1

INTRODUCTION

Although this book discusses laws as they apply to technology markets, there is no law of 'technology markets' any more than there is a 'law of the horse'. **1.01**

The term 'law of the horse' goes back to the US judge, Easterbrook, who said, in a now famous internet law conference in the US,[1] that there is no 'law of the internet' any more than there is a 'law of the horse': there are laws of contract for when horses are sold; there are laws of animal husbandry for when they need care; there are laws of gambling, for when they race. But there is no law of the horse. Easterbrook saw several risks from ignoring this: first, what he pithily entitled the cross-sterilization of ideas, where dilettantes from the areas of the laws on the one side, and the internet on the other, got together and talked simplistic nonsense across each other; second, the failure to study general rules where legal learning resides; third, the intermingling of professionals and amateurs in the study of law. **1.02**

His different criticisms have different weights. The first criticism—dilettantes talking across each other—is not a necessary consequence, unless one believes that lawyers can never understand technologists and vice versa. In any event, it would at worst be merely a waste of time for those involved. The third criticism—the intermingling of professionals and amateurs—assumes perhaps a pre-eminent position for 'professionals' that is not necessarily merited; it is after all a complaint that works in English, but not so well in French, and as the lowering of barriers to publication brought about by the internet shows, the boundaries between professional experts and amateur non-experts are far from hard and fast. But the second criticism—the failure to study the general rules of law—has substance. Without an understanding of the general rules, no lawyer can advise on the application of the rules to a particular sector. This book does not purport to be a replacement for study of the general rules; it is a complement, not a substitute. **1.03**

Looking at the legal areas covered in this book, there is, for example, no 'competition law of technology markets' or 'intellectual property law of technology markets'; there is competition law, and there is intellectual property law. And the best way to learn about competition law or intellectual property law in these sectors is to start with a book on competition law or intellectual property law in general. For example, the basic principles of competition law—consumer welfare, market power, restrictions of competition, abuses, efficiencies—are common to all cases in all industries, and are best elaborated at that general level. Although there is a brief introduction to competition law and intellectual property law, this is not a **1.04**

[1] Edited version at Frank H. Easterbrook, 'Cyberspace and the Law of the Horse', 1996 *U Chicago Legal Forum* 207.

book to be used for a broad introduction to these laws. In each section I indicate some general reading on the subject as a whole for both the EU and the US.

1.05 At the same time, Easterbrook's criticism misses the mark of why a study of the law as it applies in a particular sector might be valuable. Lawrence Lessig, in a now equally famous reply,[2] highlighted some areas that he thought did justify a sector-specific study, most generally that, 'We see something when we think about the regulation of cyberspace that other areas would not show us'.[3] The last decade has been kinder to Lessig's reply than to Easterbrook's criticism: technological developments in general and the internet in particular have produced sufficiently numerous difficult questions of law that, while a general legal education is necessary, it is also insufficient.

1.06 This book therefore provides an introduction to the various areas of law, as hooks on which to hang the later discussion of how the laws apply to technology sectors. The book then focuses on aspects of the general rules that are of particular importance in the sectors covered. So rather than a detailed discussion of, say, the concept of foreclosure under the competition rules of the EU and the US, the book focuses on issues relating to interoperability,[4] product development,[5] and access to networks.[6] Rather than a general discussion of patentability and non-obviousness in the EU and the US, the book focuses on the patentability of software,[7] and more generally the multiple layers of protection that the intellectual property rules afford to software.[8] Rather than a general discussion of the regulation of telecommunications, the book focuses on issues relating to data networks and the internet.[9]

1.07 A little over half of this book is about competition law. In part that is a reflection of my own biases—I am a competition lawyer, and tend to see the world through the eyes of competition law. In part, it is also a reflection of the role that competition law plays in the regulation of technology markets. Competition law is the regulator of last resort; if a problem arises and no other law or regulation applies, then competition law will nevertheless apply by default. For products and services which may have only recently been invented, the competition rules provide a backstop for corporate behaviour.

1.08 Although this is intended to be a text that is useful for practitioners, it is drafted differently to many practitioner texts. It has a greater focus on the historical development of the law, is discursive and analyses the doctrinal bases of laws and judgments, and it looks at different areas of law and different jurisdictions. There are three main reasons for this:

1.09 First, competition law in both the EU and the US is now, more than probably any other area of law, economic law. Some EU texts—and I include some writing that I have done myself—assume that cases from the 1970s and 1980s had broadly equivalent precedential value as cases decided today, not fully accounting for the change to the value of precedents that the shift towards economic analysis requires. Further, they assume that you can take the economic analysis of cases and policy documents from the last twenty years, and distil it down to a set

[2] Lawrence Lessig, 'The Law of the Horse: What Cyberlaw Might Teach', 113 *Harv L Rev* 501 (1999).
[3] *Ibid.*, p 502.
[4] See Chapter 6, Competition Law, Standards, and Interoperability.
[5] See Chapter 7, Product Design and Innovation.
[6] See Chapter 6, Competition Law, Standards, and Interoperability at Section C and Chapter 8, Networks and Network Neutrality.
[7] See Chapter 5, Intellectual Property.
[8] *Ibid.*, at Section D.
[9] See Chapter 8, Networks and Network Neutrality.

of black letter rules and conclusions that apply almost independently of any market analysis. Neither of these assumptions is true, at least as regards public enforcement by the European Commission and, in more areas than is probably realized, as regards the jurisprudence of the European Courts. Once we move beyond the field of hardcore restrictions, that a particular clause in a particular contract was found unlawful in 1970 says nothing meaningful about the treatment of that clause in different factual circumstances today. And even today, if a particular practice is found unlawful, that often will tell you little about the likely treatment of the same practice in another case (unless the practice and supposed rule are described at such a level of generality as to become a truism).

1.10 Second, texts tend to focus on one area of law, to the exclusion of other areas that relate closely, and impact on the analysis. This is perhaps more evident in the US where the concept of a sectoral antitrust text seems largely unknown. Still less is there much discussion of the relationship between antitrust and some types of regulation—such as telecoms regulation—which are designed to achieve the same objective of maximizing competition.

1.11 Finally, texts tend to focus on one jurisdiction—for example the EU—without considering how similar problems are dealt within in other jurisdictions—such as the US; as both jurisdictions often face the same problems, and their laws are often informed by the same underlying work of economists, it is strange that more legal texts do not consider how the issues are handled in other major jurisdictions.

1.12 No single area of law exists in isolation. It applies to the same sectors as other sets of laws, and interacts to a greater or lesser degree with these other laws. Much of EU and US telecoms regulation, for example, deals with problems that could be addressed under the competition rules, but which legislatures believe are more effectively dealt with by specific regulatory laws and bodies;[10] data protection rules define limits within which companies can compete in the use of personally identifiable information; intellectual property rules sometimes promote and sometimes inhibit competition in new products and services.

1.13 So for a business operating in these areas, knowing what is lawful and what is unlawful, what is advisable and what is ill-advised, requires a knowledge not only of the individual laws, but of how they inter-relate.

1.14 However taking these points into account in this text has led to some trade-offs: the text does not provide a complete grounding in the law in any of the areas it discusses, but only sets out the principal elements. The text is also selective in terms of the issues covered: in intellectual property, neither trade mark rules (for example for web advertising), nor the Database Directive (notable mostly for its being unnecessary) are covered; in competition law, mergers are dealt with rather briefly, usually only where a remedy imposed on a merger was itself notable. The book is essentially about the regulation of firms' conduct.

1.15 The common characteristics of the sectors covered in this book, that make a detailed study of the law applying to these sectors worthwhile, include the existence of network effects,[11] the influence of intellectual property rights,[12] the importance of interoperability,[13] the impact

[10] *Ibid.*, at Sections A and B.
[11] See paragraphs 2.42, 3.149 *et seq.*, 4.94, 5.413, 6.126, 7.110, 7.145.
[12] See Chapters 5, 6, and 7.
[13] See Chapter 6, Competition Law, Standards, and Interoperability and Chapter 7, Product Design and Innovation.

of standards,[14] and the existence of high fixed and low marginal costs and consequent decreasing average costs.[15] Understanding these factors informs an understanding of how the laws will apply in these areas.

1.16 This book looks at four areas of law—competition law, intellectual property law, telecoms regulation, and data protection law—as they apply to the telecoms, online services, and IT sectors; it looks at two jurisdictions, the European Union and the United States of America.[16] It is important to understand how the laws apply at different levels of the value chain, from underlying technology, through infrastructure to services. A holistic understanding of how different layers of the value chain interact is fundamental to understanding how, when, and where market power can be exercised.

1.17 This combination of laws was chosen because the laws are all a form of 'market regulation', laws which are intended to foster competitive markets (though they may have other objectives as well, of which more below[17]). Any one fact pattern may give rise to legal issues under several of these areas of law. This combination of sectors was chosen because the sectors share common, though not unique, characteristics that makes their grouping together a fruitful means of understanding common legal issues and approaches.

1.18 The book is structured as follows:

1. Introduction
2. Objectives of Competition Law and Regulation
3. Introduction to Competition Law
4. Competition Law and Pricing
5. Intellectual Property, including an introduction to patent and copyright law, the intellectual property protection of software, and the competition rules as they relate to intellectual property issues.
6. Competition Law, Standards, and Interoperability, including the competition rules as they relate to standardization agreements, and refusal to supply access to *de facto* (market developed) standards.
7. Product Design and Innovation, including competition law assessment of product developments and designs, and discussion of the EU and US antitrust cases against Microsoft.
8. Networks and Network Neutrality, including communications regulation.
9. Data, Data Protection, and Competition Law, including data protection rules, as well as the relationship between data protection and the competition rules and a discussion of the EU and US merger approvals of the Google/DoubleClick merger.

Chapters 4 to 9 finish with a section highlighting some of the more difficult or unresolved issues of law, and sectoral issues that are likely to emerge as significant in the coming years.

1.19 The book is aimed at all who have an interest in the area: in-house and external lawyers; academics; businesses. Parts of the book are deliberately discursive; many issues discussed are relatively novel and require more detailed explanation than a bald statement of a conclusion.

[14] See Chapter 6.
[15] See Chapter 4, Competition Law and Pricing.
[16] It does not cover Member State law in the EU or state law in the US; obviously national and state laws will be relevant in some cases.
[17] See Chapter 2, Objectives of Competition Law and Regulation.

The law does not exist as a series of one paragraph summaries of cases and principles; legal advice does not consist of hunting down the most pertinent previous case, citing it, and sitting back. The law is a dense, interconnected web. It is rich with principle, comparison, and allusion. I hope that I have done some justice to that richness in this book.

Notes on drafting

The old cliché of Britain and America being 'two nations divided by a common language' is a cliché largely because it is true. Writing an English language text that looks at both EU and US law has pitfalls galore. I have tried to remain consistent and comprehensible while remaining true to the traditions on both sides of the Atlantic. Here are some of the rules that I have tried to follow: **1.20**

English spelling is used throughout, save in direct quotations. American readers can silently skip over the ever-present silent 'u's in my drafting; European readers may want to remember to remove these 'u's when searching databases for US materials in follow-up to issues raised in this book: my research into behavioural economics was greatly helped when I remembered this point. **1.21**

The idiosyncrasies of English usage have been retained: I write about computer programs but television programmes. **1.22**

The body of law known as antitrust law in the US encompasses both behavioural rules (sections 1 and 2 of the Sherman Act) and structural rules (merger control). The EU distinguishes between antitrust (Articles 101 and 102 of the Treaty on the Functioning of the European Union ('TFEU')), merger control, and State aid control rules, which together comprise competition law. When I refer to antitrust law I mean to refer to Articles 101 and 102 TFEU and/or ss 1 and 2 of the Sherman Act. When I refer to competition law, I mean to refer to the full range of laws as they exist in the EU. **1.23**

More generally, I have tried to use EU terminology—referring to restrictions of competition rather than restraints on trade, refusal to supply rather than duty to deal. **1.24**

The book mentions to several 'Commissions'. I have therefore referred in full to the European Commission, the Federal Trade Commission, and the Federal Communications Commission to avoid confusion. **1.25**

US legal texts tend to use symbols such as § to refer to divisions of documents, in this case, sections of Acts; for the sake of non-US readers who will likely be unfamiliar with that notation, I have tried to avoid the use of symbols in favour of words: for example, in referring to the US Sherman Act, I refer to s 2 rather than §2. **1.26**

There will likely be other conventions of EU and US legal writing that I have not followed, in an attempt to make the text as comprehensible as possible to readers from each legal system. **1.27**

Following the entry into force of the Lisbon Treaty, the structure and numbering of the EU Treaties has changed. **1.28**

A table of competition law equivalences is at paragraph 3.81 below. A table of equivalences for the Treaty as a whole is available on the internet.[18] Throughout the text I refer to the new **1.29**

[18] <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:115:0361:0388:EN:PDF>.

numbering. In direct quotations the former numbering is replaced by the new numbering in [square brackets].

1.30 The Lisbon Treaty also changed the official title of the first instance appeals court at EU level from the Court of First Instance to the General Court, and changed the name of the higher court from the European Court of Justice to the Court of Justice of the EU. Again, the new title of 'General Court' is used throughout the text, even to refer to cases decided prior to the Lisbon Treaty entering into force; in direct quotations or case names the former name is replaced by the new one in [square brackets].

1.31 Finally, the book contains extensive quotations from legislation and other primary sources, as I prefer to read original texts rather than extensive paraphrases of those texts.