

The iTunes Music Store: does competition law hold the key to a closed shop?

¹At its launch in 2001, the iPod might have seemed an improbable saviour for Apple's flagging fortunes. Three years on, the iPod is at the forefront of digital media technology, and Apple runs the world's most successful retailer of music downloads, the iTunes Music Store.*

²The development of downloadable music has not been without controversy. Incompatibilities between portable music players such as the iPod and music download sites have arisen, and Apple has found itself accused of using anti-competitive tactics. For example, RealNetworks, a competitor, sponsors www.freedomofmusicchoice.org, a website that campaigns against "the status quo in digital music, which limits healthy, open competition".

³This article considers whether some issues of interoperability between online music download services and iPods could be addressed through EC competition law. Indeed, there are reports that a complaint has already been made to the French Competition Council,[†] alleging that Apple has acted anti-competitively in failing to license key software that would allow other online retailers to provide downloads for use on iPods.

There are significant impediments to interoperability of music downloads

⁴Apple's iPods are portable digital music players currently selling from around £180 for the 4 GB iPod mini (room for about 1,000 songs) to around £300 for the 40 GB model (room for about 10,000 songs). They allow the user to take a large stock of near-CD-quality music with them anywhere in a single integrated device, without the need for external media such as CDs, MDs or cassettes.

⁵To transfer music to their iPods, users have two main legal choices: buy a CD from which to copy content to the iPod, or purchase music online and download it, via a computer, to the iPod. In the UK, around 100,000 tracks were downloaded per month in early 2004, and this had risen to 500,000 tracks by August 2004. When the iTunes Music Store opened to UK customers in June 2004 it sold more than 450,000 downloads to them in its first week.[‡]

⁶Besides these legal options, iPod users might transfer music to their iPod in breach of copyright. Because of this threat of piracy, record companies do not generally allow online music stores sites to sell files that can be freely copied by users. Instead, digital rights management

(DRM) systems are used to encrypt the data and prevent unauthorised copying of downloaded music.

⁷DRM systems require that computers and portable music players run decryption software in order to play the music content that has been protected by that system. Currently, there are two main DRM formats that are used for protecting music downloads:

- (a) FairPlay, an Apple proprietary technology to secure files encoded in the standards-based AAC (Advanced Audio Coding) format.
- (b) WMA, part of Microsoft's Windows Media audio-video encoding technology platform.

⁸FairPlay is the only DRM-secured format that iPods can play. Apple is reported to have refused to license FairPlay to other retailers of music downloads,[§] thus making it difficult for iPod users to play downloaded music from retailers other than the iTunes Music Store.

⁹Most non-Apple portable players can only play the WMA format, and, in the UK at least, all the major retailers of music downloads except the iTunes Music Store supply secured WMA content (see Table 1).

Table 1: DRM formats used for music downloads

Retailer of music downloads	Format for secured content
Bignoisemusic.com	Secured WMA
hmv.co.uk	Secured WMA
iTunes Music Store	FairPlay-secured AAC
msn.co.uk	Secured WMA
Napster.co.uk	Secured WMA
Recordstore.co.uk	Secured WMA
Tiscali.co.uk	Secured WMA
Woolworth Group	Secured WMA
7 Digital Media	Secured WMA ⁽¹⁾

⁽¹⁾ Also sells a limited selection of charity-related paid tracks in AAC. The retailers listed are those reported to have their sales included in the Official UK Download Chart (see www.pro-music.org). Data on formats are taken from retailers' websites or links from these sites. Data collected 16 September 2004.

¹⁰Table 1 only applies to secured music. Some music downloads are also available on an unsecured basis, e.g. from artists seeking to build publicity and reputation. Virtually all portable players, including iPods, support the older and unsecured MP3 format.

* http://www.apple.com/uk/pr/100804_itms_1m.html on 20 Sep 2004.

† http://news.zdnet.com/2100-3513_22-5298642.html on 23 Sep 2004.

‡ http://www.apple.com/uk/pr/230604_itms.html on 20 Sep 2004.

§ <http://news.bbc.co.uk/1/hi/technology/3937385.stm> on 20 Sep 2004.

EC competition law may require technology platforms to be more open

¹¹ Under Article 82 of the EC Treaty, an undertaking that is found to be in a dominant position on a relevant market has a “special responsibility not to allow its conduct to impair undistorted competition”.*

¹² Thus, EC competition law might require Apple to meet requests from other online retailers to grant licenses to the FairPlay technology insofar as is necessary to allow supply of secured music downloads to iPod users.

¹³ The recent judgment by the European Court of Justice in the *IMS* case provides some guidance on the “exceptional circumstances” under which a dominant firm may have an obligation to provide a third party with a access to copyright-protected material.[†] Refusing to licence “a copyright to give access to a product or service which is indispensable for carrying on a particular business” is considered abusive behaviour if:

- (a) the refusal precludes all competition in a related secondary market;
- (b) the refusal prevents the emergence of a new product for which there is potential consumer demand; and
- (c) the refusal is not objectively justified.

¹⁴ It is clear that while competition law respects copyright and other IP rights, this does not give a dominant undertaking *carte blanche* to engage in conduct which threatens competition in areas ancillary to its dominance.

¹⁵ At the same time, the conditions under which licensing becomes compulsory are stringent. An access seeker must prove that failure to licence *precludes* competition, not that it merely impedes or lessens it; and that the new product and objective justification tests are met.

¹⁶ We briefly review the latter two tests before considering whether Apple can preclude competition in a relevant market.

¹⁷ The “new product” test limits compulsory licensing to cases where the party seeking access will use the licence to provide a new product of value to consumers, thus enhancing competition.

¹⁸ What this means in practice is not entirely clear. But there is considerable scope for experimentation and differentiation in the way that online music content is marketed and supplied (e.g. retailers are experimenting with a variety of price plans, including flat rates per track or album, flat rates per kilobyte of data, subscription models, etc). It therefore seems doubtful that Apple could successfully argue that no new product would be offered to consumers if FairPlay became a more open platform.

¹⁹ Perhaps more credibly, one might argue that whatever competition is introduced by compulsory licensing of FairPlay technology would simply amount to a

reallocation, without any net gain, of competitive pressures within a system of linked markets. Since the (prospective) quality of the iTunes Music Store will be taken into account by potential buyers of iPods, competitive pressures in markets for portable players may feed through to pressures on Apple to improve its own products in markets for the supply of music downloads. It is not clear how closely this argument relates to the “new product” test, but there is a sense in which it addresses a relevant question: would compulsory licensing add to the market?

²⁰ Another question is whether licensing of FairPlay could be argued to be impractical, for example if it involves the disclosure of trade secrets used to protect against piracy. However, secrets (“security through obscurity”) are likely to be at most a minor part of a modern secure system, and the proven ability of “hackers” to reverse-engineer complex technologies makes it difficult to consider it as an objective justification for refusing to licence FairPlay.

Is FairPlay “indispensable”?

²¹ If direct transfer of secured music content to the iPod requires content to be secured through Apple’s FairPlay technology, there may be grounds to believe that Apple has control over a service that is indispensable within the meaning above. This service would involve the licensing of the FairPlay technology to third parties.

²² Such a hypothesis could be challenged. In particular, there may be means to achieve compatibility between secured content and the iPod that are not dependent on licences to FairPlay.

²³ In the US, RealNetworks has created Harmony, a package that lets the user convert between most music formats with no loss of security to the files. This allows iPod users resident in the US to play secured music files that have been downloaded from RealNetworks’ music store, Rhapsody.

²⁴ It would be difficult to argue that a license from Apple is indispensable if another firm, acting independently, could legitimately develop technology to render its downloadable content compatible with the iPod.

²⁵ In fact, Apple responded furiously to this development by RealNetworks, accusing RealNetworks of “hacker tactics and ethics” and has been reported to be investigating legal action for infringement of intellectual property rights.[‡]

²⁶ If Apple is able to prevent RealNetworks and others from developing technology that can bypass the FairPlay technology bottleneck — whether through IP law, through changes to future generations of the iPod or through iPod software updates — then the “indispensability” of FairPlay would be established.

* *Michelin v. Commission* C-322/81 [1983].

† *IMS v. NDC* C-418/01 [2004].

‡ <http://news.bbc.co.uk/1/hi/technology/3937385.stm> on 20 Sep 2004.

Defining the relevant retail markets requires a detailed, fact-based analysis

²⁷ If a license to use FairPlay technology were considered indispensable to a firm seeking to supply music downloads to iPod users, we would expect Apple to be found dominant, within the meaning of EC competition law, in a market for the supply of such a licence. Although dominance would need to be assessed in detail, the court in *IMS* confirmed that a relevant market could be identified even if the relevant transaction (here, licensing to third parties) were hypothetical, showing no previous transactions.*

²⁸ Whether Apple could be forced to offer licences to FairPlay technology would then turn largely on the nature of the “secondary” market for which that licence might be an essential input. These are the music content markets that Apple supplies through the iTunes Music Store. Thus, market definition for retail markets would lie at the heart of any case against Apple’s refusal to licence FairPlay to other retailers of music downloads.

²⁹ In competition law, a relevant market is defined in such a way as to identify the other goods and services that exert effective competitive constraints on each other: i.e. a group of services amongst which competition is focused.

³⁰ The main relevant precedent for market definition in online music is the European Commission’s merger case *AOL/Time Warner* in 2000,[†] in which the Commission found separate markets for online (downloadable) music and “physical” music, noting that:

- (a) downloading gives consumers instantaneous access to the music;
- (b) while only predefined combinations of tracks can be bought on CD, music downloads allows the consumer to purchase any desired array of tracks; and
- (c) a price comparison did not establish similarities in unit price or price structure between music downloads and CDs.

³¹ However, this decision was reached at a very early stage in the development of markets for the supply of music content through downloads. Furthermore, attempts to define markets by reference to relative prices or observations on product similarities (or dissimilarities) are, in our view, often misleading.[‡]

³² A direct, fact-based analysis of substitutability and competitive constraints would therefore be required to establish the relevant market definitions for music downloads. Besides analysis of the extent to which different types of music content compete (e.g. tracks,

albums, artists, genres, etc), a key question would be whether the relevant retail markets supplied by the iTunes Music Store should be defined to include music content other than downloads in FairPlay-secured AAC.

³³ Table 2 summarises the main options that iPod users have to play downloaded copyright-protected content from major record companies.

Table 2: Playing music downloads on an iPod

Content retailer/format	Transfer method
iTunes Music Store (FairPlay-secured AAC)	Download to a computer, transfer to iPod
Online retailers of secured WMA music downloads	Download to a computer, copy to CD, copy from CD to iPod via a computer ⁽¹⁾
Retailers of CDs (high street, mail order or online)	Buy CD, copy to iPod via a computer
Piracy	Peer-to-peer file sharing, unauthorised CD copying, etc

⁽¹⁾ Unless a package such as Harmony is available — see discussion of indispensability above.

³⁴ Table 2 demonstrates the choice that consumers actually have as to where they can obtain their music. If the different options are sufficiently substitutable to lead to effective competitive constraints, then the iTunes Music Store will operate in broad markets for music content, which could include some or all of the supply of music downloads, high-street supply (e.g. CD retailers such as HMV), and supply through online stores with physical delivery by mail or courier (e.g. Amazon).

³⁵ On the other hand, research might show that the non-iTunes options carry such costs and inconvenience to iPod users that the mutual competitive constraints between the iTunes Music Store and other suppliers cannot be expected to be effective.

³⁶ However, showing that iPod users face higher costs or inconvenience from purchasing outside iTunes would not be enough to support such a narrow market definition. One would need to show that the iTunes Music Store is not competitively constrained by the threat that higher prices (or a worse service) would cause customers to switch to other sources of supply, such as downloads in secured WMA format and/or purchasing CDs.

³⁷ In particular, the customer base of the iTunes Music Store might include both iPod users and other types of consumers, such as those who listen to downloaded content through a computer or CD player. The latter group might be indifferent between the FairPlay-secured AAC and secured WMA formats. Therefore, even if iPod users appear to lack effective choice, it is possible that the ability of non-iPod users to switch between iTunes and other suppliers could lead to a broad market definition.

³⁸ Furthermore, the analysis would need to consider whether piracy might in some cases act as an effective competitive constraint on legitimate suppliers — although whether suppliers would be willing to provide candid evidence on piracy is open to question.

* *IMS v. NDC* C-418/01 [2004].

[†] *AOL/Time Warner*, Case No IV/M.1845, 11 October 2000. (At the time of writing, the decision on *Sony / BMG* had not been published.)

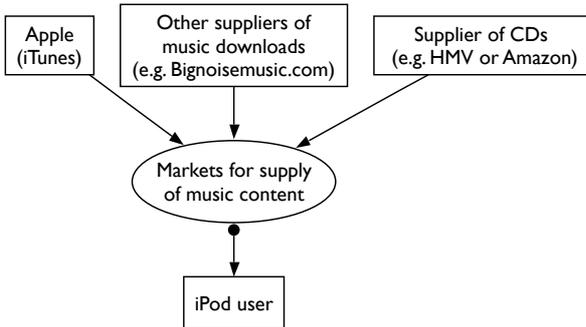
[‡] Reckon’s partners were the main authors of Europe Economics (2002) *Market definition in the media sector: economic issues*, a report to DG Competition available from http://europa.eu.int/comm/competition/publications/studies/european_economics.pdf.

Competition law could “open up” the FairPlay platform were retail competition lacking

³⁹Diagrams 1 and 2 highlight two extreme scenarios for the outcome of a market definition exercise.

⁴⁰In Diagram 1, relevant markets for music downloads are assumed to contain the supply of music content in a variety of formats, and iPod users buying from the iTunes Music Store benefit from effective competition between different distribution channels. In this case, Apple cannot preclude effective competition by refusing to license FairPlay technology.

Diagram 1: Broad markets for music downloads



⁴¹In Diagram 2, the relevant markets are assumed to be narrow, meaning that the iTunes Music Store only faces competition from other music download services that use a FairPlay-secured AAC format. In this case, the ability of third parties to supply this market is assumed to depend on licensing FairPlay technology from Apple. Apple would therefore be in a position to preclude competition in the sale of music downloads — at least where publishers are unwilling to let online retailers offer their content in an unsecured format.

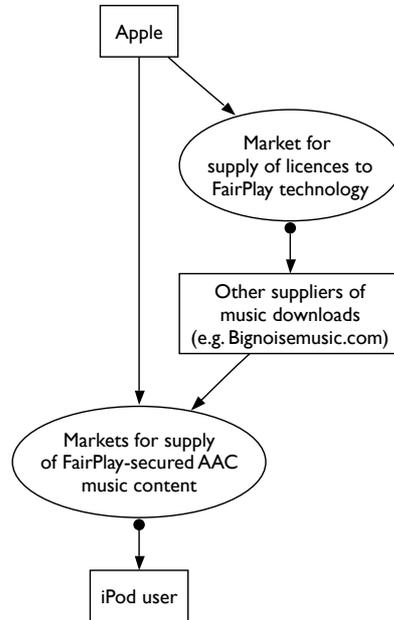
⁴²Thus, if “narrow markets” were found, defined only to include the supply of legal music downloads in FairPlay-secured AAC format, Apple could be in a position to preclude competition through its policy towards would-be licensees of the FairPlay technology. The discussion above indicates that if such licenses were found “indispensable”, it is likely that Article 82 of EC competition law could then be used to open up the FairPlay platform to enable retail competition to develop.

⁴³On the other hand, we see that Article 82 cannot be used to implement compulsory licensing in order to progress simply from a “less focused” form of competition (e.g. competition between the iTunes Music Store and suppliers of music content on CD format) to a “more focused” form of competition (e.g. direct competition between the iTunes Music Store and other retailers offering music downloads to iPod users).

⁴⁴It appears, therefore, that the use of EC competition law to achieve inter-operability in these circumstances would be limited to cases where this is necessary to address the threat that a market will lack competition altogether (e.g.

markets where the iTunes Music Store does not face effective competition from any other suppliers) and does not extend to measures to enhance and change the nature of competition that already exists.

Diagram 2: Narrow markets for music downloads



⁴⁵Finally, it is important to recognise that since different music content will attract different types of users and different consumption patterns, there is no reason *a priori* to believe that the results of a market definition exercise will be consistent across different tracks, artists and genres (e.g. in terms of whether supply on CD provides an effective competitive constraint to supply in FairPlay-secured AAC format). This raises the intriguing prospect that Apple could be required to offer FairPlay licences to other retailers of music downloads, but with this obligation to license restricted in scope to a subset of music content.

Reckon is a consultancy firm providing rigorous and challenging analysis of regulation and competition issues in media and related technology markets.

Visit <http://www.reckon.co.uk/open/iTunes> to discuss the issues raised by this article.

For more information, please contact:

Nicholas Francis	Franck Latrémolière
+44 (0) 20 7841 5859	+44 (0) 20 7841 5858
n.francis@reckon.co.uk	f.latremoliere@reckon.co.uk

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