility of the ISP exercising control over what the user receives, and so overall it would appear that ISPs in the US would have some order of First Amendment rights themselves regarding their network management practices.

Yemini considers that net neutrality rules in the US could be constitutional ie not violate ISPs’ First Amendment rights if they can be conceptualised as following the Supreme Court decision in *Turner v FCC*.<sup>319</sup> In this case, rules imposed on cable television providers that they must carry certain local commercial and public broadcast channels were upheld as being constitutional since they were content-neutral restrictions that imposed an incidental burden

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<sup>315</sup> Jon Brodtkin, ‘Netflix is paying Comcast for direct connection to network’ (*Arstechnica*, 24 February 2014) <<http://arstechnica.com/business/2014/02/netflix-is-paying-comcast-for-direct-connection-to-network-wsj-reports/>> accessed 7 September 2014

<sup>316</sup> Moran Yemini, ‘Mandated Network Neutrality and the First Amendment: Lessons from Turner and a New Approach’ (2008) 13(1) *Virginia Journal of Law and Technology*, 29

<sup>317</sup> *Citizens United v. Federal Election Commission* 558 US 310 (2010)

<sup>318</sup> Nicholas Bramble, ‘Ill Telecommunications: How Internet Infrastructure Providers Lose First Amendment Protection’ (2010) 17(67) *Michigan Telecommunications and Technology Law Review*, 76-79

<sup>319</sup> *Turner Broadcasting System v Federal Communications Commission* 512 U.S. 622 (1994)

on speech, with ‘Congress’s overriding objective in enacting these rules being not to favour programming of a particular subject matter, viewpoint, or format but rather to prevent cable operators from exploiting their economic power to the detriment of broadcasters and to preserve access to free television programming for the (then) 40 percent of Americans without cable’,<sup>320</sup> thus serving an important state interest. If net neutrality rules could be considered to be similarly content neutral and serving an important state interest such as securing a free and open Internet where all (legal) content and applications are accessible to all, etc, then they would seem to pass the *Turner* test for being a permissible restriction on ISPs’ First Amendment rights.

Appeal to free expression may also work both ways in Europe as well: there is also the issue of the extent to which ISPs themselves possess the right and how this might interact with attempts to enforce some kind of net neutrality rules. The argument in favour of such a finding would be that network management itself constitutes some kind of expression, and this may be interfered with by net neutrality rules. As Sluijs notes, the ECtHR has not come to a concise definition of ‘expression’ or ‘the freedom to impart and receive information’ for the purposes of Art 10, and in the *Autronic v Switzerland* case,<sup>321</sup> the ECtHR found that the transmission and reception of satellite signals was protected under Art 10, including for a legal person such as a corporation.<sup>322</sup> While this would suggest that network management prima facie is expression to be protected under Article 10, Art 10 does not provide an absolute right, and Art 10(2) lists the circumstances in which it can be limited. In particular, a strong argument would be that ISPs’ right to free expression should be limited by the ‘protection of the... rights of others’, which in this case would be the free expression rights of users and content providers, particularly in the case of issues over media pluralism.

Thus it would seem that in the EU the right to free expression under Art 10 ECHR may in certain specific circumstances (such as where there is a media plurality issue) go some way to protecting net neutrality, it is unlikely to do so on every occasion that net neutrality is infringed. The US situation with the First Amendment would not protect users’ expression vis-à-vis private, for-profit ISPs at all.

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<sup>320</sup> Yemini (n 317) 20

<sup>321</sup> *Autronic AG v Switzerland* App No 12726/87 (ECtHR, 22 May 1990)

<sup>322</sup> Sluijs (n 202) 34-36

## b) Privacy

In terms of the privacy concerns raised incidentally through the use of DPI in facilitating non-net neutral conduct by ISPs, the European Data Protection Supervisor (EDPS) delivered his own Opinion on this matter.<sup>323</sup> He stated that the use of DPI by ISPs to inspect the content of communications interferes with the right to the confidentiality of communications, to an increasing or decreasing extent depending on the technique used and the facts of the situation. However, in principle the EDPS considered that the existing privacy and data protection framework in Europe, if properly interpreted, applied and enforced, is appropriate to guarantee the right to confidentiality. Nevertheless, he counselled close monitoring of the situation, terming 'highly problematic' from a privacy and data protection perspective the situation in which 'ISPs engage on a routine basis in traffic management policies offering subscriptions based on filtering access to content and applications', and advocating legislative measures to address this. Any future legislative measures should give users a 'real choice' especially through forcing ISPs to offer non-monitored Internet connections.

However, the option of 'non-monitored' Internet connections is not present in the draft regulation currently under consideration, so it would seem that no such 'real choice' in privacy terms is being mandated for Internet users. While the E-Privacy Directive allows ISPs to process personal data of users 'for the purpose of the transmission of a communication',<sup>324</sup> this is subject to some conditions, including a prohibition on ISPs engaging in 'listening, trapping, storage or other kinds of interception or surveillance of communications' without users' consent except where they have other obligations to do so such as for national security reasons.<sup>325</sup> ISPs must also comply with data protection laws, however these laws may not be well-enforced.

In the *Scarlet v SABAM* case, the CJEU decided that ISPs could not be forced to monitor all

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<sup>323</sup> European Data Protection Supervisor, 'Net neutrality, traffic management and the protection of privacy and personal data' (Opinion of 7 October 2011) <[http://www.edps.europa.eu/EDPSWEB/webdav/site/mySite/shared/Documents/Consultation/Opinions/2011/11-10-07\\_Net\\_neutrality\\_EN.pdf](http://www.edps.europa.eu/EDPSWEB/webdav/site/mySite/shared/Documents/Consultation/Opinions/2011/11-10-07_Net_neutrality_EN.pdf)> accessed 31 August 2014

<sup>324</sup> Article 6 of the E-Privacy Directive

<sup>325</sup> Article 5 of the E-Privacy Directive

of their customers' traffic for possible copyright infringements as this was a disproportionate interference with their rights to privacy, data protection and free expression.<sup>326</sup> While the circumstances in that case also involved ISPs monitoring not for their own benefit, but for the benefits of third party intellectual property rightsholders, there may be some precedent established if a similar case was brought regarding the privacy aspects of ISPs' network monitoring practices if they were indeed engaging in the total monitoring of their customers' communications.

While a stronger statement in the draft regulation under consideration regarding privacy and the confidentiality of communications when it comes to network monitoring by ISPs may have been a beneficial 'spillover' move to address this 'spillover' consequence of non-net neutral conduct (or at least facilitated by deep packet inspection), the legal tools in the EU are in place to address privacy and data protection aspects. The problem, however, may lie in the detection of such practices in the first place, and so these tools can only be applied once there is sufficient knowledge that the problem exists.

### **3.8 Technical solutions**

Since the EU's draft regulation concerning net neutrality has not been finalised at the time of writing – and its final form is far from clear – it seems that existing areas of European law may go some way to addressing net neutrality problems, but they still leave gaps. Competition law will only apply in specific circumstances, usually where there is a dominant position, but most ISPs will not have this dominant position. The right to free expression may also only apply in specific circumstances, to the most severe non-net neutral conduct such as blocking and serious degradation of content, or possibly where there are media plurality issues, but this would appear to be highly dependent on the particular circumstances of the case. While privacy and data protection laws may apply in principle, they may not be well-enforced vis-à-vis network monitoring by ISPs due to a lack of information about the extent to which ISPs are actually engaging in this monitoring.

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<sup>326</sup> Case C-70/10 *Scarlet Extended v Societe belge des auteurs, compositeurs et editeurs (SABAM)* [2012] ECDR 4



In this situation, attention may be turned to certain technical solutions to some of the problems underlying the net neutrality debate as a quicker and, arguably more effective, means of ensuring user autonomy and optimal online information flows for users. Some of these solutions will be described below.

### **a) Data encryption**

The encryption of data that is being sent or requested over the Internet would challenge ISPs' efforts to monitor such data flows and act on the content of that data for non-net neutral purposes. Incidentally, data encryption may also facilitate free expression and the protection of privacy in the face of attempts at surveillance and censorship for whatever purpose (economic, ideological or other). However, data encryption may just facilitate an 'encryption arms race' between encryption and decryption technologies<sup>327</sup> and so not provide a total solution to net neutrality issues, especially the efficient delivery of content over the network and will not mask the volume of the data being sent or received (and indeed, with encryption this volume could actually increase). Encryption also does not ensure that the underlying infrastructure is managed, controlled or owned on a commons-basis.

### **b) P2P filesharing**

P2P filesharing networks have been effectively demonised as facilitating copyright infringement even though they are used for a variety of purposes, some of which infringe copyright but others of which are completely legitimate. However, as a result of lobbying by the content industry, access to them has been stymied through legislative means, 'voluntary' ISP self-regulation codes and courts orders on the one hand, and blocking and 'throttling' by ISPs on the other hand. This is convenient for centralised content providers and ISPs since it shuts down what can be an effective and decentralised content distribution system via the

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<sup>327</sup> Christopher T Marsden, 'Net Neutrality and Consumer Access to Content' (2007) 4(4) Script-ED, 422

Internet which might make content delivery networks and direct peering relationships between major online and services providers and ISPs redundant or at least seen as less necessary to facilitate the effective delivery and storage of content. Indeed, P2P content distribution/streaming networks could ensure that bandwidth is no longer a major obstacle to effective services. They can do this by distributing content or fragments of content across the participating peers' computers, with the fragments being streamed in order to the requesting user according to the peers closest to the user, and in doing so can economise on bandwidth.<sup>328</sup> However, due to this lobbying and legal action against P2P networks, corporate content providers retain their online distribution monopoly and strengthen the case for online traffic prioritisation. Perhaps the Spanish court decision mentioned above which recognised the legitimate uses of P2P as well as the illegitimate may signal the beginning of a change in attitude towards the permissibility of P2P networks, to the benefit of users and their autonomy, as well as rendering content delivery networks less attractive.

### **c) Mesh networks**

A further technical solution to net neutrality issues, particularly control and monitoring by the ISP itself can be found in mesh networking. Mesh networking consists of each node of the network relaying data for the network, and all nodes cooperating in the distribution of data in a peer-to-peer fashion. Mesh networks are usually (but not always) wireless and decentralised, and their main deployment so far has been in emergency situations to provide telecommunications infrastructure. Effectively, such mesh networks are owned and operated by their users, and provide an alternative, disruptive commons-based P2P option to using the cable and DSL networks provided by ISPs for data that is created by a node of the network and destined for another node of the same network.

Mesh networks can potentially advance online user autonomy since they typically have no central regulatory authority and can be conceptualised as a sort of private decentralised intranet: one must connect to the network in order to monitor its traffic, resisting censorship

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<sup>328</sup> Imsook Ha and others, 'P2P, CDNs and Hybrid Networks: The Economics of Internet Video Distribution', (2010) 17(4) International Telecommunications Policy Review, 7

and surveillance by gatekeepers.<sup>329</sup> Thus, ‘mesh networking represents an alternative perspective to traditional governance models based on top-down regulation and centralized control’.<sup>330</sup>

As regards the net neutrality debate, mesh networks represent a potential means of sidestepping reliance on the radical monopoly of centralised corporate ISPs for network access, and thus their network management practices. While operating mesh networks may require more technical expertise than the average Internet user has, investment and education could be used to remedy this.

However, the decentralised nature of mesh networks poses problems of control for both the nation-state and private sector and so is it not a surprise that mesh networks have not been promoted by either beyond emergency situations and for network access in authoritarian regimes when ‘Internet kill-switches’ have been used. Arguably mesh networks are in a fairly primitive and non-user friendly state given the lack of enthusiasm from the state and corporations.

### 3.9 Conclusion

This chapter has examined the situation of corporate dominance and Internet provision, particularly through the lens of the net neutrality debate over the extent to which corporate ISPs should be permitted to manage the Internet traffic passing through their networks. This debate has widened into a consideration of the role of corporately-run content delivery networks which seek to give their content and services faster access to users through the alternative model of interconnection agreements.

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<sup>329</sup>Center for a Stateless Society, ‘Entrepreneurial Anti-Capitalism: Radical Mesh Networks’ (29 May 2014) <<http://c4ss.org/content/27704>> accessed 31 August 2014

<sup>330</sup>Primavera De Filippi, ‘It’s Time to Take Mesh Networks Seriously (And Not Just For the Reasons You Think)’ (*Wired*, 2 January 2014) <<http://www.wired.com/opinion/2014/01/its-time-to-take-mesh-networks-seriously-and-not-just-for-the-reasons-you-think/>> accessed 31 August 2014

The current legal and regulatory situation in the EU, with reference to the US, has been presented, with the neoliberal, light-touch regulatory trends discouraging interference with telecoms markets and giving prominence to competition law as a principal tool for addressing whatever problems remain.

However, the rise of net neutrality as a subject of debate demonstrates the failings of this model from the perspective of users, since it would seem that only entities with market power acting in certain non-net neutral ways may warrant regulatory intervention. Furthermore, this model does not address the free expression problems created by non-net neutral conduct, nor the prospect of advancing digital divides and declining media pluralism in such circumstances. In addition, ‘real’ alternatives such as those incorporating P2P design are not supported by the current model, so Illich’s ‘radical monopoly’ can be said to exist for the most part in Internet provision in the EU and US, aside from a few European ISPs which are still (partially) state-owned, and even then there is a top-down, centralised approach to Internet provision in these public entities as well.

While the European Parliament’s proposals for net neutrality regulation are to be welcomed in terms of concentrating on the harm to Internet users that non-net neutral conduct can entail, they may be conceptualised as being ‘too little, too late’, given technology has moved on and processes which may not be covered by the regulation, namely content delivery networks, have similar consequences to ISPs acting in a discriminatory way vis-à-vis traffic which is already on their own networks.

In order to address content delivery networks as well as ISPs’ discrimination, interconnection agreements may provide another object for regulation.<sup>331</sup> Certainly these agreements could be subject to greater transparency as a first step.<sup>332</sup> More ‘invasive’ regulation could encompass obligations on ISPs, especially large ones, to accept traffic bound for their own customers ie

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<sup>331</sup> See: James Speta, ‘An Appropriate Interconnection Backstop’ (2014) 12 *Journal on Telecommunications and High Technology Law* 113

<sup>332</sup> David Clark and others, ‘Interconnection in the Internet: policy challenges’ (39<sup>th</sup> Research Conference on Communication, Information and Internet Policy, Arlington, September 2011)

users without payment.<sup>333</sup>

If bandwidth and quality of service are issues for the delivery of content and services online, then there are other options but these are not popular with corporate power since they generally involve decentralised peer to peer design. P2P filesharing has been demonised in the public narrative as facilitating illegal conduct but this obscures the technical advantages of P2P design as well as the user-autonomy-enhancing aspects. P2P solutions such as filesharing services and mesh networks represent a potentially radical alternative for the Internet infrastructure which would resist the economic or otherwise concentrations of power, and thus enhance users' autonomy.

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<sup>333</sup> Kevin D Werbach, 'Only Connect' (2008) 22(4) Berkeley Technology Law Journal



## CHAPTER 4: DOMINANCE AND INTERNET SEARCH

Search is an especially important part of the Internet ecosystem, since it is one very important (perhaps *the most* important) way in which information on the World Wide Web, a major part of the Internet's application layer, is made legible and findable for users. The rise of applications or 'apps' (application software) and online app stores for Internet-enabled mobile devices may be beginning to challenge search engines as a way of making sense of and finding information on the Web, but they do not (yet) encompass the entirety of that information, nor do they try to do so, although they are another gateway through which users can access information (and indeed, there are also search engine apps – which will be discussed in greater detail in Chapter 5 following this one).

This chapter will look at search engines, their online markets and will have a particular focus on US and EU market leader, Google.<sup>334</sup> Google is the focus of this chapter since it has dominated online search (and its associated market of online advertising) over the last ten years in the US and much of the EU, and accordingly has been the subject of antitrust investigations into alleged abuses of its dominant position in online search and advertising markets in both jurisdictions. Yet the effect of Google's information monopoly is more than just economic, but as will be seen in this chapter, these non-economic concerns are not addressed by competition law, nor other areas of the law – leaving a 'gap' where user autonomy is not adequately protected or promoted.

Here, the market developments leading to Google's dominance will be analysed, following by a description of the problems associated with Google's dominance for online data flows and users' autonomy. Then whether Google is indeed behaving abusively and acting in contravention of competition law will be considered, followed by the extent to which competition law remedies can address the problems of dominance already identified, as well as whether residual problems can be addressed by other legal regimes or extra-legally for the benefit of users' autonomy online.

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<sup>334</sup> This chapter expands upon: Angela Daly, 'Dominating Search: Google Before the Law' in Rene Konig and Miriam Rasch (eds) *Society of the Query Reader* (Amsterdam University of Applied Sciences Institute of Network Cultures 2014)

## 4.1 Problems in the market for search

Google's search engine operates by employing various processes.<sup>335</sup> Firstly, it runs a program which indexes web pages by 'crawling' ie following links from page to page (which website owners can opt out of), and then sorts the pages it indexes by their content and other factors. Then, when a search term is entered into Google's search engine, it uses algorithms to deliver results from the indexed web pages which are 'relevant' to the search term. Google then displays the relevant results in the search results page. Precisely how Google's search algorithm works to deliver these relevant results is only partially publicly known. For instance, it is known that some of these factors include the type of content, the quality of content, how recent the content is, the user's region, and how many other sites link to that one and how important those linking sites are in terms of traffic and prominence. Google has a program called PageRank which assigns a 'score' to websites on this basis of traffic and prominence, which then entails these pages are presented higher in Google's search results page.

Google as a dominant search engine presents various problems for online information flows. There are some 'classical' competition problems stemming from dominance, such as the potential leveraging and bundling services, as well as some more novel issues, such as how competition law can interact with the use of supposedly 'neutral' algorithms and the relationship between the user data that is collected, the protection of that data and privacy, and competition in the market. However, as will be explored in detail below, an economically dominant, private for-profit player such as Google can also use its dominant position in a way which has 'non-economic' consequences for users, inasmuch as users do not pay higher prices (especially since Google's search is offered free of charge to them, subsidised by advertising and data collection and analysis), but do experience issues of biased information filtering and infringements of their privacy and data protection which go beyond the economic realm.

### a) Access to information

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<sup>335</sup> See: Google 'Inside Search: How Search Works' <[http://www.google.com/intl/en\\_us/insidesearch/howsearchworks/thestory/](http://www.google.com/intl/en_us/insidesearch/howsearchworks/thestory/)> accessed 20 February 2015. For a technical explanation of Google's architecture, see: Luiz Andre Barroso and others, 'Web search for a planet: The Google cluster architecture' (2003) 23(2) IEEE Micro 22



Search engines have been identified as 'the new virtual gatekeepers of Cyberspace' because of their pivotal role in locating and filtering information relevant to users,<sup>336</sup> thus exercising some major control over access to information. Both users and advertisers, forming each 'side' of the two sided market in which corporate search engines act as the platform can face economic and non-economic problems with the way in which search engines operate as gatekeepers of information.

The problem of users with search engines is one of access to information: a search engine is a portal through which users experience the World Wide Web. If a user does a search and information which all things being equal should come up in the results page does not appear, and the search engine has had an active role in ensuring that information does not appear, then this can be characterised as a censorship of sorts (or editorial control of other sorts). Furthermore, even if certain information is not entirely blocked from the results pages, if it can be said to be 'relevant' (all else being equal) or even very relevant and does not appear on the first page or even on the first five pages then it may be effectively unavailable to users who generally will not go beyond these first few pages of results,<sup>337</sup> and thus being relegated to the 'periphery' of the Web.<sup>338</sup> Assuming there is a competitive market, then according to neoclassical economic theory, if a search engine does not provide a user with the results she is seeking, she will switch to a competitor which does provide these results. However, if the market for search engines is dominated by one entity or a small group of entities, as is the case in both the US and EU, then the user may not be able to obtain the results she wants, and have her searches restricted either according to the economic interests and/or the ideological bearing of the dominant player(s).

The problem that entities wanting either their products or services to appear in an engine's search results or wanting to buy advertising space with a search engine so that their products or services are featured in the 'Sponsored Links' (Google's paid advertising) face is one of visibility, that they want their products and services to be as visible as possible to users searching for relevant terms using the search engine. However, there are also commercially-driven reasons why Google might manipulate the results, especially the results of other

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<sup>336</sup> Elkin-Koren and Salzberger (n 40) 71

<sup>337</sup> See inter alia: A Spink and others, 'From e-sex to e-commerce: Web search changes' (2002) 35(3) IEEE Computer 107

<sup>338</sup> Matthew A Zook and Mark Graham, 'The creative reconstruction of the Internet: Google and the privatization of cyberspace and DigiPlace' (2007) 38(6) Geoforum 1322

entities. Google in particular has a host of other services apart from simple search: for instance, Google has its own price comparison search engines which compete with other price comparison sites not operated by 'generic' search engines. Google may want its own sites to appear higher in the results than those of their non-vertically integrated competitors. Again, if the market is competitive, then these entities wanting to advertise could go to a competing search engine or advertising platform; however, if the market is dominated by one or a group of players acting together, such as seems to be the case with Google, then the option to use another search engine is not such a strong alternative, and so being 'invisible' or far down the search results rankings in the search engine which is dominant or part of the dominant group then the advertiser is left in a position with no other realistic choice. Indeed, this scenario makes up part of the competition complaint against Google to the European Commission, discussed in more detail below.

#### **b) Expansionist tendencies**

Search engines and particularly Google have been seen to have expansionist tendencies, that search is just one part of an ecosystem owned by the same company, and often products and services interact with each other. So the threat is from vertical integration of Google with other upstream or downstream products and services, and the potential for leveraging Google's dominant position for search into other markets. In terms of harm, this would comprise principally economic prejudice, and to Google's competitors at whatever part of the value chain. However, there are also broader concerns about the emergence of an incredibly large for-profit entity such as Google, whose core business may be online search and advertising but has expanded into numerous other areas, from its latest acquisition of Internet of Things company Nest to the building of a fibre optic network in parts of the US and its mass digitisation of books, and the influence of this accumulation of power on the politics (and political economy) of information and technology, and society more generally. Also, thanks to the 'Invisible Handshake' between data-gathering corporations such as Google and the nation-state, laid bare in Snowden's NSA revelations, large and pervasive entities such as Google are co-opted to monitor their users' conduct for the State's benefit, with more contextualisation provided by collecting data about users from Google's myriad products and services.

This acquisition of other companies in new media and technology markets seems to have contributed to Google emerging as a leading player in online search and advertising. While EU and US authorities investigated two mergers involving Google, they were eventually approved. Furthermore, some of Google's acquisitions which were not scrutinised were subsequently the subject of competition investigations. For example, Google bought YouTube, the video-sharing website, in 2006, and the acquisition was approved both by both of the US authorities (Department of Justice and the Federal Trade Commission) unconditionally. Google also acquired Android mobile software in 2005, with no scrutiny from merger authorities.

In 2011 the Department of Justice approved Google buying ITA, the travel software company, although it did attach certain conditions, including that Google continue to license ITA's QPX software to other airfare websites on commercially reasonable terms, that Google continue to fund research and development of this product at similar levels to what ITA had invested prior to the merger, and that Google implement firewall restrictions within the company to prevent the unauthorised use of competitively sensitive information and data gathered from ITA's customers.<sup>339</sup> Absent these conditions, the fear was that Google's competitors would not have had access to ITA's software which was considered to be the leading producer of airfare pricing and shopping software in the US, for use by travel search engines. However, the DoJ did not discuss at all the possibility of Google using its general search engine to leverage its dominance into the market for travel search, which seems to be the object of the antitrust complaint against Google regarding this service. This may be due to this merger being considered a conglomerate merger, in which competition authorities tend to forbear from applying merger law.

While the US authorities are seen as having a record of being less suspicious of mergers which may lead to exclusionary effects than their EU counterparts<sup>340</sup> due to *inter alia* a non-interventionalist ideology coming from the neoliberal Chicago School and implemented

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<sup>339</sup> Department of Justice, 'Justice Department Requires Google Inc. to Develop and License Travel Software in Order to Proceed with Its Acquisition of ITA Software Inc.' (press release, 8 April 2011)

<sup>340</sup> As can be seen in the Merger Guidelines: Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings OJ C 31, 5 February 2004; Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings OJ C 625, 18 October 2008

during the Reagan administration,<sup>341</sup> the adoption of the ‘more economic approach’ in EU merger control can be seen as a move towards similar ‘rigorous’ economics-based merger analysis, with the result that in theory conglomerate mergers in the EU will usually not give rise to anticompetitive effects (according to this method of analysis) or these effects will be offset by ‘efficiency gains’ eg in the form of cost savings.<sup>342</sup>

Two major mergers involving Google were analysed in both the EU and US before eventually being approved.

In the DoubleClick merger, which represented the first merger the European Commission had to assess since adopting its Non Horizontal Merger Guidelines in 2007 which reflected the ‘more economic approach’, the Commission acknowledged that both firms were active in the “online advertising” industry, which seems to comprise a value chain containing various parts: companies that sell advertising space, companies that sell ad-serving services (ie making sure the correct ad is sent or ‘served’ to the correct space), and advert exchanges. The Commission looked at the potential harm from Google buying DoubleClick ie Google controlling the leading supplier of a key input into distribution channels that compete with its own ad network and also the combination would form a conglomerate of products that could be purchased together.

Despite both parties being active in the online advertising industry, they mainly dealt with different kinds of advertisement: Google principally offered advertising space for search (text) and contextual (text) adverts, whereas DoubleClick’s ad serving services were mainly used for (non-search) display ads. Nevertheless, the Commission left the question of whether search and non-search ads constituted different markets open, since it considered that even if separate markets were defined, the merger still did not raise competition concerns. However, the Commission’s market investigation did define separate markets for display ad serving technology (such as that provided by DoubleClick) and text ad serving technology due to differences in the features available to users. In any event, the Commission found that DoubleClick and Google were not competing on the same markets: DoubleClick was not

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<sup>341</sup> Eleanor M Fox, ‘U.S. and European Merger Policy – Fault Lines and Bridges - Mergers that Create Incentives for Exclusionary Practices’ (2002)10 *George Mason Law Review* 471

<sup>342</sup> Oliver Budzinski and Katharina Wacker, *The Prohibition of the Proposed Springer-Prosiebensat.1-Merger: How Much Economics in German Merger Control?* (University of Marburg papers on economics, 2007) <<http://ssrn.com/abstract=976861>> accessed 31 August 2014

providing online advertising space and Google was not providing ad serving tools except bundled with other advertising services (and this was not substitutable for stand-alone third party ad serving tools such as DoubleClick's).

Regarding the horizontal effects of the merger, from the perspective of actual competition, the Commission found that ad serving represented a very small part of the total cost of online advertising, DoubleClick was subject to competitive constraints from other providers of third party display ad serving tools, and Google's 'bundled' advertising services and non-bundled services such as that provided by DoubleClick were not close alternatives. As regards potential competition, while both Google and DoubleClick were in the early stages of entering other parts of the online advertising value chain (DoubleClick was developing an intermediation platform and Google was developing ad serving tools that would have competed with DoubleClick), the Commission considered that they would still face competitive pressure in these markets from other entities, and it was unlikely that anticompetitive foreclosure would arise from the acquisition. In the end, the Commission allowed the merger to proceed.

However, the Commission's decision can be criticised based on survey evidence produced by Hahn and Singer, which suggested that Google and DoubleClick *did* compete with each other, since advertisers viewed search and contextual ads on the one hand and graphic display ads on the other hand as substitutes, as well as perceiving that Google's services were a next-best alternative to DoubleClick's, with the implication that the merger would be bad for competition and harmful for online advertisers since the combined entity would have an incentive to increase the price of DoubleClick's services compared to when DoubleClick was independent.<sup>343</sup>

Furthermore, the US FTC also cleared the Google DoubleClick merger, yet Commissioner Pamela Jones Harbour dissented from the majority view and was concerned about how the 'combination of Google and DoubleClick likely will affect the evolution of the entire online market – especially in light of existing network effects', referring specifically to the

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<sup>343</sup> Robert W Hahn and Hal J Singer, 'An Antitrust Analysis of Google's Proposed Acquisition of DoubleClick', (AEI-Brookings Joint Center for Regulatory Studies Publication 2008) <[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1016189](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1016189)> accessed 31 August 2014

acquisition of data by Google that the merger would entail.<sup>344</sup> In addition, the European Data Protection Supervisor criticised the Commission's analysis of the Google DoubleClick merger due to insufficient regard being given to the merger's effect on combining each company's datasets, with the possibility of providing new services that were not envisaged when the data was originally submitted by users, thereby 'neglecting the longer term impact on the welfare of millions of users'.<sup>345</sup> The implications of these statements are that Google's position overall would have been unfairly strengthened by this acquisition of data from DoubleClick's customers, and that there might have been implications for EU data protection law as well given data had originally been collected for a certain purpose ie for the use of DoubleClick's services, and that data was now in a position that it could be used by the merged entity for new services. In EU data protection law, personal data can only be collected under certain circumstances, one of which is consent of the 'data subject' for the processing of the data for a particular purpose, so if the purpose changes, or new purposes are added, then in theory the data subject's consent should be sought again for these new purposes. However, the European Commission's conduct demonstrated a lack of concern for privacy within the context of 'consumer welfare' – an approach which may have to be modified now in the wake of the EU's Charter of Fundamental Rights, and the possible constitutionalisation of competition law this may provoke.

The Motorola Mobility merger involved Google's purchase of a smartphone and tablet computer developer. This again could be classed as vertical with Google as a provider of various online services including search and the Android operating system used on smartphones and Motorola Mobility as a supplier of mobile devices and holder of important intellectual property rights for these devices.

In terms of harm, in the Commission investigation the issue of the 'conglomerate relationship' between Google and Motorola Mobility was raised ie the danger of Google's acquisition of Motorola Mobility and its patents allowing Google to engage in exclusionary conduct, thus strengthening its market power in mobile search and search advertising.<sup>346</sup> Specifically this could be done by Google only licensing the patents it has gained from the merger to other

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<sup>344</sup> Pamela Jones Harbour, 'Dissenting Statement *In the matter of Google/DoubleClick*' FTC File No 071-0170, 4

<sup>345</sup> EDPS (n 130) 30

<sup>346</sup> *Google/Motorola Mobility* (Case COMP/M.6381) Commission Decision of 13 February 2012 [2012] OJ (C) 75/01, 34

mobile equipment manufacturers on the condition that they install Google's mobile services and potentially also forcing them to set the mobile services as default, or by offering the manufacturers more favourable terms for licensing the patents if they install Google's mobile services. This concern was dismissed, not because it was not a real fear, but because Google already had this capacity pre-merger to impose its own services on manufacturers and network operators through the licensing of its Android operating system, and in fact there are already agreements which force manufacturers which want to pre-install Google mobile services on the equipment to set Google search as the default search engine and must pre-install a minimum suite of core Google mobile services (although users could still download competing services onto their devices, change the default setting and access most computing services through the web browser of their device – this will be discussed in more detail in the following chapter).<sup>347</sup>

It seems that by the point of this merger, Google had already expanded sufficiently that even before the purchase of Motorola Mobility it had the ability to impose its own services on network operators and handset manufacturers, and so the effect of this further expansion was negligible on the power Google had already amassed. Google's activity in the device market will be discussed in more detail in Chapter 5, but interestingly Google's use of the Motorola Mobility patents formed part of its settlement with the FTC.

These mergers thus demonstrate Google's expansionist tendencies which have been 'conglomerate' in their character as well as relating to different parts of the search and advertising supply chain. They also demonstrate that, in hindsight, merger control has not been particularly effective in addressing competition concerns brought about by Google's acquisition of these other companies, given some of the acquired products have been the subject of, or related to, allegations of abuse of dominance against Google. Furthermore, while conglomerate mergers have increased the size and potency of Google, they are not adequately addressed by current theories of merger control prevalent in the US and EU, and so give rise to very large entities which have an ability to influence markets but also, in Google's case anyway, areas beyond the market.

Google's ever-expanding size and portfolio can be conceptualised as exactly the kind of

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<sup>347</sup> *ibid* 35-37

private power accumulation which concerned the ordoliberalists. Indeed, Google's vast (and ever growing) concentration of power encompasses political as well as economic.<sup>348</sup> This influence may pose problems for the democratic process (especially in the US), and democratic oversight over such an accumulation of power.

### c) Bias

Problems with bias in how search engines give their results have been identified in academic literature from computer science and politics. Search engines, including Google, like to claim that their results are generated in a 'technical' or 'mechanical' way and so are untainted by favouring certain results beyond their 'relevance' to the search, but the methods they use to determine results are designed in particular ways which have this effect, whether intentionally or not, and involve the value judgements of humans regarding how to collect and present the data.<sup>349</sup> While search engines are usually very secretive about how their ranking algorithms work, Google recently announced that it prioritises secure websites in its search results, in a rare admission of how its algorithm works (at least in part).<sup>350</sup>

From a computer science perspective, Vaughan and Thelwell found that search engines are biased in favour of sites coming from the US (at least compared to the other countries examined in the study), and this was not to do with language (ie the use of English) but instead a site's 'visibility', namely the number of other sites that link to it seems to be a source of bias: in general, the more sites already indexed by the search engine that link to a site, the more of that site will be covered by the search engine.<sup>351</sup> 'Unequal coverage' of websites by search engines for the authors is a result of various 'technical' factors including site link

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<sup>348</sup> Christian Fuchs, 'A Contribution to the Critique of the Political Economy of Google', (2011) 8.1 *Fast Capitalism*; Tom Hamburger and Matea Gold, 'Google, once disdainful of lobbying, now a master of Washington influence' (Washington Post, 13 April 2014) <[http://www.washingtonpost.com/politics/how-google-is-transforming-power-and-politicsgoogle-once-disdainful-of-lobbying-now-a-master-of-washington-influence/2014/04/12/51648b92-b4d3-11e3-8cb6-284052554d74\\_story.html](http://www.washingtonpost.com/politics/how-google-is-transforming-power-and-politicsgoogle-once-disdainful-of-lobbying-now-a-master-of-washington-influence/2014/04/12/51648b92-b4d3-11e3-8cb6-284052554d74_story.html)> accessed 1 September 2014

<sup>349</sup> Eric Goldman, 'Search Engine Bias and the Demise of Search Engine Utopianism' (2006) *Yale Journal of Law and Technology* 111, 113; Marina Lao, 'Neutral' Search as a Basis for Antitrust Action?' (Harvard Journal of Law and Technology Occasional Paper Series 2013) 3

<sup>350</sup> Zineb Ait Bahajji and Gary Illyes, 'HTTPS as a ranking signal' (*Google Webmaster Central*, 6 August 2014) <<http://googlewebmastercentral.blogspot.com.au/2014/08/https-as-ranking-signal.html>> accessed 1 September 2014

<sup>351</sup> Liwen Vaughan and Mike Thelwall, 'Search Engine Coverage Bias: Evidence and Possible Causes' (2004) 40(4) *Information Processing and Management* 693



counts, the exponential growth of the Web, the early start the US had in creating websites and a possible tendency for sites to link to others in the same country.<sup>352</sup> Furthermore, Edelman's study of Google's search results suggests that Google has 'hard-coded' (ie manually adjusted) its own links to its other products and services so as to appear at the top of algorithmic search results.<sup>353</sup> Edelman points out the possibility of algorithms themselves being biased, and goes further to express doubt as to whether all Google's search results are always generated by algorithm, despite what Google claims.

Furthermore, Introna and Nissenbaum argue that search engines systematically exclude (both by design and accidentally) certain sites and certain types of sites in favour of others and systematically make some more prominent at the expense of others, which they argue is a political issue.<sup>354</sup> They suggest that Internet users are most likely to find 'popular, large, sites whose designers have enough technical savvy to succeed in the ranking game, and especially those sites whose proprietors are able to pay for various means of improving their site's positioning',<sup>355</sup> and that smaller, less popular sites with less resources to pay for professional help to climb search ranking are less likely to be found and even if they are found, are more likely to be listed lower down in the rankings.<sup>356</sup>

While competitive pressures could limit search bias, it is particularly problematic for 'online information credibility and accessibility' where there is a dominant search engine leaving consumers without meaningful choices.<sup>357</sup> Certain manifestations of bias such as the search engine favouring its own products in different markets could constitute anticompetitive behaviour. However, as will be discussed later in this chapter in greater detail, this conduct in practice does not appear to be an abuse of Google's dominance. In addition, it would seem some element of bias is necessary in search engines' operation, or at least how search engines operate and how they produce results involves certain value choices regarding information to

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<sup>352</sup> *ibid*

<sup>353</sup> Benjamin Edelman, 'Hard-Coding Bias in Google Algorithmic Search Results' (15 November 2010) <<http://www.benedelman.org/hardcoding/>> accessed 1 September 2014

<sup>354</sup> Lucas D Introna and Helen Nissenbaum, 'Shaping the Web: Why the politics of search engines matter' (2000) 16(3) Information Society

<sup>355</sup> Using search engine optimization methods which work by trying to 'second guess' the secret ranking algorithms used by search engines – these algorithms are updated often, however, resulting in a 'cat and mouse' game between search engines and search engine optimisers.

<sup>356</sup> Introna and Nissenbaum (n 355) 17

<sup>357</sup> Eric Goldman, 'Revisiting Search Engine Bias' (2011) 38(1) William Mitchell Law Review 96, 101

include, prioritisation, ‘relevance’ and so on.<sup>358</sup> Furthermore, it may be desirable to keep certain content out of search results, such as that from ‘spammers, fraudsters and malcontents’.<sup>359</sup> Yet, this does not entail that the *status quo* is socially desirable, and the problematic effects of bias, while not necessarily anticompetitive, are likely to be exacerbated by a concentrated market and a lack of real choice for users.

#### **d) Privacy and data protection**

Privacy concerns over users' information and search engines have become prominent in recent years, especially given the diversification of Google into other areas beyond search and advertising (such as Google's social network, ownership of YouTube etc) which allows it to collect an even larger amount of data about users' searches, preferences etc. This is also exacerbated by recent revelations that the data collected by major Internet companies including Google can be passed on to government agencies, including those of foreign states such as the US NSA without warrants being issued.

At the crux of privacy concerns is Google's collection and use of user data. In the EU there is a comprehensive data protection regime which applies to private entities, and has its foundation in the Data Protection Directive from 1995 (whose revision is under discussion at the time of writing).<sup>360</sup> The Directive regulates the processing of personal data in the EU, which can only happen under limited circumstances fulfilling the criteria of transparency, legitimate purpose and proportionality, and fines can be issued for violations of these rules. The protection of personal data is also found as a separate right in the EU's Charter of Fundamental Rights.<sup>361</sup>

Google has been the subject of data protection concerns and regulatory action in various EU Member States. Google has been fined for not sufficiently identifying its Street View image-

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<sup>358</sup> Goldman (n 350) 118

<sup>359</sup> *ibid* 119

<sup>360</sup> Council Directive 95/46/EC on the protection of individuals with regard to the processing of personal data and on the free movement of such data [1995] OJ L 281 (‘Data Protection Directive’)

<sup>361</sup> Article 8 of the Charter of Fundamental Rights of the European Union

capturing cars in Italy,<sup>362</sup> and for these cars hoovering up data from open wifi networks (such as emails, photos and passwords) in Germany.<sup>363</sup> However, it was Google's modification of its Privacy Policy in 2012 in which it asserted the right to use personal data collected from one of its services in the functioning of its other services thereby merging several pieces of user data into one profile, that has given rise to a host of complaints and investigations by national data protection authorities in Europe.<sup>364</sup> The authorities in Spain and France have already issued Google with fines for this conduct, due to the combination of data collected through Google's different services greatly exceeding the reasonable expectations of the majority of users, Google hindering users in exercising their rights of access, rectification, cancellation and opposition, Google not providing its users with sufficient information regarding the conditions and purposes under which their personal data is processed, and Google not seeking adequate consent for its activities from these users.<sup>365</sup>

However, there is criticism of the level of fines that can be imposed on the finding of a data protection breach – that they are so low in level and not always enforced that large firms may find it more profitable to breach the laws and pay the fines rather than to follow the law in the first place.<sup>366</sup> Indeed, much higher fines (in line with fines for anti-competitive conduct) have been proposed as part of the revision to European data protection law currently under discussion.<sup>367</sup>

The US approach to data protection has generally been one of self-regulation, although growing concerns around data protection have led the FTC to respond from a consumer protection perspective, such as its settlements with Facebook, Google and Twitter over

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<sup>362</sup> Natasha Lomas, 'Google Pays Another Tiny Fine In Europe - \$1.4M – For Street View Privacy Concerns' (*TechCrunch*, 4 April 2014) <<http://techcrunch.com/2014/04/04/google-street-view-fine/>> accessed 1 September 2014

<sup>363</sup> Zack Whittaker, 'Germany fines Google for 'unprecedented' Street View Wi-Fi data breach' (*ZDNet*, 22 April 2013) <<http://www.zdnet.com/germany-fines-google-for-unprecedented-street-view-wi-fi-data-breach-7000014337/>> accessed 1 September 2014

<sup>364</sup> Peter Sayer, 'Google must defend privacy policies to 6 European agencies' (*TechHive*, 7 April 2013) <[http://www.techhive.com/article/2033375/google-must-defend-privacy-policies-to-6-european-agencies.html?tk=rel\\_news](http://www.techhive.com/article/2033375/google-must-defend-privacy-policies-to-6-european-agencies.html?tk=rel_news)> accessed 1 September 2014

<sup>365</sup> Bogdan, 'Google was fined by French and Spanish Data Protection Authorities' (*European Digital Rights Initiative*, 15 January 2014) <<http://edri.org/google-fined-french-spanish-data-protection-authorities/>> accessed 1 September 2014

<sup>366</sup> Paul Ducklin, 'How effective are data breach penalties? Are ever-bigger fines enough?' (*Nakedsecurity*, 26 April 2013) <<http://nakedsecurity.sophos.com/2013/04/26/how-effective-are-data-protection-regulations/>> accessed 1 September 2014

<sup>367</sup> William Long, 'EU Data Protection Regulation: fines up to €100m proposed' (*Computer Weekly*, November 2013) <<http://www.computerweekly.com/opinion/EU-Data-Protection-Regulation-fines-up-to-100m-proposed>> accessed 1 September 2014

consumer privacy, its lobbying for legislative intervention regarding 'data brokers' ie entities which compile and trade data about consumers and its forceful push of the 'do not track' mechanism.<sup>368</sup> Nevertheless, at the time of writing the lack of EU-US convergence has been thrown into sharp relief during the EU's process of formulating its new Data Protection Regulation, which has been subjected to an unprecedented amount of lobbying from the US in order that the final text of the regulation does not subject US companies handling EU citizens' data to what they see as overly strenuous conditions.<sup>369</sup>

In particular, the proposals for a new data protection regime would extend the scope of the rules to organisations based outside the EU which process the personal data of EU residents (which of course would be of particular concern to transnational corporations such as Google which is American in its origins and presumably transfers data, including the personal data of Europeans between data centres in different parts of the world).<sup>370</sup> The proposals would also require entities processing personal data to seek explicit consent from the data subject in circumstances in which this consent is required, and this consent cannot be assumed.<sup>371</sup> Furthermore, the proposals introduce a 'right to be forgotten', which would entail personal data being deleted when an individual no longer wants this data to be processed and there are no legitimate grounds for retaining it.<sup>372</sup> Finally, the proposals also envisage a (limited) right to data portability for data subjects, when their personal data is processed electronically and in 'a structured and commonly used format'.<sup>373</sup>

The lack of similar protection of personal data in the US has raised questions over whether antitrust law can be used as a means of protecting privacy. Indeed, it has been argued there that antitrust law should take into account privacy concerns in its analysis from a consumer perspective, since anticompetitive practices can cause harm to consumers which is not purely financial, and the accumulation of market power by firms such as Google exacerbates the problem since consumers/users are left without meaningful choices when these firms invade

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<sup>368</sup> Tanzina Vega and Edward Wyatt, 'U.S. Agency Seeks Tougher Consumer Privacy Rules' (*New York Times*, 26 March 2012) <[http://www.nytimes.com/2012/03/27/business/ftc-seeks-privacy-legislation.html?pagewanted=all&\\_r=0](http://www.nytimes.com/2012/03/27/business/ftc-seeks-privacy-legislation.html?pagewanted=all&_r=0)> accessed 1 September 2014

<sup>369</sup> European Digital Rights Initiative, 'US Privacy Groups Believe US Officials Lobby To Weaken EU Privacy' (13 February 2013) <<http://history.edri.org/book/export/html/3215>> accessed 1 September 2014

<sup>370</sup> Commission 'Proposal for a Regulation of the European Parliament and of the Council on the protection of individuals with regard to the processing of personal data and on the free movement of such data ('General Data Protection Regulation') COM (2012) 11 final, Article 3

<sup>371</sup> COM (2012) 11 final, Articles 6 and 7

<sup>372</sup> COM (2012) 11 final, Article 17

<sup>373</sup> COM (2012) 11 final, Article 18

their privacy since there are few or no competitors.<sup>374</sup> However, as mentioned before in this thesis in the initial two chapters, antitrust law is not well-equipped to deal with non-economic harm, inasmuch as such considerations may well be outside the legal authority of the competition authorities: for instance the majority opinion of US Federal Trade Commission in its scrutiny of the Google DoubleClick merger acknowledged the privacy concerns around this acquisition, but stated that the consideration of such concerns in an antitrust review were beyond the scope of its authority, and consumer privacy as a ‘non-price attribute’ was not harmed in any event by the merger.<sup>375</sup> Aside from a lack of legal authority, competition authorities may not have the sufficient expertise to deal with such non-economic concerns, and in certain jurisdictions it may also be viewed as breaching the separation of powers for such an institution to get involved with such ‘socio-political’ issues.

Whether privacy and data protection concerns can be taken account of by competition law is debatable - and has already been discussed in greater detail in Chapter 2 - but it seems evident that the current configuration of incentives for Internet companies is detrimental to users’ privacy and data protection since it encourages the collection and monetisation of their information, alongside the ‘trade’ of these protections by users for free services.<sup>376</sup> Furthermore, potential conflict between the two regimes could amount to a dominant entity (which is accused of violating competition law) invoking a privacy-tailored regulatory conduct defence (ie its obligation to protection consumers’ privacy) to a claim that it is leveraging its sole control over a large amount of user data to impede or eliminate competition in the market. In sum, user privacy may entail that entities which gather a large amount of personal information about users, such as Google, should not share that information with competitors lest data protection law be infringed.

Indeed this problematic scenario was mentioned by the European Data Protection Supervisor in a recent Preliminary Opinion on the interplay between data protection, competition and consumer protection in the context of ‘big data’ mentioned already in Chapter 2. He considered that the collection and control of very large amounts of personal data are a source of market power for large players in European Internet markets, yet access to these datasets

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<sup>374</sup> Al Franken, ‘How Privacy Has Become an Antitrust Issue’, speech delivered to American Bar Association Antitrust Section, 30 March 2012

<sup>375</sup> Federal Trade Commission, ‘Statement *In the matter of Google/DoubleClick*’ FTC File No 071-0170, 2

<sup>376</sup> Simonetta Vezzoso, ‘The Interface between Competition Policy and Data Protection’ (2012) 3(3) *Journal of Competition Law and Practice*, 225

by competitors may be stymied by data protection rules that require data subjects' consent for such a new use (or adherence to other legitimate grounds), and 'this is a substantial hurdle under data protection law'.<sup>377</sup> Thus, adherence to data protection law may facilitate what would otherwise be anticompetitive conduct over the use and control of users' personal data.

## 4.2 Search engines and market developments

Search engines initially appeared soon after the creation of the World Wide Web as a means to organise and catalogue websites and information. The experience with the initial search engines during the 1990s and early 2000s demonstrated a competitive market during this period, characterised by first mover advantages which declined over time and whose continuance were dependent on innovating to provide a superior product, suggesting low barriers to entry and strong competition.<sup>378</sup> Indeed, the last two decades have seen the rise and fall of many players in the search engine market.<sup>379</sup> This suggests that the markets for search engines are characterised by Schumpeter's 'creative destruction', and that competition is for the market rather than within the market.<sup>380</sup>

Furthermore, search engine markets can be described as 'two-sided'. Two-sided markets are markets in which a platform enables interactions between end-users and tries to engage both 'sides' of the market by charging each set of end-users appropriately.<sup>381</sup> For search engines, on the one side are Internet users searching for information on the Web, and on the other side are advertisers which pay for their adverts to be displayed in search results – the platform is the search engines itself which causes these two sides to meet and interact. The largest, generalised search engines do not charge users to use the service, and instead their revenue comes solely from the advertisers. Some more specialised search engines such as legal search engines (eg Westlaw, Lexis Nexis) have different business models and charge users for access

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<sup>377</sup> EDPS (n 130) 31

<sup>378</sup> Neil Gandall, 'The Dynamics of Competition in the Internet Search Engine Market' (2001) University of California, Berkeley Competition Policy Center Working Paper No. CPC01-17 <[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=502823](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=502823)> accessed 1 September 2014

<sup>379</sup> Aysem Diker Vanberg, 'From Archie to Google -Search engine providers and emergent challenges in relation to EU competition law' (2012) 3 (1) European Journal for Law and Technology

<sup>380</sup> P A Geroski, 'Competition in Markets and Competition for Markets' (2003) 3(3) Journal of Industry, Competition and Trade 151

<sup>381</sup> Jean-Charles Rochet and Jean Tirole, 'Two-Sided Markets: An Overview' (2004) University of California, Berkeley Haas School of Business, 2.

to their services; sometimes they have advertising too, but sometimes not. It is also conceivable that a search engine could operate without advertisements and without charging users, making revenue by selling data about users, their behaviour and their preferences to advertising agencies for use in advertising elsewhere.

In addition, the market for search engines has been observed to exhibit network effects which potentially encourage concentration.<sup>382</sup> The network effects in this two-sided market operate such that an increase in users adds value for advertisers since more people will see their advertisements, and an increase in advertisers using the platform causes users to experience increased value as well since each additional advertiser hands over more funding to the search engine to provide free services for users as well as the continuing development and refinement of the search engine itself.

Although the search engine market appeared to be competitive in the 1990s and into the early 2000s, this would no longer seem to be the case. The market appears to be more consolidated now than before and there are various reasons for this development from competition to Google's dominance (as well as this being a common feature of competition for the market). Van Couvering posits that this concentration is due to search provision being capital-intensive, requiring large investment in hardware, software and connection capacity.<sup>383</sup> With the huge growth of the Internet as well since the 1990s, perhaps at one time search engines could be set up and used without such large capital costs, but in order to serve a large number of users worldwide well search engines currently need such investments in their capacity. Furthermore, Van Couvering identified the introduction of 'paid-performance ads' ie the paid advertising that appears in specific parts of search engine result pages when users search for certain terms, which she argues has strengthened the position of search providers since they provide this service which targets advertising more precisely to consumers' interests than the blanket advertising which was previously used, as well as the fact that search engines control the paid-performance advertising networks AdWords (Google) and Overture (Yahoo! - now known as Yahoo! Search Marketing).<sup>384</sup>

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<sup>382</sup> Kristine L Devine, 'Preserving Competition in Multi-Sided Innovative Markets: How Do You Solve A Problem Like Google?' (2009) 10 North Carolina Journal of Law and Technology, 4-5

<sup>383</sup> Elizabeth Van Couvering, 'New Media? The Political Economy of Internet Search Engines' (International Association of Media & Communications Researchers, Porto Alegre, July 2004)

<sup>384</sup> *ibid* 17

In this context, Google specifically emerging as a market leader can be attributed its early innovation in providing a ‘better’ search service than that which was currently on offer to users, through developing a better search algorithm which relied on reputation (measured by links from other pages to that page) as well as text matching to provide the most relevant results, and building on its increasing experience of search to deliver even more relevant advertising through paid results, which ended up having greatly more credibility than previous search engines' paid results that may have been advertising an entirely different product or service from that for which the search was made.<sup>385</sup>

This observation as to the development of paid-performance ads and the more precise targeting of advertising to users seems implicitly to suggest the growing importance of user data collection by search engines, which also presents problems for privacy and data protection as mentioned above. The collection of information about users and their behaviour is also discussed below as constituting a barrier to entry in the online search and advertising markets since this accumulation of data is used to entrench the position of the leading search engines, especially Google, which is widely viewed as the dominant firm among search engines in Europe and the United States. Although the market for search in the past was characterised by low entry barriers and frequent new entrants, the current state of the market alongside the pivotal importance of the collection, analysis and sale of user data suggests that the entry barriers are now at least higher than they were previously.<sup>386</sup>

Furthermore, Google has been able to entrench its leading position in the market for search also due to offering other ‘free’ services to users such as Gmail (although that contains advertisements, so 'free' inasmuch as Google search is free) and Google Docs (which does not contain advertisements).<sup>387</sup> In this way, users are introduced into the Google 'ecosystem', which gives Google more opportunities to target adverts more accurately, and a huge amount more data about its users and their preferences which it can use to improve its search function and reinforce its commercial strength.

If Google is a dominant monopoly, then the initial legal solution to any problems arising from

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<sup>385</sup> Devine (n 383) 7

<sup>386</sup> Nathan Newman, ‘Search, Antitrust and the Economics of the Control of User Data’ (2014) 30(3) *Yale Journal on Regulation*, 10

<sup>387</sup> Martin Cave and Howard Peter Williams, ‘Google and European Competition Law’ (39<sup>th</sup> Research Conference on Communication, Information and Internet Policy, Arlington, September 2011) 4



that situation (such as those identified in the previous section) would be found in competition law, since unlike ISPs discussed in the previous chapter, search engines are not subject to any sector-specific ex ante regulation. Indeed, Google has been investigated for alleged anticompetitive conduct in both the US and EU regarding the functioning of its search and advertising business. From here, these complaints leading to the competition investigations will be outlined, Google's dominance will be assessed by examining the relevant market, Google's market share and competitive constraints to determine whether it does indeed have this dominant position. Then the complaints against Google which have been at issue in these competition investigations regarding the core functioning of the search engine will be considered. The extent to which Google's conduct is actually anticompetitive along with the outcomes of the investigations will be assessed, followed by the extent to which these outcomes, and other applicable areas of law such as data protection, address the concerns with Google's search engine mentioned in the previous section and thus protect and promote user autonomy.

### **4.3 EU investigation into Google**

The European Commission opened its investigation into Google in November 2010 for an alleged abuse of dominant position contrary to Art 102 TFEU.<sup>388</sup> This investigation is the largest and most significant competition investigation into Google to date and is still ongoing at the time of writing. Currently the Commission and Google appear to have reached a settlement in the wake of various previous proposals from Google that were rejected by the Commission. This section will examine the complaints against Google, whether Google is actually behaving anticompetitively according to EU competition law, and will consider the commitments offered by Google to the Commission.

#### **a) Complaints against Google**

The European Commission's investigation was launched in 2010 after complaints were

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<sup>388</sup> European Commission, 'Antitrust: Commission probes allegations of antitrust violations by Google' IP/10/1624

received from Google's competitors – price comparison site Foundem, ejustice.fr (a French legal search engine) and German shopping site Ciao (owned by Microsoft), whose services are known as 'vertical search' – that Google was treating them unfavorably in its search results (both 'organic' or unpaid results, and the 'sponsored' or paid results), and was discriminating in favor of its own versions of these services. In 2012, the Commission issued a communication inviting Google to offer commitments to remedy the Commission's concerns about anticompetitive behavior.

There appear to be four parts to the Commission's investigation into Google. Firstly, Google is alleged to have engaged in anticompetitive behaviour by lowering the rank of the unpaid search results of services which competed with Google (in particular, vertical search services providing users with specific online content such as price comparisons), and to have accorded preferential placement to the results of its own versions of these services in order to foreclose its competitors.<sup>389</sup> Secondly, Google is alleged to have lowered the 'Quality Score' for the sponsored links of such competing vertical search engines (the Quality Score influences the likelihood of an ad to be displayed by Google and the ranking of that ad in the search results, and is a factor in determining the price paid by advertisers to Google). Thirdly, it is alleged that Google imposed exclusivity obligations on its advertising partners which prevented them from placing certain types of competing adverts on their own websites with the aim of foreclosing competing search engines (it is also alleged that Google imposed this obligation on computer and software vendors). Fourthly, there are allegations that Google placed restrictions on the use of online advertising campaign data by competing advertising platforms (ie other 'virtual marketplaces' offering advertising space on the Internet).

The first two categories of complaint will be the focus of this analysis since they relate directly to how Google operates its user-facing search engine, as opposed to the latter two complaints which concern how Google operates its online advertising services. In addition, these latter two complaints have been addressed by commitments from Google that it will remove exclusivity requirements in search advertising agreements with publishers and it will remove restrictions on the ability for search advertising campaigns to be run on competing platforms.<sup>390</sup>

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<sup>389</sup> This was also one of the complaints against Google forming the FTC investigation.

<sup>390</sup> European Commission, 'Antitrust: Commission obtains from Google comparable display of specialised search rivals' IP/14/116

## **b) Is Google behaving anticompetitively in Europe?**

While it seems that in the EU, Google and the Commission will reach an agreement regarding Google's design and display in its search results pages, it is not clear whether Google is actually behaving anticompetitively, since such an agreement does not constitute a finding of wrongdoing. Here, whether Google has a dominant position in the EU will be assessed, by determining the relevant market, Google's market share, and the competitive constraints it experiences, and then the extent to which Google's conduct fits into a recognised category of abuse will be considered.

### **(i) Relevant market and market share**

Traditional competition analysis firstly requires that the relevant market is defined, and here some guidance as to how market definition should be conducted can be provided from the European Commission's two merger decisions involving Google, as well as the current investigation.

In the EU, markets are defined based on the substitutability of the product or service at hand from the consumer's point of view and geographical area. However, in the new media environment, market definition has been recognised as being a more complex endeavour, both due to the transnational nature of digitised products and services proving challenging for geographic definition, as well as the actual conceptual defining of the products and services at hand, along with their substitutability. Furthermore, elements such as 'free pricing' and the existence of a two-sided market which are common on the Internet complicate matters even more, for instance making the test for defining the market, which in Europe is the small but significant non-transitory increase in price (SSNIP) more complex, since for consumers they do not pay anything for Google's search service, which is instead funded by advertising revenue.

As mentioned earlier in this chapter, Google's online search and advertising business can be conceptualised as a two-sided market. Users do not pay for this service, although Google does gather data about them and their preferences when they make these searches and uses this data for its own purposes as well as selling this data on to advertisers. The other side is Google's online advertising, whose consumers are the advertisers that pay Google to be included in the Paid Ads at the top of the 'organic' results, and they are sold access to Google's customers in terms of their 'eyeballs' when they make a search, as well as the information about these customers in order to aid their advertising campaigns.

However, some attempts to define this two-sided market have run into problems. For instance, in the *Kinderstart v Google* case,<sup>391</sup> which was heard before a US District Court, the court threw out the antitrust claims against Google since Kinderstart had not established the 'search market' as a relevant market. Kinderstart did not claim that Google 'sold' its search services to users, and it did not cite any authority that indicated that antitrust law is concerned with competition in the provision of free services, and so the judge considered that 'search' was not a relevant market for antitrust purposes.<sup>392</sup> Yet, the judge was mistaken here in concentrating only on price (ie a monetary price of zero), and not on the other, non-price measures of competition such as product attributes, service and innovation. When the product is free, a more nuanced approach is necessary: antitrust analysis can consider the free product together with its 'companion' products which make money and in practice subsidise the free offering.<sup>393</sup> Changes to practices around the free product can affect the benefits or costs for the companion product and vice versa, and so constitute legitimate subject of competition investigation. As a rule, when defining markets with a two-sided character and especially where there is a free product, the assumption should be that both sides of the market are considered in defining the relevant market, although this presumption is rebuttable on the circumstances at hand.

Regarding Google's search and advertising activity, there are differing views on its substitutability: for instance Manne has implicitly criticised a narrow market definition in this case, by naming alternatives to search engines from an advertiser's point of view as ranging from advertising in print publications, television, using social networking sites for promotion,

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<sup>391</sup> *Kinderstart v Google* 2007 WL 831806 (N.D.Cal.)

<sup>392</sup> The Court also did not recognise the market for search advertising as a relevant market.

<sup>393</sup> Evans (n 119)

being linked to by other websites such as those which specialise in rating websites, purchasing paid advertising on Google or its competitors.<sup>394</sup> However, from the consumer's perspective, she may well not regard the services offered by these other entities interchangeable with that provided by Google – in fact, she may well want to search for content on the Internet, not even necessarily advertised, commercial content, and so it would be other Internet search engines (and not necessarily those specialised vertical search/price comparison sites) such as Yahoo and Bing which would count as Google's competitors. For advertisers or other companies promoting their products and services through inclusion in Google's organic search results, substitutability (and so correct market definition) will depend upon whether they would switch to advertising and promotion through newspapers etc if Google raises the prices and/or otherwise changes conditions. Some research suggests that for advertisers, there is a degree of substitutability between online and offline advertising, although this is most strongly the case with offline direct marketing where customers are difficult to reach efficiently via the mass media.<sup>395</sup> In any event, in the EU it is demand substitutability which is of the utmost importance, according to the Commission.<sup>396</sup>

Indeed, the issue of market definition especially based on substitutability has come up in the merger cases involving Google. In the Commission's scrutiny of the DoubleClick merger, it was submitted that the relevant market should encompass the provision of advertising space in all types of media and not just online, but the Commission in its decision rejected that definition given that there is a general perception that online and offline advertising are different markets. Online advertising was being used for specific purposes; was reaching a more targeted audience in a more effective way than offline advertising; had a unique reporting system which enabled advertisers to check exactly how many users had viewed or clicked on the advert; and the specific pricing mechanism applied to online advertising.<sup>397</sup> Instead, the Commission concluded that there was a separate market for the provision of online advertising space. In the later Microsoft/Yahoo! decision, the Commission followed its analysis in DoubleClick and decided that online advertising was its own separate market from

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<sup>394</sup> Geoffrey A Manne, 'The Problem of Search Engines as Essential Facilities: An Economics & Legal Assessment' in Berin Szoka and Adam Marcus (eds), *The Next Digital Decade: Essays on the Future of the Internet* (TechFreedom 2011), 419

<sup>395</sup> A Goldfarb and C Tucker, 'Search Engine Advertising: Channel Substitution When Pricing Ads to Content' (2011) 57.3 *Management Science* 458

<sup>396</sup> European Commission, 'Notice on the definition of relevant market for the purposes of Community competition law' [1997] OJ C372/03, para 14

<sup>397</sup> *Google/DoubleClick* (Case COMP/M.4731) Commission Decision [2008] OJ C184/10

offline advertising.<sup>398</sup> These analyses also show that the Commission was happy to consider the markets for online advertising separately to their offline counterparts.

As regards the search 'side' of Google's business, it could be argued that the relevant market is that for searchable online information, information in general, or advertised information, and so on. The first definition of 'searchable online information' may also include social networks such as Facebook, although it is submitted that Facebook at the moment anyway is not operating in the same market as Google since there is a lack of substitutability from the user's perspective: unlike Google, users must create an account with Facebook and log in to access its features fully and to see the full amount of information. Furthermore, Facebook's search function is geared towards results from accounts and pages already within the Facebook network rather than the whole of the web which is the case for Google. The relevant market here would appear to be that of online search, since users use these to find particular information on the World Wide Web, as opposed to any information repository eg libraries or even other websites which are searchable such as Facebook.

In the context of Google's search engine operating in a two- or multi-sided market, there are at least two approaches that could be taken to their examination in a competition investigation, either together as part of a 'business ecosystem', or the market can be focussed on one of the products/services such as search and take the complementary product (advertising) into consideration when assessing market power.<sup>399</sup> The former approach ensures that all competitive constraints are taken into account, while the latter approach minimises errors such as false negatives (based on defining the market for the paid product while the harm arises in the free product) and false positives (concluding there is market power for the paid product but not when the paid and free products are considered together). For multi-sided platform businesses (such as Google's search and advertising), the preferred approach is to recognise that competition takes place with other multi-sided platforms, and the market consists of these firms as well as firms operating on each side of the platform which impose competitive constraints. Indeed, the European Commission took this approach in its *Microsoft Yahoo!* Decision, where it defined the relevant market as 'online search and advertising'. It is submitted that this is the appropriate approach here too.

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<sup>398</sup> *Microsoft/Yahoo!* (Case COMP/M.5727) Commission Decision of 18 February 2010

<sup>399</sup> Evans (n 119) 18-23

The other markets of relevance given the complaints against Google are those for video streaming and vertical search (which may be further subdivided into eg travel search). These markets are relevant due to the complaints against Google coming from vertical search engines and the fact that Google has launched various vertical search engines of its own. Another relevant market may actually be that for user data, or some variant such as ‘monetisation of users’ information to advertisers’.<sup>400</sup> However, this may be too broad a market definition in practice for competition authorities.<sup>401</sup>

Regarding the geographical scope of the market, it is submitted that the relevant market would be the entirety of the EU. Nevertheless, Europe differs from eg North America in its linguistic plurality: there are 23 official languages of the EU, not to mention the many more languages spoken in other European countries which are not Member States. This has an effect on national markets in Europe: while Google which is primarily Anglophone/Latin alphabet-based has a leading share in the European market overall, in some national markets this has not always been the case. Although not an EU Member State, in Russia Yandex holds the leading market share instead of Google,<sup>402</sup> and in the Czech Republic Seznam.cz had the dominant market share until early 2011, but was subsequently overtaken by Google, which by 2013 held a market share of 71%.<sup>403</sup> For the purposes of this discussion the relevant market is that of the EU as a whole, but this cannot simply be assumed without looking at the dynamics of national markets, especially those with languages which do not use the Latin alphabet.

Google is the market leader in the overall EU market(s) for online search and advertising, based on either proportion of searches that are conducted through Google (for no monetary cost to users) or its proportional share of advertising revenue (which is where Google gets its funds).<sup>404</sup> The company's market share in Europe is around 90 percent,<sup>405</sup> which would be classified as ‘near monopoly’ according to the Commission’s past practice. Google’s online search and advertising is also the market leader in the US, but with a lesser market share of

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<sup>400</sup> Florence Thepot, ‘Market Power in Online Search and Social Networking: A Matter of Two-Sided Markets’, (2013) 36(2) World Competition 195, 218

<sup>401</sup> *ibid*

<sup>402</sup> Bas Van der Beld, ‘Alternatives to Google in Europe’ (*Search Engine Land*, 14 September 2010) <<http://searchengineland.com/alternatives-to-google-in-europe-50425>> accessed 1 September 2014

<sup>403</sup> Return On Now, ‘2013 Search Engine Market Share By Country’ (2013) <<http://returnonnow.com/internet-marketing-resources/2013-search-engine-market-share-by-country/>> accessed 1 September 2014

<sup>404</sup> There are different methods of calculating shares of the search engine market in Europe, which are subject to various criticisms, but Google seems to come out in all of them as possessing a dominant position in this market.

<sup>405</sup> StatCounter, ‘Global Stats Top 5 Search Engines in Europe from Aug 2013 to Aug 2014’ <[http://gs.statcounter.com/#search\\_engine-eu-monthly-201308-201408](http://gs.statcounter.com/#search_engine-eu-monthly-201308-201408)> accessed 1 September 2014

around 75 percent, though this is still enough to be considered a dominant position.<sup>406</sup>

**(ii) Competitive constraints**

Google likes to claim that its competitors are only a click away when on the defensive from allegations that it operates an abusive monopoly. Google does face competition from other general search engines offered by Bing and Yahoo, as well as subject-specific vertical search engines and video streaming services. Nevertheless, there are various barriers to entry for new potential competitors and barriers to expansion for current competitors, which suggest that Google does have market power as well as having a leading market share.

Two or multi-sided markets such as those in which Google operates usually exhibit features such as network effects and externalities which contribute to the establishment of market power. In Google's services, advertisers will derive a benefit from there being more users of the search engine, since the more users there are, the more their adverts will be seen. Users may derive a benefit from there being more advertisers as they may make them more likely to be targeted by a more relevant advertisement, but this is probably not to be the case for all users, some of whom may prefer not to see any advertisements at all in the search results page.

Furthermore, the enormous amount of user data gathered and analysed in the functioning of Google's search service creates significant barriers to entry by giving Google advantages that cannot be replicated by potential entrants and it allows Google to move easily into neighbouring markets such as vertical search.<sup>407</sup> Another consequence of this is that Google's competitors will not be able to match the quality of the search results offered by it, due to the fact that Google reinforces its position by its simultaneous presence in multiple parallel markets in which it can acquire more user information in addition to that obtained in the normal search context. Thus, due to Google's advanced algorithm, portfolio of related

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<sup>406</sup> StatCounter, 'Global Stats Top 5 Search Engines in the United States from Aug 2013 to Aug 2014' <[http://gs.statcounter.com/#search\\_engine-US-monthly-201308-201408](http://gs.statcounter.com/#search_engine-US-monthly-201308-201408)> accessed 1 September 2014

<sup>407</sup> Newman (n 332); Nathan Newman, 'The Cost of Lost Privacy: Search, Antitrust and the Economics of the Control of User Data' (2013) <<http://ssrn.com/abstract=2265026>> accessed 1 September 2014; Nicolo Zingales, 'Product market definition in online search and advertising' (2013) 9(1) Competition Law Review



products and services and its accumulation of user data across these products and services, it would be difficult for a completely new entrant to provide services as advanced as Google's.

A greater threat to Google may come from its established rivals, but in the absence of them developing services, particularly search, as effective as Google's which they have not managed to do so far, then it is unlikely they will overtake Google. In the context of Internet markets characterised by creative destruction and platform competition, it might be an entity which is not currently competing with Google in the markets already defined which actually may pose the largest threat to Google. In that case, other vertically integrated online 'platform' operators such as Facebook (which itself has a very large repository of very personalised information about its users and their preferences) and Apple may actually be more of a threat to Google in terms of developing the next paradigm-shifting innovation rather than the other search engine providers. Facebook has been in the process of developing a new product, Graph Search, which seems to integrate Bing's general search engine with other results based on information in a Facebook user's social network connections.<sup>408</sup> This would seem to provide a potential competitive constraint on Google's search and advertising ecosystem, and at some point in the future Facebook and Google may be competing in the same market.<sup>409</sup> However for the moment Graph Search could either be conceptualised as existing in a different market given its strong social network element, and the fact that Bing has not been very successful (especially in Europe) in competing with Google (implicitly suggesting that Google provides more 'relevant' results than Bing) suggests that Google still would have market power for the foreseeable future in the online search market. It is submitted that Google is highly likely to be monitoring its rivals' developments closely in order to respond to any competition, actual or potential, and ensuring that it is doing its utmost to secure its existing dominance. Given in the EU in particular Google's market share has not varied by any great degree over the last few years and is not expected to do so any time soon, it is submitted that despite this possible potential competition, Google still has a dominant position.

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<sup>408</sup> Chris Smith, 'Facebook Graph Search: how the industry rates it' (*The Guardian*, 16 January 2013) <<http://www.theguardian.com/media-network/2013/jan/16/facebook-graph-search>> accessed 1 September 2014

<sup>409</sup> Thepot (n 401) 208

It seems that Google faces more competitive constraints in online advertising markets, with Facebook gaining market share particularly in mobile advertising markets.<sup>410</sup> However, Google's inclusion of exclusionary terms in contracts with advertisers does suggest that despite these constraints, Google still has market power in these markets as it is able to operate independently of its competitors.

Thus, while Google experiences competitive constraints from other online platforms such as Facebook and may also experience potential constraints in terms of future competition in the online search market with the development of Graph Search, Google's achievement and maintenance of a dominant position in the European market for online search (and advertising) over a period of time as well as the extent to which Graph Search will actually exert a competitive constraint on Google (given its use of Bing which does not have a particularly successful track record in taking market share from Google) suggests that Google does have a dominant position in the market for online search at least, and possibly also in the market(s) for online search and advertising.

### **(iii) Abuse of dominance?**

The core claim of the Commission's investigation is that Google is favouring its own services in how it displays search results and how it organised its paid advertising, and acting in a way that is prejudicial to the providers of services competing with Google. There is evidence that Google is at least engaging in the first practice of prioritising its downstream services over those of competitors in the unpaid or 'organic' search results, but then also evidence of Google's competitors such as Yahoo and Bing doing exactly the same thing with their results,<sup>411</sup> although Yahoo and Bing are not dominant entities, and thus do not have the same obligations regarding 'fair play'.

The issue of whether Google is acting anticompetitively here is in practice questions whether

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<sup>410</sup> 'Driven by Facebook and Google, Mobile Ad Market Soars 105% in 2013' (*eMarketer*, 19 March 2014) <<http://www.emarketer.com/Article/Driven-by-Facebook-Google-Mobile-Ad-Market-Soars-10537-2013/1010690>> accessed 1 September 2014

<sup>411</sup> Benjamin Edelman and Benjamin Lockwood, 'Measuring Bias in "Organic" Web Search' (19 January 2011) <<http://www.benedelman.org/searchbias/>> accessed 1 September 2014

Google should be allowed to control how it organises its search results, both those for which nothing is paid and those for which companies do pay - to have their result placed in the special, more prominently placed ad boxes. If Google is acting abusively in the instances mentioned above, it would be doing so in a way to foreclose competitors horizontally since it is favouring its own upstream or downstream services.

Yet, for any finding of anticompetitive behaviour from Google on this count, evidence must be adduced to show that Google is actually downgrading the results of its competitors. However, Google has denied that it does this, and claimed that their vertical search competitors' results in Google's search are not among the high rankings since they themselves copy most of their data from other websites.<sup>412</sup>

#### Special responsibilities of the dominant entity

In competition law, the dominant entity in a market has a special responsibility not to allow its conduct impair genuine undistorted competition, as stated by the CJEU in the *Michelin v Commission* case.<sup>413</sup> Similar language was used by the US Supreme Court in *Eastman Kodak* when it stated that '[w]here a defendant maintains substantial market power, his activities are examined through a special lens: Behavior that might otherwise not be of concern to the antitrust laws... can take on exclusionary connotations when practised by a monopolist'.<sup>414</sup>

This is something of a tautology since all this means is that dominance itself is not to be sanctioned, but the dominant entity should not abuse this position of dominance, which it is not supposed to do anyway, this very conduct being proscribed by competition law.

Whether Google's conduct amounts to an abuse will be considered from here on, examining the established categories of discrimination, bundling/tying and refusal to deal/essential facility.

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<sup>412</sup> Sophie van Loon, 'The Power of Google: First Mover Advantage or Abuse of a dominant position' Aurelio Lopez-Tarruella (ed) *Google and the Law* (Springer 2012), 30

<sup>413</sup> Case 322/81 *Michelin v Commission* [1983] ECR 3461

<sup>414</sup> *Eastman Kodak Co v Image Technical Services, Inc* 504 US 451 (1991), at 488

## Discrimination

Certain types of discriminatory conduct by dominant entities which do not involve pricing have been found to constitute abuses of dominance. Yet these have been in circumstances in which the dominant firm favours some third party customers over other third party customers, and not when the dominant firm is active both upstream and downstream, as is the case at hand with Google.<sup>415</sup> There appears to be no general duty for vertically integrated firms such as Google not to discriminate against downstream competitors of their subsidiaries, especially if the circumstances do not amount to a case of refusal to deal (considered below) or margin squeeze, and indeed, this kind of discriminatory conduct may well ‘more often than not... [constitute] an expression of competition on the merits’.<sup>416</sup>

Furthermore, while certain types of discriminatory conduct by dominant entities have been found to constitute abuses of dominance, there seems to be no general duty not to discriminate against competitors on neighbouring markets, and again it is unclear that Google’s conduct is analogous to the cases where such abusive discrimination has been found to exist.<sup>417</sup>

## Refusal to deal/essential facility

If Google’s conduct is not clearly a case that would fall under exclusionary discrimination, it might be characterised as a refusal to deal, backed up with appeal to the fact that Google is an essential facility ie ‘a refusal to grant access to an essential facility or network’.<sup>418</sup> Here, the theory of abuse would be that Google is foreclosing competition on downstream vertical search markets through its terms of access to its general search engine for vertical search competitors and their results, which are disfavourable compared to the terms of access Google gives its own vertical search service results. Google’s competitors would also have to

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<sup>415</sup> Pablo Ibanez Colomo, ‘Exclusionary Discrimination Under Article 102 TFEU’ (2014) 51(1) Common Market Law Review 141

<sup>416</sup> *ibid*

<sup>417</sup> *ibid*

<sup>418</sup> European Commission, ‘Guidance on the Commission's Enforcement Priorities in Applying Article 82 EC Treaty to Abusive Exclusionary Conduct by Dominant Undertakings’ [2009] OJ C45/7, para 78

argue that Google's general search engine constitutes an essential facility to which they require access otherwise they would be unable to run their services, and that by refusing their access, Google is harming competition in the vertical search markets and harming consumer welfare by reducing consumer choice.

Firstly, a refusal to deal would need to be established by Google's competitors. According to the Commission, there does not need to be 'actual refusal' on behalf of the dominant entity, and instead 'constructive refusal' will suffice, which can include 'unduly delaying or otherwise degrading the supply of the product or involve the imposition of unreasonable conditions in return for the supply'.<sup>419</sup> Here, Google is not refusing outright to deal with its vertical search competitors: it is including results from their services in its general search results. It could be argued that the placing of Google competitors' results less favourably than Google's own results could be characterised as 'undu[e] delaying or otherwise degrading the supply'. However, merely placing competitors' results less prominently on the page than Google's own results may be insufficient to establish an undue delaying or other kind of degradation of the 'supply' of search results, particularly if the competitors' search results are still available on the first page of Google's general search results.<sup>420</sup> If these results are on page ten of the result then the argument would be stronger that Google's treatment of these results is a constructive refusal to deal, especially if they are 'relevant' to the search term entered (although this 'relevance' may be difficult to prove). In any event, it seems that what is happening here is that Google is refusing to deal with vertical competitors on the terms they want, not refusing to deal with them entirely, and Google's conduct could only be seen as a constructive refusal to deal if, all things being equal the vertical search engines' results would be 'relevant' to a particular search term but they are not appearing on the first page of Google's search results.

Nevertheless, even if this can be conceptualised as a constructive refusal to deal, Google competitors must also fulfil three other criteria, according to the Commission's 2009 Guidelines:

- The refusal relates to a product or services that is objectively necessary to be able to

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<sup>419</sup> *ibid* para 79

<sup>420</sup> According to research by Chitika in 2013, results on the first page of Google's search results receive more than 90% of user traffic, with traffic directed to subsequent pages sharply dropping off. See: Jessica Lee, 'No. 1 Position in Google Gets 33% of Search Traffic [Study]' (*Search Engine Watch*, 20 June 2013) <<http://searchenginewatch.com/article/2276184/No.-1-Position-in-Google-Gets-33-of-Search-Traffic-Study>> accessed 1 September 2014

compete effectively on a downstream market;

- The refusal is likely to lead to the elimination of effective competition on the downstream market; and
- The refusal to likely to lead to consumer harm.<sup>421</sup>

Firstly, regarding the objective necessity or indispensability of inclusion in Google's general search results, this goes beyond a 'mere' dominant position in an upstream market, and from the decision in *Bronner*, the input to which access is sought must be incapable of being duplicated or could only be duplicated with great difficulty.<sup>422</sup> This does not appear to be the case with Google's general search. Google does have competitors in online search and advertising markets, even if it is the dominant player, so there are alternative 'inputs' for Google's vertical search competitors. Furthermore, users can access their sites by typing in their web addresses rather than searching through Google, and it is open to them to advertise their services elsewhere, for instance offline, with information about their web address. In addition, they can create 'apps' for use with tablets and smartphones which entail that users can find their services without going through Google's general web search service.

Regarding the refusal to deal leading to the elimination of effective competition on the downstream market, it seems that in practice Google's conduct has not eliminated competition in the vertical search markets. Google's competitors have remained in operation since the Commission opened the investigation into Google. In *British Airways v Commission*, the relevant standard, however, was whether the conduct was 'liable' to eliminate such competition.<sup>423</sup> This might be judged to be the case for Google, and would probably depend upon the actual placing of the rivals' results ie whether they were still on the front page, or on a later page.

In any event, it is unclear what consumer harm is suffered via Google's conduct. As mentioned above, results from vertical search competitors are still being displayed in Google's general search results. Competition still exists in these markets. Consumers still have a choice of products and services (a choice at least in the eyes of current EU competition law, even if there is no great difference in substance or quality between the offerings). Even if

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<sup>421</sup> European Commission (n 419) para 81

<sup>422</sup> Case C-7/97 *Oscar Bronner v Mediaprint* [1998] ECR I-7791

<sup>423</sup> Case C-95/04 *British Airways v Commission* [2007] ECRI-2331

Google's conduct is liable to eliminate competition, in light of the Commission's More Economic Approach, this may well be insufficient to find the conduct illegal. Thus it seems that the conditions for a refusal to deal have not been definitively fulfilled.

It is possible that the 'refusal to deal' may actually concern access to the user data that Google has amassed, with the claim that this itself is an 'indispensable' for Google's competitors such as Microsoft or the vertical search engines to provide their services. Vast accumulations of such data have been recognised as a possible essential facility by the European Data Protection Supervisor, with a refusal to supply access to it constituting a possible abuse of dominance.<sup>424</sup> Yet, again it seems to be the case that even if Google has amassed more data than its rivals about users, their preferences and their behaviour, in practice these other services have not closed down as a result of not having access to this data, the other services are quite probably also amassing data about their users (who might be the same as Google's users), it is likely that Facebook itself has a large amount of data collected about its users (which it may sell to Google's rivals). Thus, it seems that the user data here is also not an essential facility.

### Tying

Another line of argumentation would be that Google is abusing its dominance in the market for online search to leverage its dominance into other markets, such as the market for price comparison sites and flight/travel search.

It is certainly true that Google 'ties' its services together: with its vast portfolio of Internet services, especially its mobile services contain default options that attempt to 'lock' consumers in to other of its services, for example, the default setting on Android and Chrome is to direct users to other Google services, mainly search.<sup>425</sup> Also, in the functioning of its online search engine, Google has been accused of trying to leverage its dominant position in that market into other markets, such as the various markets for vertical search, by placing its own vertical search services as first or most prominent in the search results pages.

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<sup>424</sup> EDPS (n 130) 31

<sup>425</sup> Cave and Williams (n 388) 9

Google's conduct here is reminiscent of the European *Microsoft* case, in which Microsoft, which held a dominant position in the market for PC client operating systems, was including its media player in the operating system on offer to PC manufacturers, in an attempt to leverage its dominance from the market for operating systems into the market for media players.<sup>426</sup>

The Commission in its 2009 Guidelines set out various requirements for tying to be abusive: the undertaking must be dominant in the tying product market; the tying product and the tied product are two distinctive products; and the tying practice is likely to lead to anticompetitive foreclosure.<sup>427</sup> Here, Google does have a dominant position in the tying product market ie general online search (and advertising). The tying and the tied products also appear to be distinctive even if closely related – separate markets can be defined for general search services and specific vertical search services. The third requirement, however, would seem not to be fulfilled, that the tying is likely to lead to anticompetitive foreclosure, since it is still possible for users to use another search, competing service through their browser or download another search app on mobile devices, as well as scroll down Google's results to use an alternative vertical search service to those offered by Google. Furthermore, it is unclear that, assuming Google's vertical search results are identified as being from Google, users are in some way harmed by these results.

The *Microsoft* case seemed to add a fourth requirement for tying, which was that the dominant entity did not give consumers a choice to obtain the tying product without the tied product. This potential fourth requirement could prove even more problematic to finding Google has abused its dominant position, since users are not usually obliged to use Google's vertical search services if they use Google's general search. Some results from Google's vertical search services may be displayed when a user searches for particular terms using the general search engine but they are certainly not required to click on these results for instance in order to see the general search results and will also see results from vertical search competitors.

Moreover, even if this conduct amounts to tying, Google may argue that it has an 'objective

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<sup>426</sup> *Microsoft* Commission decision 2007/53/EC [2007] OJ L32/23, upheld on appeal Case T-201/04 *Microsoft Corporation v Commission* [2007] ECR II-3601

<sup>427</sup> European Commission (n 419) para 50



justification' for what it is going, that through its newer services and its integration of these with its older services it is offering 'richer, more-responsive and varied forms of information' ie a better, improved, more relevant service to its users, which is a necessary innovation given new Internet informational technologies being introduced such as Apple's voice-recognition tool Siri and the convergence of search and social media.<sup>428</sup> If what Google has been doing can be characterised thus, as providing users with new, innovative products (which could be argued to be the case in terms of its integration of Google+ and its search service, although this is seemingly not part of the Commission's investigation), then this may result in Google having an objective justification for its behaviour.

Indeed, one of the conclusions of the FTC's investigation into Google, discussed in more detail below, was that the FTC found evidence that Google adopted design changes to its search results page (which displayed its vertical search results more prominently and had the effect of pushing the organic search links further down the page) primarily to improve the quality of its search product and the overall user experience,<sup>429</sup> following precedents such as *Kodak*<sup>430</sup> and *IBM*<sup>431</sup>. Although Google's vertical search competitors may have lost sales as a result of this improvement, this was just a normal part of a fierce competitive process, the outcome for users was more directly relevant information for their search queries.

There is no clear equivalent precedent to *Kodak* and *IBM* on this matter in EU law, but the recent CJEU decision in *Post Danmark* asserts that a dominant position per se is not a violation of competition law, nor does Art 102 TFEU prevent the acquisition on the merits of a dominant position or seek to ensure that competitors that are less efficient than the dominant undertaking remain on the market, and so not every course of conduct with exclusionary effect is detrimental to competition.<sup>432</sup> This seems to confirm an effects-based approach to Art 102 TFEU and the existence of an efficiency defence in EU competition law<sup>433</sup>. 'Competition on the merits', which *Post Danmark* permits, includes on the basis of quality or innovation, so

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<sup>428</sup> Geoffrey Manne, 'Google Isn't `Leveraging Dominance', It's Fighting To Avoid Obsolescence' (*Truth on the Market*, 12 March 2012) <<http://truthonthemarket.com/2012/03/12/google-isnt-leveraging-its-dominance-its-fighting-to-avoid-obsolence/>> accessed 1 September 2014

<sup>429</sup> Federal Trade Commission 'Statement Regarding Google's Search Practices, *In the Matter of Google Inc.*' FTC File Number 111-0163

<sup>430</sup> *Berkey Photo v Eastman Kodak* 603 F.2d 263 (2d Cir. 1979)

<sup>431</sup> *California Computer Products v IBM* 613 F.2d 727 (1979)

<sup>432</sup> Case C-209/10 *Post Danmark A/S v Konkurrenceradet* [2012] ECR I-0000, para 20-22

<sup>433</sup> Mel Marquis and Ekaterina Rousseva, 'Hell Freezes Over: A Climate Change for Assessing Exclusionary Conduct under Article 102 TFEU' (2013) 4(1) *Journal of European Competition Law & Practice* 32

Google could argue along the same lines as the FTC decision that its 'integration' of results from its vertical search engines into its 'generic' search results is an innovation/quality improvement that benefits customers, but it would have to bring evidence to prove this. However, it is not yet clear how far the decision in *Post Danmark* will extend, and whether such an argument could be made in these different factual circumstances.

Overall, it is unclear whether the conditions for tying have been found regarding Google's general search and its vertical search subsidiaries, particularly with regards to the tying leading to anticompetitive foreclosure, the lack of obliging Google's users to use Google's vertical search services if they use its general search, as well as the availability of objective justifications to Google for its conduct ie it is offering new and innovative products to its customers.

### Sui generis abuse

From the previous sections, it seems highly unclear whether Google's conduct falls into one of the established categories for an abuse of dominance, ie discrimination, refusal to supply and tying. However, the examples of abuse given in Article 102 are not exhaustive.<sup>434</sup> Thus it is possible that the Commission considers Google's conduct to be a new kind of abuse of dominance. Yet, if the investigation does indeed end with Google's commitments, the Commission's reasoning will not be made apparent and so there will be little guidance on what precisely the Commission considers the abusive conduct to be.<sup>435</sup> In any event, insufficient anticompetitive effects of Google's conduct may make even this possible sui generis abuse not actually an abuse in the end.

Thus, it is far from clear that Google was acting anticompetitively and abusing its dominant position in the EU. Indeed, the Commission may have been motivated to settle with Google for the reason that if it conducted a full investigation, it may not have come to the conclusion that there was anticompetitive conduct, and even if it did, Google could have requested a judicial review of that decision from the EU Courts, which might well not have agreed with

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<sup>434</sup> Case 6/72 *Continental Can v Commission* [1973] ECR 215, para 26; Case C-280/08 *Deutsche Telekom v Commission* [2010] ECR I-9555, para 173

<sup>435</sup> Ibanez Colomo (n 416) 143

the Commission's application of competition law.

### c) Google's commitments

The saga between Google and the Commission in practice regarding the first two complaints discussed above has been lengthy and drawn out. The Commission has twice rejected offers from Google to change its behavior before seeming to accepting Google's current proposal in early 2014, yet bowing to lobbying pressure later that year in appearing to reject the third proposal.

Google's first proposal to the Commission in early 2013 to remedy its behavior appeared to include an offer to label its own services in search results in order to distinguish them from its competitors' and to provide links to rival services. The Commission rejected these proposals in July 2013. Indeed, Foundem called Google's initial offer to the Commission 'half-hearted' because it did not address the deeper problem of how Google determined the 'relevance' of links to search queries, especially when its competitors' services were involved.<sup>436</sup>

The second, supposedly confidential, proposal from Google came later in 2013 (whose content was leaked on an American consumer rights group).<sup>437</sup> This version seemed to involve Google offering to label its own services when one or other of them was displayed in the results page when a user did a generic search for particular terms. The label should be 'accessible to users via a clearly visible icon', should show that this result has been added by Google in order to ensure that users would not confuse it with generic search results and should indicate to users where they can find alternatives provided by Google's competitors. The results from Google's own services should be displayed in a separate area to Google's generic search results and Google also offered to display links to three rival services in 'a manner to make users clearly aware of these alternatives'. These rivals' services would be selected from a pool of eligible vertical search competitors according to a complicated process set out in the document. Google included screenshots of how these results would be

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<sup>436</sup> Kelly Fiveash, 'Google's Euro antitrust offer: Fine! We'll link to our search rivals' (The Register, 25 April 2013)

<[http://www.theregister.co.uk/2013/04/25/ec\\_gives\\_google\\_rivals\\_one\\_month\\_to\\_market\\_test\\_search\\_tweaks/](http://www.theregister.co.uk/2013/04/25/ec_gives_google_rivals_one_month_to_market_test_search_tweaks/)> accessed 1 September 2014

<sup>437</sup> Google, 'Commitments in Case COMP/C-3/39.740 *Foundem and others*' (21 October 2013) <<http://www.consumerwatchdog.org/resources/googlesettlement102113.pdf>> accessed 1 September 2014

displayed, which included links to competitors being displayed under its own specialized search results in a separately boxed part of the screen and taking up roughly half of the space on the page that Google's specialized service results occupied.

In response to Google's offer, FairSearch (a lobby group comprising many of Google's search rivals) commissioned a survey with the aim of finding the likely impact of these proposals on actual Internet users, in particular testing the extent to which users were likely to click on any of the three rival links and whether they understood and recognized the different parts of Google's proposed search results page ie the labeling and descriptions.<sup>438</sup> The survey found that 'only a modest number' of users would click on one of the rival links and that users were confused about the difference between Google's vertical search results and the other results.<sup>439</sup> The conclusion was that if Google presented links to its rivals in a relatively neutral fashion ie in a comparable way in terms of appearance and placement on the page, then this would result in higher click through rates for the competitors' links. However, the Second Commitments offered by Google did not achieve this and so were not 'likely to command materially increased consumer attention or restore competition for [Google's] rivals'.<sup>440</sup>

The head of a consumer advocacy group, BEUC, also condemned the second commitments proposal as 'not just inadequate to solve consumer detriment, but are in fact self-serving' since they continued to 'marginalize concerns' and 'bizarrely' suggested a new revenue stream for Google, since certain competitors would have to bid in a separate auction to be included as one of the rival links displayed.<sup>441</sup>

In the end, the European Commission again rejected Google's offer. The third and final offer made by Google at the time of writing comprises Google: informing users via a label that Google's own specialised services are promoted; Google separating its specialised service results from the other search results in order to make clear the difference between them and

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<sup>438</sup> David J Franklyn and David A Hyman 'Review of the likely effects of Google's proposed Commitments dated October 21, 2013 ("Second Commitments")' (*FairSearch*, 9 December 2013) <[http://www.fairsearch.org/wp-content/uploads/2013/12/FairSearch-Hyman\\_Franklyn-Study.pdf](http://www.fairsearch.org/wp-content/uploads/2013/12/FairSearch-Hyman_Franklyn-Study.pdf)> accessed 1 September 2014

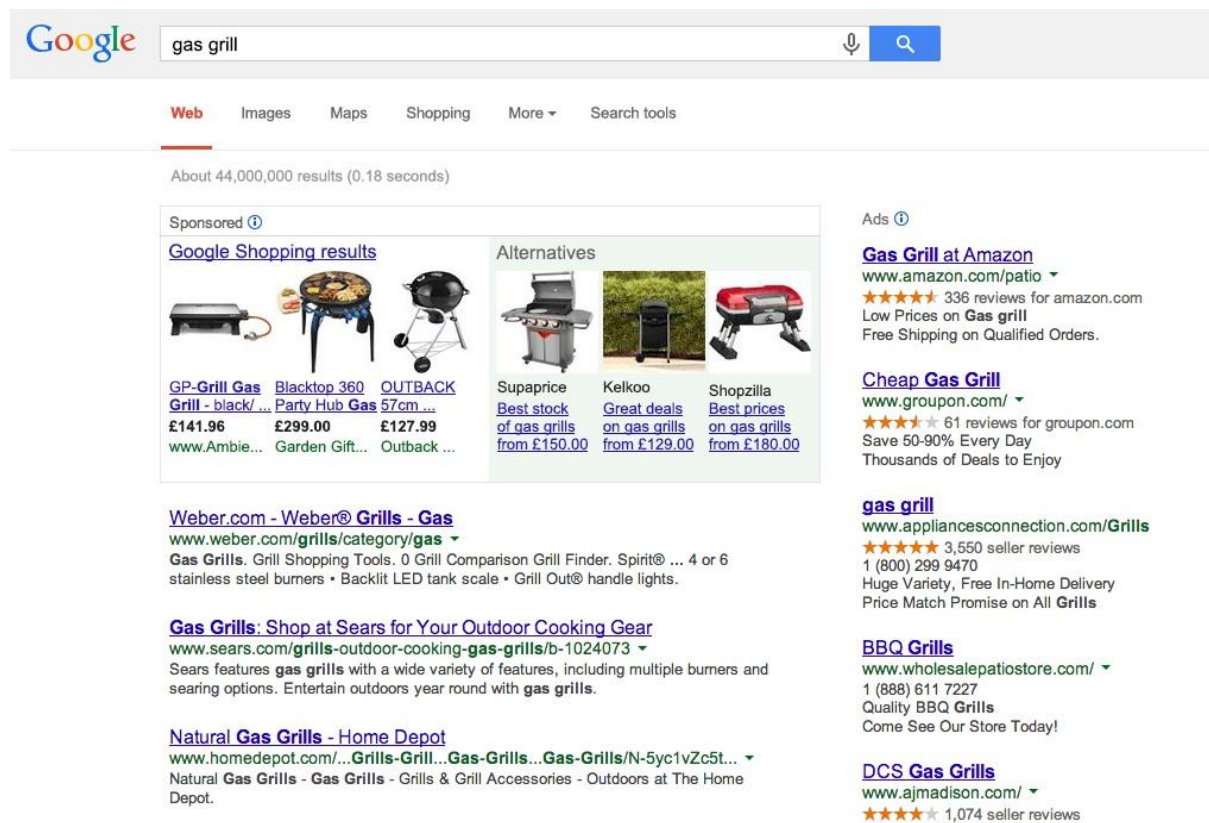
<sup>439</sup> *ibid* 2

<sup>440</sup> *ibid* 13

<sup>441</sup> John M Simpson, 'Consumer Groups on Both Sides of the Atlantic Oppose Google Antitrust Settlement', (*Consumer Watchdog*, 26 November 2013) <<http://www.consumerwatchdog.org/newsrelease/consumer-groups-both-sides-atlantic-oppose-google-antitrust-settlement>> accessed 1 September 2014

‘normal’ results; and Google displaying ‘prominent’ links to three rival specialised search services from a pool of ‘eligible competitors’, which will be displayed clearly to users in a ‘comparable’ way to how Google displays its own services.<sup>442</sup> Google will also not charge its rivals for inclusion as rival links on occasions on which Google does not charge for inclusion in its specialized search results, and here will select them using its ‘normal’ web search algorithm. However, for those services for which Google does charge for inclusion, the three rivals will be chosen via an auction from a pool of eligible competitors.

The Commission includes screenshots of how Google’s services will change as a result of the commitments. When results from Google’s specialised Shopping service are displayed in the results page, they are done so at the top of the page in a box headed ‘Google Shopping results’ and directly adjacent to the right of this box is one of the same size labeled ‘Alternatives’, with a shaded background, displaying results from some of Google’s vertical search rivals. Google Shopping is a service for which Google charges for inclusion, and so the rivals whose results will be displayed will be selected via the auction mechanism.

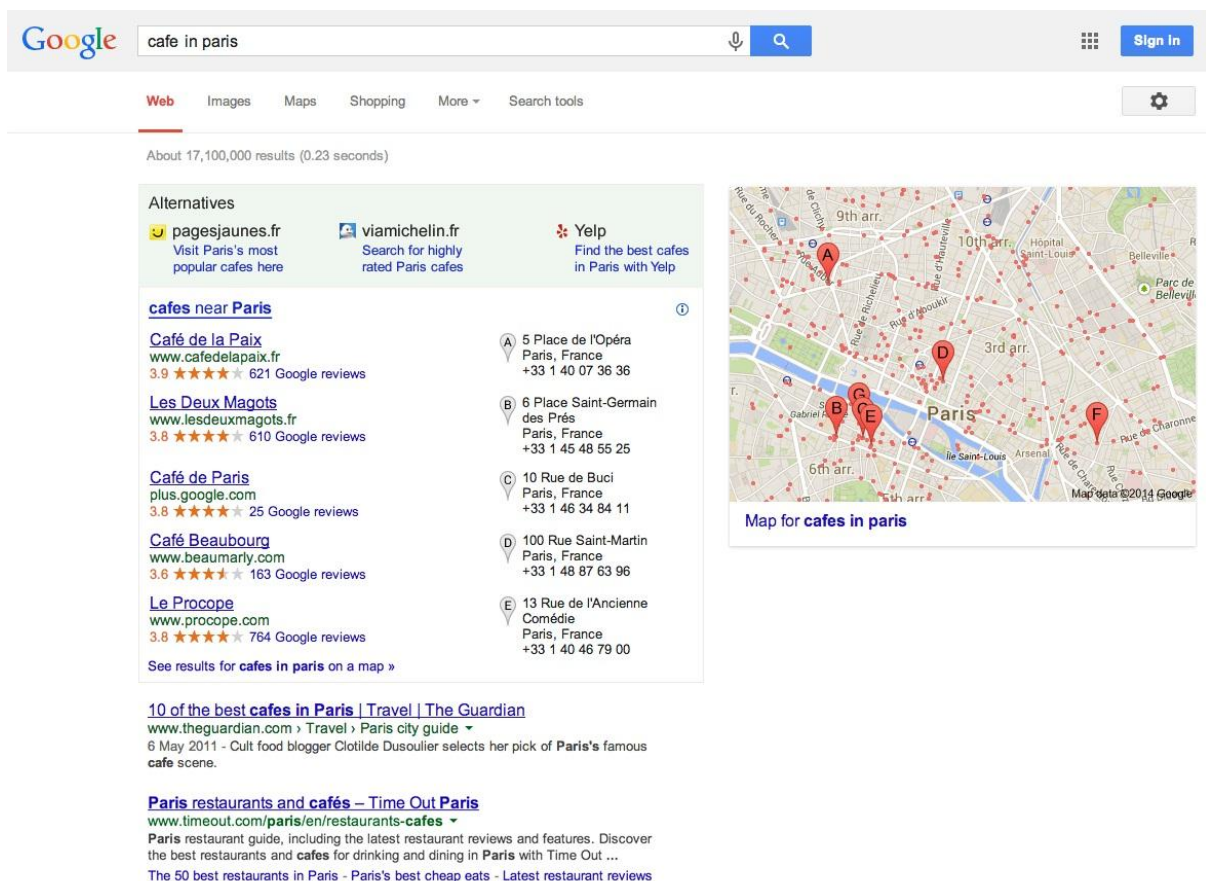


<sup>442</sup> European Commission, ‘Antitrust: Commission obtains from Google comparable display of specialised search rivals – Frequently asked questions’, MEMO/14/87 <http://europa.eu/rapid/press-release\_MEMO-14-87\_en.htm> accessed 7 September 2014

Source: European Commission

This would go further towards the ‘parity of appearance and placement’ that the FairSearch-commissioned consumer research found increased consumers’ likelihood of clicking on Google’s rivals’ results, although the research also found that the result to the furthest left on the screen was the more likely to be clicked on than those to the right.<sup>443</sup> If this research goes some way to reflecting accurately how European Internet users in general behave, then this formulation of the results page should see an increase in clicks on rivals’ results but Google’s specialised service results will still have the more attractive position.

The other screenshot from the Commission includes results from Google’s Local Search service, for which Google does not charge a payment for inclusion and so the rivals whose results will be displayed will be selected using Google’s general search algorithm.



Source: European Commission

<sup>443</sup> Franklyn and Hyman, (n 439) 10-11



Here, the layout is somewhat different, with the rivals' results placed at the top of the page but in a much smaller shaded area than Google's own specialised search results, which are also less clearly labelled. While the rivals' results might be thought to be in a better position, at the top of the page, their reduced size may well make them less attractive for users' clicks. This scenario does not seem to be addressed directly in the FairSearch commission and so it is unclear as to how users would react to this in practice.

In contrast to Google's first two proposals this third one has not been subject to a rigorous 'market test', during which interested third parties can offer their opinions and research, such as the FairSearch survey evidence mentioned above. This is significant since it seems that the results of the market test of Google's previous proposals contributed to the Commission's decisions not to accept them.

However, in a highly unusual move for the European Commission, it has retreated from accepting Google's third proposal and seems at the time of writing to be waiting for a fourth offer. This retreat seems due to great dissatisfaction expressed by the original complainants with the terms of the third proposal, but also the 'politicisation' of the case within the EU.<sup>444</sup> Google's competitors had expressed their unhappiness with the proposed settlement: the Initiative for a Competitive Online Marketplace (ICOMP), an umbrella group of competitors, said that without another market test of the proposals, the Commission's head of competition Joaquin Almunia 'risks having the wool pulled over his eyes by Google'.<sup>445</sup> However Almunia himself had emphasised that his mission is to protect competition for the benefit of European consumers, not competitors, and that this proposal strikes the right balance between allowing Google to improve its services and giving users a 'real choice between different options'.<sup>446</sup> Nevertheless, it seems that external pressures have brought about this *volte face* by the Commission.

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<sup>444</sup> Foo Yun Chee, 'Microsoft, publishers try to stop 'catastrophic' Google EU deal' (*Reuters*, 4 September 2014) <<http://www.reuters.com/article/2014/09/04/us-eu-google-microsoft-idUSKBN0GZ1NW20140904>> accessed 22 February 2015

<sup>445</sup> Initiative for a Competitive Online Marketplace, 'ICOMP Response to Commission's Announcement on the Google Antitrust Case' (*ICOMP*, 5 February 2014) <<http://www.i-comp.org/blog/2014/icompe-response-commissions-announcement-google-antitrust-case/>> accessed 1 September 2014

<sup>446</sup> Joaquin Almunia, 'Statement on the Google investigation' (European Commission SPEECH/14/93, 5 February 2014)

Nevertheless, it may be in Google's interests to persist and make another offer, which if accepted, would entail that Google escapes an official finding of wrongdoing. Its previous conduct will also not officially be termed anticompetitive, which can have value as a precedent in future investigations. Perhaps an even greater victory for Google will be if it does not have to reveal to the public any more information about how its secretive algorithm works, although that might be precisely what its rivals are seeking with their continued opposition to its offers thus far.

#### **4.4 US investigation into Google**

In the US, the Federal Trade Commission launched an antitrust investigation into Google's activities, including search and advertising, which resulted in a settlement with Google in early 2013.

In the US, the Federal Trade Commission (FTC) also conducted an antitrust investigation into Google and came to a very different conclusion to that of the European Commission; it found that Google had adopted design changes for its search results page (it displayed its own vertical search results more prominently and had the effect of pushing the organic search links further down the page) primarily to improve the quality of its search product and the overall user experience.<sup>447</sup> Although Google's vertical search competitors may have lost sales as a result of this improvement, in the FTC's eyes this was just a normal part of a fierce, competitive process, and the outcome for users was that there was more directly relevant information for their search queries. So the FTC found that Google had not acted anti-competitively, and the company was not forced to label its results or otherwise change the operation or format of its search results page. However, the FTC's technical competence in determining that these changes were actually improving consumer experience rather than attempting to foreclose competitors has been questioned since it is not clear from the decision 'what types of expertise or methods the FTC deployed to make such distinctions'.<sup>448</sup>

Indeed, the FTC may also have found it legally difficult to insist on such changes. Certain constitutional rights in the US are also enjoyed by 'legal persons' such as corporations as well

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<sup>447</sup> *In the matter of Google Inc.*, FTC File Number 111-0163, 3 January 2013

<sup>448</sup> Frank Pasquale, 'Privacy, Antitrust, and Power' (2013) 20(4) *George Mason Law Review* 1009, 1022



as ‘natural persons’ (ie real individual people), including the right to freedom of expression under the First Amendment, as can be seen in the highly controversial Supreme Court decision in *Citizens United*.<sup>449</sup> Search engines including Google may be considered to be ‘speakers’ for the purposes of First Amendment protection, given they make ‘editorial judgements’ about information akin to a newspaper, with the implication that the government is not able to regulate what is presented by Google in its search results nor the way in which it is presented.<sup>450</sup> If the FTC had tried to impose regulations in this way, then Google may claim that it would be unconstitutional and thus illegal for them to do so.

Indeed, since this investigation, a federal district court held that Chinese language search engine Baidu was permitted to block pro-Chinese democracy websites appearing in its search results viewable in the US since this was an ‘editorial decision’ protected by the First Amendment.<sup>451</sup> As discussed above in Chapter 3.7 a) (‘Free expression’), a similar argument is unlikely to be salient in the EU – while legal persons as well as natural persons have been recognised as bearing fundamental rights by the ECtHR in certain circumstances, free expression under Art 10 is not an absolute right and can be limited by the ‘protection of the... rights of others’, which in this case would be the free expression rights of users and website operators.

## 4.5 Outcome of competition investigations and user concerns

In practice, although it seems at least unclear whether Google has actually abused its dominance position, the outcome of the EU investigation in the form of the last round of Commitments proposed (and seemingly ultimately rejected by the Commission) seem rather weak from the user perspective given the concerns outlined at the beginning of this chapter, particularly given the Commission’s powers to take actions that can radically change the way businesses operate if it makes an official finding of abusive conduct, such as obliging certain kinds of business practices vis-à-vis competitors and customers, or even breaking up an entity

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<sup>449</sup> *Citizens United v Federal Election Commission* 558 U.S. 310 (2010)

<sup>450</sup> Eugene Volokh and Donald M Falk, ‘First Amendment Protection for Search Engine Search Results’, (Google White Paper, 2012) <<http://www.volokh.com/wp-content/uploads/2012/05/SearchEngineFirstAmendment.pdf>> accessed 1 September 2014

<sup>451</sup> Jeff John Roberts, ‘US judge rules Chinese search engine can block pro-democracy websites’ (*Gigaom*, 28 March 2014) <<http://gigaom.com/2014/03/28/us-judge-rules-chinese-search-engine-can-block-pro-democracy-websites/>> accessed 1 September 2014

into smaller constituent parts in extreme circumstances.

The Commitments would have entailed that Google will have to make some changes to the layout and content of its results page, but it will not seemingly have to be a lot more transparent about its inner machinations, nor will a general obligation of non-discrimination be imposed on Google, which were possible remedies during the investigation.<sup>452</sup> It remains to be seen whether Google makes a fourth offer and what the substance of that offer would be, but more transparency in particular around how Google's search algorithm works and an obligation of non-discrimination would have positive consequences for user-centric concerns: if the Commission ends up taking measures to force Google to reveal more details about its algorithm, then this will be important for users as well as Google's competitors since they would have a lot more understanding of the hitherto secret way in which Google operates.

In comparison, the U.S. FTC did not force Google to make any changes to its search results page, since it did not find that Google had acted anticompetitively or abused its dominant position. Since this conduct was not viewed as anticompetitive, there could be no possibility of remedies for anticompetitive behavior having a positive 'spillover' effect for user-centric concerns.

This outcome from the US may seem rather disappointing given the problems, identified above, that a dominant search engine such as Google poses for users. However, competition law is not designed to deal with all of these problems, even when they seem to flow from a concentrated market, and even when it would seem that more competition may solve or at least lessen the problem.

Nevertheless, the Commission's approach in this case seems, at first blush, to be a departure from the neoclassical, neoliberal approach to competition and regulation. The Commission's investigation seems definitely not to be in the interests of the transnational globalised capital that Google constitutes. In addition, the Commission's willingness to intervene and even push for changes to Google's business practices when it is debatable that Google is behaving in an anticompetitive way would also not seem to accord with the approach of minimalising intervention in markets that neoliberalism promotes. Indeed, it seems that the Commission may have gone beyond what is 'necessary' or the bare minimum to address competition

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<sup>452</sup> Cave and Williams (n 388)

concerns. While neoliberal thought has been a dominant political current in the U.S. and U.K. at least since the 1980s, and has made inroads into the rest of the European Union, it would seem that the Commission's conduct here cannot wholly be attributed to it.

The Commission's conduct may possibly be due to factors such as European protectionism when faced with an American corporation (yet some of Google's competitors which have been making the complaints are also American) or being seen to be a relevant institution to the general public and act in the face of what they perceive as a monopoly.<sup>453</sup> Indeed, a coalition of European 'digital companies', mainly from France and Germany, seems to have succeeded in lobbying the European Commission, and some domestic politicians in these countries to urge a reconsideration of the commitments.<sup>454</sup>

Thus the Commission's conduct may be seen against the backdrop of Marx's idea of competition as the inner nature of capital (mentioned in Chapter 1) – here different forms of capital are competing against each other for a favourable intervention by the Commission, and what is favourable for one will be disadvantageous for the other. It is clear thus far that the Commission has not been overly 'invasive' of Google's business practices, and particularly those which hold the most concern for users, and so thus could still be conceptualised within the neoliberal paradigm. A possible fourth offer of commitments from Google – and possible eventual acceptance by the Commission - will be highly instructive as to the extent to which users' – as opposed to Google's rivals' – interests prevail.

#### **4.6 Other legal regimes, ex ante regulation and non-legal solutions**

Given the less than satisfactory situation for users in light of the competition investigation into Google, the possibility that Google may not actually be infringing EU competition law and the possibility that Google's next set of commitments will be enough to placate its rivals but insufficient to address all user interests, other areas of law, ex ante regulation or non-legal solutions may go some way towards addressing the outstanding issues for users presented by

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<sup>453</sup> Alfonso Lamadrid, 'European Commission v Google' (*Chilling Competition*, 10 December 2010) <<http://chillingcompetition.com/2010/12/10/european-commission-vs-google/>> accessed 2 September 2014

<sup>454</sup> Jeevan Vasagar, 'The news baron battling Google' (*Financial Times*, 9 June 2014) <<http://www.ft.com/cms/s/0/beb7aeae-eb3d-11e3-bab6-00144feabdc0.html#axzz3C77rQzcyj>> accessed 2 September 2014

this dominant search engine and its functioning.

### **a) Merger control**

Merger control is also part of competition law but operates on an ex ante basis to block transactions that would result in anti-competitive outcomes.

As mentioned earlier in this chapter, Google has accumulated power through various mergers, few of which were scrutinised by merger authorities in the US and the EU, with other mergers going ahead unconditionally, with the result being that Google bought companies whose additional services being integrated with Google's existing business became the object of the Commission's investigation into Google for abusing its dominant position. Thus, it could be argued that the merger authorities, especially for those transactions, have been too lenient with Google and its accumulation of market power, especially by not taking adequate account of the possibilities for Google to leverage its power in the market for online search into other parallel in which it is active. This was a criticism levelled by the European Data Protection Supervisor at the Commission's decision in Google/DoubleClick, that not only were the effects of this merger on the market for Internet search not adequately taken into account, but also insufficient regard was paid to the longer term effects of the merger on user data, culminating in no reference to 'consumer welfare not to the users of Google's search engines, even though this potentially implicated every internet user in the EU.'<sup>455</sup>

In general, though, the practice of the American and European merger authorities especially when it comes to vertical or conglomerate mergers has not been particularly strong. The US merger authorities specifically have been criticised for being too lenient with vertical mergers, leading to these large concentrations in technology and communications markets.<sup>456</sup> Furthermore, the European Commission's Non-Horizontal Merger Guidelines from 2007 have been criticised as being 'quite hospitable' to non-horizontal concentrations.<sup>457</sup> The guidelines downplay 'portfolio effects' theories in the absence of tying or bundling and do not discuss possible theories of harm based on the financial strength of one or more of the parties to the

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<sup>455</sup> EDPS (n 130) 29-30

<sup>456</sup> Franken (n 375)

<sup>457</sup> Cave and Williams (n 388)10

merger.<sup>458</sup> ‘Portfolio effects’ are the creation of a stronger player via a conglomerate merger due to its wider range of products that will ultimately foreclose competition due to leveraging its dominant position in one market into another to gain market share. This theory was once popular in antitrust policy in the US but is currently out of favour in the aftermath of the Chicago School hegemony, yet it seemed to surface in more recent EU merger policy and decisions prior to the adoption of the Non-Horizontal Merger Guidelines.<sup>459</sup> Thus, the Guidelines can be seen as being ‘hospitable’ to non-horizontal concentrations, even if they would seem to form such a ‘portfolio’, since such anticompetitive tying may not be likely in those particular circumstances and even if so, it may well not be considered to be anticompetitive but done to effect ‘efficiencies’ eg economies of scope/scale.

Nevertheless, the increasing size of Google, for instance, due to its takeover of many smaller companies in related markets, the increasing amount of data about users it is able to gather and its ability to cross-subsidise its large array of products and services creates an ever higher entry barrier for its rivals. As mentioned at the beginning of this chapter, it also entails a vast (and ever growing) concentration of power in one entity, which encompasses political as well as economic.<sup>460</sup> This is precisely the situation which the ordoliberalists feared and saw competition law as averting, yet current merger policy does not seem to take these concerns into account.

Merger authorities may be encouraged to take other, non-economic factors into account in making their decisions in order to avert similar events in the future. However, as has already been discussed earlier in this thesis, while this may be desirable, it is not always effective given the mainly quantitative nature of competition analysis and the difficulty this analysis has in bringing in non-quantifiable values (such as a threat to political power). Merger authorities could be more alert to entities that are already dominant or super-dominant, especially in various markets already, which wish to buy up companies in other sectors.

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<sup>458</sup> Carles Esteva Mosso, ‘Non-Horizontal Merger: A European Perspective’ (2007) 31(5) *Fordham International Law Journal* 1442, 1468

<sup>459</sup> Eric M Emch, ‘“Portfolio effects” in merger analysis: difference between EU and U.S. practice and recommendations for the future’ (2004) 49 *Antitrust Bulletin* 55; Thomas L Ruffner, ‘The Failed GE/Honeywell Merger: The Return of Portfolio-Effects Theory?’ (2003) 52 *DePaul Law Review* 1285

<sup>460</sup> Fuchs (n 349); Hamburger and Gold (n 349)

## **b) Data protection**

As mentioned at the beginning of this chapter, the EU has data protection laws which may address the harm to users' privacy that Google's business practices entail. Data protection laws, however, are limited inasmuch as they only apply to 'personal data' and not necessarily all the data that Google collects about users and their conduct in using its services, and as mentioned above, the low level of fines for breaches of data protection law render this regime less effective in practice. Furthermore, there may also be difficulties in enforcement given the internal business practices of Google and other large Internet corporations are often opaque, so it is difficult to know if a breach of the law has occurred as it is difficult to know what Google is actually doing vis-à-vis collecting information about users. Moreover, as mentioned above, the current configuration of incentives for players such as Google encourages the collection and monetisation of as much user data as possible, with existing data protection law only addressing some of the 'excesses' of such collection and monetisation rather than preventing it from happening in the first place.

The new EU Data Protection Regulation may address some of the issues around Google's collection and use of user data which, it is submitted, are exacerbated by Google's dominance, although again it is limited in its application since it would only apply to 'personal data'.

The original text of the draft Regulation proposed by the European Commission posits that the processing of personal data is only lawful in situations where data subjects have given their consent for specific purposes (or a few other, limited situations such as where necessary for compliance with a legal obligations), and the data controller bears the burden of proof for this consent.<sup>461</sup> Importantly, this consent would not provide a legal basis for processing the data 'where there is a significant imbalance between the position of the data subject and the controller'.<sup>462</sup> That would certainly appear to be the case in the relationship between Google and its users, where Google is in a much stronger bargaining position than the vast majority of users. In this case, in order to process their personal data, Google would have to fulfil the criteria for one of the alternative situations to obtaining user consent, of which the most relevant to this scenario would be: necessary for the performance of a contract to which the

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<sup>461</sup> COM (2012) 11 final, Articles 6 and 7(1)

<sup>462</sup> COM (2012) 11 final, Article 7(4)

data subject is party or in order to take steps at the data subject's request prior to entering a contract; or processing being necessary for the controller's legitimate interests except where these interests are overridden by the data subject's interests, fundamental rights and freedoms.<sup>463</sup> Here, the contractual situation or pre-contractual situation might be implied from users' use of Google's search engine, yet the extent to which Google's collection of data about them is 'necessary' for the performance of this contract is disputable. Google may argue that the collection of user data is necessary for its legitimate interests, such as running its business, yet users' data protection, free expression and privacy rights would seem to override such an interest.

However, this wording was amended by the European Parliament in its adoption of the draft, which replaced the text on the imbalance of positions with a provision that would make consent 'purpose-limited', losing its validity when that purpose ceases to exist or as soon as the processing of that personal data is no longer necessary for the original purpose. Yet, this amended provision would also entail that the provision of a service is not to be made conditional to the data subject consenting to the processing of data not necessary for the provision of that service.<sup>464</sup> This would still be restrictive of Google's activities but not as potentially debilitating as the Regulation's original text. Certainly Google's ability to collect data for one purpose eg use of its search services and then use it for other purposes would be curtailed, but also Google would not be entitled to collect and process more data than is necessary for the provision of whatever service is at issue, assuming its legal basis for collecting data is the user's consent.

Therefore, it would seem that the Data Protection Regulation, if enacted, would restrict Google's gathering and processing of its users' personal data to that which is necessary for the performance of the specific service, and would not allow this data to be used for other purposes without obtaining the user's consent. However, the Regulation is unlikely to be in force for some time and its final form is uncertain, as discussed above.

The European Data Protection Supervisor considers that it also may be necessary to

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<sup>463</sup> COM (2012) 11 final , Article 6(1)(b) and (f)

<sup>464</sup> European Parliament, *Legislative resolution on the proposal for a regulation of the European Parliament and of the Council on the protection of individuals with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation) P7\_TA-PROV(2014)0212*, 12 March 2014 <<http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P7-TA-2014-0212+0+DOC+XML+V0//EN>> accessed 2 September 2014, Amendment 101 of Article 7

incorporate violations of the right to data protection into the concept of consumer harm in the context of competition enforcement, such as when a dominant entity is restricting users' freedom of choice and control over their personal data.<sup>465</sup> Although data protection law may apply nonetheless, integrating it into a competition law analysis may be desirable given the higher fines for anticompetitive conduct compared with breaches of data protection law, and to utilise the resources available to competition investigators. As already mentioned, fundamental rights including data protection are binding on European institutions, including the Commission and courts in their competition roles, and can entail the invalidation of laws, measures and decisions which infringe these rights, thus decisions in competition matters ought to respect them.

Yet, data protection law itself might be thought as a better protector of personal data than competition law, which, as already discussed in various places in this thesis, is (in its current form anyway) not well suited to taking account of 'non-economic', difficult to quantify values such as fundamental rights.<sup>466</sup> The cooperation between competition and data protection agencies that the European Data Protection Supervisor also recommends may be a more appropriate path to follow to deal with scenarios exhibiting competition issues as well as data protection concerns.<sup>467</sup>

While in the U.S. there is growing regulatory activism around privacy and data protection, as discussed at the beginning of this chapter, the approach taken is largely self-regulatory, with privacy activists actually appealing to the antitrust regime to intervene when dominant entities infringe on privacy. If the antitrust regime does not uphold their privacy in practice, then the limited privacy regime already in place is unlikely to help. Aside from the FTC's cognisance of the limits of its legal authority in this area regarding antitrust and privacy, Pasquale has also identified the conceptual limits of competition law (at least in the U.S.) to govern 'dominant' search engines, since economics-based, consumer welfare-oriented competition analysis cannot deal properly with inter alia privacy concerns.<sup>468</sup> Indeed, within

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<sup>465</sup> EDPS (n 130). 32

<sup>466</sup> Orla Lynskey, 'A Brave New World: The Potential Intersection of Competition Law and Data Protection Regulation' (*Chilling Competition*, 21 April 2014) <<http://chillingcompetition.com/2014/04/21/a-brave-new-world-the-potential-intersection-of-competition-law-and-data-protection-regulation-by-orla-lynskey/>> accessed 2 September 2014

<sup>467</sup> EDPS (n 130) 36-37

<sup>468</sup> Pasquale (n 451); Frank A Pasquale, 'Dominant Search Engines: An Essential Cultural & Political Facility' Berin Szoka and Adam Marcus (eds), *The Next Digital Decade: Essays on the Future of the Internet* (TechFreedom 2011).



that neoclassical model, the state should not interfere with the collection, analysis and use of data as this might even interfere with competition and the ability of companies to sell data to each other, so antitrust may be antithetical to the protection of user data and privacy.

Furthermore the neoliberal view of privacy (which is more prevalent in the US than EU) as a commodity to be bought and sold via users' 'consent' to terms of service contracts is criticised as not reflecting what privacy is for users, ie a 'social practice'.<sup>469</sup> Instead, Pasquale views that it is the unequal power relationship between user and dominant corporation which is the real problem for both privacy and antitrust, and he advocates for more transparency about data use by these corporations in order to determine whether there is anticompetitive conduct as well as privacy infringements. Newman also argues that improved protection of personal privacy in the US context may also have spillover effects in 'reducing monopoly power of players like Google and encouraging a fairer economic return to individuals when they do choose to share that data with commercial entities' through facilitating data portability for instance.<sup>470</sup> While competition and privacy concerns may be entwined in this context, the laws that deal with each have differing methodologies of achieving their goals. Furthermore, it is not clear that this imbalanced power relationship is the current manifestation of antitrust/competition's main target. Unless antitrust is redirected back at tackling large concentrations of private power for its effect on the socio-political as well as the economic, it seems unlikely that it will prove to be a useful tool in upholding the privacy and protection of users' data.

In any event, it would seem that what data protection laws there are, or might be in the EU, may go some way to addressing some of the concerns around user data and privacy, they also are limited to only applying to 'personal data' and their effective enforcement is not always guaranteed. They also do not prevent data generated by users being gathered in the first place, especially if it is not personal data, and even personal data can be gathered so long it is in accordance with data protection law. The current configuration of incentives for search engines such as Google to proliferate data about users is not altered by the intervention of data protection law.

Due to the large amount of concentration in the market for search, users do not have a real

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<sup>469</sup> Pasquale (n 451) 1011-1012

<sup>470</sup> Newman (n 387) 15

choice either to use Google's services without their data being collected and processed, or to use similarly robust and well-functioning search engines which uphold the protection of their data and privacy. Without more aggressive data protection/privacy based intervention, or antitrust/competition enforcement which is suspicious of such vast accumulations of power for its non-economic as well as economic consequences, it seems the vastly unequal positions of users vis-à-vis Google will persist.

### **c) Fundamental and constitutional rights**

The human/constitutional rights legal regimes could also be called on to aid users regarding their access to information and privacy more generally vis-à-vis Google.

Users' privacy claims would be similar to those outlined in the preceding section, while their free expression claims would relate to the concerns raised about the possibility of Google censoring certain information in its search results, and bias in how those results are presented. These affect users' abilities to send and receive information.

The machinations of the ECHR regime in Europe regarding fundamental rights, especially in situations involving freedom of expression between private parties as opposed to the State has been discussed at length in the previous chapter on Internet provision (in Section 3.7 a) 'Free expression').

The potential censorship by Google by deliberately leaving certain results that would otherwise be 'relevant' out of its results page, and thus producing biased results, would seem to be the stronger case for a breach of users' free expression, either as the creator of those results or as a person who wishes to receive this information. However, the possibility to receive this information in other ways, for instance via another search engine or directly inputting the web address into a browser, may distinguish these circumstances from those found to infringe the applicants' rights in the *Kurshid Mustapa* case discussed in the previous chapter. The concern with Google presenting biased results may only be seen as a possible infringement of Article 10 if it implicates media plurality ie Google is biasing results in such a way that diminishes media plurality. If Google's censorship of results also implicates media

plurality, then this may also be grounds for a finding of Art 10 infringement. In any event, restrictions of users' Art 10 rights can be justified 'for the protection of the... rights of others', which might be considered to include Google's right to carry on its business.

The Council of Europe has turned its attention to search engines, and in April 2012 its Committee of Ministers adopted a Recommendation to Member States concerning the protection and promotion of respect for human rights with regard to search engines.<sup>471</sup> The non-binding recommendation recognises the potential challenges from search engines to the right of freedom of expression (Art 10 of the ECHR) and the right to a private life (Art 8), which may come from the design of algorithms, de-indexing and/or partial treatment or biased results, concentration in the market, a lack of transparency about how results are selected and ranked, the ability of search engines to gather and index content which may not have been intended for mass communication, general data processing and retention, and the generation of new kinds of personal data such as individual search histories and behavioural profiles. The recommendation, of course, is not legally binding, and is merely suggestions for the Member States to follow, if they see fit, for instance in the form of new legislation and regulation or amendments to current rules.

However, thus far it does not seem that the recommendation has been followed by Member States, and users' privacy and free expression remains problems for privately-owned and operated platforms such as search engines including Google.

As for the US situation, as mentioned earlier in this chapter, the recent federal court decision involving Baidu may suggest that Google would be found to have its own First Amendment rights and so may not be subject to interference with its search engine in the interests of its users' First Amendment rights. As regards constitutional protections of privacy, the American situation is encompassed by the Fourth Amendment, which prohibits unreasonable seizures and searches by the State, so would not be effective in this situation where it is another private party interfering with users' privacy, particular when users may be considered to have 'disclosed' their information to another party, and so the 'third party doctrine' is likely to apply, by which people are not entitled to an expectation of privacy in the information they

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<sup>471</sup> Council of Europe, *Recommendation CM/Rec(2012)3 of the Committee of Ministers to member States on the protection of human rights with regard to search engines*, adopted on 4 April 2012 <<https://wcd.coe.int/ViewDoc.jsp?id=1929429&Site=CM>> accessed 2 September 2014

voluntarily provide to third parties for the purposes of the Fourth Amendment.<sup>472</sup>

#### **d) Ex ante Regulation**

Prior or ex ante regulation of search engines is another possibility, especially if the legal regimes above do not adequately address user concerns. There have been various proposals for regulation as well as, or in place of, appeal to other legal regimes for addressing in full the problems that a dominant search engine creates. These proposals appear to be motivated by a mixture of a wish to address a market failure, namely the asymmetry of information between Google and its users over how Google works, as well as a desire to pursue certain social goals such as free expression for users.

In Europe, the Council of Europe's Committee of Ministers advocated a co-regulatory approach to search engines. Member States should cooperate with the private sector and civil society to develop strategies to protect fundamental rights and freedoms pertaining to search engine operation, particularly regarding transparency over how the search engines provide information, the criteria according to which search results are organised, how content not intended for mass communication (although in the public space) should be ranked and indexed, transparency as to the collection of personal data, empowerment of users to access and modify their personal data held by search engine providers, the minimisation of the collection and processing of personal data, and the assurance that search engine services are accessible to people with disabilities. Member States should also consider offering users a choice of search engines, particularly to search outputs based on criteria of public value. This may act as some kind of substitute for competition law inasmuch as the user has options of different search engines to use, including those which may not (wholly) be driven by concerns of profit. However, as mentioned above, Member States so far have not acted on this recommendation, and as it stands the recommendation is also non-binding. Furthermore, it is difficult to see what incentive search engines would have for such cooperation unless they are 'threatened' by the possibility of new legislation and regulation which would restrict their activities unless they cooperate.

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<sup>472</sup> *Smith v Maryland* 442 US 735 (1979); *United States v Miller* 425 US 435 (1976)

Furthermore, regulation similar to that advocated for Internet Service Providers in the net neutrality debate has been suggested for search engines including Google. Interestingly, Google itself was an early advocate of net neutrality regulation for ISPs, before ‘modifying’ its position on the issue in 2010. An equivalent obligation on Google might encompass non-discrimination rules for its search results, as well as a requirement that Google does not ‘block’ content which would otherwise be considered a ‘relevant’ result for a search. However, without knowing more about how Google's search algorithm works and how ‘neutral’ or not it already is in determining results, it may be difficult to design such an obligation of neutrality and see that it is effectively put in place, although co-regulation may have a role to play here by which Google would be ‘incentivised’ to co-operate in the design of the rules. With ISPs it is easier to determine whether they are acting in a non-neutral fashion due to their technical makeup. Furthermore, truly neutral design for search engines may not exist since every design choice necessarily reflects certain normative values, in this case around what is ‘relevant’.<sup>473</sup>

Yet a transparency obligation may also be considered, either on its own or as part of a broader package of ex ante regulation. This would address, at least in part, the design problem for ‘search neutrality’ and would enable oversight of search engines’ activities to ensure they are operating in accordance with such an obligation. Some kind of transparency obligation could have been imposed on Google as part of the commitments agreement with the Commission, but this did not happen in practice. Had it been imposed, aside from potentially aiding Google’s competitors in exposing any ‘bias’ against them in Google’s search results, it may also have had benefits for users at large, inasmuch as they could understand too how Google goes about determining ‘relevance’ for its search results, and use this information to aid users’ choice between different search engines as well as giving them the tools to determine ‘the appropriate level of cognitive authority to assign to their search results’.<sup>474</sup>

In the US context, given the limits of competition law to deal with privacy and other ‘non-economic’ concerns due to its current goal of maximising ‘consumer welfare’ yet along narrow efficiency terms and disregarding the ‘cultural and political consequences of concentrated corporate power’ due to its legal economic basis which privileges ‘market outcomes’, Pasquale argues that search engines should instead be thought of as an ‘essential

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<sup>473</sup> Goldman (n 358) 107

<sup>474</sup> Goldman (n 355) 117

cultural and political facility' and regulated accordingly, using tools beyond competition law.<sup>475</sup> He has also previously advocated the increased regulation of search engines including protection for users' privacy and increased transparency over how search results are ordered.<sup>476</sup>

Nevertheless, despite these suggestions for law and regulation to deal with Google's dominance, given the imperfect solutions offered by areas of existing law for user autonomy concerns, there has been no attempt to implement any of them. This inaction may be explained by the regulatory climate in the US and Europe. The regulation of communications in both jurisdictions operates according to a mostly 'market-based' approach, which, as mentioned above, has reflected the ascendancy of neoliberalism and its corresponding doctrine of 'light touch' regulation of private entities. Alongside this development, there has been the attempted capture by corporate interests of public regulatory bodies. A glaring example is the aforementioned corporate lobbying of European institutions during the legislative process for a new Data Protection Regulation. This has resulted in governments of liberal democracies being loathe in practice to extend any further regulation of private entities, especially for seemingly 'non-economic' purposes, in accordance with the mantra that the market will provide. Alternatively, as may end up being the case with the European Commission's investigation into Google for alleged anticompetitive practices, lobbying by other corporate actors may result in an outcome of more ex ante regulation of Google but it may well only be beneficial to their businesses and not to society at large.

In any event, the legislative and regulatory solutions outlined above would entail significant intervention and 'interference' with the market for online search and advertising. Given the general environment, it is not surprising that these solutions for Google's dominance may be thought of as idealistic or going too far. Furthermore, the risk remains that even if regulation concerning Google is enacted, it may be difficult to enforce for the reasons discussed above, that understanding how Google works may be a difficult task for regulators, and a co-regulatory solution may run the risk of regulatory capture by Google to a greater extent given the close working relationship that would be likely to ensue between the regulator and the regulated. Moreover, the extension of regulation to other intermediaries, whether other search

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<sup>475</sup> Pasquale (n 471) 408-409

<sup>476</sup> Frank A Pasquale, 'Beyond Innovation and Competition: The Need for Qualified Transparency in Internet Intermediaries'(2010) 104(1) Northwestern Law Review 105

engines such as Bing, or social networks, for instance, such as Facebook, may follow from such regulation of Google, which would be a costly task in both time and resources. In any event, given Google's search engine is subject to a great deal of innovation and alternations to how the algorithm works, this fast-pace of change may render attempts to regulate obsolete in practice. Finally, at least in terms of privacy and data protection concerns, in the wake of the Snowden revelations it would seem that states also have an interest in private parties engaging in data collection about Internet users which states can then tap into for their own purposes, and so the now-more-visible 'Invisible Handshake' may also operate to deter regulation of conduct that gives rise to this data collection – as the collection is in both the interests of Google for its business model and nation-states for their own surveillance purposes.

#### **e) Extra-legal solutions**

If ex ante regulation of search engines along the lines suggested above seems unlikely to be designed and implemented in practice, then attention turns to the possibilities offered by extra-legal solutions.

One suggestion has been for a publicly-funded search engine which would compete with Google and its ilk.<sup>477</sup> Nevertheless, Lewandowski notes that such initiatives have already been trialled, such as the French project Qaero, but this alternative only has an 'insignificant' market share and so can be considered to have 'failed' as an online search tool.<sup>478</sup> He critiques the idea of publicly funding a single alternative search engine to Google as 'placing all eggs in the one basket' ie the engine could fail for a number of reasons which may not even be related to the quality of search offered, such as poor marketing. Instead, he suggests an alternative path: 'to create a search engine index and make it available to other providers', based on an open structure, access to the index being on a fair and transparent basis, and institutional resilience in the form of state sponsorship (not subject to the unpredictability of

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<sup>477</sup> Goldman (n 355) 117-118; Pasquale (n 471) 416

<sup>478</sup> Dirk Lewandowski, 'Why We Need an Independent Index of the Web', in Rene Konig and Miriam Rasch (eds) *Society of the Query Reader* (Amsterdam University of Applied Sciences Institute of Network Cultures 2014) 55

the market).<sup>479</sup> This model is similar to that proposed by Pasquale: a non-governmental agency indexing and archiving the web, using open standards for ranking and rating websites, which might provide ‘an important alternative source of information and metadata on ranking processes’.<sup>480</sup> This is also similar to the transparency and interoperability approach to Internet regulation advanced by Brown and Marsden.<sup>481</sup> In any event, this kind of publicly funded search index would enable, it is hoped, the creation of various alternative search engines to provide users with a more substantial choice than what they currently have.

A more radical position is taken by Fuchs, specifically in response to the issues around the use and exploitation of user data: as a solution, Google should not be dissolved, nor are alternatives needed nor are its services ‘a danger to humanity’.<sup>482</sup> Instead he advocates that Google should be ‘expropriated and transformed into a public, non-profit non-commercial organization that serves the common good’, although he does not detail what the legal basis for this would be – and expropriation usually involves some compensation being paid to the original owner, which could run into an enormous sum in the case of Google. He outlines how this public search engine could look like, such as its services being run by non-profit organisations such as universities and supported by public funding. Interestingly, Viadhyathan has previously identified Google as remedying what he terms ‘public failures’ ie the opposite of a ‘market failure’, when the state cannot satisfy public needs and deliver services effectively – Google has ‘stepped into voids better filled by the public sector’.<sup>483</sup>

While there seems consensus that an alternative to the *status quo* brought about by State action of some sort is desirable to remedy the problems identified, the preceding paragraphs present alternative paths to follow in order to achieve this: either the State should set up a new search engine as an alternative to Google, or Google itself should be nationalised. However, Fuchs also admits that despite these suggestions, a truly non-exploitative search engine for the benefit of humanity may only be possible through the general establishment of a commons-based Internet in a commons-based society.

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<sup>479</sup> *ibid* 56-58

<sup>480</sup> Pasquale (n 471) 416-417

<sup>481</sup> Brown and Marsden (n 42)

<sup>482</sup> Christian Fuchs, ‘Google Capitalism’ (2012) 12(1) *Triple C Communication, Capitalism & Critique Journal for a Global Sustainable Information Society*, 47-48

<sup>483</sup> Siva Vaidhyathan, *The Googlization of Everything (And Why We Should Worry)* (University of California Press 2011) 44



In the interim, creating a strong rival to Google with a public service mandate seems the most realistic extra-legal solution, since the expropriation of Google would require an amount of ‘intervention in the market’ far beyond what would be deemed acceptable in contemporary Euro-American developed states, even if it would provide the advantage of acquiring Google’s existing equipment and know-how as opposed to starting from a more preliminary stage with the design of a Google alternative.

Nevertheless, caution is due regarding the state’s involvement in creating an alternative to Google from the perspective of protecting and upholding users’ rights. The concerns around data protection, privacy and free expression encompassed by users’ use of Google’s search engine and the amount of data gathering about them that the use of Google entails should also be at the forefront of the design of a state-backed alternative to Google. This alternative should not be used as a platform for states to gain even more intrusive information about their citizens, particularly in the context of the Snowden revelations about the misuse of state surveillance powers and the recent decision by the CJEU in finding the Data Retention Directive to be unlawful due to its lack of proportionality and undue interference with citizens’ privacy and data protection rights.<sup>484</sup>

Thus, it may well be that P2P design is also most appropriate for a true alternative to Google’s monopoly – both its ‘radical’ one and its competition law conceived one. Handley advocates P2P search engine YaCy as both a solution to the problems presented by Google and other for-profit data-gathering centralised search engines, and an enabler of users’ autonomy online.<sup>485</sup>

## 4.7 Conclusion

This chapter has examined the problem of dominance and Internet search through an interrogation of the practices of the dominant entity, Google, and the concerns that such a dominant entity poses for users and their autonomy: both in terms of undesirable economic

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<sup>484</sup> Joined Cases C-293/12 and C-594/12 *Digital Rights Ireland and Seitlinger and Others* (CJEU, 8 April 2014)

<sup>485</sup> Tyler Handley, ‘P2P Search as an Alternative to Google: Recapturing Network Value through Decentralized Search’ (2013) 3 *Journal of Peer Production*

consequences encompassed in a standard competition investigation and the undesirable ‘non-economic’ consequences of dominance that the use and operation of Google entail, such as the infringement of privacy and data protection, and free expression concerns related to the ‘gatekeeper’ role Google plays for users wishing to access information on the Web.

The progress and outcomes of the competition investigations into Google have been examined. The European investigation is particularly interesting given the lack of clarity as to whether Google is actually abusing its dominant position in violation of EU competition law rules, yet the Commission has advocated a settlement with Google that would nevertheless see some (albeit fairly minor) changes as to how it sets out its search results, and now seems to be demanding more stringent commitments from Google. Precisely what has driven the Commission to adopt this course of action is unclear, but it actually seems a more ‘interventionist’ approach than the ‘More Economic Approach’ would normally entail in this situation - unless the lobbying from European-based competitors of Google can account for the Commission’s conduct.

However, neither competition law nor its somewhat unusual enforcement by the Commission goes very far to addressing the concerns around Google for users. Thus far there has been no more transparency around how Google conducts searches via its secretive algorithm, transparency which also would have addressed in part at least the concerns already identified around bias and censorship. Whether more transparency regarding the search algorithm will form a part of a possible fourth set of commitments from Google remains to be seen.

It is true that other areas of law could be used more effectively to deal with the problems raised. In particular, the reform of data protection law currently underway in the EU may well empower users to a greater extent over the collection and use of their information.

Nevertheless, it would seem that *ex ante* regulation (in theory at least) is a more desirable avenue to protecting and upholding users’ rights *vis-à-vis* Google. This chapter has outlined certain proposals for regulatory reform, which may involve transparency and ‘search

neutrality' obligations being placed on Google, and it is argued that these would be more effective in achieving the aim of protecting and empowering users than competition law itself. Yet the regulatory inaction in this field and the lack of prospect of any regulation actually being put in place at a near point in the future despite a 2012 Council of Europe Recommendation along these lines does not inspire confidence that ex ante regulation is a realistic solution. In addition, there are the usual concerns around the success of any regulation that might be enacted given the practical problems of enforcement, the regulation being 'too little, too late', and the possibility of regulatory capture.

Thus, again it is the extra-legal solutions to which attention ought to be turned, which may be in the form of a publicly-funded search engine (or possibly - yet unlikely - the public expropriation of Google), in order to provide a non-profit alternative to the *status quo* given the market is not providing it. This, however, would need to be properly designed too in order to ensure data minimisation, transparency, neutrality and so on, and indeed it may be that a P2P equivalent is the most desirable option in practice again given the untrustworthiness of public power to advance user autonomy, evidenced by its vast surveillance of Internet users.



## CHAPTER 5 DOMINANCE, DEVICES AND APP STORES

When the Internet became publicly available in the early 1990s, the average user accessed it on a desktop computer, or (less likely) a laptop via a fixed line connection. In the interim, technological developments have given rise to a proliferation of devices, especially mobile, with which users can connect to the Internet, such as smartphones, e-book readers, games consoles, tablets and netbooks as well as laptops and desktops. The development of mobile devices on the one hand, and the move to cloud computing on the other hand (which will be discussed in more detail in the following chapter), has contributed to a different Internet experience, arguably one more 'closed' than the Internet of the early 1990s. While desktop and laptop computers and their operating systems did not themselves influence the extent of the Internet that was available on them (but online service providers such as AOL and CompuServe did limit the Internet experience by offering limited 'walled garden' access in the early 1990s), it is now the devices themselves and their vertical integration with other parts of their manufacturer's business, such as 'app stores', which determine the kind of Internet with which the user engages, and Internet-dependent applications which these devices run. Interestingly, with the launch of Google's Chromebook and Chromebox which are designed solely for running Web-based applications and storing data in the cloud (rather than these applications being run offline on the machine and data stored on the user's machine as well), this trend towards closed devices has also penetrated the traditionally agnostic laptop and desktop markets respectively.

This move to more 'closed' devices used to access the Internet and run Internet-based applications has raised concerns about continued innovation, free expression, privacy, ownership and control, and competition – in other words, user autonomy. The markets for Internet devices are characterised by vertical integration of the device provider and distribution platforms ('app stores') to access content and applications for the device. Furthermore, these devices are increasingly relying on cloud services (which are usually part of the vertically integrated value chain) to store data as opposed to on the device itself. Due to the link between the device and the cloud service, the cloud operator can also control the data stored on the device or what data stored elsewhere is accessible to the device user. As will be seen below, this gives such device manufacturers much more control over the programs, apps and content that run on the device compared to 'traditional' desktop or laptop computers. This power can manifest in potentially anticompetitive behaviour eg discriminating in favour of

the device provider's vertically integrated content, or 'ideologically' censorious conduct such as refusing to allow users access to an app which is in some way controversial.

Justifications for allowing a more 'reduced' access to the Internet for mobile devices compared to 'fixed' or desktop devices have been based on the fact that mobile devices engage the use of a scarce resource in the form of the electromagnetic spectrum to function, whereas desktop devices are connected to the Internet via a fixed-line which does not rely on the electromagnetic spectrum. As a result, early access to the mobile Internet was far more restricted than desktop access. Indeed, as late as 2008 the UK's Advertising Standards Agency banned an advert for the iPhone which claimed it could access all parts of the Internet for being misleading since it did not support Flash or Java so not all websites could be fully seen.

However, with advances in technology which have brought high speed mobile Internet in the form of 4G and the convergence of the distinction between mobile and desktop as city-wide wifi networks are increasingly implemented, the difference becomes less pronounced. Furthermore, even the issue of the scarcity of electromagnetic spectrum may well be diminishing as spectrum-agile networks and cognitive devices become increasingly prevalent, which can detect available channels in wireless spectrum and accordingly change their transmission or reception parameters to maximise the amount of wireless communications that can take place concurrently. A further technical justification for 'reduced' Internet access for smartphones at least has been that the smaller size of screen entails websites may not display properly or fully, but with the increased use of smartphones along with technological advances and specially designed mobile versions of webpages this is no longer a major concern.

Another justification for allowing such reduced Internet access is that of security, and this seems to be the dominant justification for what happens with mobile devices and their Internet access and functionality via 'apps'. In this way, device manufacturers and/or software distribution platform operators ensure that only 'safe' applications are available to users ie no viruses or illegal content. However, this process gives device manufacturers and software distribution platform operators (almost) complete control over what users can do and view on their devices, and, as will be seen below, only users who are themselves technically skilled can break out of this system.

The transition from the open desktop 'culture' to the closed and 'sanitised' environment of mobile devices has been documented by Zittrain, who laments the trend exhibited by mobile devices to be deliberately designed as less open platforms for user innovation compared to 'traditional' desktop and laptop computers, or as he puts it, less 'generative'.<sup>486</sup> He acknowledges the advantages to a more controlled environment, such as the aforementioned security gains, but warns of the corresponding disadvantages for innovation and progress, especially given the track record of the Internet itself as a system open to widespread change has produced more innovation and benefits than a 'closed' system which can only be altered by a centralised entity (eg a single company). Furthermore, the lack of 'generativity' and the according lock-in of users to certain platforms operated by one entity can have a negative effect on competition due to a lack of data portability and interoperability.<sup>487</sup>

This chapter will examine problems of dominance, Internet-enabled (usually mobile) devices (such as e-book readers, tablet computers and smartphones) and 'app stores', comprising a discussion of gatekeeping including the economic and non-economic effects that such gatekeeping, especially when concentrated and ring-fenced via technology and contract, may have, taking into account the specific control over online information flows that this control encompasses and its effects on user autonomy. The structure of the mobile device value chain will be explained, before going on to consider the problems of dominance, gatekeeping and control of online information flows posed by mobile devices for users. Allegations of anticompetitive conduct against Apple and Google in particular will be explored, followed by a determination of which practices (if any) would be found abusive in practice. The extent to which other existing areas of law might address these problems will be considered, to determine whether or not there is also a 'gap' in the law as it stands, and so other solutions may be needed.

## **5.1 The mobile device value chain**

The definitions between different kinds of Internet-enabled mobile devices is blurred, but they can be defined in distinction to laptops and desktop computers, and include smartphones, tablet computers and certain e-book readers. These categories of mobile devices converge into

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<sup>486</sup> Jonathan Zittrain, *The Future of the Internet and How to Stop It* (Yale University Press 2008)

<sup>487</sup> *ibid* 177

each other, especially when the same operating system is used for both tablets and smartphones, as is the case with iPad and iPhone Apple devices which both use Apple's iOS operating system, and Google Nexus smartphone and tablet devices which both use the Android operating system. Here, it is only the size of the device and possibly the ability to make phone calls through the mobile phone network which distinguish a smartphone from a tablet.

Functionality, particularly when it comes to e-book readers, can also illustrate distinctions between the devices. E-book readers have had a principal function of displaying and storing e-books to be read by users. Yet there have been developments in these devices: now most e-book readers now have some form of Internet connectivity, either being wifi-enabled or working on 3G/4G mobile networks. This Internet connectivity is sometimes restricted to having access to online e-book distribution platforms, or one online platform in particular from which users can buy e-books to read on their device (as is the case with Amazon devices), yet does not encompass general web browsing ability. Interestingly, the trend is currently away from dedicated e-book reading devices such as the 'traditional' Kindle towards multi-functional mobile devices which can support a variety of content types, with it being posited that dedicated e-book readers, especially those using e-ink, will become a niche market.<sup>488</sup>

One important feature of all mobile devices, though, is the strong level of vertical integration encompassed in their value chain, which is significantly greater than the situation with 'non-mobile' desktop and laptop computers. While 'PC' desktops and laptops may typically be made by a certain manufacturer, they use a different operating system (often Microsoft Windows) which can then run any compatible third party applications/programs and can store any compatible files on the computer itself. Apple desktops and laptops are more vertically integrated inasmuch as Apple is the manufacturer as well as the operating system owner for these systems, but these devices can also run any compatible third party applications/programs and store any compatible files. However, mobile devices can encompass the same corporation acting as manufacturer, operating system provider and application provider. Furthermore, mobile devices have also been designed to constitute

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<sup>488</sup> Jordan Selburn, 'Ebook Readers: Devices to Go the Way of the Dinosaurs?' (*iSuppli*, 10 December 2012) <<http://www.isuppli.com/home-and-consumer-electronics/marketwatch/pages/ebook-readers-device-to-go-the-way-of-dinosaurs.aspx>> accessed 2 September 2014



another virtual ‘layer’ in this value chain in the form of ‘app stores’, namely ‘controlled environment[s] for applications (‘apps’)’.<sup>489</sup> These app stores offer an extra point of control for their vertically integrated operators, which must approve third party apps before they are available to users in the app stores. Due to the more restricted ‘architecture’ of mobile device operating systems and device functionality, power is thus concentrated in the app store operators, which are usually also vertically integrated with the device manufacturer and/or operating system provider.

App store operators operate in another example of a two- (or multi-sided) market and provide a platform where the two sides meet. On one side are users (the device owners) and on the other side are app developers. App store operators often produce apps that are made available in the stores for users, but they also provide access to the app store to the offerings of third party developers. The apps themselves may be downloaded for free or for a fee, or they may be downloaded for free but parts of their functionality may be subject to ‘in-app’ purchases. The app store operator may take a percentage of any price paid either for the app itself or the in-app purchases as well as the app developer if it is a third party.

## **5.2 Problems with mobile devices and app stores**

This configuration implicates two broad categories of problems for users and third party app developers: problems concerning anticompetitive conduct from the entities which control the app store; and problems of expression and control, that the app store operators can ‘censor’ certain apps for non-economic reasons or put other restrictions on what users can do with their devices.

### **a) Competition**

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<sup>489</sup> Daithi Mac Sithigh, ‘App law within: rights and regulation in the smartphone age’ (2013) 21(2) *International Journal of Law and Information Technology* 154, 155

The concerns around competition encompass the ‘gatekeeping’ or ‘control’ function that app store operators exercise over what is available within the store to users. For instance, an app store operator which also makes apps ‘in-house’ may have an incentive to exclude apps from third parties which compete with its own offerings. The app store operator may also have an incentive to engage in predatory pricing ie offering its own apps at a low or zero price with the intention of raising the price for users once its competitors have exited the market.

There are also other issues of competition given the high level of vertical integration of the value chain. Users who purchase, for instance, an Apple device are forced to use the Apple app store and operating system unless they ‘jailbreak’ the device. In order to ‘jailbreak’ these devices, however, and load on an alternative operating system and/or access an alternative app store, certain digital rights management measures (DRMs)/technical protected measures (TPMs) whose primary purpose is to protect digital copyrighted material may need to be circumvented. Various problems arise here since the circumvention of these digital ‘locks’ may be illegal, even if there is no infringement of copyright (due to anti-circumvention provisions introduced initially by the 1996 WIPO Copyright Treaty, possibly also supplemented by contractual terms), and the purpose is to provide users with a choice of operating system and/or app store. Thus, the vertically integrated provider’s control over the value chain and ability to resist competition can be entrenched by the laws around circumventing TPMs by restricting users’ choice at these various parts of the value chain.

#### **b) Free expression and control**

These characteristics of mobile device value chains and control also pose other, ‘non-economic’ problems for users. Firstly, the app store operators can ensure that certain apps are not approved and made available in the store for users for reasons other than competition. The inclusion of apps in the Apple App Store, for instance, is governed by the non-negotiable App Store Review Guidelines (as well as general Terms of Use). Some apps containing ‘adult’, pornographic or erotic content have not been approved for inclusion in the App Store, even though this content is not necessarily illegal. Other apps with controversial political (but still

legal) content have been removed from the App Store as well, such an app which provided access to WikiLeaks' content on the leaked US embassy cables from 2010 (Apple gave no reason as to why it was removed),<sup>490</sup> and another app created to raise awareness of the US's 'drone war' was rejected by Apple on various occasions for inter alia being 'objectionable and crude'.<sup>491</sup> Thus app store operators can perform a censoring role over what content and applications users can receive and use. Indeed, Hestres considers that the control that Apple and other App Store/operating system providers exercise over what apps are approved or not 'poses a greater barrier to content diversity and freedom of expression than lack of technological generativity'.<sup>492</sup>

This control extends as well to users' ability to use their mobile devices however they wish. The use of DRMs/TPMs to 'lock' users into a particular app store or operating system and the more limited functionality of these mobile devices via their original design and their operations compared to desktop and laptop computers leaves users much less able to use their devices as they may wish. This is compounded by the degree of legal 'greyness' in certain circumstances when it comes to jailbreaking the devices, which will be discussed below.

Similarly to the scenarios discussed in other chapters of this thesis, if there are truly competitive markets, then these problems either may not exist or may not pose significant disadvantages to users – users (and developers for that matter) could switch to other operators in a competitive market, and the market would offer differentiated solutions, such as certain operators giving users more freedom and choice in response to their demand. However, it is submitted here too that when markets are not competitive, these problems of expression and control are exacerbated. Furthermore, the price of these devices, usually running into the €100s, as well as smartphones often being packaged with 12 or 24 month contracts with a mobile network operator, entail that it is difficult and expensive to switch devices if users are unhappy with what their provider offers, and so even a competitive market may not provide much relief for users who are in practice 'locked-in' to a particular device 'ecosystem'.

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<sup>490</sup> Daly (n 49) 83

<sup>491</sup> Infosecurity, 'Apple bans 'drone app'' (31 August 2012) <<http://www.infosecurity-magazine.com/view/27914/apple-bans-drone-strike-app>> accessed 2 September 2014

<sup>492</sup> Luis E Hestres, 'App Neutrality: Apple's App Store and Freedom of Expression Online' (2013) 7 *International Journal of Communication* 1265, 1268.

### c) Privacy

There are also heightened privacy concerns over mobile devices and their app store ecosystems, since the operation of the app stores has implicated the collection of a large amount of data about users. For certain apps to be downloaded to a user's device, the user must agree to the app store itself and sometimes also the third party developer having access to certain information about that user and how she operates her device. Furthermore, there have been allegations that app store operators have passed along personal information about users to third party developers in a less than transparent fashion.<sup>493</sup>

'In-kind' payments by users of their personal data or metadata characterises mobile device ecosystems in a similar way to the user side of search engines, as discussed in the previous chapter. Users may be able to download certain apps for free inasmuch as they do not pay a sum of money for the app, but they do 'pay' by handing over information about themselves and their conduct.

Privacy issues for mobile devices may be exacerbated by the greater reliance on the 'cloud' that these devices have (and have been designed to have) – so files may be more easily stored in the 'cloud' (again, often a vertically integrated offering by the same company that manufactures the device, manages the app stores, provides apps) rather than on the device itself, as was traditionally the case with desktop and laptop computers. This line of control enables a large amount of data to be collected about users, and the 'mobile' nature of these devices too provides a rich supply of data about the location of the user when she is using the device.

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<sup>493</sup> Alexei Oreskovic & Michael Sin, 'Google app store policy raises privacy concerns' (*Reuters*, 14 February 2013) <<http://www.reuters.com/article/2013/02/14/us-google-privacy-idUSBRE91D1LL20130214>> accessed 2 September 2014

While the user may ‘consent’ when she first buys the device and each time she downloads a new app to use, it may not be clear exactly what is being consented to (in terms of exactly what data is being gathered) and the average user may not understand the language in the privacy policy.<sup>494</sup> Furthermore, there is no real ‘choice’ on this matter between the different offerings from Apple, Google, etc given none of them provide users with a mobile device which does not invade their privacy. Accordingly, a lack of respect for user privacy when using these devices and applications entails an interference with user autonomy and is exacerbated by the concentration of the market and an absence of true choice.

### **5.3 Mobile devices, apps and market developments**

As discussed above, mobile device markets are characterised by their two-sided nature – the platform is provided which acts as a meeting place for users on the one side and app developers and content providers on the other side. The markets are also characterised by a strong degree of vertical integration, where device manufacturers are integrated with operating systems, app stores, cloud services and applications.

Related to this strong degree of vertical integration are the network effects which also characterise these markets, and contribute to their concentration around certain big players, namely Google, Apple and, to a lesser extent, Amazon. The more users that these platform ecosystems have, the more attractive they are to app developers and content providers as their offerings can reach more potential customers. Accordingly, the more a mobile device ecosystem offers in terms of a variety of content and applications, the more attractive these ecosystems will be to end users.

Another characteristic of these mobile device ecosystems, again mentioned above, is the strong degree of ‘lock-in’ users experience, which makes switching to competitors’ offerings

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<sup>494</sup> Irene Pollach, ‘A typology of Communicative Strategies in Online Privacy Policies: Ethics, Power and Informed Consent’ (2005) 62(3) *Journal of Business Ethics* 221

more challenging. This lock-in is achieved in various ways: with smartphones, it can be due to users obtaining the device as part of a long-term contract with a particular network provider (with penalties for the user if she terminates the contract before the period is over) – thus lock-in by legal means. Another significant method of lock-in is the design of the devices and operating systems, which entails that only one app store from which applications for the device can be downloaded is available, and this is usually a vertically integrated offering of the device manufacturer and/or operating system provider. Users are thus ‘locked-in’ by technical means to using that app store and the applications it approves. As mentioned above, it is possible for users to choose another app store or operating system via ‘jailbreaking’ the device and then have a wider/different selection of apps available, but this is not a simple procedure. If the device is not jailbroken, then the app store operator/operating system provider/device manufacturer exercises ultimate power and control over the content that can be accessed on it and the programs that it can run. For Apple, for instance, this vertical integration has been a feature of its business model for a long time, predating the development of mobile devices.

This lock-in is compounded by the legal status of jailbreaking. Aside from jailbreaking devices in order to use other software and applications being a somewhat technically complex procedure, the process involves breaking DRMs/TPMs. These technical locks are intended to protect copyright and prevent infringement by limiting the user's ability to copy/lend/modify files and devices, and they also allow syncing between 'approved' devices - but their practical application often goes much further than this purpose, for instance preventing interoperability of file formats and devices, or preventing the use of copyrighted works that are legal, such as fair use/dealing or copying for private/research purposes.

Hackers have worked out technical measures to get around, remove or ‘break’ DRM but these are not necessarily legal even though these ‘breaking’ techniques have at least a dual use: on the one hand they can be used to infringe copyright, but on the other hand they can be used for legitimate reasons such as to facilitate interoperability. The law on this point comes from Article 11 of the 1996 WIPO Copyright Treaty, which provides that signatory states should provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by authors to protect their work, ie

DRMs/TPMs. Both the US and the EU are signatories to this treaty, and have transposed it into their domestic laws. In the US it is found in section 103 of the Digital Millennium Copyright Act, which makes it illegal to circumvent DRM measures, although claims not to affect defences to copyright infringement such as fair use. The Librarian of Congress also issues exemptions to this rule: there is currently an exemption for jailbreaking smartphones, but not for jailbreaking tablets or e-books readers. In any event, it is at least a grey area as to whether breaking DRM to make a file or device interoperable or to load on different software/content is legal. In the EU, it is Article 6 of the ‘Copyright’ or ‘Infosoc’ Directive that transposes this provision, and it discusses Member States making available national exemptions/limitations in the absence of voluntary measures being taken by rightsholders. However, different European Member States have identified different exceptions (or exceptions with differing scopes) to the prohibition on circumvention, and the EU also lacks a similar process to that overseen by the Librarian of Congress in the US regarding the issuing of exceptions.<sup>495</sup> As a result of this opacity as to the legal situation for users, jailbreaking can be viewed as a ‘legally unattractive option’, especially when there is no explicit exception for it such as for smartphones in the US.<sup>496</sup>

#### **a) Market leaders**

While precise market definition can prove tricky for mobile devices given overlapping functionality and use by users, certain large players can be identified as raising dominance concerns, especially Apple and Google.

Apple is active in both the smartphone and tablet markets, pioneering tablet take-up with the introduction of its iPad. As mentioned already, Apple provides its own operating system on its devices, the iOS, and also operates the Apple App Store for these devices as well as providing its own apps alongside the offerings of third parties.

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<sup>495</sup> Vasiliki Samartzi, ‘Optimal vs Sub-optimal Use of DRM-protected Works’ (2011) 33 *European Intellectual Property Review* 517, 527

<sup>496</sup> Mac Sithigh (n 492) 170

Google provides its own devices in the form of the Nexus branded tablets and smartphones, but it also offers its Android mobile device operating system to be used by other device manufacturers, with Samsung being a notable manufacturer which has used Android in its devices. Android is an open source operating system - Google releases the source code under an Apache licence, which allows the software to be modified and distributed freely by the device manufacturers and wireless carriers. However, Google has trademarked 'Android' and only permits others to use this trademark and call what they have done 'Android' as well as use the Google Play app store, apps created by Google and related data if their version passes Google's certification tests and adheres to various other terms. Nevertheless, Android has undergone a process of fragmentation with 'forked' versions of it emerging - indeed, Amazon's Kindle Fire uses a forked version of Android that is not approved by Google, and has its own app store rather than using Google's services.

At the time of writing, systems running the Android operating system have a share of the European tablet market of almost 70%, while Apple's share is 29%.<sup>497</sup> Android systems also lead European smartphone markets overall, with a share of 71%, against Apple's declining share of 16%.<sup>498</sup> Apple's share in the UK is higher, of around 32% but in other EU5 markets its share is as low as 8%.<sup>499</sup>

In the US, Android's market share has grown over the last year or so, such that it now has around 50% of the smartphone market compared to Apple's share of 44%.<sup>500</sup> As for tablets, Apple has a larger market share than in Europe, with around 52% of the market in North America (US and Canada), but its market share there is also declining in favour of Android

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<sup>497</sup> Marco Attard, 'Context: Tablets Outsell Laptops in European Q4' (*Consumer I.T.*, 27 February 2014) <[http://www.consumerit.eu/index.php?option=com\\_content&view=article&id=1982:context-tablets-outsell-laptops-in-european-q4-&catid=20&Itemid=100017](http://www.consumerit.eu/index.php?option=com_content&view=article&id=1982:context-tablets-outsell-laptops-in-european-q4-&catid=20&Itemid=100017)> accessed 2 September 2014

<sup>498</sup> Shaun Nichols, 'iPhone slips in Europe as Windows Phone claims OVER 10% market share' (*The Register*, 2 December 2013) <[http://www.theregister.co.uk/2013/12/02/iphone\\_loses\\_ground\\_in\\_europe\\_as\\_windows\\_phone\\_claims\\_market\\_share/](http://www.theregister.co.uk/2013/12/02/iphone_loses_ground_in_europe_as_windows_phone_claims_market_share/)> accessed 2 September 2014

<sup>499</sup> Kantar World Panel, 'Smartphone OS market share' <<http://www.kantarworldpanel.com/smartphone-os-market-share/>> accessed 2 September 2014

<sup>500</sup> *ibid*



systems.<sup>501</sup>

From this it can be seen that the market in the US is more competitive inasmuch as the market shares would suggest no one entity has market power, while in the EU the Android operating system's indicative shares of around 70% of both the smartphone and tablet markets may present a stronger case for it having a dominant position in these markets.

As for app stores, globally the Apple App Store has a 65% market share to Google Play's 35% in terms of revenue,<sup>502</sup> even if Google Play facilitates 75% of all app downloads.<sup>503</sup>

Nevertheless, even if one player does not have a dominant position in these broader markets, and so there is little cause for concern from a competition perspective, the possibility of user lock-in and each brand of device/app store constituting a market in itself can create a situation in which there are problems for competition, and most certainly problems for user autonomy once stuck in such a situation.

## **b) Allegations of anticompetitive conduct**

Both Google and Apple have been accused of behaving anticompetitively in the running of their mobile device ecosystems.

### **i) Apple**

A scenario which pre-dates Internet-enabled mobile devices but involves a predecessor to the iPhone was the antitrust proceedings against Apple's portable digital music device, the iPod

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<sup>501</sup> Ina Fried, 'The iPad Still Dominates Tablet Market, but Samsung and Others are Inching Up' (*re/code*, 23 April 2014) <<http://recode.net/2014/04/23/the-ipad-still-dominates-tablet-market-but-samsung-and-others-are-inching-up/>> accessed 2 September 2014

<sup>502</sup> Tony Bradley, 'Android Dominates Market Share, But Apple Makes All The Money' (*Forbes*, 15 November 2013) <<http://www.forbes.com/sites/tonybradley/2013/11/15/android-dominates-market-share-but-apple-makes-all-the-money/>> accessed 2 September 2014

<sup>503</sup> Chris Yackulic, 'Apple App Store v Google Play Store' (*Android Headlines*, 12 November 2013) <<http://www.androidheadlines.com/2013/11/apple-app-store-vs-google-play-store.html>> accessed 2 September 2014

(whose original versions did not have Internet connectivity) in the US.<sup>504</sup>

The complaint, in the form of a class action, concerned the alleged tying, in violation of section 2 of the Sherman Act, of the iPod device to Apple's iTunes store (which can be viewed as a predecessor of the Apple App Store) and was triggered by the iPod not supporting a music file format engineered by a competitor via the use of Apple's proprietary DRM.<sup>505</sup> This entailed that iPod device owners would have to obtain their music files via the iTunes store, and music bought through the iTunes store could only be played on iPods and not competitors' digital music devices. The claim of tying was subsequently dropped, and modified twice, with the finalised argument being that that Apple engaged in alleged monopolization based on inflated prices for iTunes music downloads, thus users paid prices of a supracompetitive level. The plaintiff alleged that as a result of Apple's proprietary DRM, Apple achieved a monopoly in the personal digital music player and audio download markets, and that Apple maintained and furthered its monopoly in these markets through the use of software updates intended to prevent Apple's competitors from selling music files that were compatible with iPod, and playing music bought through iTunes on other devices, thus enabling Apple to charge supracompetitive prices for music downloads. Furthermore, it was claimed that the use of this proprietary DRM on music files was anticompetitive conduct on Apple's behalf.

The case was dismissed by a District Court and this dismissal was upheld on appeal by the Ninth Circuit Court of Appeals.<sup>506</sup> The Court found that the plaintiff failed to make out a monopolization claim for damages based on overcharged music downloads since she failed to plead sufficient facts: indeed, in the relevant time period Apple had continuously charged the same price regardless of whether there were competitors present and so the plaintiff failed to show that Apple's software updates affected the music prices, and failed to show that Apple's prices were supracompetitive in the circumstances. The plaintiff had also failed to show that the use of proprietary DRM constituted an antitrust injury, given a restriction of consumer choice in itself does not constitute an antitrust injury, and a lack of allegation that the presence of DRM on the files harmed competition in the music download market ie was an injury to competition. There were also procedural issues in this case which contributed to its

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<sup>504</sup> Although the current version, the iPod Touch, does have wireless Internet connectivity and directly connects to the Apple iTunes Store and Apple App Store.

<sup>505</sup> *Apple iPod, iTunes Antitrust Litigation*, C05- 0037JW (N.D. Cal. 2010)

<sup>506</sup> *Somers v Apple*, No. 11-16896 (9<sup>th</sup> Cir. 2013)

dismissal, but it does seem to suggest that the use of DRM (or TPMs) will not in itself be anticompetitive – it must also produce an anticompetitive outcome for it to constitute antitrust injury.

The class action proceeded with some other plaintiffs, and went to trial again in late 2014.<sup>507</sup> However, the jury at trial found no antitrust violation, due to Apple making legitimate product and security improvements to the iPod devices and the iTunes software, seemingly following the *Kodak* and *IBM* lines of case law discussed in the previous chapter. At the time of writing, this decision has been appealed.

Apple has also faced other controversies in the US specifically regarding the governance of its App Store. Apple initially blocked the voice over IP (VoIP) service Skype as an app for its iPhone in the US which was contracted to AT&T for use with its 3G mobile network, presumably to prevent competition for AT&T's voice services, but Skype was finally made available in 2009, possibly due to some informal regulatory pressure as AT&T specifically informed the FCC of their decision.<sup>508</sup> Google's Voice app had also been rejected from the App Store which prompted the Federal Communications Commission to question this decision.<sup>509</sup> Apple had argued that the Google Voice app merely replicated existing iPhone features,<sup>510</sup> but eventually it made the Google Voice app available in the App Store, quite possibly because antitrust agencies (FTC or DoJ) might have viewed Apple's conduct as anticompetitive and abusive.<sup>511</sup>

Furthermore, Apple has been involved in more litigation in the US. In the proceedings in *Ward et al v Apple*, the complainants alleged that Apple had violated section 2 of the Sherman Act by entering into exclusive distribution contracts in the US with AT&T, locking iPhone buyers into these voice and data contracts. These proceedings were consolidated with another

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<sup>507</sup> Mike Masnick, 'Apple Facing Trial Over Whether Its Use of DRM Violated Antitrust Laws' (*Techdirt*, 6 October 2014) <<https://www.techdirt.com/articles/20141003/15453128723/apple-facing-trial-over-whether-its-use-drm-violated-antitrust-laws.shtml>>

<sup>508</sup> AT&T, 'AT&T Extends VOIP to 3G Network for iPhone' (*AT&T News Room*, 6 October 2009) <<http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=27207>> accessed 3 September 2014

<sup>509</sup> Ryan Singel, 'Feds Want Apple and AT&T to Explain Google Voice Rejection' (*Wired*, 31 July 2009) <<http://www.wired.com/business/2009/07/feds-want-apple-and-att-to-explain-google-voice-rejection/>> accessed 3 September 2014

<sup>510</sup> Jason W Croft, 'Antitrust and Communications Policy: There's an App for Just About Anything, Except Google Voice' (2010) 14 *SMU Science and Technology Law Review*, 5

<sup>511</sup> *ibid*

class action alleging that Apple unlawfully stifled competition and consumer choice and artificially increased the prices in the aftermarket for iPhone voice and data services and for iPhone software apps by retaining exclusive control over the iPhone's design, features and operating software, refusing to approve any app by an outside developer which did not pay an annual fee of \$99 to use Apple's software development kit or agree to 30% of any app sale going to Apple, and not providing iPhone customers with any means by which they could download third party apps not approved by Apple. A US District Court dismissed the complaint due to standing issues concerning the plaintiffs' ability to bring the antitrust case and the questionable accuracy of some of their allegations.<sup>512</sup> This decision leaves open the possibility of a better-worded complaint being made in which the plaintiffs' standing is established, and certainly does not definitively establish that Apple's conduct is not anticompetitive. However, to establish Apple's conduct is anticompetitive and in breach of section 2 of the Sherman Act, Apple would have to be shown to have a dominant position, and from the subsection above, this does not appear to be the case for the US smartphone market. Thus it may have to be demonstrated that these aftermarket for iPhone voice and data services, and apps exist, which is not necessarily a straightforward task in practice, as will be explored below.

Finally, Apple has been embroiled in litigation regarding anticompetitive conduct vis-à-vis the distribution of e-books.<sup>513</sup> Apple and five of the 'Big Six' book publishers (namely HarperCollins, Hachette, Simon & Schuster, Penguin and Macmillan) have been investigated for alleged price-fixing in both the EU and US. Apple provides access to e-books on its mobile devices via its iBookstore app, though also allows users to purchase or otherwise obtain e-books from other sources, such as via Amazon's Kindle app, but all content being read outside of an app must be uploaded to Apple's distribution platforms and Apple has also tried to ensure that e-books being sold from other sources are not available for lower prices than via the iBookstore. The particular conduct which was the subject of the competition investigations concerned new 'agency' contracts that Apple entered into with the book publishers which gave them more control over retail prices and also gave Apple 30% of the final retail prices and an assurance that the e-books would not be sold elsewhere for less than

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<sup>512</sup> *In Re Apple iPhone Antitrust Litigation*, 11-cv-06714-YGR (N.D. Cal. 2013).

<sup>513</sup> This section is based on Angela Daly, 'E-book monopolies and the law' (2013) *Media and Arts Law Review* 350

Apple's price for them. The European Commission investigated Apple and the book publishers for alleged price fixing in breach of Art 101 TFEU, suspecting that the shift to agency contracts may have been the result of collusion between competing publishers with Apple's help and may have had as their goal the increase of retail e-book prices or the prevention of the emergence of lower prices for consumers. Apple and the publishers eventually offered commitments to the Commission that they would terminate the existing agency agreements and not adopt clauses which would prevent them from selling e-books more cheaply via Apple's competitors compared to Apple's prices for five years. However, in the US, all of the publishers settled with the Department of Justice which filed a civil antitrust suit against them, while Apple opted not to settle and the case went to trial. The District Court judge held that Apple had violated section 1 of the Sherman Act, finding direct and circumstantial evidence that Apple had conspired with the publishers to eliminate retail price competition and raise the price of e-books.<sup>514</sup> The DoJ had proposed a remedy to Apple's illegal conduct that would have had consequences beyond the e-book markets: it wanted Apple to be prohibited from entering from entering into agreements with suppliers of other types of content as well as e-books (eg music, films, TV) that were likely to increase the prices at which Apple's competitors might sell that content too.<sup>515</sup> Furthermore, the DoJ also proposed that Apple must allow competing e-book sellers such as Amazon and Barnes & Noble to provide links from their e-book apps for Apple devices to their e-bookstores.<sup>516</sup> Yet neither of these remedies made the final judgement from September 2013, which concerned only e-books, stipulated that the agency agreements must be terminated as well as agreements containing clauses which restrict the retailer's ability to set the retail price of an e-book or clauses which attempt to ensure that other retailers will not sell e-books for lower prices.<sup>517</sup>

While the final judgement is likely to ensure lower e-book prices and more competitive e-book markets for consumer, the measures initially proposed by the DoJ but left out in the end would have had more wide-ranging consequences, particularly for the operation of Apple's App Store. Similar aspects of the model Apple used to contract with the book publishers are found in Apple's contracts with other entities selling their content/apps through its App Store, including newspaper publishers and software developers, such as a 30% cut of overall profits

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<sup>514</sup> *United States v Apple Inc*, 12 Civ. 2826 (S.D. N.Y., 10 July 2013)

<sup>515</sup> Department of Justice, 'Department of Justice Proposes Remedy to Address Apple's Price Fixing' (press release, 2 August 2013) <<http://www.justice.gov/opa/pr/2013/August/13-at-877.html>> accessed 3 September 2014

<sup>516</sup> *ibid*

<sup>517</sup> *United States v Apple Inc*, 12 Civ. 2826 (SD NY, 6 September 2013)

going to Apple. Previously Apple had wanted an assurance that the other party not sell its wares elsewhere for a price lower than that which it offers via the App Store (although it would seem that Apple no longer enforces this requirement),<sup>518</sup> and Apple has ensured that the other party does not include signups for paid services to be accessible directly in the app other than those available through the In App Purchase feature (which must abide by Apple's pricing rules). The DoJ's initial proposal would not have prevented Apple from continuing to receive a 30% cut of revenue but it might have averted the move to agency contracts in other content sector and have encouraged more competition among content retailers. The initial proposal would also, however, have affected the In-App Purchase rules by allowing third party providers in the form of rival e-book retail distributors to provide direct links to their platforms from inside their apps, while Apple's rules entail that third parties which do not wish to follow the rules and wish to sell content via their own prices must do so through their websites, accessible via iPad and iPhone browsers, or even create a 'web app' in HTML5, which is what the *Financial Times* preferred to maintaining an Apple App Store app. However, there have been allegations that certain web apps may run slowly on Apple devices when launched from the home screen, possibly to deter users from these apps and encourage them to use ones available through the Apple App Store.<sup>519</sup>

While there are thus other options for content providers than adhering to Apple's In-App Purchase rules they are less convenient for users, and attempts to circumvent Apple's App Store rules by creating web apps may provide a lower quality experience for users compared to using Apple-sanctioned apps.

## ii) Google

Google and its Android-fronted mobile ecosystem have also been accused of anticompetitive conduct.

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<sup>518</sup> Jordan Golson, 'Apple Reserves Course on In-App Subscriptions' (*MacRumors*, 9 June 2011) <<http://www.macrumors.com/2011/06/09/apple-reverses-course-on-in-app-subscriptions/>> accessed 7 September 2014

<sup>519</sup> Cade Metz, 'Apple handcuffs 'open' web apps on iPhone home screen' (*The Register*, 15 March 2011) <[http://www.theregister.co.uk/2011/03/15/apple\\_ios\\_throttles\\_web\\_apps\\_on\\_home\\_screen/](http://www.theregister.co.uk/2011/03/15/apple_ios_throttles_web_apps_on_home_screen/)> accessed 3 September 2014

The online search-facing side of the European Commission's competition investigation into Google was discussed previously in Chapter 3; however that investigation also has concerned other aspects of Google's business. Indeed, part of Microsoft's complaint to the Commission alleging anticompetitive behaviour from Google included an allegation that Google prevented Microsoft's smartphones from working properly with YouTube, as contrasted with the situation with YouTube and phones using Google's Android operating system (and apparently Apple iPhones as well). Microsoft competes with Google in inter alia the search market, and the mobile operating system market - initially with Windows Mobile for smartphones, which was succeeded by Windows Phone, and Windows 8 for tablet computers.

Furthermore, the FairSearch coalition of Google's competitors filed another complaint with the Commission regarding Google's practice of obliging manufacturers which wish to use the Android operating system to 'pre-load an entire suite of Google mobile services and to give them prominent default placement on the phone'.<sup>520</sup> However, this formulation of the problem somewhat obscures the actual situation with Google's demands – in fact, manufacturers are free to use the Android operating system without pre-loading Google apps, but if they wish to pre-load some Google apps, they must pre-load a whole suite of them as opposed to just the apps which are more prominent or popular. Yet more recent information has surfaced which suggests that if manufacturers wish to use the *most recent* version of Android, they must pre-load a suite of Google apps and services, although they can use older version of Android without being obliged to load on these additional Google products.<sup>521</sup> It seems that the European Commission has a renewed interest in this case and at the time of writing has been inquiring further into Google's precise business practices in this area.

There are, however, important differences between how Google and Apple operate their mobile device ecosystems. Firstly, unlike Apple, Google permits other app stores beyond its

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<sup>520</sup> FairSearch, 'FairSearch Announces Complaint in EU on Google's Anti-Competitive Mobile Strategy' (8 April 2013) <<http://www.fairsearch.org/mobile/fairsearch-announces-complaint-in-eu-on-googles-anti-competitive-mobile-strategy/>> accessed 3 September 2014. Google's methods are also discussed by Benjamin Edelman, 'Secret Ties in Google's "Open" Android' (13 February 2014) <<http://www.benedelman.org/news/021314-1.html>> accessed 3 September 2014

<sup>521</sup> Foo Yun Chee and Alexei Oreskovic, 'European regulators training sights on Google's mobile software' (*Reuters*, 30 July 2014) <<http://www.reuters.com/article/2014/07/30/us-google-europe-android-insight-idUSKBN0FZ2B220140730>> accessed 3 September 2014

own Google Play to be installed on devices running Android operating systems,<sup>522</sup> except possibly the situation in which a manufacturer wishes to install the latest version of Android. Secondly, bona fide Android apps can be installed and executed on a device without needing to go through Google Play, either via the aforementioned non-Google app stores which Google permits, or directly downloaded from a developer's website – this process is known as 'sideloading'. Finally, 'rooting' the device is another option open to Android users, similar to 'jailbreaking' Apple devices inasmuch as both processes give the user 'superuser' administrative privileges, but distinct from jailbreaking as using a different operating system or app store is usually permitted on Android devices (while not on Apple ones) by the device vendor.

Thus, any claim that Google is engaging in anticompetitive bundling would seem to involve only the apps rather than the apps plus Android operating system (unless the speculation about manufacturers wanting to install the latest version of Android is accurate). Even then, since the apps are available via other means such as sideloading, it may be that a strong competition claim would only involve the Google Play app/store – ie if a manufacturer wishes to offer the Google mobile device ecosystem comprising the Android operating system and the Google Play app store, it must also pre-load various other Google apps onto the device before it is sold.<sup>523</sup> If it is indeed true that Google is requiring manufacturers to pre-load various Google app and services onto their devices if they wish to use the most recent version of the Android operating system, then this may be the most convincing example of possible anticompetitive bundling. The European Commission's continuing inquiries on this point ought to clarify whether this is actually the situation in practice.

Google is also being sued in the US on similar grounds.<sup>524</sup> The complaint alleges that Google is acting anticompetitively in including Google's search app in this pre-loaded suite of applications, especially given 'consumers do not know how to switch, nor will they go to the trouble of switching the default search engine on their devices, so this practice is a highly effective means of ensuring that consumers will use Google search to conduct general

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<sup>522</sup> Alfonso Lamadrid, 'Some thoughts on the new anti-Google (Android) complaint (Post 3/3): Bundling allegations' (*Chilling Competition*, 9 September 2013) <<http://chillingcompetition.com/2013/09/09/some-thoughts-on-the-new-anti-google-android-complaint-post-33-bundling-allegations/>> accessed 3 September 2014

<sup>523</sup> *ibid*

<sup>524</sup> *Feitelson et al v. Google Inc.*, 5:14-cv-02007 (N.D. Cal. 2014)



Internet queries rather than one of its competitors' search products'.<sup>525</sup> The contention is that the agreements that Google makes with manufacturers which wish to pre-install these apps are in restraint of trade and are designed to maintain and extend Google's dominance in search markets via tying Google apps the manufacturer may want to other apps, such as search, that the manufacturer may not want to pre-install.

## **5.4 Is there anticompetitive conduct?**

In the following subsections, Apple and Google's conduct will be examined to see whether they are in fact engaging in anticompetitive conduct in the running of their mobile device ecosystems. The relevant markets will be considered, and competitive constraints incumbent on both entities will be discussed. If either Apple or Google is found to have market power in a particular mobile device market, then whether their conduct amounts to an abuse of a dominant position will be considered. The harmful conduct that will be considered in this section is threefold: the blocking of apps (which are otherwise legal) by an app store operator; the tying of products and services in one mobile device market to products and services in another market; and the use of DRM to achieve user lock-in and a lack of interoperability.

### **a) Relevant markets and market share**

For the complaints outlined in the previous section to constitute anticompetitive conduct, Apple and Google must be found to have dominant positions in the relevant market, hence market definition is the first step.

As mentioned at the beginning of this chapter, there is a high degree of vertical integration in mobile device markets, and also conglomeration inasmuch as the main players in these markets are also active in other information markets as well, most prominently Google whose online search engine forms the basis for Chapter 4 of this thesis.

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<sup>525</sup> *ibid* 2

**i) Device/operating system markets**

Certain relevant markets can be defined for the possible anticompetitive conduct. Firstly, there is the market for Internet-enabled mobile devices, which can be further subdivided into markets for smartphones and markets for tablets. Secondly there is the market for operating systems for mobile devices. Apple and Google are active in both of these markets, but Google only has a small presence in the device markets with its Nexus range, which does not even make up a majority of devices using its own Android operating system.<sup>526</sup>

In any event, it would seem that any of these market definitions would be too wide in order to find that Apple was dominant/had market power based on market share. From the figures detailed in the section on Market Leaders above, Apple and Google are the two major players in mobile device markets in the US and EU. While Android may have a larger share of mobile operating system markets in the EU and a slightly larger share of the tablet market operating systems, Apple has the larger share of tablet operating systems in the US, with both companies having similarly sized shares of the smartphone market. However, these figures are for new devices currently being sold and do not reflect the devices already sold, which given Apple's first mover advantage, may give Apple a larger market share. In any event, these shares suggest that these markets are not concentrated around one sole entity and might well be judged competitive since market shares have not remained static over the last few years.

Narrower markets around particular branded devices may also be defined eg Apple iPhones may be found to constitute their own market, so Apple is the only player in this market and thus dominant. Indeed, this seemed to be the approach taken in a French case regarding a contract entered into between Apple and Orange for exclusive distribution rights concerning the iPhone in France, Belgium and Romania, which was alleged by another mobile network operator to be anticompetitive on the grounds of imposing unjustifiable vertical restraints, and

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<sup>526</sup> Matt Hamblen, 'Google's Nexus lineup may not sell well, but still challenges Android makers' (*Computer World*, 3 December 2013) <[http://www.computerworld.com/s/article/9244477/Google\\_s\\_Nexus\\_lineup\\_may\\_not\\_sell\\_well\\_but\\_still\\_challenges\\_Android\\_makers](http://www.computerworld.com/s/article/9244477/Google_s_Nexus_lineup_may_not_sell_well_but_still_challenges_Android_makers)> accessed 6 September 2014

found to be anticompetitive by the Conseil de la Concurrence, a decision which was upheld by the Paris Court of Appeal.<sup>527</sup> Cox considers that the iPhone's 'unique characteristics' gave Apple 'monopolist bargaining power', which seemed to be hinted at in the Conseil de la Concurrence's research for the case, and was explicit in the French Supreme Court's reasoning, that the iPhone's industrial design combined with its functions rendered it distinct from other smartphones.<sup>528</sup>

The question remains from this is the extent to which Apple products are substitutable for eg Android products. The Apple/Orange litigation in France took place before mobile devices with Android operating systems became widely available, and so it could be argued that while at the time those procedures were occurring, iPhone constituted a product market in themselves, the launch and take-up of Android-enabled products (as well as mobile devices running other operating systems) has provided an equivalent to Apple products in terms of design and functionality, belied by the 'patent wars' which have included allegations that Android infringed Apple's patents. It is unclear whether the Conseil de la Concurrence used the SSNIP test in the Apple/Orange litigation, but it would seem at the time of writing that if Apple did attempt to raise its prices then it would likely lose market share to competitors.

Nevertheless, Apple may be considered to offer a sufficiently 'different' experience to devices running Android operating systems for Apple devices to constitute separate product markets in themselves, due to factors such as the perception of quality and security the Apple ecosystem offers compared to that of Android.

Furthermore, from the 'demand' side of the market, app developers are likely to make separate apps for the Apple App Store and the Google Play/other Android app stores given the different APIs that each ecosystem uses – therefore they may be regarded as separate markets from that side as well.

In any event, even if Apple devices are not considered to constitute their own product markets

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<sup>527</sup> Unreported case discussed in: Fabien Fontaine, 'French antitrust law and strategic analysis: apples and oranges?' (2009) 30(6) *European Competition Law Review* 286

<sup>528</sup> M B Cox, 'Apple's exclusive distribution agreements: a refusal to supply?' (2012) 33(1) *European Competition Law Review* 11. On the point of industrial design, Apple has sought and obtained various patents for certain components and processes within its mobile devices, which have been the subject of the 'patent wars' – litigation between various companies including Apple, Google and Samsung concerning unauthorised use of patented processes and objects in Internet enabled mobile devices

per se, the Apple App Store or iOS operating system for instance may be considered as a complementary product constituting an ‘aftermarket’ – such that even if Apple does not have power over the smartphone or tablet market, it may have a dominant position in the secondary market for iPhone or iPad app stores or operating systems. This is assessed on an empirical, case-by-case basis, and depends on inter alia whether consumers take into account the prices (and other features) of this secondary market for app stores when making their initial purchase on the primary ie smartphone or tablet market. Yet mobile devices might be considered to be ‘experience goods’, whereby product characteristics are difficult to observe in advance but can be ascertained upon consumption, or might be considered experience goods at least for consumers who have never purchased one before. If they are considered as such, then consumers may be unlikely to take into account features of the secondary markets prior to purchasing the primary product ie the device, and so the aftermarkets analysis will not hold.

Regarding Google, as mentioned above it has only a small share of device markets with its Nexus range. However, it is in the operating system markets rather than device market where Google, through Android, may have market power. Nevertheless, the ‘open’ nature of the Android system, which is distributed on a free software basis, would be at odds with a finding of market power since Google permits Android to be taken and modified by others for no charge (so long as the latter makes the source code of the new system available), thus anyone can freely produce a version of Android to ‘compete’ with Google’s.<sup>529</sup> In any event, the allegations against Google relate to its apps/app store rather than the Android operating system itself, which as mentioned is distributed on a free software basis, and, unlike the Apple ecosystem, using the Android operating system on a device does not require using the app store, Google Play, as well.

## **ii) App Stores**

If mobile app stores can be taken to be another market, then market share can be calculated in two ways: either via revenue for the app store provider, in which case Apple leads the market

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<sup>529</sup> Free Software Foundation Europe, ‘FSFE objects to claims of ‘predatory pricing’ in Free Software’ (Letter to European Commission, 29 July 2013) <<http://fsfe.org/activities/policy/eu/20130729.EC.Fairsearch.letter.en.html>> accessed 6 September 2014

globally, or in terms of app downloads, in which Google Play leads. It is important to note here that data collected through apps is another way in which Google ‘feeds’ its overall business model of acquiring large amounts of information about users, so even if apps are ‘free’ in terms of not costing money, or little money compared to what users or developers pay through the Apple App Store, particularly users may be ‘paying’ instead via the collection of their personal information while they are using the app and the device.

The market for mobile app stores may be further subdivided, for instance into narrower markets for mobile app stores on Apple/iOS devices (which as mentioned above could also be considered an ‘aftermarket’ for these devices – Apple may not be dominant in the smartphone or tablet markets, but would be dominant in this market if it is considered a separate secondary market) and app stores on Android. Google Play is considered to be the leading Android app store in terms of number of apps available and downloads of those apps,<sup>530</sup> but there are other app stores for Android not affiliated to Google, and there are fewer barriers to using these alternatives compared to the situation with Apple devices.

### **iii) Markets for specific apps**

Further markets may be defined for specific types of app, such as for search engine apps (as alleged in the American Android complaint), or video apps (such as was implicit from Microsoft’s European complaint). In both of these cases, it is Google which is the entity behinds these apps – and the fact these particular Google services are the subject of competition concerns concurs with Kenny and Pon’s view of where Google captures value in the mobile device ecosystem, that it is presumably here due to the user data and advertising revenue generated by these apps, as opposed to aspects of the mobile devices themselves.<sup>531</sup>

For search apps, they may be judged to be also in a separate relevant market to ‘desktop’ search or ‘browser’ search, with which the competition investigations into Google detailed in

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<sup>530</sup> Simon Hill, ‘Tired of Google Play? Check Out These Alternative Android App Stores’ (*Digital Trends*, 5 December 2013) <<http://www.digitaltrends.com/mobile/android-app-stores/#!OIQuS>> accessed 6 September 2014; Francis Bea, ‘10 Google Play alternatives to boost Android app installs’ (*AppFlood*, 3 September 2013) <<http://appflood.com/blog/ten-alternative-android-app-stores/>> accessed 6 September 2014; One Platform Foundation, ‘List of Android Appstores’ <<http://www.onepf.org/appstores/>> accessed 6 September 2014

<sup>531</sup> Martin Kenny and Bryan Pon, ‘Structuring the Smartphone Industry: Is the Mobile Internet OS Platform the Key?’ (2011) 11 *Journal of Industry, Competition and Trade* 239, 242

Chapter 3 were principally concerned. Whether they constitute a separate market in themselves will depend on their substitutability: the extent to which desktop or browser search is substitutable for search app search. This may well be the case given the different functionality of each, and the ‘better experience’ that search via a search app may offer on a mobile device compared to via a browser. In any event, even if search apps are judged to constitute a separate market, then it would seem that Google still has a dominant position in this market globally and also in the US at least.<sup>532</sup> It is likely that Google would also dominate the search app market in the EU as well.

As for YouTube, the relevant market would need to be defined, which is not clear – it may be the market for online video content aggregators or specific apps for online video content aggregation. How market share might be measured in whatever market is defined is also unclear – it may be measured either by views, downloads and/or advertising revenue. Nevertheless, YouTube has an important position globally as generating a large amount of advertising revenue as well as being a very popular online resource in terms of total views,<sup>533</sup> so may well be found to have a leading share in that market.

## **b) Competitive constraints**

Before dominance or market power can be ascertained, the competitive constraints in each market must be examined.

The markets for mobile Internet devices are currently reasonably competitive from the consumer perspective. There is competition among Apple devices, Android-enabled devices, devices running Windows Mobiles etc, and, except in the case of Apple, there is a selection of manufacturers making devices running each operating system – whether Google’s Android

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<sup>532</sup> Forbes, ‘Google’s Mobile Division to Fuel Revenue Growth in 2014 and Beyond’ (8 April 2014) <<http://www.forbes.com/sites/greatspeculations/2014/04/08/googles-mobile-division-to-fuel-revenue-growth-in-2014-and-beyond/>> accessed 6 September 2014

<sup>533</sup> eMarketer, ‘Advertisers to Spend \$5.60 Billion on YouTube in 2013 Worldwide’ (11 December 2013) <<http://www.emarketer.com/Article/Advertisers-Spend-560-Billion-on-YouTube-2013-Worldwide/1010446>> accessed 6 September 2014; Jeff Bullas, ‘The Facts and Figures on YouTube in 2013 – Infographic’ (11 February 2013) <<http://www.jeffbullas.com/2013/02/11/the-facts-and-figures-on-youtube-in-2013-infographic/>> accessed 6 September 2014

for which there is no charge, or Windows Mobile operating system for which device manufacturers pay Microsoft for a licence to use. It is submitted that there is not significant buyer power on the part of the device manufacturers given the consolidation of the mobile operating system markets around Apple, Google and (to a lesser extent) Microsoft, and the network effects each exhibit for users and app developers. As mentioned above, market shares for different players have fluctuated over recent years, which suggests these markets are competitive and in terms of device provider, there seems to be none with an overall dominant share. While there are high barriers to entry for a completely new manufacturer, for established phone or computer manufacturers the barriers to entering these new markets are relatively low, particularly given the availability of free operating systems such as Android to install onto their devices.

However, it is a different picture if a market specifically for Apple products is found to exist. Apple is completely dominant over these products as it is the only vendor and it does not license its iOS operating system to other manufacturers to use with their devices. This is also the case for any Apple product aftermarkets that may be identified, such as for the Apple App Store or iOS operating system – aside from ‘jailbroken’ devices, Apple is entirely dominant in these markets and so has market power. While it is unclear how many Apple devices have been jailbroken and so ensuring Apple is subject to competition in these aftermarkets, the scant evidence available suggests that only a very small percentage of Apple products are indeed jailbroken eg 2% of the total,<sup>534</sup> and so the practice of jailbreaking is likely to be insufficient to exercise much of a competitive constraint on Apple in these aftermarkets. In consequence, users experience a high degree of ‘lock-in’ to Apple’s ecosystem when they acquire an Apple device given the lack of choice offered in terms of operating system and App Store, as well as the difficulty in switching to rivals’ offerings, which essentially must be done through jailbreaking – a complex and sometimes unsuccessful process.

The overall situation for app stores in general is likely to be competitive as well, since there are various app stores in circulation exerting competitive constraints on each other. This is

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<sup>534</sup> Anthony Wing Kosner, ‘What 7 Million Jailbreak Are Saying. Is Apple Listening?’ (*Forbes*, 10 February 2013) <<http://www.forbes.com/sites/anthonykosner/2013/02/10/what-7-million-jailbreaks-are-saying-is-apple-listening/>> accessed 6 September 2014

especially the case concerning Android devices, on which Google permits a choice of app store, including its own Google Play offering but also the offerings of competitors. Nevertheless, these app stores also exhibit network effects inasmuch as the more users there are, the more attractive developing an app for a specific app store is from the perspective of developers, while conversely the more apps there are available in an app store, the more attractive that store is for users. For Apple devices, the Apple App Store could be considered a specific aftermarket in which Apple is dominant even if it is not accepted that Apple products themselves form their own relevant market, as discussed above.

Finally, as regards the markets for specific apps, in theory these ought to be competitive given the low entry barriers a priori for creating an app to run on mobile devices. However, in the specific circumstances of search engine apps, this market would seem to mirror the entry barriers in the search engine market as discussed in Chapter 3, most notably the vast amount of user data over which Google presides which would be difficult to replicate by many potential competitors (except possibly Facebook), which leads to Google having a dominant position in these markets at least in the EU. YouTube as a video content aggregator would seem to experience more competitive constraints, from other video hosting/aggregating sites and apps and possibly also from social networks and other user generated content platforms. However, YouTube is likely to benefit from network effects inasmuch as the more users upload videos to it, the more attractive it will be to those wishing to watch videos, and the more users it has as an audience, the more attractive it will be to those wishing to upload their videos and have them seen.

### **c) Abuse of dominant position**

Here, three types of conduct in mobile device ecosystems which are most injurious to users' autonomy will be considered to determine whether they would constitute anticompetitive behaviour. As mentioned above, these three types of conduct are: tying products and services from one market to products and services in another, thus depriving users of choice; the mobile device ecosystem operator locking users into that ecosystem, also depriving them of choice; and a mobile app store blocking apps.



## i) Tying

Tying is problematic for user autonomy in mobile device ecosystems because it deprives them of a choice of products and services, including from competitors of the mobile device ecosystem operator and permits the ecosystem operator to exert a high level of control. Two instances of tying will be examined here: Apple's tying of its operating system, app store and possibly also individual Apple apps to the initial purchase of the mobile device; and Google's alleged tying of a pre-loaded suite of its apps to either certain other Google apps or the current version of the Android operating system.

Taking the situation with Apple first, in order to show tying the relevant market would have to be one specifically for Apple-branded devices, although the discussion above shows that the market may not be defined so tightly around Apple products, and in the general market for smartphones or tablets Apple will not have a dominant position). Assuming this is the correct characterisation of the relevant market, the anticompetitive conduct on Apple's behalf would be an abuse of dominance in tying its devices to downstream markets for operating systems, App Stores and possibly also certain individual Apple-owned apps. This situation is reminiscent of the *Microsoft* case,<sup>535</sup> where Microsoft engaged in 'technical tying' by physically integrating the tied product into the tying product so that it was impossible to take one product without the other – here it is impossible (or at least only possible via the legally questionable jailbreaking) to take Apple devices (the tying product) without also getting the Apple operating system and the Apple App Store on them (the tied products).

To show anticompetitive tying, aside from a dominant position, there must be two distinct products being tied as opposed to a single integrated one, however in this situation that does not seem to pose a problem: as the conduct of other players (particularly Google) in these markets demonstrates, the device is distinct from the operating system which is distinct from

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<sup>535</sup> *Microsoft*, Commission decision of 24 March 2004, upheld on appeal Case T-201/04 *Microsoft Corporation v Commission* [2007] ECR II-3601

the app store. Customers must also be coerced into purchasing both the tying and tied product: in the *Microsoft* case, the General Court found that there had been coercion of customers to take the Windows Media Player application with Windows operating system since it was ‘technically bundled’ and impossible to uninstall from the operating system. Here, unless the device is jailbroken, it would be impossible to uninstall the operating system or app store from the Apple device, and it is submitted that this is an analogous situation to that of *Microsoft*. This is unlikely to be the case with individual Apple apps however, as it is possible to uninstall them.

Finally, it must be demonstrated that the tie has an anticompetitive foreclosure effect. It would appear that this is the case here, that the market for operating systems on Apple devices and/or app stores on Apple devices is indeed foreclosed as a result of the tie between the device and these other products since no other players are able to compete in these markets as a result. Thus, unless Apple was able to show an objective justification for this tie, or that the tie enhances efficiency, it is likely it would be judged anticompetitive. One justification may be the ‘safety’ of the experience Apple offers on its devices – that users are sure that they will receive a quality and ‘family friendly’ product at all stages from the device itself to the applications available on the device, however a similar justification was rejected by the Commission in *Hilti*,<sup>536</sup> which was upheld on appeal by the General Court.<sup>537</sup>

If the market is not defined as being a narrow one for Apple products only, then the aftermarket approach could be taken, ie that Apple may not have market power on the wider markets for smartphones and tablets, but does have power in the secondary markets of operating systems and/or app stores for Apple devices. If this approach is followed, then the tying would be between the operating system iOS and the App Store and in accordance with the steps above, it would be likely that this scenario would be judged anticompetitive if these aftermarkets are found to exist. If these aftermarkets can be found to exist, then it would seem that the tying claim on this basis would be more likely to succeed than the claim based on Apple products as constituting their own separate market. While this might have been more credible some years ago, the competitive constraint exercised by similar products using other

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<sup>536</sup> *Eurofix-Bauco/Hilti* (Case IV/30.787 and 31.488) Commission Decision 88/138/EEC [1988] OJ L 65/19

<sup>537</sup> Case C-53/92 P *Hilti AG v Commission* [1994] ECR I-667

operating systems such as Android would appear to place Apple devices in more general markets for smartphones and tablets. Thus, it is submitted that it is unlikely that Apple will be found to have the requisite dominant position at the time of writing and so it is unlikely to be found to have engaged in anticompetitive conduct in the form of abuse of dominance.

Regarding Google's conduct, the tying claims concern Google's alleged tying of certain desirable Google apps to a whole suite of (supposedly less desirable) Google apps if a device manufacturer wants to pre-load any Google apps onto an Android operating system-enabled device. If the claim regarding app pre-loading onto the most recent version of Android is true, then this may also constitute tying: the Google app suite is tied to the operating system.

Regarding the first situation, of Google tying certain apps to others, Google would have to be found to have a dominant position over the 'tying' apps ie the desirable ones that device manufacturers would wish to pre-load. As mentioned in the section 5.4 a) (iii) (*Markets for specific apps*) it is unclear what the relevant markets here are, but supposing that Google did have a dominant position with YouTube for instance in a properly-defined market, then it would appear that Google is tying two distinct products: the desirable apps to the less desirable apps. The issue of coercion may be more difficult to establish, and depends upon the truth of the allegation that Google coerces device manufacturers into pre-loading the Google app suite if they wish to use the most recent version of Android. If this is not the case, then the tying situation only arises when the device manufacturers wish to preload some apps before the device is sold to the user, in which case they must preload the whole suite if they wish any of the individual apps. Users are still able to download the apps (including Google's) they wish on their devices once they have bought the device, even if there has been no pre-loading of Google apps. Nevertheless, if this situation is deemed to amount to coercion ie not possible to get the tying apps without the tied apps, then the anticompetitive foreclosure effects must be found, that Google is leveraging its dominance in certain markets into other markets, which may well be the case in practice. Furthermore, there must be no objective justification for the tie, and indeed it is difficult to see what objective justification Google could have here beyond attempting to increase its market share in other markets/increase the amount of data it gathers about users in order to boost the advertising side of its business by engaging in this conduct.

As regards the possible second situation, of Google possibly tying the most recent version of Android to its suite of pre-loaded apps, then Google would have to be demonstrated to have a dominant position in the ‘tying’ product market, ie that of operating systems. In the EU at least, this may well be the case since Android has around a 70% share of the smartphone and tablet markets there which is sufficient to constitute dominance. The apps also constitute a separate market to the operating system, and coercion is likely to be established if the allegations are true, that manufacturers must take this app suite if they wish the latest version of Android. Again, it would be difficult to see what the objective justification is for this conduct. However, one weakness in this claim may lie in the fact that if the allegations are true, it is only the most recent version of Android which is implicated in the tying, while other versions of Android can be used by manufacturers without this obligation to pre-load apps. The most recent version of Android may be viewed to have a much smaller share of the market than Android operating systems taken altogether, and so the dominant position may not be found in the first place, and thus the tying would not be anticompetitive.

Thus, as regards anticompetitive tying in mobile device ecosystems, it seems that in Apple’s case it will only be found if either a narrow market for Apple products is defined (in which case there may be tying between these devices, the operating system and/or the app store, but not individual apps themselves) or if aftermarkets for Apple products exist, in which case Apple may be tying its operating system to app store in an anticompetitive fashion. Google may also be found to be engaging in anticompetitive tying in its pre-loaded app suite, either in terms of tying some apps to other apps, or tying the most recent version of Android to these apps.

In terms of remedies for any anticompetitive conduct found to exist, Apple may be forced to give users a choice of operating system or app store, which would represent a major change to its business practices –although as mentioned above, Apple is unlikely to be found to have a dominant position in the requisite market in the first place and so it is unlikely it will be found to have engaged in an anticompetitive abuse of dominance. In Google’s case, the remedy is likely to encompass Google being forced to offer certain individual apps for pre-loading onto

Android devices rather than forcing device manufacturers to pre-load the app suite, or force Google to offer the latest version of Android without forcing device manufacturers to pre-load apps. However, these remedies are unlikely to alter fundamentally how Google conducts its mobile device business from the user perspective particularly with regards to Google's data gathering, but then Google's mobile ecosystem is decidedly more 'open' than Apple's and gives the user more control (although not total control) over their devices.

## ii) Lock-in

Another scenario which may constitute an abuse of dominance is the use of DRMs and TPMs in mobile device ecosystems to 'lock' users technically into that ecosystem – for instance, by preventing them from accessing a choice of app store (in the case of Apple devices), a choice of cloud service or certain other apps, content and services, and possibly also preventing users from engaging in data portability to a rival's service.

These DRMs and TPMs usually involve certain standards protected by intellectual property, and the exclusive rights of the intellectual property holder – the device ecosystem operator – are usually to be respected notwithstanding the restrictions on portability and interoperability the operations of these standards can involve. However, in certain, exceptional circumstances, a dominant player preventing interoperability of such standards may be viewed as an abuse of dominance.<sup>538</sup> Indeed, this was one of the findings in the European *Microsoft* case, that Microsoft had to give its competitors full access to the information which would allow them to interoperate with its services, otherwise they would not be able to compete viably with Microsoft.

In mobile device markets, then this would require the finding of a dominant position initially. Whether a dominant position may be found in these markets has been discussed above.

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<sup>538</sup> Inge Graef and others, 'Putting the Right to Data Portability into a Competition Law Perspective' (2013) *Law: The Journal of the Higher School of Economics Annual Review*, 53

Google may be the most likely candidate to have a dominant position in EU smartphone and tablet markets, regarding its Android operating system and certain apps, but it generally engages in less lock-in than Apple. Apple may only have this dominant position if its devices are taken to be markets in themselves, or if aftermarkets are found. Even in these scenarios, it is unclear whether the requisite ‘exceptional circumstances’ would be found in mobile device markets, particularly where there does seem to be competition overall in the markets.

### iii) **Blocking apps**

The practice of blocking apps created by third party developers by app store operators may also be subjected to competition scrutiny as constituting a possible abuse of a dominant position namely a refusal to deal.

However, it would have to be demonstrated that entry into the particular app store was an essential facility or ‘indispensable’ for a developer wishing to compete in the downstream apps markets in accordance with the requirement from the *Bronner* case. There are various other app stores which the developer could use to distribute the app, as well as ‘web apps’ such as the Financial Times approach, and then of course distribution of that information via the web browsers on these devices. Although jailbreaking the device may not be attractive for many users due to a lack of technical knowledge and the risks involved with doing so, accessing information through the web browser is likely to be attractive and accessible even to users without much technical knowledge, even if the contents may not be fully optimised for mobile devices. Furthermore, the app store operator may well have objective justifications for not including certain apps, such as that they contain prohibited content in accordance with its guidelines for developers – content which may be prohibited by the app store even if it is not prohibited by the law on eg pornography.

Thus in the absence of a finding of essential facility, an app store, even one with a dominant position, is unlikely to be acting anticompetitively in blocking apps.

#### **iv) Summary**

Competition law in the particular form of abuse of dominance is unlikely in practice to do much to alleviate user concerns with private economic power exercised over mobile device ecosystems. Apple may not be judged to have a dominant position in any market, even though its business practices in its mobile device ecosystem are the most restrictive of user freedom and choice. Google may be more likely to be engaging in anticompetitive conduct, particularly tying, but from the user perspective its conduct is less limiting of user choice (although poses plenty of privacy problems – yet these are unlikely to be addressed here) and remedies for any anticompetitive conduct are more likely to be beneficial to device manufacturers. Lock-in using DRMs and TPMs and app stores blocking apps are unlikely to be anticompetitive due to the intellectual property rights involved in the former case, and the high threshold that needs to be reached in order for a refusal to deal to be found. Thus, ‘gaps’ are left by this area of law when it comes to protecting users’ interests vis-à-vis for-profit mobile device ecosystems.

### **5.5 Other legal regimes**

Given competition law’s abuse of dominance is unlikely to address all the problems identified at the beginning of this chapter which are posed by private economic power over mobile device ecosystems, other areas of law will be considered here to determine the extent to which they fill in the ‘gaps’.

#### **a) Free expression**

Earlier in this chapter, a lack of free expression for users was identified as one of the problems posed by mobile devices due to the higher level of control over them that their vendors exercise, particularly Apple.

Previous chapters have identified at length how laws protecting freedom of expression may apply to scenarios where it is another private party restricting users' free expression, particularly Chapter 3 on Internet provision (Section 3.7 a)), so the full detail will not be repeated here. Suffice it to say that in Europe, Art 10 of the ECHR has been found to have some horizontal effect in disputes between two private parties and it has also been found to apply to restrictions on the freedom to receive information on the Internet, yet whether it has been infringed depends highly on the facts of the situation at hand. The *Yildirim* decision shows that *some* expression being blocked from being received by users over the Internet can constitute a violation of Article 10 – which would be relevant to the circumstances of this situation as well, where Apple (for instance) can block certain classes of content or apps. Yet while these apps may be blocked or restricted, if the content is still available on the device via the browser or web apps then it is highly unlikely that Art 10 would be found to have been infringed – and even if the information is available by other means, although not via a mobile device, then this is probably sufficient to ensure that Art 10 has not been violated, in accordance with the *Khurshid Mustafa* case. One other avenue may be if Apple's App Store management practices were having a sufficiently adverse effect on media plurality, as this has been another scenario about which the ECtHR has been particularly concerned, although it would seem that if the material that Apple is prohibiting from its App Store is still available via the web browser, then Apple's prohibition is unlikely to amount in practice to being a threat to media plurality in a particular territory.

In the US, it is likely that the operators of mobile device ecosystems will be considered 'speakers' for the purposes of the First Amendment and so interference with how they operate their app store on expression grounds is likely not to be possible in practice, even to uphold the free expression rights of others.



In addition, mobile device ecosystem operators may well be able to use their intellectual property rights in order to fend off free expression claims of users, as well as claims in competition as discussed above, either in terms of what is included in the app stores, or in terms of the lock-in users experience when buying a device (particularly Apple's), when there is no choice of operating system, app store, etc. Since intellectual property and particularly technical protection measures protecting this intellectual property is used at each stage of Apple's device value chain for one, then Apple may argue that its exclusive rights granted under this regime permit it to decide how its property is used and by whom. Furthermore, this is also the case as to restrictions Apple and its ilk may place on third party app developers, since application programming interfaces (APIs) have recently been found to enjoy copyright protection in the US at least.<sup>539</sup>

Thus due to combination of the high barriers that must be traversed in terms of finding an infringement of Art 10 in these circumstances, and the intellectual property protections that mobile device vendors enjoy which allows them to 'lock' users and developers for that matter into their particular mobile Internet device ecosystems, it is unlikely that free expression laws can aid users in addressing the problems that Internet mobile device vendors pose for their free expression and free flow of online information.

#### **b) Data protection and privacy**

The data protection and privacy problems are not addressed at all by any potential competition intervention in mobile device markets. Again, the European data protection regime has been explained at greater length already earlier in this thesis, particularly in Chapter 4, so a detailed account will not be repeated here. Suffice it to say that in the current Data Protection Directive, personal data can only be processed under limited circumstances in which the criteria of transparency, legitimate purpose and proportionality are fulfilled.

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<sup>539</sup> David Kravets, 'Oracle's Java API code protected by copyright, appeals court rules' (*Arstecnica*, 10 May 2014) <<http://arstecnica.com/tech-policy/2014/05/oracles-java-api-code-protected-by-copyright-appeals-court-rules/>> accessed 7 September 2014

The British Information Commissioner's Office has issued more specific guidance to mobile app developers as to how they can comply with data protection law, which emphasises data minimisation and privacy by design as desirable traits for apps collecting user data.<sup>540</sup> While data minimisation and privacy by design are laudable goals for mobile apps and the systems on which they run, the option for users not to have their data gathered in the first place while using these devices and applications is usually not present. Users who may wish to preserve their privacy either must agree to standard term contracts when using the devices and apps, or not agree and thus not use the apps. Data protection law will not mandate these companies to give users another option, that they can use the services and not have their data collected, even if they may have to pay an additional fee. This lack of real choice for users is compounded by the fact that all mobile ecosystems are engaging in this data-gathering conduct so even if a user opts out of eg the Android ecosystem, they do not encounter a qualitative difference in this regard when using eg the Apple ecosystem.

The reform to European data protection law in the form of the draft Regulation currently under discussion may ensure that app developers and mobile device vendors must seek user consent more actively than the existing law mandates. The original text of the draft Regulation, in which user consent would not provide a legal basis for processing data where there is a significant imbalance between the data subject and controller's position, would possibly have entailed that large corporations such as Google and Apple providing mobile devices and apps would not be permitted to process user data given this imbalance between them and users. However, this provision has been amended by the European Parliament to read that consent must be 'purpose-limited' – such that these corporations would only be permitted to process users' personal data for a specific purpose and would have to seek users' consent again to process it for another purpose. While this would put some restrictions on what these corporations could do with the data they collect, it is not as restrictive (and protective of user privacy) as the original formulation of the text. Moreover, the draft Regulation text adopted by the Parliament would not prevent this user data being collected in the first place, which is effectively the strongest way to protect user privacy.

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<sup>540</sup> UK Information Commissioner's Office, 'Privacy in mobile apps: Guidance for app developers' (December 2013) <[http://ico.org.uk/for\\_organisations/data\\_protection/topic\\_guides/online/mobile\\_apps](http://ico.org.uk/for_organisations/data_protection/topic_guides/online/mobile_apps)> accessed 7 September 2014

The configuration of popular mobile device ecosystems ensures a much greater intrusion into user privacy than previous desktop/laptop computers entailed, or even pre-smartphone mobile phones (dumbphones?). The grouping of computer facilities with connectivity over telecoms infrastructure, GPS tracking, built-in cameras and the development of high-speed mobile Internet ensures that a large amount of data about an individual's movements beyond Internet browsing for instance can now be gathered – such as real-time location, images and so on.<sup>541</sup> The portability of such devices too has spillover effects in other, hitherto offline, areas of life – raising concerns about privacy in public places for instance, where previously CCTV was perhaps the main threat to data protection and individual privacy, whereas now other citizens are equipped with machines that perform similar functions, with a large amount of the data generated being collected and stored by vast global corporations. Here, even if individual mobile device users agree to terms and conditions which outline privacy protections (or lack thereof), other citizens circulating in public places may become incidental data subjects yet not have expressed any consent for their image to be taken or other data to be gathered about them. Thus the portability of these devices demonstrates one limitation of the current data protection regime. This trend is likely to be exacerbated with the rise of the Internet of Things adding many more data-gathering Internet-enabled artefacts to the network.

Nevertheless, one aspect of the draft Regulation that may be of benefit to users given the lock-in they experience in these mobile device ecosystems is the proposed right to data portability, whereby users would be able to obtain their personal data held by a particular entity, in order to move to a competitor for instance, yet with the proviso that this right only would apply if the data is already in 'a structured and commonly used format'.<sup>542</sup> However, if the user has provided their personal data and the processing is done based on the user's consent or on a contract, the user should have a right to port that data in a commonly used electronic format, seemingly mandating that in these situations the data controller must provide that data in a commonly used format.

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<sup>541</sup> See: Yana Welinder, 'Facing Real-Time Identification in Mobile Apps & Wearable Computers' (2013) 30 Santa Clara Computer and High Technology Law Journal

<sup>542</sup> COM (2012) 11 final, Article 18

Even if the Regulation is enacted and comes into force, this does not represent a particularly strong right for users, since entities processing user data on a basis which is not user consent or a contract could sidestep some of its stipulations by not arranging the user data into such a structured and commonly used format.<sup>543</sup> Furthermore, in the former scenario (of users being able to access their personal data if it is already in a structured and commonly used format), that data will not necessarily be deleted from the repository where it is being held.

### **c) Regulation**

Given current laws on competition, free expression and privacy are inadequate to address all of the concerns identified at the beginning of this chapter, possible regulatory avenues for mobile Internet devices ought now be explored.

Some kind of mandated ‘openness’ or ‘neutrality’ in how app stores function may address the free expression and competition concerns that arise in mobile device ecosystems. Mac Sithigh has suggested that electronic programming guides (EPGs) regulation in the EU may provide a possible model for app stores to adopt, whereby fair, reasonable and non-discriminatory access terms are imposed on the provision of EPGs, regardless of whether there is significant market power or a dominant position, although these do not amount to a right to be included or price regulation as such, but requirements to conduct themselves in a particular way when entering into dealings with other parties, which are publicly available, unlike Apple’s opaque review guidelines for developers.<sup>544</sup> Certainly app stores, especially those with more prescriptive terms for inclusion such as Apple, would benefit consumers and the competitive process by being more transparent about how they accept or reject third party apps, and in this way would uphold the interests of developers on their side of the market.

However, this process would still not necessarily guarantee the freedom of users, especially those on the other side of the market, to receive information via app stores. To do this,

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<sup>543</sup> Peter Swire and Yianni Lagos, ‘Why the Right to Data Portability Likely Reduces Consumer Welfare: Antitrust and Privacy Critique’ (2013) 72 Maryland Law Review 335, 340

<sup>544</sup> Mac Sithigh (n 492) 172. See also: Campbell Cowie and Christopher T Marsden, ‘Convergence, Competition and Regulation’ (1998) 1(1) International Journal of Communications Law and Policy

Hestres suggests a more ‘invasive’ regulatory approach to that effect in the form of ‘app neutrality’ (inspired by suggested net neutrality guidelines, discussed in Chapter 2):

- The app store operator (in Hestres’ example, Apple) would reject apps that contain universally accepted illegal content or facilitate/incite universally accepted illegal behaviour – such as child pornography/paedophilia;
- Apps that violate national laws, which themselves conflict with internationally recognised human rights laws and standards would not be rejected;
- Apps could be rejected for technical reasons, such as the potential damage they may cause to devices;
- There must be clear, unambiguous, publicly available developer guidelines;
- When rejecting apps, the app store operator would provide clear reasons for doing so, that refer to the specific guidelines allegedly rejected by the developer;
- A transparent appeals process for rejected apps would be established;
- If an app which was initially approved is now rejected, clear reasons referring explicitly to the guidelines would be provided.<sup>545</sup>

It is submitted that the adoption of guidelines akin to these would allay the free expression concerns regarding what apps are included in app stores, especially the Apple App Store which is particularly controlled in a top-down manner. In this way, a less paternalistic approach would be taken to users, giving them more autonomy over the content they access, as well as possibly having spillover effects as regards competition in the app store offerings.

However, this approach only concentrates on app stores themselves, and does not address the technical issue of interoperability and a lack of choice of app store and operating system for Apple devices in particular, which is also experienced to lesser degrees in other mobile device ecosystems. As explored earlier in this chapter, a lack of interoperability or access to competitors’ products in itself is not an infringement of competition law: there must be a dominant position, and even then ‘exceptional circumstances’ may be necessary for access to be granted. Yet this does not aid users who are locked into these particular proprietary mobile device ecosystems. Thus some form of mandated interoperability with other systems, and the presenting of users with a choice of operating systems and/or app store when they first

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<sup>545</sup> Hestres (n 495) 1725-1726

purchase a mobile device would be welcome. The limited right to data portability included in the draft Data Protection Regulation even if it did come into force may be only of limited practical benefit, since it does not mandate user data being made available in an interoperable fashion, leaving that choice up to the entity doing the data processing – unless the data is obtained via user consent or a contract. A stronger right would address competition, privacy and free expression concerns by ensuring that users could ‘take their data with them’ regardless of the basis on which their data was collected in the first place, moving to other services, with that data being deleted from the servers of the original provider – reducing switching costs, protecting their private information and permitting them more freedom over their devices and online presence.

Thus some kind of app neutrality regulation such as that suggested by Hestres would address the expression problems inherent in how Apple in particular operates its App Store and deals with third party apps. Some kind of interoperability/data portability regulation such as a stronger version of the right to data portability proposed in the EU draft Data Protection Regulation would address the problems around user lock-in to particular branded mobile device ecosystems and programs. Yet the deeper privacy problems still remain and perhaps can only be solved at a more socio-cultural level than current legal conceptions of the problem. For instance, data protection laws and privacy contracts focus on the device user and her (more informed or less informed) consent, yet these devices can also constitute an infringement of others’ privacy given their near-constant Internet connectedness, their geolocation revelations (via the Internet and/or mobile phone masts) and their capacity to collect data about other people such as photographs or audio in public places. Given advancements in technology whereby facial recognition of a particular individual from a photo is possible, or voice from an audio recording, there is a deep problem in how these devices facilitate near-constant surveillance of peers. Of course, this is convenient for Elkin-Koren and Salzberger’s Invisible Handshake discussed earlier in this thesis, by which the nation-state co-opts the private providers of devices and services to perform information gathering on citizens, thus there is little incentive for government to reduce the privacy-invading impact of these devices by laws and regulation if that will affect its own proxy surveillance activities. This status quo also suits corporations whose business models are based on or aided by gathering data about users ie Fuch’s ‘economic surveillance’.<sup>546</sup> Thus, it

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<sup>546</sup> Fuchs (n 108)

is submitted a broader paradigm shift is necessary in order to ensure an adequate level of non-interference with private persons and their behaviour and the current legal, political and economic climate is otherwise unlikely to facilitate that level of protection.

## **5.6 Conclusion**

This chapter has explored issues for dominance and mobile Internet devices, looking at the familiar combination of competition, free expression and privacy. At best, the anticompetitive abuses taking places in these scenario are abusive tying of one level of the mobile device ecosystem to another (in Apple's case) or certain desirable apps to other less desirable apps (in Google's case). Yet the remedies for these potential abuses are likely to be no more severe than users being given a choice of offerings from competitors along with the hitherto tied product. The remedies are unlikely to be as invasive as to change fundamentally the operating of the app store, for instance, or ensure users are given the choice to use certain services without their personal data being gathered, even for an extra fee.

Other areas of law have been explored to discern whether they can offer more protection to users and their interest when engaging in these mobile device ecosystems. Free expression laws are unlikely to facilitate this greater protection of users unless certain content is blocked entirely from them (including via web browsers and possibly not available at all via any other means) or there is a threat to media plurality, highly specific circumstances that may not arise. The data protection regime in the EU does little to stop these services gathering vast amounts of data about users, which are usually governed by standard terms and conditions to which users must 'agree' and abide by the stated rules on data gathering, or disagree and not use the services at all.

Ex ante regulation would address the main competition and free expression concerns that arise, through 'app neutrality' rules at the app store level, by which broadly speaking app store operators would have to include apps that contain otherwise legitimate material and are not harmful to the network or device (eg such as being sufficiently secure and not introducing

viruses). This would address problems around app store operators not including apps made by rivals and apps that may be 'ideologically awkward' but otherwise legal. Furthermore, a strong right to data portability for users may well ensure that they are not 'locked-in' to the entire Apple ecosystem when they buy an Apple product, further stimulating competition and giving them more freedom over their own devices.

However, the issue of privacy in these mobile ecosystems and outside of the systems remains, and is only likely to be exacerbated by the onward march of the Internet of Things and the norm of sustained data gathering from any source possible, promoted by Big Data evangelists yet co-opted by governments for their 'political' surveillance programmes and large information corporations for their 'economic' surveillance programmes. This unholy marriage of state and corporate interests in advancing data slurping technologies is unlikely to be subject to sufficient pressure to reform from the law, architecture, market and norms as they currently are, and it is submitted a socio-cultural change is necessary in order to preserve individual privacy and autonomy from this technocorporatist alliance.







## CHAPTER 6 DOMINANCE AND THE CLOUD

In this chapter, dominance and the cloud will be examined. While there is no single definition of the cloud or cloud computing, it can be thought of as the storage of data and processing in a location which is not the user's own computer,<sup>547</sup> or the provision of computer resources on-demand over the Internet.<sup>548</sup> The programs and applications run on an external server, and data is stored on this external server, rather than on the user's own device, and so is an example of the client-server model. Even if the term 'cloud computing' was not coined until recently, users have been storing their data in 'the cloud' at least since they have been using web-based email clients such as Hotmail, Gmail, Yahoo mail etc – if a user sends a document as an attachment, the sent email including the attached file will be retained and stored by the email provider. However, 'cloud computing' became the 'mainstream' term to describe the remote programs, applications and data storage services with the launch of Amazon Web Services (AWS) in 2005.<sup>549</sup>

Cloud facilities offer many advantages to users such as remote storage, easy and ubiquitous accessibility, the storage or processing of (very) large amounts of data which would not be possible on a user's device, the opportunity to collaborate with other users privately and remotely, and so on. However, cloud computing also poses problems for users, including for competition given the lack of interoperability and data portability, along with other issues regarding the control of information, data protection and privacy. In addition, surveillance is heightened with the placing of yet more user data in the cloud, accompanied by the trends observed with mobile devices to store data, especially content, in the cloud rather than on the users' devices (as has been seen in the previous chapter).

It is important to point out that there is no one type of cloud or cloud computing. There are 'public' clouds, 'private' clouds, 'community' clouds, hybrid clouds (encompassing a mixture of eg private and public) and even distributed clouds. The major deployment models for cloud computing are public, private and hybrid. Public clouds encompass services rendered over a network open for use by the general public and usually only offer access to the cloud via the

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<sup>547</sup> Jonathan Cave and others, 'Regulating the Cloud: More, Less or Different Regulation and Competing Agendas' (40<sup>th</sup> Research Conference on Communication, Information and Internet Policy, Arlington, September 2012), 1

<sup>548</sup> Primavera De Filippi and Smari McCarthy, 'Cloud Computing: Centralization and Data Sovereignty' (2012) 3(2) European Journal of Law and Technology

<sup>549</sup> *ibid*

Internet. Examples of public cloud providers include Amazon, Microsoft and Google. Private clouds are operated solely for a single organisation which may be managed internally or by a third party provided and can be hosted either internally or externally. They usually are subject to more security settings and protections than public clouds. Community clouds occupy a positive between public and private clouds, in which infrastructure is shared among a few organisations with common interests, with costs shared between fewer users than public clouds yet more users than private clouds. Hybrid clouds encompass a mixture of services typical of private, public and hybrid clouds.

This chapter will concentrate on dominance and public cloud services, since these cloud services directly use the Internet for users' connections, and thus directly implicate online information flows (as opposed to data flows in closed private networks).

## **6.1 Problems with the cloud**

There are various issues that arise from use of the cloud by users, encompassing the now-familiar trio of privacy/data protection, free expression/control and competition. Despite the name, public clouds are another sector in which the players are private corporations providing these services for profit.

### **a) Privacy and data protection**

Privacy and data protection are engaged by use of cloud services since users usually have to provide credentials to access these services, as well as the high likelihood of confidential, personal and otherwise sensitive information being divulged through their use, and the rich contextual picture that can be built of these users and their habits also through use of the cloud.

While users may be able to minimise the risk of privacy and data protection breaches by not storing sensitive data in cloud services, or by relying on more than one provider,<sup>550</sup> the

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<sup>550</sup> *ibid*

metadata about their conduct in interacting with cloud services could still be collected by the cloud provider. Metadata can be conceptualised as the data ‘about’ a communication as opposed to the content of that communication – such as IP address of the sender/receiver, time, date, place of connection, etc. However, the theoretical distinction between metadata and communications content cannot be sustained so neatly in practice. Metadata can paint a highly detailed picture of an individual and in some circumstances can be ‘even more revealing than the content of our communications’.<sup>551</sup>

Indeed, this collection of data about users, whether via the content of their communications with the cloud or the metadata that these communications generates, fuels the business models of some cloud providers, which may provide, for instance, data storage space in the cloud for no monetary cost to users, but may harvest and aggregate this data as ‘recompense’ for the ‘free’ service, which can then be sold on to advertisers (or accessed by governments for surveillance purposes).

Perhaps unsurprisingly, Google is a major cloud services provider to individual users with its Google Drive cloud data storage service, and this forms one of the portfolio of Google services from which it gathers data, as mentioned in the previous chapters.

Furthermore, there are often jurisdictional issues concerning cloud providers which provide services to customers geographically located in other countries, and may have their servers geographically located in yet another country. Such a scenario may exacerbate privacy concerns given the differing privacy and data protection standards in different countries and their practical enforceability abroad, as well as the possibility of data being accessed by the governments of countries of which a user is not a citizen.<sup>552</sup>

## **b) Free expression and control**

The issue of users' control of data resurfaces here as well – by moving their data to the cloud

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<sup>551</sup> Bryce Clayton Newell and Joseph T Tennis, ‘Me, My Metadata, and the NSA: Privacy and Government Metadata Surveillance Programs’ (iConference 2014, Berlin, March 2014), 2

<sup>552</sup> Dan Svantesson and Roger Clarke, ‘Privacy and consumer risks in cloud computing’ (2010) 26(4) Computer Law & Security Review 391

either in terms of storing files in the cloud or using applications in the cloud from which data about them is gathered, they give the cloud provider more effective control over the management of their data. There are implications on the one hand for the ownership and property over the data contained in cloud storage,<sup>553</sup> and on the other hand for freedom of expression, given the surveillance role that the data storage provider has over the information uploaded to it and the power it has to censor that information.<sup>554</sup>

Indeed, Lametti sees the move to the cloud as not only potentially rendering the concept of user privacy meaningless, but also reducing the possibilities for users to participate in the Internet as ‘creators, collaborators and sharers’ ie a reduction of user autonomy online, and this is compounded by the fact the devices they use to interact with the Internet are increasingly emasculated ie smartphones and tablets (which are more restricted than traditional computers and laptops, as seen in the previous chapter).<sup>555</sup> The consequence of this is that providers have a greater capacity to manage and control what users do within the cloud, thus weakening users’ online autonomy, and arguably also their free expression broadly conceived.<sup>556</sup> While this is not the fault of the cloud per se, its implementation along with the rise of mobile devices and their entwinement leads to this dramatic loss of user privacy, leaving users without a means of using such devices or using the cloud in ways in which their privacy is preserved.

In addition, the use of digital rights management (DRMs) to control content and applications in the cloud is often done in a way which is more restrictive of users than the law entails. As mentioned in the previous chapter, these ‘digital locks’ are used to protect copyrighted content and software, but they often do not reflect the permitted exceptions to copyright that exist in the law for users, such as fair dealing/use, and have the effect of reducing data portability and interoperability. Users may not be able to remove the content or applications which they have legally bought from one cloud ecosystem to another as a result of DRMs. In addition, interoperability can also be limited by contractual terms which oblige users to use

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<sup>553</sup> See: Chris Reed, ‘Information ‘Ownership’ in the Cloud’ (2010) Queen Mary School of Law Legal Studies Research Paper 45/2010 <[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1562461](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1562461)> accessed 3 September 2014

<sup>554</sup> Primavera De Filippi, ‘Ubiquitous Computing in the Cloud: User Empowerment vs. User Obsequity’ in Jean-Eric Pelet and Panagiota Papadopoulou (eds), *User Behavior in Ubiquitous Online Environments* (IGI Global 2013), 46

<sup>555</sup> Lametti (n 101) 197

<sup>556</sup> De Filippi and McCarthy (n 551) 47

certain cloud services when purchasing eg a certain device.

### c) Competition and dominance

Similarly to other Internet markets already examined, in theory at least some of the privacy, data protection and data control concerns would be addressed by a competitive market for cloud data storage services, in which users (as consumers) would switch provider if they were dissatisfied with the terms and conditions, and consumer demand for services with privacy protection etc would be met by providers.

Nevertheless, the cloud itself promotes centralisation in the Internet (although perhaps not under the control of just one entity), since it has become profitable for large-scale data storage (along with other computing services) to move from a local computer and server to the resources of a non-local centralised system.<sup>557</sup> Furthermore, thus far the move to the cloud has also facilitated vertical integration in the Internet, with cloud providers competing with each other for users to use their services, for instance by offering cloud storage for free or for a small cost, and integrating other services with their cloud services in order to make their cloud services more attractive.<sup>558</sup> Once users choose the particular cloud provider, they usually experience lock-in due to a lack of interoperability and high switching costs to other providers, and perhaps even the inability to access their data in cloud storage on the devices of competitors, or experience restriction in the content that is available to them depending on the vertically integrated cloud provider's 'commercial and ideological interests'.<sup>559</sup>

In addition, there are various features of cloud markets which facilitate dominance. Firstly, the market for data storage in the cloud can be characterised as being two-sided with the presence of network effects. The network effects and the associated accumulation of user data and meta-data by platforms whose revenue is based on selling this information to advertisers can constitute a barrier to entry for potential competitors which want to enter the market. This is particularly so when these cloud services are not interoperable with each other (as is often

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<sup>557</sup> Lametti (n 101) 208

<sup>558</sup> *ibid* 215

<sup>559</sup> Slavoj Zizek, 'Corporate Rule of Cyberspace' (*Inside Higher Ed*, 2 May 2011) <[http://www.insidehighered.com/views/2011/05/02/slavoj\\_zizek\\_essay\\_on\\_cloud\\_computing\\_and\\_privacy#sthash.B8DVfwFj.04ssAm14.dpbs](http://www.insidehighered.com/views/2011/05/02/slavoj_zizek_essay_on_cloud_computing_and_privacy#sthash.B8DVfwFj.04ssAm14.dpbs)> accessed 3 September 2014

the case in practice), which limits users' mobility and ability to switch between competing platforms. The reason is that potential competitors in the form of alternative cloud providers in these circumstances would have to make large investments in technical infrastructure, software and advertisement to provide a service of sufficient quality and sufficiently popular to compete with what already exists, thus there are economies of scale and scope in the operation of data centres.<sup>560</sup> Data portability does not appear to be a problem that will be solved by the market since providers currently have no incentive to facilitate it.<sup>561</sup> Furthermore, since the provision of cloud services to individual users tend to be governed by standard form contracts, and the existence of unequal bargaining power between these parties in favour of the cloud provider, which can result in unfair and potentially anti-competitive terms that can raise switching costs and lead to consumer lock-in.<sup>562</sup>

A further feature of cloud markets is the possibility of leveraging dominance from one market into another – either a dominant position in a cloud market into a non-cloud market, or a dominant position in a non-cloud market, such as that for mobile devices, mobile device operating systems etc, into a cloud market. Indeed, as will be seen below, given that a dominant position is unlikely to be found in cloud markets, the leveraging of dominance from a non-cloud market into the cloud may constitute the most likely finding of abusive conduct. This conduct may be related to a lack of interoperability and data portability, restricting what users can do with their information by preventing interoperability or portability may be part of this tying – that if the user uses a particular mobile device, for instance, then she is tied to using a particular cloud service, and is not able, or at least inhibited from choosing another service by a lack of interoperability and portability.

## **6.2 Cloud computing and market developments**

Overall, it seems that markets for cloud computing are relatively competitive. Cloud computing is a broad and vague term, and so encompasses a variety of functions – software as a service, infrastructure as a service, platform as a service etc. Thus an overall market for cloud computing would be defined in a very broad fashion and would likely not exhibit

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<sup>560</sup> Cave and others (n 550) 50

<sup>561</sup> *ibid* 42-43

<sup>562</sup> *ibid* 44



dominance. Indeed, Sluijs and others noted in 2006 that markets for cloud computing were actually quite competitive,<sup>563</sup> and it is submitted that this remains the case now, with various large vertically integrated providers such as Google, Amazon, and Apple, as well as other cloud-only players all vying with each other to provide cloud services. It seems unlikely that in a generalised market for cloud computing services any one of these players could be deemed to have a dominant position, especially in the US with its high threshold for dominance. Even if the market is defined more narrowly, such as for data storage in the cloud, then it is still submitted that this market would also be found to be sufficiently competitive not to have given rise to a dominant player.

Nevertheless, as mentioned above, certain cloud providers are vertically integrated with other Internet services, in whose markets they may be dominant, with a prime candidate being Google, which has a dominant position in the European online search market. Thus cloud markets could be implicated in anticompetitive conduct in other markets, such as an attempt to tie a cloud service to use of search, or a particular mobile device.

Furthermore, the net neutrality debate discussed in Chapter 3 has a bearing on competition in cloud computing markets. This is because if priority access to the network is permitted (and thus there is a deviation from the principles of net neutrality), then incumbents may well pay for such priority access to ensure the connection with their users is as quick and of as high a quality as possible, which will increase the entry barrier for potential entrants since they will require an even greater investment in order to enter that market. There is also the possibility for cloud providers to merge with ISPs and become vertically integrated, with the potential for the newly vertically integrated player to discriminate in favour of its own cloud services eg by providing them more quickly to the end user or by blocking the services of a cloud competitor. Thus competition and openness in the network layers has a direct bearing on cloud computing since the cloud depends directly on these layers to function.<sup>564</sup>

At the time of writing, markets for cloud computing per se are probably insufficiently mature for substantial competition issues to emerge, however it is possible to see that the ways in which they are developing already raise prospective competition concerns, aside from the

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<sup>563</sup> Jasper Sluijs and others, 'Cloud Computing in the EU Policy Sphere' (2012) 3(1) *Journal of Intellectual Property, Information Technology and e-Commerce Law* 3

<sup>564</sup> Ian Walden and Laise Da Correggio Luciano 'Ensuring Competition in the Clouds: The Role of Competition Law?' (2011) <[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1840547](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1840547)> accessed 3 September 2014, 2

privacy and control/free expression issues mentioned above.<sup>565</sup> Thus, this chapter is shorter in length and more forward-looking in style than the others of this thesis which are ‘reactive’ to concrete events, in particular alleged abuses of dominance. Instead, this chapter will assess the extent to which current laws are able to deal with the problems caused by accumulations of private power in cloud computing causing this initial concern. This is not an overly theoretical endeavour given the trends towards moving more and more content and data storage, platforms and applications to the cloud as opposed to running on users’ own devices, and thus the control that cloud providers will increasingly possess.

### **6.3 Effectiveness of competition law in addressing cloud concerns**

This section will consider how effective competition law may be in addressing the dominance concerns around cloud computing as detailed at the beginning of this chapter. This is unlikely to be an easy process as dominance as recognised by competition law is unlikely to be found in cloud markets as they currently stand (and given the lack of dominance, a violation of Art 102 TFEU will not be found), nor does there seem to be the requisite conditions for collective dominance or collusion (ie a breach of Art 101 TFEU). Nevertheless, problems for competition are already emerging in these markets, particularly the locking-in of users to particular branded cloud ecosystems and the leveraging of dominance from an external market into cloud markets. The problem with competition law, though, is that it can only act reactively to deal with these problems once they blossom into full-blown infringements – rather than nip them in the bud as they emerge.<sup>566</sup>

#### **a) Market definition**

Market definition is a key first step for assessing the effectiveness of competition law in addressing dominance concerns in the cloud. Given cloud computing markets overall are probably competitive, a broadly drawn market definition is unlikely to lead to a finding that a particular player is dominant. Thus narrower markets would need to be defined to arrive

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<sup>565</sup> *ibid* 1

<sup>566</sup> Walden and Luciano (n 567)10

closer to that finding of dominance. As has already been discussed in this thesis, market definition depends on substitutability of services and products, particularly from the consumer's point of view, so how the precise boundaries of the market will be drawn will depend on the extent to which certain cloud services are viewed as being substitutes for each other. However, given that cloud computing services often exhibit features such as a lack of portability of data and services by users and consumer lock-in, making switching to a rival's service more difficult, it is possible that very narrow markets might be defined for a particular cloud service, such as a market for Google Drive or a market for Dropbox, in which either of these players would be found to be dominant as they are the only player in that very narrowly-defined market.

#### **b) Competitive constraints**

Competitive constraints in the form of entry barriers and switching costs exist in cloud computing markets. As mentioned above, there is already a degree of user lock-in. Other barriers to new entrants in cloud markets include the costs in providing cloud infrastructure such as data centres, software and a sufficiently large bandwidth connection such that users do not experience interruptions in service. The net neutrality debate is also of relevance here since if 'prioritised' or 'special' services are permitted, then this could pose a further barrier to new entrants. Leading cloud services are likely to want to guarantee a certain quality of service for their users and take advantage of the possibility to pay for a prioritised service for their data packets to users, thus raising the costs of an entity which wished to enter the market to compete.

Furthermore, cloud operators' offerings may be protected by intellectual property, mainly copyright and patents, giving the cloud operator exclusive rights. If 'proprietary' and 'closed' standards are adopted by cloud computing operators for their services, then this will contribute to a lack of interoperability between their services and their rivals' services, which in itself is not anticompetitive but will contribute to users' switching costs.

### c) Operation of abuse of dominance

Only if the market is sufficiently narrowly defined is dominance likely to be found and thus trigger the application of competition law. So if the market is defined more broadly, a finding of dominance is less likely and cloud computing players' conduct towards users such as stymying data portability and locking them into a particular cloud system is unlikely to be found to be anticompetitive.

A dominant cloud provider will have incentives to retain as many users (and their data) as possible, so will be incentivised to restrict data portability and may also be incentivised to restrict the interoperability of their ecosystem with those of rivals, lest it lose users to these other services. Restricting interoperability and data portability per se will not constitute an abuse of dominance – there is usually intellectual property protection of the standards used by the dominant player, and these exclusive rights are generally to be respected.

However, in certain, exceptional circumstances, a dominant player preventing interoperability of such standards may be viewed as an abuse of dominance.<sup>567</sup> Indeed, this was one of the findings in the European *Microsoft* case, that Microsoft had to give its competitors full access to the information which would allow them to interoperate with its services, otherwise they would not be able to compete viably with Microsoft. While such a finding, and its remedy, may have positive spillover effects for users, such as increasing the possibility of them being able to engage in data portability, it is unlikely that these exceptional circumstances will be found in cloud markets, even if dominance is found, and so it is unlikely that a lack of interoperability will constitute an abuse of dominance. Also, the circumstances of the Microsoft case were that Microsoft was leveraging its dominance from one market (for operating systems) into another (for work group server operating systems) and so it may also have to be shown that a cloud operator is leveraging its dominance from one market into another by refusing to interoperate with rivals' services. In the situation of eg a user storing her files in the cloud, and wanting to move those files to another cloud operator's service constituting another player in the same market, then if the first, original operator refused to

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<sup>567</sup> Graef and others, (n 541) 53

interoperate this would not be an attempt to leverage dominance from one market into another, as the entities are competing in the same market. While it is possible that a cloud operator would refuse interoperability in order to leverage its dominant position in one cloud market eg for file storage into another market eg the provision of a certain software service for those files already stored in the cloud, this would only seem to be one criterion for the lack of interoperability to be found to be an abuse of this dominant position.

A dominant cloud provider may also have an incentive to leverage its dominant position from one market into another, which could prevent users using a cloud service having a choice of eg mobile app as the leveraging of dominance involves the tying of the cloud service to a particular mobile app – or vice versa. Indeed, although it is unlikely that a cloud provider would have a dominant position in a cloud market (unless it is very tightly drawn eg around one provider’s particular offering), it is possible that cloud services may be tied to another product or service in which the same owner has a dominant position which could result in the leveraging of a dominant position from that another market into the market for cloud services and users being deprived of choice. If such a tie is found to constitute anticompetitive conduct, then remedying this situation could ensure users are given choices when it comes to which cloud service they use in conjunction with other online services.

Moreover, even if primary cloud computing markets are competitive, it is possible that a particular cloud operator may attempt to impose, for instance, the use of that operator’s software on users already using the cloud service, thus constituting a possible example of abusive conduct in an aftermarket. Whether there are primary and secondary markets comprised in a particular combination of products and services is highly context-dependent. Distinctness of the two claimed products or services is important, and a key question will be whether consumers take into account the prices and other features of the secondary market, eg for software in the cloud, when making their initial purchase/decision in the primary market for cloud provision ie did the consumer view that they were acquiring a ‘package’?

As more content and applications are being moved to the cloud or being accessible via cloud services, Renda recognises that cloud operators constitute another online gatekeeper, and in

theory similar competition issues may arise as have done with the physical network infrastructure (as discussed in more detail in Chapter 3): refusals to deal with certain content or applications with the result that they are inaccessible/blocked to cloud users; preferential treatment to certain content and applications via agreements; and vertical integration leading to discrimination against upstream or downstream competitors.<sup>568</sup> Yet the operation of competition law here links back to the discussion of the operation of competition law (and existing *ex ante* regulation) in Internet provision markets (Section 3.6 *Adequacy of competition law and current regulation*), and there, a finding of dominance was key to whether competition law operates to sanction this kind of conduct by an ISP. If there is no dominant position, then accordingly and perhaps obviously, these behaviours will not be found illegal under competition law's abuse of dominance. Given the lack of specific regulation of cloud computing as well, conduct which may be harmful to users such as restricting what they can access in the cloud and not permitting them to take their data with them to other services is likely to be unaddressed if done by non-dominant providers, and, as seen above, even a dominant player restricting interoperability may not be abusing that dominance.

Thus, unless a dominant position can be found, either by a very tight market definition or through finding a dominant position in a cloud computing aftermarket, it is unlikely that competition law's abuse of dominance mechanism will aid users in the problems they face with cloud computing. Yet these problems are already emerging from cloud markets, and include a lack of interoperability of services, an inability for users to take their data with them from one service to a rival's (or take it out of the cloud and offline completely), and a lack of choice for users when a cloud service is tied to another product or service. However, absent any merger in this sector which would enable competition authorities to consider some of these user-harming tendencies in cloud markets, or evidence of collusive conduct or collective dominance among cloud providers, European competition authorities must wait for the achievement of a position of dominance by one player before they can potentially intervene to address any possible abuses.

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<sup>568</sup> Andrea Renda, 'Competition, Neutrality and Diversity in the Cloud' (2012) 85 *Communications and Strategies*, 39

From the user perspective this seems highly inadequate – there are already threats to their autonomy by cloud service operators in terms of a restriction of their choice, a lack of interoperability and an absence of data portability, yet as it stands competition law is unlikely to provide solutions to these problems. As this conduct without dominance is unlikely to be anticompetitive, and as the achievement of dominance itself is likely to be permitted, competition law seems impotent – one must wait for the worst to happen even if it was already predicted and current conduct and conditions could be observed to lead in that direction.

## **6.4 Other legal regimes**

Given the unlikelihood of competition law being effective in practice vis-à-vis cloud computing providers to address the concerns identified at the beginning of this chapter, other legal regimes will be considered here.

### **a) Data protection and privacy**

In the EU, the data protection laws will apply *prima facie* to the processing of data in the cloud when the data controller is based in the EU, and personal data should not be transferred out of the EU to third countries which do not provide an adequate level of protection.

The Article 29 Data Protection Working Party issued an Opinion on Cloud Computing in which it identified the lack of control by users over the personal data they commit to the cloud, specifically due to a lack of interoperability and lack of confidentiality (given the possibility of law enforcement requests for the data, including from agencies outside of the EU), and a lack of transparency over how precisely the personal data is being processed, including it being transferred to countries outside the EU.<sup>569</sup> The applicability of the EU data protection regime, however, will become more complicated if the controller is not based in the EU: the data protection laws will apply if the controller uses equipment located in the

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<sup>569</sup> Article 29 Data Protection Working Party, Opinion 05/2012 on Cloud Computing, 1 July 2012

territory of a Member State (except only for purposes of transit), even if the controller is established elsewhere. Yet, at the moment it appears that a data controller based outside of the EU with no equipment (or only transit equipment) physically in the EU's territory will not fall under the data protection laws, even if that entity is processing the personal data of EU citizens. Furthermore, the data controller in these situations is likely to be the person or entity using the cloud services eg by uploading their data to the cloud, while the cloud provider providing the virtual infrastructure or service is likely to be considered a mere processor of data rather than a data controller. In addition, cloud operators which put the data uploaded to their services to further uses, such as analysing it for their own business purposes, may be considered to be data controllers as well. This is likely to be the case for certain 'freemium' cloud services, which are provided at zero monetary cost to users but whose providers recoup costs in other ways, such as by gathering data about users and selling it on to advertisers etc. Services such as Google Drive might well operate under this business model- if this is indeed the case, Google would be considered to be a data controller as well as a processor.

The proposals for reform of EU data protection law currently under consideration would modify the provisions on jurisdiction ie when the application of EU data protection law is triggered. What is proposed is that the laws will still cover data controllers which are established in the EU but also cover other entities which process EU citizens' personal data in relation to 'the offering of goods or services to such data subjects in the Union; or... the monitoring of their behaviour'. Thus the trigger is the personal data of EU citizens being processed, rather than the geographical location in which the data controller or processor is established. Nevertheless, some uncertainties remain or are created by this new wording, such as the case of a third country data controller with an EU subsidiary, where it is unclear that the third country controller itself (and not just the subsidiary) would itself be directly subject to EU data protection law.<sup>570</sup> Nevertheless, this formulation, if adopted, would attempt to offer protection to EU citizens' personal data in more scenarios than the current rules, with the protection 'following' the EU citizen's personal data through the cloud, rather than the protection being based upon the geographical establishment of the data controller. Yet the practical enforceability of such jurisdictional reach remains a problem, particularly if the data controller has no assets in an EU Member State. Furthermore, the concerns about a third

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<sup>570</sup> W Kuan Hon and others, 'Cloud Accountability: The Likely Impact of the Proposed EU Data Protection Regulation' (2014) Queen Mary School of Law Legal Studies Research Paper 172/2014; Tilburg Law School Research Paper 07/2014 <[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2405971](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2405971)> accessed 3 September 2014, 21-22



country's law enforcement agencies accessing EU citizens' data remain, particularly in light of the Snowden revelations and more specifically following the recent ruling of a US judge that Internet companies must provide information about their customers geographically stored overseas (including in the EU) when issued with a valid search warrant from US law enforcement agencies.<sup>571</sup> Indeed, there have been some moves away from US cloud providers and towards EU-based alternatives in the wake of these events, so as to avoid US law enforcement agency interference and to ensure the applicability of EU data protection rules to EU citizens' personal data.<sup>572</sup>

Another aspect of the draft Data Protection Regulation relevant to the discussion in this chapter is the proposed right to data portability which may remedy some of the lock-in users experience in using the cloud. This right would enable users to obtain a copy of their personal data held by a particular entity, which could then be used to move to a competing cloud service for instance, yet with the proviso that this right only would apply if the data is already in 'a structured and commonly used format'.<sup>573</sup> Furthermore, it does not entail that the user's data held with the first provider will be deleted – although the proposed 'right to be forgotten' may also operate to achieve this outcome.<sup>574</sup> However, if the user has provided their personal data and the processing is done based on the user's consent or on a contract, the user would have a separate right to port that data in a commonly used electronic format, and transmit it to another 'automated processing system... without hindrance from the controller', seemingly mandating that in these situations the data controller must provide that data in a commonly used format. Nevertheless, it seems unlikely that this first aspect of the right to data portability will be included in a final draft of the Data Protection Regulation since it is opposed by both the European Parliament and Council: these organs would restrict the second aspect of the right to situations in which the data subject has 'provided' the personal data, yet it is not clear what 'providing' one's data would mean in practice, ie how 'actively' the data must be given by the data subject.<sup>575</sup>

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<sup>571</sup> Joseph Ax, 'U.S. judge rules search warrants extend to overseas email accounts' (*Reuters*, 25 April 2014) <<http://www.reuters.com/article/2014/04/25/us-usa-tech-warrants-idUSBREA3O24P20140425>> accessed 3 September 2014

<sup>572</sup> EurActiv, 'Europe pushes own digital 'cloud' in wake of US spying scandal' (29 August 2013) <<http://www.euractiv.com/infosociety/prism-cloud-european-silver-lini-news-530004>> accessed 3 September 2014

<sup>573</sup> COM (2012) 11 final, Article 18

<sup>574</sup> COM (2012) 11 final, Article 17

<sup>575</sup> Hon and others (n 573) 44-45

In any event, these provisions do not equate to particularly strong rights for users, since entities processing user data on a basis which is not user consent or a contract could sidestep some of its stipulations by not arranging the user data into such a structured and commonly used format.<sup>576</sup> Furthermore, the right to data portability only applies to transfers of personal data, and information which does not qualify as personal will be outside the scope of this right.<sup>577</sup> However, for personal data processed on the basis of user consent or contract, it seems that data controllers *must* provide this data in a commonly used format such that users can switch with their data to a rival service, yet there are many occasions in which this obligation will not apply ‘given the breadth of situations when processing of data is not based on consent or contract’.<sup>578</sup>

Nevertheless, some right to (personal) data portability, perhaps accompanied by explicit interoperability requirements on cloud providers, would address some of the competition, control and privacy concerns identified at the beginning of this chapter, and so its adoption in law should be encouraged. A stronger response to these concerns would entail a right to the portability of ALL data, and not just that which is personal, along with interoperability requirements on cloud providers. Furthermore, clarification about the application of EU data protection law to non-EU cloud providers handling the EU residents’ data along the lines suggested by the proposed regulation would aid the enforcement of these rules, such that the trigger for their application would be the handling of this data, as opposed to where the cloud provider is situated. However, this is one of the most contentious parts of the proposed regulation, entailing strong opposition by the US and US-based companies, and so it is by no means clear that it will reach the stage of final implementation. Furthermore, problems may still remain regarding the effective enforcement of EU data protection law vis-à-vis entities operating outside of the EU.

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<sup>576</sup> Swire and Lagos (n 546) 340

<sup>577</sup> Graef and others (n 541)

<sup>578</sup> Hon and others (n 573) 45

## **b) Free expression**

Competition law and data protection law (particularly if the proposals for reform are enacted) would go some way to addressing the free expression concerns raised at the beginning of this chapter, namely the increased control over what users access and upload that cloud providers have, the increased possibility of surveillance of user activity and the increased lock-in users experience when using cloud services (either via technical means or contractual terms). If a player is found to have a dominant position in a particular cloud market, then its actions such as preventing interoperability between its services and those of others or forbidding users to port their data stored with that player may amount to anticompetitive conduct addressed by Art 102 TFEU. Furthermore, a dominant player restricting the content and services users can access in or via the cloud may also amount to an abuse of that dominant position via tying its different products and services together. As seen in the previous subsection on data protection and privacy, the right to data portability, if enacted, may alleviate some of the concerns around user lock-in.

Nevertheless, the problems for free expression that cloud computing presents are not fully addressed by these other legal regimes. Competition is only triggered where there is a finding of dominance or collusion (or if a merger is proposed), so the users of cloud players that are not dominant in their particular market nor exhibit collusive conduct will not be able to seek remedies from this area of law. While the right to data portability would seem to apply to non-dominant players as well as those with a dominant position, in its current formulation it is not a particularly strong right – since it only applies to personal data and only operates in specific circumstances, as detailed above.

The discussion on the application of free expression laws to the net neutrality debate in Chapter 3 is relevant to how free expression laws might be applied in the cloud context. The law is unlikely to address the lack of interoperability/data portability, but if cloud providers are restricting users' access to content via the cloud, then this restriction may be found to be an infringement of Art 10 ECHR. As discussed in greater detail in Chapter 3, a finding of infringement is highly context-dependent, and previous case law has tended to set a high bar as to whether this kind of conduct will amount to an infringement. It may be that it will only amount to an infringement if it is not possible for users to access this content in any other way (including offline). Furthermore, it may be necessary that a whole class of content is blocked

by the cloud provider. As noted in the context of this discussion in Chapter 3, an alternative route to finding an infringement of Art 10 may be if the cloud provider's conduct in some way affects media plurality – and in the increasing move towards online 'walled gardens' this may be less of a fanciful thought as it was during the height of the 1990s cyberliberterian utopianism. Indeed, given the profit-motivation of commercial cloud providers, they have incentives to disseminate 'popular content which attracts a greater number of users and thus generates higher advertising revenues... at the detriment of less popular, but not necessarily less important content which receives less visibility'.<sup>579</sup>

While state-mandated online ubiquitous surveillance facilitated by private parties has been recognised in recent CJEU jurisprudence to pose problems for users' right to free expression,<sup>580</sup> such surveillance being carried out for private parties' own purposes and not obliged by law has not been found to be illegal, providing the private parties abide by data protection law and their own contractual arrangements, in particular privacy policies.

Thus, it seems that the application of the right to free expression in Europe to cloud providers will be highly context-dependent, and is only likely to apply if a cloud provider is restricting users' access to content via the cloud – and even then, probably only if this restriction means that users are not able to access this content via any other means. The right is unlikely to entail changes to cloud providers' other business practices, such as surveillance and the locking-in of users and prevention of interoperability and data portability.

## 6.5 Extra-legal solutions

Given the current laws in the form of competition, data protection and free expression laws only go some small way to protecting users' interests in cloud computing but do not protect and promote all of them, and not necessarily in every set of circumstances, it can be seen here that there is a 'gap' in EU law when it comes to upholding users' autonomy online against the

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<sup>579</sup> De Filippi and McCarthy (n 551) 50

<sup>580</sup> For instance: Case C-70/10 *Scarlet Extended v Societe belge des auteurs, compositeurs et editeurs (SABAM)* [2012] ECDR 4; Joined Cases C-293/12 and C-594/12 *Digital Rights Ireland and Seitlinger and Others* (CJEU, 8 April 2014)

threats to it from private power in the form of for-profit cloud providers. Here, other options beyond current law will be considered to determine whether they would be more effective in enhancing user autonomy than the current legal situation.

Regulation or other government action would be one option to ‘fill’ this gap in the current law. This might encompass the implementation of some kind of privacy by default/design when it comes to new technologies and promoting international standards on privacy and data protection in the cloud may be welcomed. However, governments themselves have an interest in ensuring users’ communications are available to them for their own law enforcement purposes and so are unlikely to promote strong privacy protections which could stymie their own surveillance efforts. It also seems highly unlikely that international consensus could be reached on these issues. This is particularly the case given the divergence in data protection and privacy standards between the US and EU, let alone other global powers (both greater and lesser), and the direct and indirect resistance of the US and American businesses to the EU data protection reforms currently under discussion. If global standardisation of norms is to occur, then pragmatically it may result in a norms being agreed that are not particularly strong protections of individual privacy (and free expression) so the whole exercise may produce unwelcome outcomes.

At the national or regional level (in the case of the EU), some more regulation of cloud services could be more achievable. This might include obligations on cloud providers to facilitate interoperability with each other, to allow data portability, and not to interfere with users’ right to receive and impart information which is otherwise legal. Nevertheless, the problems with jurisdiction in the cloud may persevere unless there is more invasive regulation here too: for instance obliging cloud operators providing services to EU citizens to be entirely geographically based in the EU’s territory.

Users may also be encouraged to encrypt their data, so that even if it goes into the cloud they retain more privacy over the information that they put into it, although encryption does not address the fundamental power imbalances in the cloud in favour of the cloud provider, and just means that the cloud provider cannot see exactly what the information is – or may just need to employ decryption services.

At the policy level, alternative cloud infrastructures might be promoted, such as ‘community

clouds’, whereby groups of individuals set up their own cloud services, without a profit motive and independent of the state apparatus, according to a commons-based peer production model. These community clouds might use peer to peer technologies in order to protect user interests,<sup>581</sup> such as the Freedom Box (a small device comprising a server) which provides a decentralised architecture for users to exchange information and communicate securely,<sup>582</sup> or ownCloud which is a free software alternative to commercial cloud providers which includes encryption and can be installed on a private server. The mesh networks discussed in Chapter 3 may also facilitate the setting up of community cloud services on a peer to peer basis.

While De Filippi acknowledges that there are problems with peer to peer technologies, especially for ‘normal’ Internet users who may not be so technically adept, their ‘mere existence’ provides a safeguard for users eager to retain autonomy and freedom of communication, or who are no longer satisfied with the growing encroachments on privacy and civil liberties implemented by cloud operators<sup>583</sup> – and thus should be encouraged as a ‘third way’ between private, for-profit clouds and state-controlled clouds.

However, the proliferation of data about users in the cloud is not limited to direct interactions of the user with cloud services, but also includes government and corporate use of the cloud via contracting out/the subcontracting of services, so there will also be data held in the cloud by a third party about an individual collected by the public services of her country or her bank, credit card company etc. Thus - opting out of legal/regulatory solutions entirely is not realistic for users – so other solutions must also be pursued.

## 6.6 Conclusion

While this chapter may be viewed as more ‘speculative’ when it comes to issues of private economic power over online information flows to the detriment of user autonomy than the others in this thesis (as well as being shorter in length), it addresses cloud services at a stage before there have been competition investigations into them, yet when issues of dominance

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<sup>581</sup> De Filippi and McCarthy (n 551) 51

<sup>582</sup> Freedom Box Foundation <<https://freedomboxfoundation.org/>> accessed 5 September 2014

<sup>583</sup> De Filippi and McCarthy (n 551) 53

are emerging. Given the progressive move towards placing more content, services and infrastructure in the cloud, this chapter provides a forward-looking consideration of the problems for users that arise, and recommends ‘nipping them in the bud’ before they become fully blown competition issues. In any event, cloud services already present problems for the effective enforcement of what data protection law there currently is, as well as represent a ‘gatekeeping’ point for users accessing certain content and services online (with the associated surveillance and censorship capacities that status brings).

Existing competition laws may address some of the concerns identified in the initial part of this chapter, such as a lack of interoperability between one provider’s products/services and those of others, but only if dominance/market power is found. The only other trigger for competition investigation here would be a suspicion of collusion among cloud providers – or possibly a planned merger, although none are currently on competition authorities’ horizon. Otherwise, competition law will not intervene more generally to promote choice, interoperability, portability and free access to content and services. Users may find that even if there is not dominance in the competition law sense, they still do not have a ‘real’ choice among cloud providers’ offerings – whether it is because they are all offering similar services even if there are many players in the market or because users are locked in to a particular cloud service via contracts or technical measures and so are unable to switch providers – thus with no choice but to stay with the original cloud provider.

EU data protection law, particularly if the reforms comprised by the proposed Data Protection Regulation are enacted, would go some way to addressing user concerns, particularly in the form of the mooted right to data portability. However, as has been discussed above, this right to data portability is not a very strong right nor does it cover all data that users may have in the cloud. Furthermore, it is not even clear what final form the proposed Regulation might take given the controversies over its provisions and the amount of lobbying going on to mitigate its effects on Internet businesses, particularly those from outside of the EU.

The problem remains, in any event, of jurisdiction and the enforceability of whatever laws that may already be in existence vis-à-vis the cloud, given the lack of transparency over where information ‘in the cloud’ is actually hosted physically, the ability of that information to be transferred very easily between data centres in different parts of the world, and the differing norms that different countries apply to data being held in the cloud when it is being

hosted on their geographical territory.

Pragmatically, it is submitted that a regional or national initiative to impose more regulation on cloud providers in the interests of users may be achievable. This regulation could comprise obligations on cloud providers to facilitate interoperability with each other, to allow data portability, and not to interfere with users' right to receive and impart information which is otherwise legal. Regulation may also be required to address the problem of enforceability of law, for instance obliging cloud providers to be entirely geographically based within a particular jurisdiction. Nevertheless, the practical problems with regulation have already been recognised in this thesis regarding the influence of lobbying on the regulatory process as well as the time taken to get to the stage of regulation being contrasted against the often-much-quicker rate of technological development. Given the controversies over the proposed Data Protection Regulation and the slow speed at which it is moving along its journey to implementation, it seems highly likely that any further attempts to regulate cloud services would be subject to a high level of resistance by the industry (except possibly European-based cloud operators which might be likely to benefit in part at least from such regulation). Furthermore, the problem remains of convincing regulators to make an intervention in the market given the general 'light touch' trend, and even though larger problems can be anticipated, the net neutrality example in Chapter 3 demonstrates that in practice if regulators intervene at all, it can be many years afterwards, by which time conditions have changed – and not necessarily for the better.

Thus, as immediate solutions to the problems that cloud services present for users' autonomy online, technical and other extra-legal methods emerge again as the most expedient. Users should be encouraged to encrypt data they send to the cloud, as well as participate in 'community cloud' schemes based on peer to peer technologies. These seem to be the only methods by which users' privacy and freedom of communication – in other words, users' autonomy – can be retained in the cloud.







## CHAPTER 7 CONCLUSION

This thesis has considered the rise and manifestation of private economic power wielded by for-profit corporations over online information flows in the EU, making comparisons where relevant with the situation in the US. The law and regulation which principally apply to these concentrations of private economic power has been examined, which is mainly competition law (antitrust), ex ante regulation in the case of Internet provision examined in Chapter 3, data protection and fundamental rights, to determine the extent to which the law as it currently stands can promote not just the standard goal of ‘consumer welfare’ but also the more expansive and liberating concept of ‘user autonomy’.

Four substantive case studies have been considered in this thesis, namely Internet provision, search engines, mobile devices and app stores, and the cloud. These case studies have been chosen since they each encompass a ‘choke point’ over online information flows to and from users, and so can be considered to be in a gatekeeping position. They have also been chosen as they provide examples of corporate dominance over these online information flows, either in the form of a ‘dominant position’ as recognised in competition law, or as markets whose main - if not all - participants are large, often transnational, for-profit corporations which might be thought of as examples of Illich’s ‘radical monopoly’ where true choice for users between true alternatives does not exist.

In each case study contained in this thesis, it can be seen that the law and regulation which does apply to the given situation - competition law supplemented by fundamental rights to free expression and privacy and EU data protection law - fall short of fully protecting and promoting user autonomy in this context of corporate dominance over online information flows. Thus there are ‘gaps’ in the existing legal framework when it comes to protecting and promoting user autonomy.

It is submitted that the influence of neoliberalism over EU law, policy and regulation vis-à-vis private economic power in Internet markets (if not in other markets as well) can explain, at least in part, this state of affairs. EU competition law’s contemporary neoliberal influence and More Economic Approach has entailed that values aside from those encompassed by the nebulous goal of consumer welfare cannot be promoted easily within the competition analysis and limitation of private economic power. Furthermore, the triumphalism of neoliberalism in

promoting minimalist ‘light touch’ ex ante regulation of private economic power in EU communications markets explains the general lack of anterior regulation in this area. In addition, fundamental rights are also caught up in this neoliberal conception of the world given their application is mainly vis-à-vis the nation-state despite globally there being transnational accumulations of capital which are more powerful financially than some nation-states and the very real violation of rights that these corporations’ business entails in certain circumstances.<sup>584</sup> Data protection law, while exceptional in its application of certain aspects of privacy rights to private entities, is narrow in its scope (‘personal data’) and not always well-enforced – and is the target of an intense wave of corporate lobbying to minimise any further ‘burden’ its reform may impose on these entities to bring it more in line with the techno-social reality and the vast proliferation of data about individuals held and used for the pursuit of profit (and conveniently accessible to nation-states’ espionage agencies as well).

The proposed net neutrality regulation represents an exception to this trend of *avoiding* ex ante regulation of information gatekeepers, but can also be critiqued for being too little, too late: many years that have passed since it was first raised as a problem for both competition and digital rights, which has entailed that technology and business methods have moved on, which is not clearly addressed in the regulation.

The European Commission’s competition investigation into Google is another exception to this trend, given it is not clear that Google has actually abused its dominant position. While it is unclear precisely what is motivating the Commission in its actions, in any event so far they are still fairly ‘light touch’ when it comes to tackling the myriad problems posed for users by the large concentration of corporate power which Google encapsulates.

Indeed, in most case studies of this thesis, alternative, usually technical, ‘self-help’ methods for users in the form alternatives to the corporate information gatekeepers are proposed. These alternatives involve peer to peer design as a means of re-establishing decentralisation, eroding the gatekeeping potential, and providing better protection and promotion of user autonomy in terms of facilitating free speech, more user control over infrastructure, enhanced user privacy (as it is more difficult to carry out surveillance of decentralised P2P systems) as well as solidarity and sharing among network participants rather than the extraction of value

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<sup>584</sup> See: Naomi Klein, *Shock Doctrine: The Rise of Disaster Capitalism* (Knopf Canada 2007)

from users by large for-profit corporations. These alternatives have specifically been chosen not on a technodeterministic basis, but because they embody the normative values of free expression, privacy and decentralisation advanced by the idea of user autonomy.

This thesis is limited inasmuch as it does not consider in great detail conceptual reforms to competition law to promote user autonomy, which may be possible but would be a longer term project. Instead a realistic and immediate approach is taken to the problems that exist now with these large concentrations of private power online manifesting in commodified information gatekeepers and how they may be resolved in the short term with existing law, regulation and extra-legal methods. Nevertheless, as mentioned in the Introduction, the reform of the law, particularly competition law and regulation, in ways which would promote user autonomy online, and perhaps autonomy for citizens in other areas of life as well may be a much larger project, part of a broader and more profound societal change. As the implications of the EU's Charter for Fundamental Rights for competition and economic regulation become more apparent, the 'constitutionalisation' of these parts of the legal framework will be a more pressing issue, and one ripe for further research at the intersection of economic considerations and human rights, both vis-à-vis new technologies and other areas of life, such as the environment. The European Data Protection Supervisor's comments on this topic are thus to be welcomed as starting this discussion in the EU, and the final outcome of the Google search investigation may be instructive as to other institutions' views on the matter.

Another limit to this thesis is its concentration on private economic power, and accordingly excludes a thorough consideration of the exercise of state power over online information flows to the detriment of user autonomy. While there is some acknowledgement of the coupling of state and private economic power in the form of the Invisible Handshake, a detailed consideration of this relationship is outside the scope of this thesis due to considerations of length. The state has very much re-asserted itself (if it ever was truly absent) in recent years, including states of a so-called 'liberal democratic' persuasion, as evidenced in particular by the mass surveillance and data gathering programmes operated by the US and its allies in different parts of the world. The state interest in surveillance of Internet users whether directly or indirectly via third parties, as has been acknowledged in this thesis, may entail that reform to privacy and data protection law which would promote optimal conditions for user autonomy online is unlikely to be achieved in practice any time soon. Nevertheless,

the peer to peer alternatives offered to the status quo ought to serve to promote and protect user autonomy vis-à-vis the state as well as vis-à-vis private economic power. In any event, how the state interest in surveillance, the co-option of private providers for this end, and the War on Terror justifications given for these alliances accords with neoliberal ideology, and how and whether the law including communications regulation and fundamental rights can effectively manage and oversee these relationships for the benefit of users forms another avenue for future research.

In the meantime, it is submitted that reform of Internet law and policy reform in the EU in the short term should proceed on a basis in which users' autonomy is recognised, celebrated and promoted to the greatest extent possible within the current legal, economic and regulatory framework. Yet, given the challenges to this happening in practice, technical solutions designed with privacy, free expression and the decentralised resistance of control in mind may be the most realistic means of protecting and promoting user autonomy online, and so EU law and policy in this area at least should not prevent these solutions from doing so.







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