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Film theft in the UK

Anti-Piracy Task Force: an analysis and
recommendations for action

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1 Chair's foreword

The pirate is often seen as a romantic hero figure, someone who steals but does so in an honourable and victimless way. The truth is very different.

Film piracy is the single largest threat facing the UK film industry today. Film piracy is theft. Like all forms of theft it has damaging financial and social consequences. These effects may be less immediately visible than those that stem from the theft of a physical object – but they are no less harmful as a consequence.

Piracy undermines the economic basis of the film industry by depriving rights holders of the revenues needed to fund future films, and to provide jobs in our industry. Piracy cheats consumers by duping them into paying money for a product which is often of extremely poor quality. Piracy also provides illicit revenues to those engaged in a range of organised criminal activities at home and overseas.

The problem of film theft is now growing at an alarming rate. In 2001, the number of illegal video products seized by the Federation Against Copyright Theft (FACT) was 314,000. This figure almost doubled in 2002 to 607,000 units, but in 2003 the total number of films seized rose to nearly 2 million units; a 223% increase on the previous year. Increasingly these problems are also transferring into the digital world by copying and file sharing on the net. This level of damage and loss to our industry is simply unsustainable.

That is why the UK Film Council, the Government's strategic agency for film, has established an Anti-Piracy Task Force. The Task Force brings together the key stakeholders in the UK film industry to deliver a joined-up anti-piracy strategy in the UK to reduce film theft and to build public awareness of the importance and benefit of copyright protection.

This report maintains that film theft must be tackled using all available means. There is need for urgent action from both Government and the film industry itself, but there is no single magic bullet. The solutions involve, among other things, tougher legislation, education of consumers as to the economic and social consequences of piracy and in the long term a rethinking of our business models to enable consumers to buy legitimately what is currently being stolen.

Also the film industry needs to prepare for future sale and rental of films digitally through broadband and via the internet. This report is intended to help inform the debate. Failure to confront this challenge will also result in serious damage to our film industry.



Of course, the real challenge is to ensure that the legitimate rights of citizens and consumers are safeguarded whilst ensuring that adequate measures are introduced to enable rights owners to protect their intellectual property.

Action is required now – at this point our industry has everything to lose.



Nigel Green
Chairman
UK Film Council, Anti-Piracy Task Force

2 Executive summary

The ability to generate intellectual property increasingly represents one of the keys to the success of a modern economy. The protection of intellectual property rights, such as those generated by film and other creative industries, is therefore one of the keys to enhancing overall economic competitiveness.

Equally, the protection of the rights created by an industry such as film is in the interests of citizens and consumers. Without such protection the economic basis of an industry like film – which depends on a virtuous circle in which revenue is recycled as investment capital for future projects – will be undermined. This will ultimately lead to a decline in the variety of projects made and a reduction of choice and cultural diversity in the market.

In an era when digital technology is increasingly important across the film sector, one of the key challenges for the industry and for policy-makers is how best to maximise the ability of that technology to offer films to consumers with a greater degree of choice and convenience, while also ensuring the protection and enforcement of intellectual property rights.

Equally, it is important to ensure that the potential of digital technology to enhance creativity and innovation is maximised, without undermining the value of rights.

The Government has recently created a Creative Industries Forum on Intellectual Property to discuss how best to meet the opportunities and threats that rapid technological developments

are generating for the UK's Creative Industries sector. It is a cross-Government body – including the devolved administrations – and industry, and brings together key players from across the sector. The challenges posed by piracy and file-sharing are high on the agenda of the Forum.¹

Physical piracy and the illegal transmission of films through file-sharing networks are major concerns requiring urgent attention.

In recent years, physical piracy activity at the professional criminal level in the UK has been increasing. In 2003, the number of illegal video products seized by the Federation Against Copyright Theft (FACT) increased to nearly 2 million units, a 223% rise as compared with 2002.

Physical piracy costs the film industry in the UK hundreds of millions of pounds every year. The UK has one of the highest piracy rates in Western Europe. According to the Motion Picture Association (MPA), only Austria and Germany had a higher percentage of DVD and video piracy in 2003.

The methodology used to quantify the losses caused by piracy is in need of improvement. It is possible, therefore, that current figures could significantly underestimate the impact of piracy on the UK film industry.

The pace of change of digital entertainment technologies is accelerating. This means that any response to the threat of piracy must be



sufficiently flexible to respond to fluid likely changes in technology. The growing threat of copyright theft also extends to digital TV services and the Internet. Peer-to-peer (P2P) Internet filesharing networks are increasingly used as a means of illegally downloading films for free. The growth of P2P and broadband (which facilitates the exchange of large files) presents serious challenges to the attempt to protect the value of film rights.

Equally, however, these developments offer an opportunity to create new business models which provide consumers with a legitimate and convenient means to download films. The development of Apple's i-Tunes service and of other models for downloading music illustrates the ways in which digital technology can be used to provide legitimate services which offer increased convenience for the consumer at very little marginal cost to rights holders.

This report considers both the scale and extent of copyright theft and means of countering this threat. Measures to combat piracy are reviewed under five headings:

- 1 The legal framework;
- 2 Enforcement;
- 3 Security measures;
- 4 Education and consumer awareness; and
- 5 The development of new business models.

As a result of this review, we have made 30 recommendations for Government, the

industry and Government-backed and other stakeholders on how these measures could be improved. The most important of these are summarised below.

Recommendations for the UK Government

- Make it legally possible to extract financial damages from those pirating film by extending the legal concept of 'exemplary' and 'statutory' damages to cases of copyright infringement.
- Introduce a comprehensive package of legislative reforms designed to curb the sale of pirate products at street markets, car boot sales and via other forms of informal trading.
- Make the act of camcording a film in a cinema a criminal offence.
- Through the Creative Industries IP Forum, and working in conjunction with Ofcom and other appropriate organisations, promote the development and spread of open cross-platform global standards related to Digital Rights Management (DRM).
- Recognise that the Government target for "the UK to have the most extensive and competitive broadband market in the G7 by 2005" needs to be supported by complementary measures which ensure protection of intellectual property rights.²
- Ensure that the Patent Office's national IP

enforcement strategy remains sufficiently flexible to respond to changes in the sourcing and supply of illegally copied films.

- Through the European Union, prioritise co-operation with other EU Governments to further harmonise regulatory and anti-piracy enforcement measures.
- Work with other international trade organisations (eg the World Trade Organisation) as appropriate to encourage enhanced protection of intellectual property rights across the globe, especially in those countries which have been identified as significant sources of pirated material.
- Ensure that the Creative Industries IP Forum on Intellectual Property results in a productive dialogue between rights holders and Internet Service Providers on the most effective means to stem piracy.

Recommendations for the film industry

- Work with the Government's Creative Industries IP Forum and individual Government departments to develop a strategy to deal with unauthorised Internet P2P filesharing that fairly balances consumer interests with the legitimate rights of the industry to exert copyright ownership and contain misuse.
- Through the relevant trade associations, work with Ofcom, the UK Film Council and other relevant stakeholders to ensure that regulatory barriers to the development of new, legitimate business models for the online delivery of film are minimised.
- Through the relevant trade associations, work with the *bfi*, Film Education, First Light and other appropriate organisations to help ensure that young people are aware of the damage that piracy can inflict on their enjoyment of films.

Recommendations for other public sector organisations and trade bodies

- Consult with all relevant stakeholders and with research experts on developing improved methodologies to quantify the scale and impact of all forms of film industry piracy, paying particular attention to the impact of Internet P2P filesharing.
 - Develop best practice security procedures for the handling of film prints and digital materials throughout the production process and make these procedures a condition of support schemes administered by the UK Film Council and other public sector funders. These procedures to build upon the Film Print and Digital Disk Management Protocol published by the Film Distributors Association in July 2004.
 - Further develop public campaigns to highlight the dangers of piracy, in particular focusing on the links between piracy and organised crime, the illegal nature of piracy and file-sharing; the threat to the development of creativity and culture in the UK and the dangers of unsuitable material becoming available to children and teenagers younger than 18.
 - Through the UK Film Council, forge links with EFAD (the forum of European Film Agency Directors) to further European co-operation in the fight against copyright theft.
 - The UK Film Council to convene discussions to consider ways to expand the financial resources available for enforcement activities.
- Our report also includes a review of the many lessons to be learnt from the experience of the music industry in the face of digital piracy. Two of these are of critical importance:
- Take into account the industry's relationship with the consumer, and manage consumer expectation more skilfully.
 - Don't wait; act now.

3 Introduction

Piracy has long been a major cause for concern for the global film industry. Since the appearance of the videocassette in the 1970s, the illegal manufacture and sale of pirated movie content has increased enormously.

However, while until recently movie piracy has been a 'physical' activity using analogue technology, the digital revolution has triggered a quantum leap in the means of copying and disseminating copyrighted works. With the advent of the Internet and the accelerated development of 'off-the-shelf' digital entertainment and PC technologies, it is now easier than ever to illegally copy and distribute film content. This applies both to copying by large-scale criminal organisations and to illegal copying by consumers.

In short, the digital age, has brought with it a startling array of threats and challenges. If these threats and challenges are not addressed they could have extremely serious consequences for the film business, and for the diversity of film culture, across the globe. To this end, this report evaluates the task ahead for the UK film industry, as it squares up to the challenge posed by film theft in the early 21st century.

There are five key sections to this report:

- An examination of the current climate of film theft as it impacts the UK film industry, with a special focus on the emerging threats from online piracy and Internet filesharing.
- An assessment of the measures available to combat piracy in the UK; particular attention is given to legal and enforcement methods. This section also includes examination of possible security measures, education and consumer awareness initiatives, and the development of new business models for the industry.
- A review of consumer attitudes and behaviour, and how the film industry might respond to the challenges of balancing the rights of citizens and consumers with those of content providers.
- Preliminary recommendations on how the UK government, film industry and other stakeholders in the film sector, such as the UK Film Council and the Federation Against Copyright Theft (FACT), can work together to deal with the growth of film piracy.
- An appendix which includes an analysis of the music industry's experience – an industry that has suffered significant losses from both physical piracy and file-sharing over the Internet because of a failure to act in a timely fashion.

4 Film theft in the UK: the current climate

The business of film

The film industry is based on a business model which involves a complex series of release windows. This model maximises profits by exploiting film content via three key interlinked dimensions: time, technology and geography.

- **Time** is exploited through sequential release windows tied to **technological** platform or format (essentially, when and how the film becomes available)
- **Geography** is exploited through rights tied to territory and language (that is, where the film becomes available), based on the territorial nature of copyright.

As technology stands currently, this means that a film premieres first in the cinema (the theatrical window), then makes its way onto DVD, VHS video and in some territories Video-CD (the video window), before progressing onto television – first on pay-per-view and subscription television (the pay-TV window), then onto free-to-air television.³ In each instance, exclusive access to a new film ahead of the next ‘window’ in the value chain has been considered by the industry to be critical to maximising turnover.

It also means that a film becomes available in some territories earlier than it does in others. For practical reasons, most films are released earlier in the US (the largest single revenue generating country for film) than Europe or indeed the rest of the world. However, over

recent years there has been a steady reduction in the time lag between the US theatrical release and theatrical release elsewhere – and indeed some movies are now released more or less simultaneously in all key global territories.

This business model has been developed over decades as a commercially viable way of generating a sufficient return on investment to protect filmmakers against the risks inherent in bringing new movies to the market, many of which do not make a profit. Indeed, not every project that is developed becomes a motion picture and not every film that is produced is profitable. According to the MPA, approximately ten projects are developed for every major film project that is “greenlit” (ie, a decision is made to produce a motion picture based on that project), and four out of every ten films do not recoup their total production and distribution costs.

Production costs are not recouped from theatrical revenues alone⁴; rather production costs, as well as overhead and the costs of those projects that have been developed but not produced, are recouped from all media and markets in which the film is exploited. If any medium or market is cannibalised or destroyed by piracy, the loss is felt not only in that market, but in all subsequent distribution markets, and the amount of money available for production of the picture at issue (not to mention recoupment of development costs and losses on non-profitable pictures) are similarly



reduced. The consequence is that these lost revenues must be recovered from other markets (ie prices are increased) or quality reduced, all to the ultimate detriment of the consumer.

An example of how consumers can lose out due to piracy and of how it can threaten cultural diversity comes from Stefan Arndt, the producer of the highly acclaimed German film *Good Bye, Lenin!*. Arndt recently reported that piracy had caused him losses of about 3m and that, as a result, he had had to cancel four film projects by new filmmakers – thus depriving consumers of viewing productions from fresh talent. Prior to the DVD release of *Good Bye, Lenin!* last September, it is estimated that some 770,000 German households owned pirate copies of the film, either downloaded from the Internet or purchased on pirate optical disc.

The film industry is an important component of the UK economy and cultural life. By the end of 2003, according to *Screen Digest* calculations, the sector had a turnover of approximately £5 billion annually.

In 2002, the UK exhibition sector recorded its best box office for 30 years, with 175.9 million cinema visits. Figures released by the Cinema Advertising Association (CAA) showed a 13% rise in admissions over 2001. In 2003, the total revenue was £742 million.

Even more successful in revenue terms has

been the UK video/DVD sector, which is Europe's largest video market. Thanks to the phenomenon of DVD, UK consumer spending on video (both retail and rental) passed the £2.5 billion mark in 2002. By end 2003, the market was generating £2.9 billion. Though demand for other genres, such as children's and music, is increasing, feature film still dominates DVD/video.

The UK also has Europe's largest pay-TV market (and the second largest globally). As of end 2003, there were more than 13 million UK digital television households, largely driven by the strategic dominance of BSkyB's satellite platform, Sky Digital, which accounted for just over half the total figure.

Put simply, exploitation of film via television takes place in three sequential stages: pay-per-view (PPV), pay-TV and free-to-air TV.

PPV is a system whereby consumers order a one-off screening of a film via the remote control (or by making a telephone call) for a single fee. In comparison to the cinema and video businesses, PPV is still in its earliest stages of life. In 2003, PPV movies generated an estimated £96 million in the UK.

Pay-TV in contrast is based on a subscription model. Subscribers to a movie channel package are provided with unlimited access to a range of pre-scheduled film titles. In November 2003, Sky announced that it had signed 5 million subscribers to its movie channels (equivalent to

around 80% of total customers), making its film service the most popular outside of the US.

Free-to-air television is generally considered the final point in the value chain, where films are broadcast on one of the five terrestrial TV channels.

It is worth noting that, while the growing revenues generated by the different distribution elements that comprise the UK film industry are impressive, these gross numbers do not always translate into similarly impressive profitability. Indeed, the economics of the industry can often be fragile, particularly as the cost side of the business continues to escalate. From this perspective, the threat of piracy and the spectre of associated lost revenues is an especially worrying prospect.

Film piracy in the UK

Piracy at any stage in this process can cause the film industry to sustain heavy financial losses across the whole value chain. If consumers are able to acquire and view a film title illegally, the incentive to see and acquire that film by legitimate means is diluted; whether in the cinema, on DVD/video (rented or purchased), or pay-TV. Also, the logical extension of this argument is that the earlier the pirated copy appears in a film's business lifecycle, the heavier the potential revenue loss is likely to be. Essentially, the earlier the act of piracy is, the greater is the number of 'windows' of exploitation that become vulnerable to diminished revenues.

Physical piracy

Physical piracy, as it stands at the moment, is the manufacture and distribution of illegally copied movies on either videocassette or optical disc (mainly DVD, DVD-R and CD-R). These illegal copies are typically traded in high street shops (as 'under the counter' trade), on the Internet, in street markets and car boot

sales, or by vendors operating on the street. Physical piracy is of particular concern to the movie industry, given that the home video market is the most lucrative single window in the film value chain.

There are two main sources for this type of piracy:

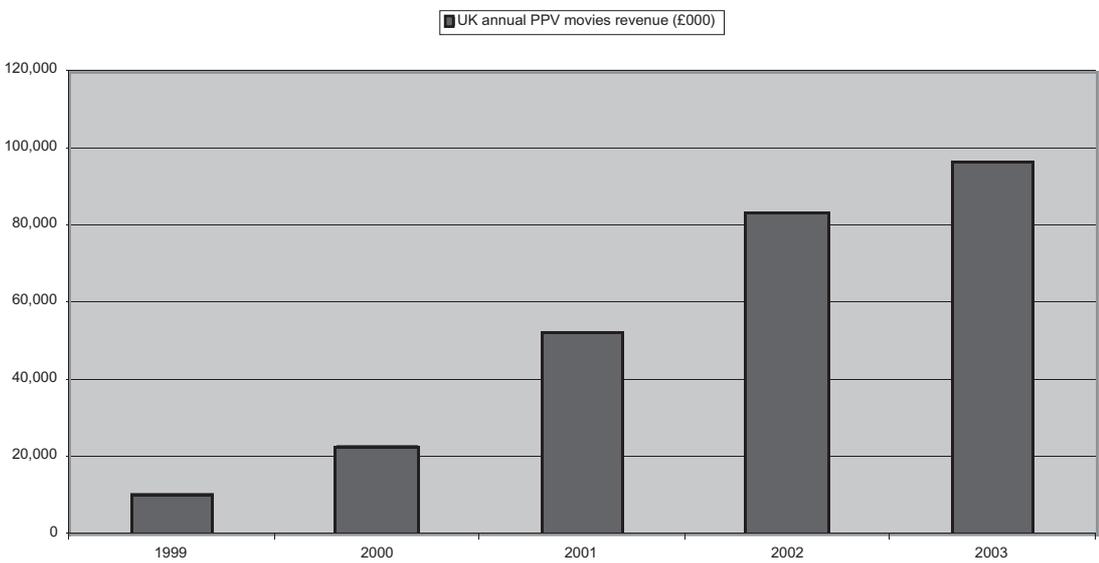
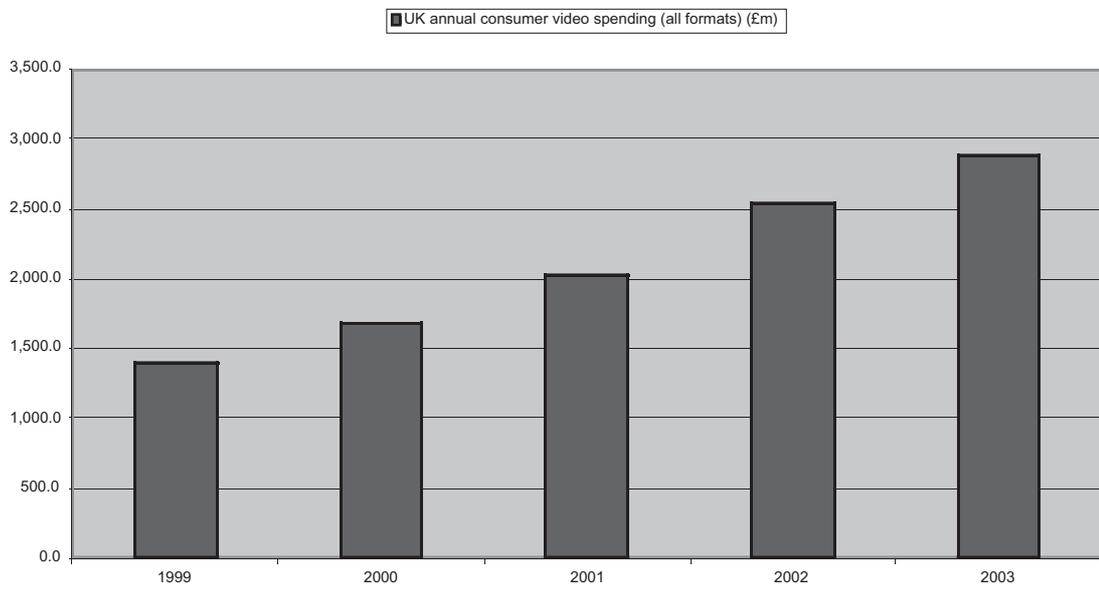
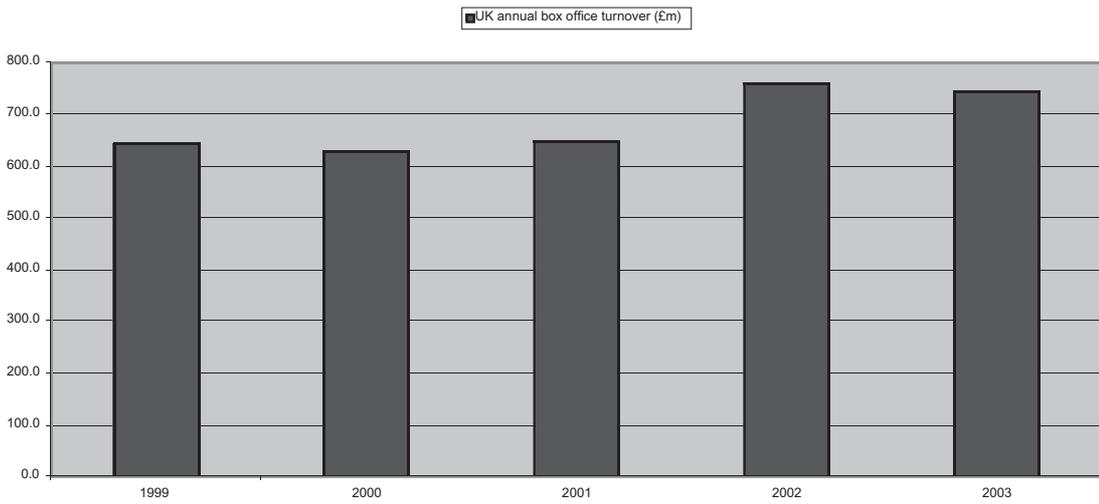
- Professional piracy operations
- Consumer home copying

Professional piracy

Large-scale professional piracy, usually the domain of organised crime, with profits being channelled into other criminal activities, has received considerable legal attention in recent years (examined in the next chapter). The Asia Pacific region has been identified as a key base for importing counterfeit films into the UK. According to the Federation Against Copyright Theft (FACT), the main sources of imported pirate DVDs in the UK are now Pakistan (36%), Malaysia (31%) and China (14%). Pakistan has now become one of the world's leading exporters of pirate optical discs of all kinds and is known to have eight illegal facilities in operation. In 2003, these facilities produced upwards of 180 million discs, far in excess of local market demand. Pakistan's socio-geographical position in the Middle East makes this of exceptional concern. According to local sources, optical disc piracy appears to be taking over from drug trafficking as a low risk high yield source of revenue for criminal elements in Pakistan and, according to some sources, by international terrorist groups.

FACT representatives have stated that film piracy in London is believed to be feeding Chinese organised crime and human trafficking.

More recently, Russia has joined the ranks of those countries supplying large amounts of illegal copies of films. The Motion Picture Association (MPA) has estimated that Russian



Source: *Screen Digest* from industry sources

DVD plants are capable of manufacturing about 200 million DVDs a year. Over the past two years, there has been a major surge of large-scale factory production of DVDs in Russia. The latest numbers indicate that there are now at least 34 DVD lines (both legal and pirate) in the country. Russia has become one of the world's largest producers and distributors of pirate optical discs of all kinds. This production has devastated the domestic market and is now threatening markets throughout Europe and beyond. In 2002, the film industry's local anti-piracy organisation, RAPO, seized over 226,000 pirate DVDs in raids on warehouses and outlets across Russia; in 2003, this number exceeded 1.4 million DVDs. Despite vigorous enforcement activities by RAPO and, more recently, ex-officio actions against pirate DVD plants (four have been raided since the beginning of 2004 and over 3 million pirate DVDs seized), barely a dent has been made in the problem, despite significant political pressure on the Russian Government.

Piracy activity at the professional level in the UK appears to have been increasing. The most reliable indication of this is the rise in the number of counterfeit products seized by FACT. In 2001, the number of illegal video products seized by FACT was 314,000. This almost doubled in 2002 to 607,000 units, but in 2003 the total seized rose even further, close to 2 million units; a 223% increase on the previous year.

Whilst it is likely that FACT's operations are becoming increasingly effective, and therefore successfully confiscating a greater proportion of the pirate product that is distributed, it is very reasonable to assume that the escalating volume of product impounded is indicative of an underlying growth in pirate traffic.

A key trend has been the move towards DVD as the pirates' medium of choice. In 2001, less than 30% of the counterfeit product seized in the UK was on DVD. During 2002, the DVD proportion of the total increased to 57%, while

FACT total seizures of counterfeit products (2003)

FORMAT	SEIZED
VCD	120,722
VHS	86,501
DVD-R	178,577
DVD COMPILATION	2,515
DVD	1,573,510
Total DVD format seized	1,754,602

Source: FACT

in 2003 DVD became the dominant pirate format accounting for more than 90% of all confiscated products – that is, 1.75 million DVD units.

This figure of 1.75 million units compares with around 145 million DVDs sold legitimately in the UK last year – seizures thus representing a little over 1% of legitimate sales in volume terms. However, as discussed below, it is very difficult to extrapolate from numbers confiscated to the number of pirate products actually sold. Nevertheless, based on the MPA estimate that the UK piracy rate is 20%, the number of pirate DVDs sold in the UK last year was 36.25 million. This implies that FACT seized less than 5% of the counterfeit DVDs in circulation.

Of the total seizures made by FACT, about 50% are made as the illegal items enter the country – as a result of joint actions with Customs and Excise authorities⁵. The remainder is divided roughly 50:50 between seizures made while pirate product is being stored (in warehouses, garages, houses, etc) and seizures made at the point of sale.

Pirate product is primarily sold via the 7,000 'occasional sale' venues that are estimated to operate on a regular basis across the UK. These consist primarily of unlicensed street markets, computer fairs and so-called 'car boot sales'.

In addition to imported pirate DVDs, there is also an active business in burned CD-Rs, and DVD-Rs (single use recordable DVDs used with PCs and consumer recorders). In 2003, FACT seized over 178,500 DVD-Rs and 549 DVD-R burners (compared with 85,353 DVD-Rs and 43 burners in 2002). These discs, manufactured in small labs and often mastered from imported pirate product or from Internet downloads, are a fast-growing problem. In May 2003, FACT conducted a controlled delivery of DVDs seized by Customs and discovered a storage facility containing over 100,000 pirate DVDs and a DVD-R burning lab with ten DVD-R burners.

There is a big variation in the quality of pirated content. Since pirated copies are made illicitly, the finished article often has poor visual and audio presentation. This of course largely depends on the source of the original master copy, an issue that is further examined below in the context of Internet piracy, and also in the next chapter in the context of security measures. In many cases, however, the customer who buys a pirated DVD or VHS cassette is left with a poor image captured in a cinema by a handheld video camera, complete with ambient cinema noise and people walking past the screen.

Consumer home copying

Consumer home copying on the other hand poses a far more difficult activity to assess as a potential threat to the film industry. In the mid 1990s the analogue home VCR was the only consumer device that enabled illegal copies to be made in the home. The only way to do this was by 'back-to-back' copying'; connecting two VCRs together via an analogue cable, one set to play, the other set to record.

Less than ten years on, the home recording environment has changed dramatically. The digital revolution has resulted in a variety of new digital recording devices appearing on the

market, most of which are linked either to the TV or the PC and which simplify home recording.

In the TV-based environment, consumer electronics manufacturers launched two key technologies in 2001: the consumer DVD recorder, and the hard disk-based personal video recorder (PVR). In the right circumstances, both technologies can allow the consumer to make perfect or near-perfect copies of DVDs and videocassettes.

With prices heading below £200, the number of UK households with a DVD recorder is growing fast. At the end of 2003, there were approximately 260,000 UK homes with a consumer DVD recorder. In 2003 alone, according to *Screen Digest's* calculations based on market data, there were 187,000 DVD recorders sold. It is expected that the number of UK DVD recorder households will pass 1 million in 2004, with the device becoming the must-have affordable consumer electronics item of Christmas 2004.

The PVR market meanwhile has been slower to grow, but is starting to show significant signs of life as the hard disk recording function is increasingly embedded in digital TV set-top boxes (for example, BSkyB earmarked £20 million in late 2003 to push its 'Sky+' PVR service), VCRs and DVD recorders. *Screen Digest* estimates that there were 250,000 PVR households in the UK by the end of 2003.

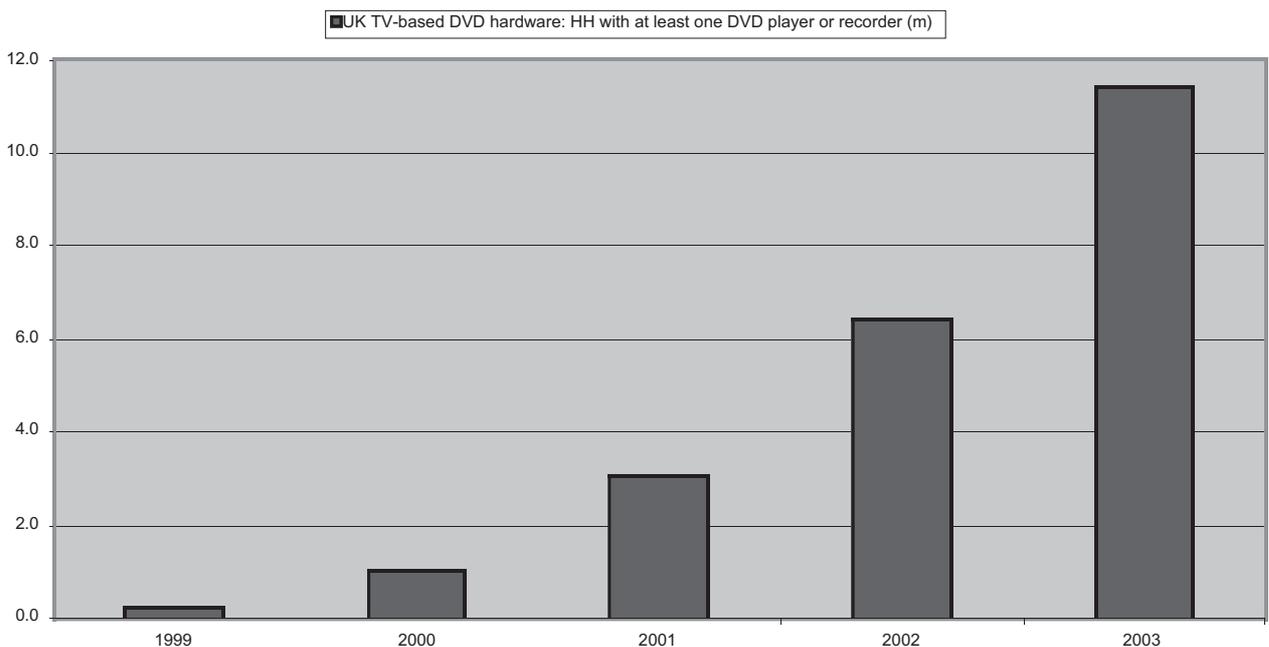
Home copying of DVDs and other digital audiovisual content is in part possible due to the phenomenon known as the 'analogue hole'. This refers to the fact that all connections to TV sets (as well as to other devices like VCRs) are analogue. Regardless of the fact that modern home entertainment appliances like DVD players and pay-TV decoders are digital, their output must be converted from digital to analogue in order to display them on a TV set. Moreover, because DVD players are optimised to deliver the best possible (analogue) picture and sound quality to the TV set, they can

potentially provide a high-quality analogue source for copying to a blank DVD. The resulting copied DVD will have none of the digital copy protection of the original DVD and can thus be used to make an infinite number of further perfect digital copies of this single analogue copy. Exploitation of the 'analogue hole' in this manner can also be used to make digital file copies for further circulation on the Internet.

For DVD, there are two main technical options for 'plugging' this 'analogue hole'. One is a proprietary copy protection system developed by the firm Macrovision, which has also been used for many years to protect some pre-recorded VHS releases. Some, but by no means all, DVD movie releases utilise this Macrovision system. The other option is a non-proprietary system (ie free to use without paying a further licence fee) called CGMS-A (Copy Generation Management System for Analogue signals) that is part of the DVD specification. However, some DVD players do not correctly implement CGMS-A and, therefore, do not properly signal to recording devices whether or not a signal can be copied⁶. These players effectively make this form of copy protection useless⁷.

The bottom line is that it is possible to make high-quality copies of some commercial DVD movies by connecting an off-the-shelf DVD player directly to an off-the-shelf DVD recorder or PC-based DVD writer with a simple cable.

The PC environment has developed at an even faster pace. Advances in computer peripherals and software allow for affordable and efficient recording (usually termed 'ripping' in the PC environment) of DVDs using a standard home computer. The content can then be burnt onto blank CDs or DVDs using off the shelf CD/DVD writer devices, which now come as either standard with new PC purchases, or can be acquired at retail for around £99. Copying of DVDs using a PC can either be done via the 'analogue hole' described above, or using technology that allows a direct digital copy of the DVD to be made. One company has sold almost 1 million copies of a software application that enables DVDs to be copied with a PC,⁸ and similar software can be found for free on the Internet⁹. The threat posed by the home computer comes into its own in the context of Internet piracy (see below), since it makes it very easy for the consumer to generate physical copies (CD or DVD) of illegal movie downloads.



Source: Screen Digest

In February 2003, research firm GfK conducted a survey¹⁰ of 10,000 German households, looking at consumer reasons for buying CD/DVD recording hardware, and their recording habits. Of those surveyed, 22.5% responded that recording downloaded movies onto an optical disc was at least an 'important' reason for purchasing the hardware. Meanwhile, 55.7% responded that they record downloaded films from the PC to a blank CD.

A subsequent study by GfK for the German Federal Film Board in September 2003 concluded that 58.5% of downloaders burned the films onto CD-R discs and 7.4% burned them onto DVD-R discs.

However, consumer home recording raises difficult issues in a public policy context. The issue of commercial versus private copying goes to the heart of how the concept of piracy itself is defined. It seems difficult to argue that casual home copying is an activity with serious deleterious commercial consequences. At what point does legitimate copying end and piracy begin? For example, if a consumer purchases a legitimate copy of a DVD, and then makes a 'back-up' copy for personal use, is this to be considered unlawful piracy or a legitimate right? Indeed, should there be any concept of legitimate home copying at all?

The issue of the balance between individual freedom and the interests of the film industry is a sensitive one. This is addressed more thoroughly in the examination of the legal measures to combat piracy.

The loss to the industry

Measuring the losses to the legitimate industry from piracy – even physical video piracy which is more established – is an extremely difficult exercise. According to FACT¹¹, actual revenue loss to the UK film industry at a retail level in 2002 was £400 million, significantly higher than the figure in 2001, which was £330 million. FACT equates this figure to mean that

UK piracy levels are somewhere between 20-30% of the video market. According to the MPA, 2001 and 2002 estimated piracy levels in the UK were fairly steady at around 18%, with the level rising in 2003 to 20% (with estimated US industry losses rising from \$40 million in 2001 to \$120 million in 2003). These apparent discrepancies over figures underline the fact that coming up with reliable estimates is a difficult – but crucial – task.

Because the scale of the losses occupies such a central role in the arguments, the imperative to develop more robust and consistent methodology is stronger than ever. There is a good case for having a defensible methodology based on reasonable assumptions that is used on a consistent basis by all organisations concerned. Current methodological approaches used by the industry to measure the impact of piracy are in urgent need of revision.

For instance, the widely quoted concept of a video 'piracy rate' can be a difficult one to pin down and is certainly open to misinterpretation. The MPA maintains that its piracy rate is a measure of volume and a percentage of the sum of the legitimate and pirate markets.

In the past there may have been a tendency to assume that all pirate video copies sold at a pirate street price represent a lost legitimate sale at a full retail price – and calculate the loss accordingly. However, it appears extremely unlikely that such a one-to-one relationship exists. In other words, it is far from self-evident that a consumer who buys a pirate DVD at £5 would have bought a legitimate copy at £15 if they had not been offered the pirate version. Nevertheless, the Chancellor of the Exchequer put the average value of every DVD seized by HM Customs & Excise in 2003 at £15.25 and the corresponding average value of videocassettes seized at £8.69¹².

There is also some uncertainty over exactly what element of lost business is being

calculated. Some sources quote losses in terms of retail sales values, while the MPA's version of losses appears to equate only to losses suffered by the US film industry itself. This seems to be based on an estimate of the US share of the legitimate market and the wholesale price (rather than retail price) of legitimate products.

For example, the MPA's stated methodology on calculation of losses¹³ says that "the number of stores that rent pirate video product and the number of shops and vendors that sell pirate video product are multiplied by the average number of pirate video product rented or sold per shop or vendor each year". However, no explanation is given as to how the number of pirate vendors is arrived at, nor is it indicated how the average number of transactions per pirate vendor is estimated.

The MPA then goes on to take "the resulting total number of pirate video products sold and rented each year in the country [that] is then multiplied by the percent of pirate video product that *would have been sold or rented legitimately*" (emphasis added). Again, no explanation is given regarding the numerical assumptions that underline the relationship between sales of pirate product and potential sales of legitimate product that could have been made in the absence of the illicit trading. The MPA has acknowledged that the current position is unsatisfactory and at present its Research Department is soliciting feedback from MPA members on a revised methodology.

One of the most reliable and methodologically robust indicators of the scale of the physical piracy problem is the escalating number of pirate copies seized by FACT in the UK and by corresponding enforcement agencies elsewhere. However, judging reliably the ratio between the number of pirate copies confiscated and the number that are still sold through to the public by pirate traders is extremely challenging. Moreover, the precise nature of the relationship between pirate transactions and corresponding lost legitimate

transactions is worthy of further investigation.

Reports on the impact of physical piracy tend to focus exclusively on the damages to home video revenues; there have been few attempts to estimate the impact of any forms of piracy on theatrical film revenues. However, there is likely to be an impact on cinema box office from Internet downloads that occur before, or during the exhibition window (see next section), as well as from the circulation of physical pirate products that circulate in a similar time frame. This can be particularly deleterious for so-called 'second run' cinemas (those that specialise in showing films after their initial theatrical screening run). Indeed, the Cinema Exhibitors Association reports that some UK exhibitors are already suffering from illegal pirate 'competition'. Cinemas that serve smaller communities are particularly at risk.

The bottom line is that lost revenues to the UK film industry from physical piracy undeniably runs into the hundreds of millions of pounds. Furthermore, current estimates of industry losses from physical piracy do not take into account the impact of home copying – for example, where one person buys a DVD and makes multiple copies for friends and family using a PC or DVD recorder. Nor do they take into account the impact of Internet piracy (see next section)¹⁴.

There is also a wider point about the affect of piracy, not just on retail sales, but also on the longer-term value of film rights, not least for the independent producer. This may be in relation to a specific instance of piracy. For instance, the distribution of pirate copies of a film sourced from a pre-release preview screening could completely destroy the prospect of making sales of the rights to that film to local distributors in one or multiple territories where the pirate copies are circulating.

At a macro level, fears about the negative consequences of piracy could undermine confidence in the entire film industry sector, not least amongst the investment community.

This could result in real falls in the valuations of entire companies and particularly to the long-term value of film libraries and film rights generally.

Moreover, commercial losses suffered by the film industry due to piracy will weaken the economic viability of the entire sector and ultimately result in the loss of jobs throughout the value chain (studios/infrastructure, production, post-production, distribution, exhibition, retail, etc). Reduced revenues will also result in reduced tax revenues (both corporation tax and VAT) for the Government. The Chancellor of the Exchequer currently makes no estimates of the losses it suffers from film piracy¹⁵.

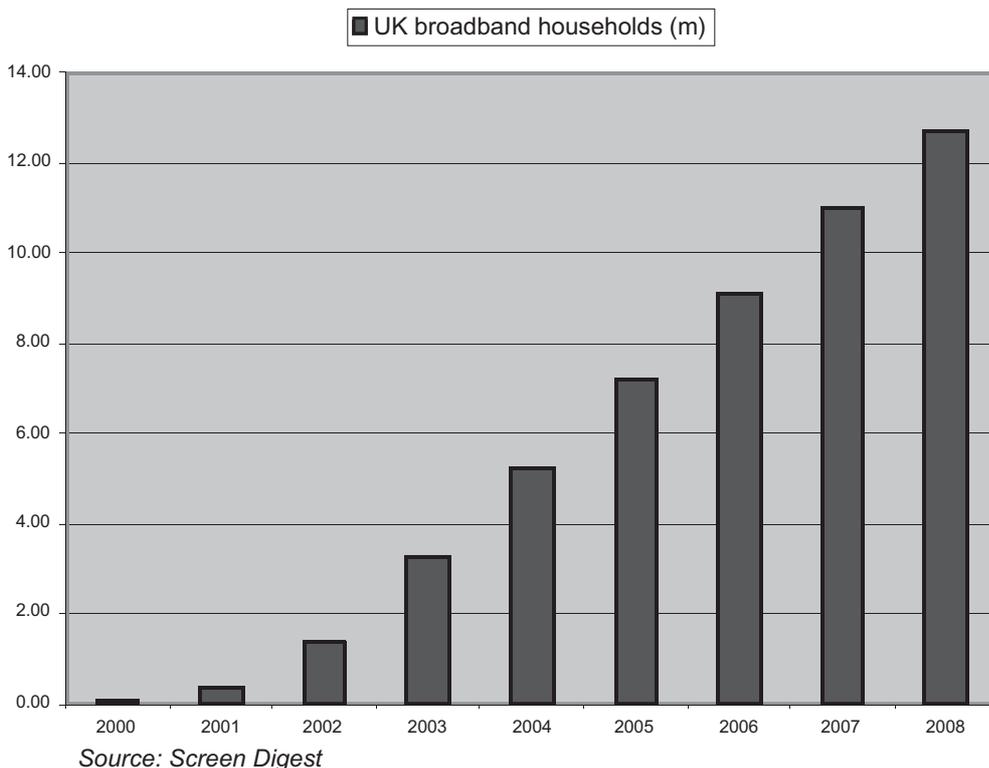
And not all 'loss' from piracy is financial. Film also plays an important cultural and social role in society. For example, one of the problems caused by pirated titles finding their way into UK homes is that they will not have been certified by the British Board of Film Classification (BBFC). This is especially true of those titles that hit the streets, or are available for download, ahead of their UK theatrical

release. This creates serious issues of underage access to unsuitable films, especially in the Internet environment (where many users are under 18).

Internet piracy

The UK broadband market is growing very rapidly. By end 2003, there were over 3 million broadband enabled UK households, a number set to pass 12 million by 2008 – by which time, according to *Screen Digest*, the UK will have the largest number of broadband subscribers in Europe. Significantly, broadband has brought with it a new threat to the film industry – the prospect of Internet piracy.

One line of argument from sceptics has been that, unlike music files, feature film files are too large to be downloaded efficiently. Therefore, they contend that there is not only an aesthetic disincentive ("who wants to watch a movie on a PC screen?"), but also a technological one ("who wants to wait several hours to download a movie when it is much easier to go to the cinema/video store/retail outlet?"). Many also



argue that, while most music consumers like to play the same content multiple times, film consumers want to watch a movie only once or twice – and therefore have less incentive to download them. As technology develops, these arguments become less persuasive.

In November 2002, the regulatory body OFTEL conducted a broadband survey that found that only 1% of subscribers had signed up to the service with movie downloading as their main intention. This equated to around 10,000 broadband homes at the time.¹⁶

A year on, the situation seems to be changing. Cable operators NTL and Telewest are now offering higher broadband speeds (1Mbits/s and 2Mbits/s respectively) that enable the downloading of movies in around two hours, with British Telecom already piloting its own 1Mbits/s connections. And according to a 2004 survey¹⁷ commissioned by the British Video Association (BVA), Film Distributors' Association (FDA) and British Phonographic Institute (BPI), 4% of weekly UK Internet users have illegally downloaded a feature film. Figures show a corresponding 2% drop in DVD purchases with a calculated loss in sales of £46 million in 2003¹⁸.

Also, digital compression technology is improving, meaning that movie files are getting ever smaller. New compression formats¹⁹ are able to reduce a 4.7Gb DVD down to a file size as low as 700Mb – small enough to download in two to three hours using a standard 512Kbits/s broadband connection, and to fit on a standard CD-R. On a normal TV set, the downloaded movie looks much like a VHS recording (or sometimes better).

Access to free content appears to be a major source of motivation for those who seek out illegal copies of a film. In GfK's 2003 German survey, 71% of respondents said that getting the content for 'free' was an important reason for downloading feature films. The threat of Internet piracy has been sufficiently serious to

persuade the US studios to investigate and invest in business models exploiting direct Internet movie delivery – resulting in the launch of 'Movielink' in November 2002, supported by all the major studios except Fox.

P2P filesharing

Internet piracy has two main public distribution 'channels': specialist websites, and peer-to-peer (P2P) filesharing networks. Whilst the former, such as Film88.com, have been easy to identify (operating out of countries such as Iran and Malaysia via the Netherlands) and shut down, the latter have been far more anonymous, difficult to combat and are exploding in popularity.

However, before pirate content reaches these public channels, it is usually distributed via more secretive means. Typically, when a stolen media file is first uploaded to the Internet it is made available on a private site, access to which is closely guarded by a relatively small group of hacker-type enthusiasts. The next stage is usually for the file to be communicated further via news group and chat 'channels'. Only then is the file usually uploaded to P2P networks. The US anti-piracy company MediaDefender estimates that only 20,000-30,000 people have access to these private sites, while around 100,000 use the relevant news groups²⁰. Only when the file in question reaches the P2P networks does distribution explode. The most popular P2P filesharing client Kazaa has around 3 million users at any given moment.

P2P filesharing is a relatively new phenomenon with its roots firmly planted in the late-1990s. For a whole generation of young technology-savvy adults and teenagers, file sharing, whether legal or otherwise, is now an acceptable mode of obtaining film and music content. Alongside this development the number of homes that are able to burn these films onto CDs and DVDs has also been rising –

thus the threat is physical as well as virtual.

P2P networks have gone through at least three main generations of technology in their short history, each new one making the sharing of large movie files easier and at the same time becoming harder to police. Napster was the original first-generation P2P network and application that popularised the concept to millions of users around the world. This was followed by the second-generation network Gnutella that advanced the technology by removing the requirement for the centralised servers used by Napster. Although the latter was efficient and user-friendly, it made policing easy – just a question of shutting down the central servers that indexed the files held on users' own machines. By contrast, the Gnutella network was completely decentralised and connected users directly to each other without the need for a centralised server.

Third-generation P2P technology has taken the Gnutella concept a stage further by improving the efficiency of the networking process and enhancing file transfer speeds as well as cutting the time required to search for desirable files. The most important third-generation P2P network is called Fasttrack. A number of client applications have been developed to use this network, including Kazaa, Grokster and Morpheus.

Sharman Networks, the company behind the Kazaa application, has recorded over 250 million downloads of its software worldwide, citing 60 million regular users around the globe. Though there has been a recent dip in Kazaa's numbers, this has been attributed to the appearance of a new generation of applications. This latest generation of applications are specifically designed to facilitate the downloading and sharing of large files, such as films. Examples of these new protocols are BitTorrent, Overnet and eDonkey²¹. The latter saw its user-base triple to 1.8 million in 2003.

It should, however, be noted that the new P2P services are claimed not to be solely designed for illegal distribution of content – one of the factors that have made legal attempts to shut them down largely unsuccessful – so far²². Sharman Networks is an example of a P2P company encouraging legitimate use of its product. In 2003, its US-based digital content partner Altnet struck a deal with IndiaFM.com, a popular Bollywood website, to make available paid-for downloads to Kazaa users of movies from 35 Bollywood producers. The first title, *Supari*, was made available in November 2003 for \$2.99. The downloaded file is encoded by proprietary copy-protection solutions, and self-destructs after viewing.

But the fact is, in the P2P environment, getting illegal movies for free on the Internet has never been easier. Within a single day of release, *The Matrix Reloaded*, which had a tight security cordon drawn around all preview screenings (including the banning of all electronic devices), was available on Kazaa, and attracted approximately 200,000 downloads within the first week. Similarly Disney's *Finding Nemo* and Fox's *Daredevil* found themselves on P2P networks within one day and three days respectively of their theatrical release. One of the earliest victims was *Star Wars Episode II: The Attack of the Clones*, available in 2002 on P2P networks a week before its premiere.

The emphasis from downloaders throughout appears to be access to new and blockbuster content. In December 2003, according to BayTSP, a digital tracking firm serving some of the US studios, *Terminator 3: The Rise of the Machines* was the most widely available film on P2P networks, with 57,008 locations available for download (this, says the company, was a slight decline from 62,827 locations in November).

P2P filesharing also seems to be acting as a 'preview' process by some downloaders. In 2003, for example, Universal Pictures' *The Hulk* was leaked onto a P2P filesharing network

more than two weeks before its official premiere whilst special effects on the movie were being completed. The critical panning of the movie that followed on Internet chat sites was, according to sources at Universal Studios, responsible for what it called a relatively poor \$62.6 million opening weekend in the US (which ironically was a record June opening weekend). Notably, it was an opening that was disappointing enough to knock 12% off Marvel Comics' share value on the New York Stock Exchange.

Sources of internet piracy

The Hulk case highlighted another significant issue. An individual involved in marketing the movie leaked the copy that found its way onto the Internet. The culprit was eventually tracked down by the FBI and prosecuted. But the affair cast light on the extent of leaks within the post-production and distribution process.

According to a recent study²³ by AT&T Research and the University of Pennsylvania, over 77% of all illegal movies on P2P networks are the result of 'insider leaks'. That is, employees somewhere along the filmmaking chain ripping and uploading 'screener' copies intended for non-commercial use. The AT&T study conducted an 18-month empirical analysis of P2P filesharing networks, looking for a random selection of film titles in the US box office top 50 between 1 January 2002 and 27 June 2003. The resulting data, compiled from an eventual 312 movies, were interesting. Of all films, 77% were sourced back to within the filmmaking and distribution process, as set out above. According to the same piece of research, over 90% of movie content available on P2P networks is before the US DVD release.

The AT&T listed the following as points of risk in the filmmaking chain:

- Unauthorised copying of a movie in the editing room or nearby in the supply chain, whether first cut or final product. These copies

often have small differences from the released version or include incomplete audio or visuals.

- Unauthorised copying of a critic's advanced copy of a movie. This may have the text "Screener copy only, property of some name" appearing on the screen occasionally.
- Unauthorised copying of a promotional or preview screening copy. This may be marked in a similar fashion to critics' versions.
- Unauthorised copying of an awards judge presentation of a movie. Copies may be marked with the text "For your consideration".
- Digital 'through-the-air' video recording by a projectionist at a cinema with aspect-correct video, suitable exposure, and direct audio. These copies have highly variable video quality, but can often be very good.
- Unauthorised copying of a consumer medium such as DVD or VHS at the factory or any other point prior to sale. These copies are unmarked and of near perfect quality.

The MPA has taken issue with the AT&T research, pointing the finger more squarely at the camcorder pirates in preview screenings, who are reckoned by the MPA to be responsible for 90% of all pirated films. According to the MPA, the AT&T research is flawed because the survey relied heavily on a single, unnamed Internet portal to identify which films were online and by confining their analysis to movies available 100 days after release, the researchers excluded the major source of online piracy, namely camcords at theatrical screenings. This resulted in the exclusion from the analysis of poor quality copies, primarily those deriving from use of camcorders in cinemas. According to the MPA, between May 2002 and May 2003, over 50 major movie titles were stolen by camcording prior to their theatrical release in the US. The MPA has also criticised AT&T's definition of industry "insider", suggesting it encompasses too broad a universe of people, including couriers, ad agencies and cinema projectionists.

Some argue that this line of argument is inconsistent with the MPAA's efforts in 2003 to prevent the circulation of so-called awards 'screeners' (preview copies of films on DVDs or VHS traditionally sent to voting members of various industry guilds and associations, such as AMPAS and BAFTA, by distributors). It is argued that this move represented an implicit criticism of the film industry itself.²⁴ It also does not seem to tally with some empirical evidence showing downloads to be clearly copies of a DVD, or telecined during the latter stages of the filmmaking process (see the next chapter for further analysis). Meanwhile, BayTSP, the company that investigates unauthorised movie downloads on behalf of several studios, says that the largest volume of movie files available on P2P networks are copies of commercial DVDs – a finding that appears to contradict the AT&T research. Clearly this is a sphere that requires much closer scrutiny.

Perhaps the most interesting proposal to emerge from the AT&T report, one which the MPAA appears to be looking at in terms of the US film industry, is a 'chain of custody' practice, similar to that used by the Federal Bureau of Investigation (FBI) for sensitive intelligence and evidence. Such a procedure would track a pre-release copy of a film at all times, as well as designating individuals responsible throughout the whole process.

The loss to the global industry from Internet piracy

Internet piracy cannot, by its nature, ever be quantified territorially – the repercussions are global. At peak periods, Kazaa (currently one of the most popular P2P services) attracts almost 5 million simultaneous users worldwide sharing over 1 billion files. According to BigChampagne, a firm analysing global P2P Internet file sharing trends that spent three years monitoring active file sharers, 7% of all files traded via P2P networks are feature films.

A number cited by organisations such as the MPA, from US research firm Viant²⁵, is that 400,000 movies are downloaded illegally on P2P networks every day. However, the methodology underpinning that number has been criticised by experts – and the estimate is anyway now very old. The bottom line is that it is extremely difficult to quantify the financial impact of illegal Internet downloading.

However, the seriousness of the threat posed by P2P filesharing has been finally recognised by the US studios at least. Serious enough to move the studios to foster the development of legal online movie services, such as Movielink and CinemaNow, to encourage people away from illegal P2P channels. And serious enough to prompt a number of studios to employ 'cyberspace investigators' such as BayTSP. The latter tracks 1.5 million-3 million copyright infringements a day worldwide. Moreover, the MPA has mounted a global campaign to curb Internet piracy. In 2003 alone, over 225,000 infringement notices were sent to Internet Service Providers worldwide by the MPA's Worldwide Internet Enforcement group, and local programmes around the globe have conducted large numbers of raids and initiated many legal actions against Internet pirates.

It is worth noting that some consumer research indicates that movie downloading actually has a positive impact on the film industry rather than a negative one. For instance, a study of US Internet users conducted by Yankee Group²⁶ found that 8% had downloaded one or more films in the previous three months. These 13.5 million individuals downloaded an average of 3.6 movies per month, with the 13-24-year-old demographic being the heaviest culprits. However, when asked about their cinema-going and video rental/purchase activity after they started downloading, a greater proportion of respondents from this heavy-downloader group indicated that their frequency of cinema-going and video rental/purchase had increased than the percentage that said they had

subsequently reduced this activity. Overall, 86% of 13-17-year-olds and 87% of 18-24-year-olds who download say they now rent/purchase video the same or more frequently than they did prior to the start of their downloading.

However, a similar survey conducted by the BVA, the FDA and the BPI in the UK found evidence of a negative impact on legitimate business. In this survey, 18% of film downloaders said that they were buying fewer VHS cassettes, whilst 10% said it was adversely affecting DVD buying. Similar percentages seem to operate for the rental market: 13% of those surveyed said they were renting fewer VHS tapes, with again 10% were renting fewer DVDs.

Indeed, subsequent UK research by TNS for the BVA shows that downloaders are heavier DVD buyers, but that their purchases have been reduced by 2% due to downloading. This suggests that, overall, downloading is having a detrimental effect on consumer DVD buying habits.

In another recent study by OTX in conjunction with the MPA²⁷ covering eight countries, 26% of users admitted buying fewer videos and 17% admitted attending cinemas less frequently. This average figure was inflated by particularly high results in Korea; the percentage of UK downloaders admitting to reduced movie buying was 12%. Moreover, respondents were not asked if they bought more videos or attended the cinema more frequently after they started downloading. The incidence of downloading movies was found to be higher in the UK than Germany, Australia and Japan, but lower than in Korea, France and the US.

It is possible then that some P2P users may be using online downloads as a way of trialling film content – subsequently visiting the cinema or purchasing the DVD if they like it. This is an area that requires further investigation, especially as the cinema and DVDs have fairly unique selling points (the theatrical experience

and DVD quality/extras respectively). Nonetheless, since some consumers tend to view films just once, this may be a moot point.

Pay-TV piracy

Pay-TV operators use technologies called conditional access (CA) systems to attempt to ensure that only authorised paying customers can access their television signals. In addition to securing payment from subscribers for television services, these CA systems are also intended to ensure that signals are kept within the territorial boundaries for which programme rights have been granted to the broadcaster. They also perform the function of enabling adult subscribers to control the viewing of children and teenagers aged under 18 and protect them from viewing unsuitable material.

CA systems are sophisticated and expensive technologies that require significant and ongoing investment by operators. Indeed, pay TV broadcasters routinely spend around 5% of their revenues on security²⁸, which can total very sizeable sums.

Like any other technologies designed to protect valuable audiovisual content, the CA systems used by pay-TV operators have come under attack by hackers. The latter have usually been seeking commercial gain by selling their circumvention solutions to consumers attracted by the prospect of gaining access to high value pay-TV packages for a much reduced sum. Most of the major European pay-TV operators utilise a smart card-based CA system²⁹. This involves bona fide subscribers each being issued with a unique smart card on which information about their viewing entitlements is stored. Once activated, the smart card communicates with the decryption system in the pay-TV set-top box and the appropriate channels can be decrypted and decoded for viewing.

Most pay-TV piracy in the UK and the rest of Europe has involved the sale of counterfeit

smart cards of some form or another. The now-defunct British digital terrestrial television (DTT) pay-TV operator ITV Digital was hit particularly badly by the circulation of pirate cards that circumvented its CA system. At the peak of this problem, pirated smart cards were widely distributed for a one-off payment of £20-£30, often via street market stalls. These enabled unlimited viewing of pay TV packages that should have cost around £30 a month. The Chief Executive of ITV Digital estimated that this smart card piracy cost the company in excess of £100 million in lost revenues³⁰. Indeed, ITV Digital insiders consider this problem to be one of the major contributors to the company's demise.

Because of the levels of technological sophistication generally required to defeat CA systems, the distributors of pirate smart cards tend to be well-organised 'professional' criminals. However, the relatively easy availability of 'how-to' information on the Internet on the subject of CA system hacking means that there is a spectrum of pirate activity – ranging from casual hobbyists who circulate their hacks amongst family and friends, via small-scale criminal production, all the way up to 'industrial-level' criminal activity.

The organisation responsible for combating pay-TV piracy is the European Association for the Protection of Encrypted Works and Services (AEPOC). While AEPOC concedes that "it is quite impossible to evaluate the actual size of a so pulverized and mushrooming illegal phenomenon", it goes on to state "it is reasonable to say that at least 1 billion is spent yearly in the EU to buy pirate cards and/or to get manipulated decoding apparatuses"³¹. There is no explanation or methodological justification given for this number in the source document, but AEPOC suggests that the problem is getting worse not better. It says that the comparable spend in 1996 was more than 200 million³².

Pay-TV piracy clearly affects the film industry in

the UK. The sale of pay-TV and pay-per-view rights for British films to broadcasters around the world has become an increasingly important revenue stream and this is directly threatened by signal piracy. The structure of deals for film sales to pay-TV operators are normally tied to subscriber numbers, so a reduction in the number of paying subscribers will often directly impact the revenues returning to UK film companies.

Notwithstanding the fact that the UK has a strong pay-TV broadcaster in BSkyB, it is certainly the case that the economics of the pay-TV broadcasting business can frequently be fragile; there have been a number of company failures as well as a general trend towards industry consolidation. There is no doubt that piracy is a contributing factor to this difficult operating environment. When pay-TV broadcasters are under financial pressure, they generally have less money to spend on the acquisition of movie packages – thus directly impacting the revenues returning to film companies. Moreover, the failure of operators – such as ITV Digital – reduces the level of competition in the market, which in turn will often tend to reduce the value of film rights (as there are fewer parties bidding for the rights).

Another dimension to pay-TV piracy is the impact on territorial exploitation of film rights. When signal piracy allows widespread viewing in unauthorised geographical regions, this may reduce the possibilities for the same film rights to be sold to legitimate operators in those 'over-spill' territories.

The 'free' availability of movies via pirated TV services may also help reduce the market for other films in other formats, particularly the sale and rental of films on DVD and video.

From the perspective of content regulation, it should also be noted that the circumvention of CA technology removes the ability of pay-TV operators to control access to potentially offensive programming that could therefore be more easily viewed by minors.

Piracy in the UK in a European context

Compared with its European neighbours, the UK has a significant piracy problem. According to the MPA, only Austria and Germany had a higher percentage of DVD and video piracy in 2003. For example, in terms of actual financial loss to the US film industry, given the size of the UK video market, only Italy had a worse record. In 2003, according to the MPA, piracy in the UK lost the US film industry \$120 million, whilst piracy in Italy accounted for a \$140 million loss.

Piracy is increasingly becoming a topic of interest for the European Commission, the European Parliament and the EU member states' governments. Important results have so far been achieved.

On 21 March 2003, the EU Heads of State and Governments at the European Council approved a resolution against piracy and counterfeiting. The declaration: '... calls upon the Commission and Member States to improve exploitation of intellectual property rights by taking forward measures against counterfeiting and piracy, which discourages the development of a market for digital goods and services...'

Subsequently, on 5 June 2003, the European Parliament adopted a declaration against piracy and counterfeiting. It was sponsored by British MEP Arlene McCarthy and signed by 321 MEPs. It was a major political signal of a tougher attitude toward piracy in Europe. Finally, on

March 9, 2004, the European Parliament voted (by 330 votes to 151) to approve the text of the EU Enforcement Directive, which will be finally adopted by the Member States on 26 April 2004.

The EU Commission originally proposed the urgent adoption of a Directive on the enforcement of intellectual property rights in its "Follow-up Communication" of 2000. This was a follow-up to the Commission's Green Paper on Piracy and Counterfeiting of October 1998. When the Commission's text finally appeared in January 2003, it had been restricted and was limited to infringements "committed for commercial purposes" or causing "significant harm to the right holder". As a result of pressure from rights holders, however, many features of the draft were removed or reduced, resulting in legislation which rights holders believe substantially improves their position in civil enforcement proceedings although it still does not fulfil all their aspirations. EU Member States have 15 months in which to implement the Directive in national law.

Member States were adamantly opposed to the inclusion of any penal provision in the Enforcement Directive, there being at present litigation in the European Court of Justice as to the competence of the Community to pass criminal legislation. However, the EU Commission's Directorate-General for Justice and Home Affairs is planning to propose a Council Framework Decision to set minimum thresholds for sentences in cases of piracy and counterfeiting and to improve police and judicial co-operation in this field.

MPA Piracy Metrics

Country	Rate of video and optical disc piracy	Estimated losses for the US film industry
UK	20%	\$120 million
France	10%	\$65 million
Italy	20%	\$140 million
Germany	22%	\$100 million

Source: MPA

The future digital home

The development of digital entertainment technologies is accelerating. Consequently, any response to the threat of piracy must take account of the likely future directions of technology development.

One key future development is likely to be a blurring of the boundaries between media that have hitherto been distinct. For instance, while broadband Internet has to date primarily been associated with the PC, it is probable that broadband will increasingly be a feature of the TV space as well.

In the future, new digital TV set-top boxes and receivers will increasingly be designed in such a way that Internet services are integrated seamlessly into the package. More and more they will also start to include computer-type hard disks and ever-larger measures of processing power. As well as being connected to the open Internet, these devices will progressively be connected to networks inside the home. These home networks will eventually come to link all media devices in the home, be they networked media products like TV receivers or packaged media devices like DVD players.

Over the longer term, the hard-and-fast distinctions between TV devices and PC devices are likely to blur. Instead, homes will likely be furnished with a multitude of screens of different shapes and sizes. These will probably all be connected to at least one 'fat pipe' down which will flow all sorts of digital signals, including those we today categorise as TV and Internet.

As far as piracy is concerned, it will potentially be far easier to move unauthorised copies of films around the home from one device to another. It will also be possible to download media files from the Internet directly to a TV device, rather than the current situation where a downloader has to use a PC and either watch the movie on a small PC screen or copy it to

blank media before viewing on a DVD player.³³

There will also be an increasing trend towards portable devices that allow audiovisual media to be consumed outside the home. Products that allow hundreds of films to be recorded on a video equivalent of the iPod hard disk-based music player and viewed on the move are already on the market. The emergence of new categories of device like this is often unanticipated by regulators and technologists alike, the net result of which is that they will sometimes ignore or bypass the copy protection and other security systems that have been designed for older products³⁴. In the future, increasingly powerful portable video devices are also likely to be connected to broadband networks – and hence P2P distribution systems.

And the technology driving broadband networks and P2P distribution will of course not remain static. To cite just one example, a team at the California Institute of Technology claim to have developed a new data transfer protocol for the Internet fast enough to download a full-length DVD movie in less than five seconds³⁵. At the same time, compression technology is moving on rapidly, so that the size of the file to be downloaded is decreasing all the time, while the picture quality keeps improving.

5 Combating film theft

There are several methods available to government and industry to combat piracy:

- Strengthening the legal framework;
- Improving enforcement efforts;
- Enhancing industry security measures;
- Improving education and consumer awareness; and
- Developing new services and business models.

All of these methods are already part of the industry's strategy to combat piracy. However, there is still much that needs to be done.

The root causes of piracy can be broken down into three simple rules of access, quality and cost. That is:

- If there is a gap in supply, the pirates will exploit the opportunity.
- If the retail price of content is perceived to be too high, or higher than that which the consumer feels justified given the quality of that content, then the pirates will achieve sales at a lower price³⁶.
- If the conditions under which a product can be acquired are perceived to be too strict, the pirates will provide an easier alternative.

The above operates in an environment in which the theft of intellectual property is not considered by authorities and the judicial system as a serious enough criminal activity to warrant robust regulation, and where rich

pickings are to be had from what remains a low risk, high reward illegal racket operating in the context of widespread ignorance of intellectual property rights.

It is also important to recognise that not all unauthorised copyright use is organised, nor is it undertaken for financial gain.

The demographics of piracy

Large-scale physical piracy tends to be the domain of organised crime. That is, professional operations usually seeking refuge in countries with a relaxed anti-piracy regime; such as Pakistan, Russia, and some territories in the Far East. In contrast, unauthorised Internet downloading, in terms of P2P filesharing, is typically the playground of juveniles and young film buffs; teenagers and students who have a high volume appetite for movies, but do not necessarily have either the will or financial ability to satisfy that appetite. The key underlying difference is that there is no direct economic gain for the Internet filesharers, as there is for the professional pirates.

Professional commercial piracy is based on a simple supply-and-demand rule, which takes advantage of gaps evident in the 'windows' model of film distribution. Counterfeit discs are made for next to nothing, and then sold on for a profit to consumers who wish to see the films quickly and cheaply.

Unauthorised Internet distribution is driven by



a similar urge to see the film quickly and cheaply (or, as in almost all cases, freely). However, the motivations are generally different – so-called ‘filesharing’³⁷ is not necessarily for direct economic gain. It is done for the supplier to get access to the files of other sharers, and thus might be better termed file ‘exchange’. Therefore, there is a ‘community’ element that is usually not present in cases of organised commercial piracy (it is arguable that the supplier can become perceived as a ‘Robin Hood’ figure of sorts).

There is also another tier of activity, which can be called ‘casual’ consumer unauthorised practice. This is typically not carried out by juveniles nor organised criminals, but the average consumer using standard home recording equipment to make copies of a legally acquired or borrowed DVD or videocassette for distribution on a one-to-one basis.

Different types of unauthorised use of copyright works are perpetrated by people from different demographic backgrounds, who will respond to different levels of regulation, technical restrictions and education; a combination of ‘carrot and stick’, education, rewards and enforcement. For example, strict legal measures may be the best way to deal with piracy arising out of organised crime, or ‘insider’ leaks from film companies, but may not afford the same effectiveness when dealing with a 12-year-old uploading/downloading

movies in their bedroom. The tactic of prosecuting (young) consumers may not only be bad business practice, but may also act to entrench and inflame negative feelings toward the industry.

This understanding of demographics is crucial if the film industry is to tackle piracy in a more effective manner than the music industry has. There is a strong argument that the music industry derailed its own efforts to combat piracy, and in many consumers’ eyes it weakened its case by treating all ‘pirates’ in a similar manner (the music industry’s experience is discussed at length in the next chapter).

Legal framework for combating piracy

Intellectual property is at the heart of the economic and political challenges posed by piracy as it touches upon the growth of investment and cultural diversity. To sustain cultural activities, the UK and the European Union needs to protect and reward its creators and investors for their specific contributions. Failure to do so will seriously damage the ability of artists and companies to make their works and catalogues available.

Copyright protection in the UK

In the UK, the principal legislation on copyright can be found in the Copyright, Designs and

Patents Act 1988 (CDPA) (as amended). Part I of the Copyright Act deals with the definition and protection of copyright. It establishes measures aimed at safeguarding authorship and ownership of copyright, covers cases of copyright infringement and provides for remedies for copyright owners and licensees (such as injunctions and damages).

In terms of copyright infringement, under Section 107 CDPA, a person who possesses pirated material essentially commits an offence if he or she distributes or exhibits it, whether in the course of a business or not. The CDPA also renders illegal the possession of any device designed or adapted to make copies of a particular copyright work.

The CDPA is a major instrument to ensure consumers are protected and that creators, manufacturers and designers have the incentive to innovate. Nevertheless, the legislative framework still needs improvement in the following areas:

- Burden of proof;
- Damages;
- Devices designed to circumvent copyright protection;
- Enforcement of legal obligations for Trading Standards;
- Protection for whistleblowers; and
- Camcording.

Pressure from bodies such as the Alliance Against Counterfeiting and Piracy (AACP)³⁸, has resulted in progress being made in some of these areas. For example, the Copyright etc and Trade Marks (Offences and Enforcement) Act 2002, first introduced as a Private Member's Bill, has gone some way to plugging gaps in enforcement powers and bringing maximum copyright theft penalties up to that of trade marks (ten years' imprisonment).

Key points in the 2002 Act are:

- The raising of the maximum penalty for

copyright offences – relating to making for sale and dealing in copies infringing copyright, illicit recordings of performances and unauthorised decoders for the reception of satellite broadcasts – to an unlimited fine and/or up to ten years in prison.

- The improvement of, and in some cases the introduction of, new powers enabling the police to obtain a warrant for the search of premises and the seizure of evidence of an offence, so that warrants are available for all the offences in the copyright and related rights areas and in respect of trade mark offences.
- The introduction of new provisions on forfeiture of illegal material which has been seized during the investigation of such offences, modelled on the existing forfeiture provisions in trademarks law.

Furthermore, Kent County Council introduced an important piece of local legislation in 2001, which if extended nationwide in an improved form, could give a significant advantage to enforcement agents. The Kent Act 2001, which came into force on December 2001, enables Kent Police to investigate 'occasional places of sale' (ie 'car boot' sales and irregular open air markets) as likely places of disposal for stolen or counterfeit goods. However, according to FACT there have been no prosecutions of organisers of occasional markets or of landowners under the Kent Act 2001.

In January 2002, the Home Office commissioned Kent Criminal Justice Centre to evaluate the introduction and operation of the legislation on a national scale. The Act also requires organisers of occasional markets to provide 21 days notice to local authorities about sales taking place – a tool for Trading Standards Officers to monitor likely locations for infringing and counterfeit items. Introducing such a provision into UK-wide legislation would appear considerably more logical and economic, given that the likely cost to each local authority to legislate individually would be approximately £50,000 a time³⁹.

(Legal measures to improve enforcement at occasional markets are discussed further below under the Enforcement section.)

There is also the implementation of the EU Copyright Directive into UK law on 31 October 2003 (see below), which has brought with it a tightening up of existing legislation; amending existing provisions on circumvention of copy-protection, giving much enhanced protection for right holders, and clarifying the relationship between exceptions and technological measures in situations considered to be 'fair dealing'.

Limitations on when copying is not infringing have been fairly robust. For example, the existing exception for time-shifting (home recording) in section 70 of the Copyright Designs and Patents Act 1988 is tightened by a requirement that the copy be made "in domestic premises". Such a copy may not be sold, hired out, offered or exposed for sale or communicated to the public. This means that copies of films and programmes recorded for later viewing cannot be used for other purposes. Similarly, the taking of a photograph of a broadcast work from the television screen for private and domestic use remains excepted from liability, but the photograph must be taken in domestic premises and may not subsequently be dealt with for commercial purposes.

However, there are areas still open to debate – raising serious issues of consumer rights: such as, should there be a right to create personal 'back-up' copies from legitimately purchased DVDs? As the law now stands, it is a criminal offence to make home copies of any copy-protected work. To this end, in December 2003, Warner Home Video UK filed a civil action for an injunction against US-based 321 Studios in the High Court, under the new 2003 Regulations. Warner alleged that 321 Studios, which sells software enabling DVD back-ups to be made (called 'DVD-X Copy'), circumvents DVD copy-protection and is not 'fair dealing'.

The response from 321 Studios was a claim that consumers are fed up with buying digital products, such as CDs and DVDs, which are not always as robust as the industry claims. Hence, according to the company there was a legitimate consumer need to back up copies.

In early August 2004, 321 Studios ceased operations apparently as a result of financial pressures brought on by various lawsuits.

The following week, the MPAA announced the successful resolution of the litigation that began over two years ago. In a private settlement with the motion picture companies, 321 Studios and its founders agreed to cease selling its DVD copying software on a worldwide basis. Rejecting the 'fair use' argument, the Courts decided that 321's product enables circumvention of the copy protection technology included in DVDs and any such circumvention contravenes section 1201 of the Digital Millennium Copyright Act⁴⁰.

A continuing area of concern is that of damages, and the judiciary's attitude towards the severity of copyright theft. Though the penalty for copyright infringement is now a maximum of ten years' imprisonment, some question whether the judiciary is actually applying this. Anecdotal evidence suggests that the majority of infringements go largely under-punished,⁴¹ although recent cases have resulted in fines of £180,000 and three years' imprisonment.

A clear shortcoming in the UK legal framework is the absence of exemplary damages in infringement cases. These are 'punitive' damages requested and/or awarded where the defendant's wilful acts were malicious, violent, oppressive, fraudulent, wanton or grossly reckless, and are awarded not only as a punishment, but to set an example to the public.

Section 97(2) of the CDPA permits the court to award "additional damages" in cases where the defendant has behaved particularly badly or

has made profits from the infringement. Although this provision seems to have been intended to permit awards of exemplary damages⁴² there remains judicial uncertainty as to the precise meaning of the section.⁴³

This does not appear to tally with requirements in the EC Copyright Directive that national law provide a 'dissuasive' remedy for copyright infringement. One clear approach appears to be to amend the Copyright Designs and Patents Act 1998, along the lines of section 128 of the Irish Copyright and Related Rights Act 2000, to make it clear that exemplary damages should be available in claims for copyright infringement. Commonwealth territories such as Canada, Australia and New Zealand also provide for similar provisions.

The AACP has lobbied the Department for Constitutional Affairs about the issue of exemplary damages as a piracy deterrent, but with little result. No convincing case has yet been made why the government should not extend the legal concept of 'exemplary damages' to cases of copyright infringement. Exemplary damages are paid as a punitive measure rather than compensating for actual loss in cases where, simply put, there has been some form of malicious intent behind the actions. Given that much organised piracy is carried out with a clear intent to reap a reward from another's loss, the extension of the principle would appear logical and persuasive. Such a move would act as a disincentive by considerably increasing the financial risk to organised pirates.

In addition, or as an alternative, the CDPA could be amended to provide for pre-established or statutory damages, so that where it is difficult for a rights owner to prove the scale or extent of its losses (which also includes disclosing often confidential information), the judge is able to award an appropriate amount within a set range. Such damages are available in other countries such as the US, Canada and Israel, and constitute an effective remedy in an

area where it is often impossible to assess the extent of infringing activity. The criminal nature of piracy usually means that records showing the extent of pirate sales do not exist, or any that do exist are unreliable.

Whilst camcording a film in a movie theatre is a clear civil infringement, there is no clear criminal offence. Section 107 of the CDPA states that an offence is committed only if a copy is made "for sale or hire" and this may not be the case. Other possibly relevant offences must be done "in the course of business". It is arguable whether a person who has camcordered a film and then passes it to another person has distributed in the sense required by s.107(e), and in any event this will not have occurred if a person is caught whilst still camcording.

Proving criminal intent (beyond reasonable doubt) is extremely difficult. Even if it is implausible that someone would be camcording for the fun of it, if they claim they are, how can it be proved otherwise? That is why it needs to be illegal per se, or at least there needs to be the presumption that it is being done for gain, so that the onus is on someone to prove otherwise.

Specific camcording legislation has been and is being introduced in a number of US states and there is a clear need for similar legislation in the UK.

As a result of lobbying efforts, the Licensing Act 2003 – under which UK cinemas are licensed – does contain several provisions relating to copyright protection. The net result of these is that licensees stand to lose their licences – and potentially their livelihood – if they fail to observe copyright arrangements or knowingly keep any goods on licensed premises that have been imported without duty or unlawfully imported.

International harmonisation: the WIPO Treaties and TRIPS

Due to the global nature of both the Internet and piracy, it is essential to harmonise

regulations internationally. The set of key measures needed to protect and enforce copyright and neighbouring rights in the digital world are as follows:

- New standards of protection to take into account digital downloading and digital copying;
- Protection against the circumvention of technological copyright protection methods and rights management;
- Harmonisation of procedural law to fight against computer-related crimes and piracy;
- Liability rules for on-line service providers in relation to copyright infringement; and
- Consistent approaches to data protection and privacy laws.

WIPO Treaties

In the field of copyright and neighbouring rights, international harmonisation is well under way with the adoption at the World Intellectual Property Organisation (WIPO) of two international copyright Treaties in 1996. The WIPO Diplomatic conference took place in Geneva in December 1996. The conference adopted two international Treaties: The WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT). These Treaties were negotiated to update international norms of copyright protection to the new technology order.

First, the Treaties establish that copyright and neighbouring right holders must be able to control the electronic delivery of their works to individual members of the public in relation to on-demand services. Second, the Treaties require countries to prevent the circumvention of technical measures and interferences with rights management information used by copyright holders to protect or identify their works. Thirdly they provide a moral right to performers (the right to be identified and to object to any distortion or manipulation of

their work).

In relation to private copying the WIPO Treaties provide that exceptions to the reproduction right cannot conflict with the normal exploitation of the work and should not prejudice the legitimate interests of the right holders. They do not, however, specify how to protect best this legitimate interest. This remains for the time being a matter for national legislations.

Whilst these instruments do not solve all the issues, they provide a useful framework for future national or regional legislative efforts in this field. However, some important legal matters, such as the liability of Internet Service Providers (ISPs) in relation to online copyright infringements, remains untouched at international level. These topics may well come under WIPO's scrutiny in the near future.

The WIPO Treaties have been open to ratification since December 1996. The European Union should ratify the Treaties in 2004 or 2005.

TRIPS Agreement (WTO)

At international level, the second major legislative instrument aimed at fighting copyright infringements is represented by the TRIPs (Trade Related Aspects of Intellectual Property Rights) Agreement. This Agreement was adopted with the creation of the WTO (World Trade Organisation) at the end of the Uruguay Round of Multilateral Trade Negotiations in 1994. The TRIPs Agreement deals with various areas of intellectual property including copyright and related rights. It sets out the minimum standards of protection to be granted to intellectual property rights (IPR) by Member States. Part III of the TRIPs agreement sets out enforcement rules. The agreement lays down certain general principles applicable to all IPR enforcement procedures. In addition, it contains provisions on civil and administrative procedures and remedies, provisional

measures, special requirements related to border measures and criminal procedures, which specify, in a certain amount of detail, the procedures and remedies that must be available so that right holders can effectively enforce their rights. The TRIPs Agreement entered into force on 1 January 1996 for developed countries (including the EU), whereas developing and least-developed countries were granted different transition periods (from 2000 to 2006) to implement its provisions.

Copyright protection in the US and the EU

i) The status in the US

The first regulatory step in the US in relation to new media took place with the adoption of the 1992 Audio Home Recording Act, which introduced levies on digital tapes and digital recordings with measures to prohibit circumvention of copy protection. The Act purports in some degree to compensate for damage suffered by the music industry as a result of home recording. At the time of the Act, levies in relation to private audio copying already existed in Germany and France, becoming a feature of national European legislations in the 1980s.

The real problem, however, has been how to legislate for unauthorised Internet distribution.

Whilst copyright owners have the right to prevent unauthorised distribution, on-line downloaders (and uploaders) are difficult to investigate since they are located around the world and constantly switch web servers. ISPs take the view that they have no capability to identify infringing activity and no obligation to police their networks – indeed from an ISP business perspective, a ‘monitored’ Internet connection poses an unattractive offer to the consumer and

could affect uptake of broadband services.

An uncomfortable middle ground was reached with the US Digital Millennium Copyright Act (DMCA) of October 1998, which provides a remedy to copyright owners for on-line copyright infringement whilst limiting the liability of ISPs. Under the DMCA, ISPs must establish a policy for the termination of the service to users who are repeat infringers. Second, the ISP must accommodate and not interfere with the copyright owners’ use of “technical measures” to prevent unauthorised copying. The ISP has no obligation to monitor copyright infringements but must respond to copyright owners’ requests for information or action through a Notice and Take Down Procedure. To encourage co-operation in the fight against piracy, the ISP is exempt from liability arising from the removal of infringing material after it has received notice from the copyright owner.

The same US legislation aims at implementing the WIPO Treaties by providing protection against circumvention of technical protection systems as well as by safeguarding the integrity of copyright management information.

ii) The status in the European Union

The situation in the EU is somewhat similar, with Member States and institutions working on a programme of harmonisation of intellectual property.

The European Enforcement Directive has already been discussed (see above, ‘Piracy in the UK in a European context’).

One early initiative was to deal with Pay-TV piracy. The 1998 Conditional Access Directive, incorporated into national law by 2000, established a Europe-wide rule against piracy caused by counterfeit TV smart-cards and illegal decoding devices, to protect European operators and broadcasters (see previous chapter: pay-TV piracy).

However, the directive only protects the TV

service not the underlying copyright protected work being broadcast. It explicitly provides for member states to ensure that providers of services have access to appropriate remedies. It protects the signal against theft. But the use of illicit devices for private purposes is not prohibited.

The EU Directive on e-commerce⁴⁴ addresses the liability issue in a wider context than the copyright-only application of the US Digital Millennium Copyright Act (DMCA). The result very much parallels that of the DMCA providing circumstances under which ISPs would be liable. The most significant difference from the US approach is that the EU directive establishes both civil and criminal liabilities whereas the US legislation addresses only civil liability. The E-Commerce Directive also lacks certain tools contained in the DMCA. For instance, it does not have threshold conditions, there is no established procedure for notifying infringements to ISPs, and provides no means to get information on subscribers (even as limited by the current status of the Verizon case). The issue of ISP liability is also dealt with in the Copyright Directive, which legislates for creation of temporary copies.

To ensure free provision of electronic services in the internal market, the E-commerce Directive lays down the principle that the law applicable is the one of the member states in which the service provider is established. This is very important in relation to mail-order businesses using the Internet, as some countries' rules are more business friendly than others.

Of most relevance, of course, has been the Copyright Directive, discussed above in the context of UK law. Notably, the directive grants enhanced protection to technological security measures and creates criminal offences to protect copyrighted works against unauthorised electronic creation and distribution.

Enforcement

The issue of enforcement is fundamental in the fight against piracy, as any law is only as effective as the efforts taken to enforce it. In the UK, FACT has been very active in this area, working in conjunction with HM Customs and Excise, UK police authorities and Trading Standards offices across the country.

According to FACT, the total number of seizures of pirated DVD and VHS product in 2003 was about 2 million units.⁴⁵ Of the total, about 50% of the seizures were made as the illegal items entered the country – as a result of joint actions with Customs and Excise authorities. The remainder was divided approximately equally between seizures made from sites of stored material (in warehouses, garages, houses, etc) and seizures made at the point of sale.

There have been a number of high profile successes. In December 2003, FACT and the UK police raided premises in north London, recovering 250,000 counterfeit discs of major film titles, imported from the Far East, destined for UK car boot sales and street markets. The street value of the goods was set at £1.25 million. Titles included some that were still six months away from release.

But controls and seizures by the police and customs authorities are insufficient to bring to an end the massive import of counterfeit material.

FACT's activities also stretch to the Internet, but are limited in scope. The form of online crime that FACT encounters regularly includes film piracy, encryption circumvention, pay-TV piracy and malicious passing-off, taking place from a variety of sources including web-sites, auction sites, email (including spam), FTP, bulletin boards and file-sharing programmes.

The organisation takes a two-tier approach to tackling online piracy, which it recognises to be an ever-increasing percentage of the overall caseload. In the first instance, if illegal trading is found on, for example, Internet auction sites,

a notice is served for infringing items to be removed. If the traders continue to post the infringing items, they may be liable to a full FACT investigation that could end in prosecution. One example was that of an individual in Derbyshire who headed up a counterfeit ring aiding online sales of infringing product. After a long and protracted investigation and collation of evidence, the trader responsible for the online payment system to facilitate all financial transactions was prosecuted in March 2002 and pleaded guilty to offences under the Trade Marks Act. According to FACT, he was sentenced to six months imprisonment and ordered to pay costs of £8,000⁴⁶. All offending domains were closed down.

Most recently in January 2004, FACT, working in conjunction with the British Phonographic Industry (BPI) and Police and Trading Standards, smashed an Internet piracy ring, which consisted of 300 subscribers, in approximately a dozen major UK towns and cities. According to FACT, material found ranged from music, films, software, computer games and paedophilic material.

However, such actions do not address the biggest threat posed by the Internet: P2P filesharing networks. Although FACT's monitoring of online activity can also take it into P2P filesharing, the effective monitoring of P2P networks and other Internet distribution channels is a highly specialist activity requiring advanced technical capabilities and systems. This is currently mostly the preserve of a handful of expert companies, which mostly reside in the US.

In general terms, it is fair to suggest that the film industry has yet to formulate a fully coherent strategy to deal with copyright infringements via P2P networks. One reason for this is that, in the main, P2P users are not trading film files as a commercial act, but exchange files with other users as a means of saving money. This diminishes legitimate sales

since P2P users acquire and disseminate copyright material without paying the copyright holder for the privilege.

One approach of the music industry has been to sue individual P2P users, primarily teenagers and students, for copyright infringement. Whether or not this is a desirable tactic for the film industry to pursue is addressed in the next chapter. The film industry so far has not sued individual P2P users. The MPA and its member companies are, however, considering all of their legal enforcement options against P2P services and against the heavy users of such services, although the MPA member companies view litigation as an option of last resort.

The MPA's worldwide Internet Enforcement programme is currently focused on notifying ISPs of the abuse of their services. The programme uses a search engine to search the Internet, looking for unauthorised files. When it finds an infringement, an email is sent to the service provider, seeking the taking down or blocking of the site or file in question. Over 225,000 such notices were issued in 2003, over 101,000 of them to ISPs located in the European, Middle East and African region. The vast majority of the notices sent concern illegal downloading, particularly P2P infringements.

This process of searching takes place in the public space of the Internet and the main focus is on the service provider, not the user. However, according to the MPA, ISPs have been becoming increasingly unco-operative in relation to downloads, but remain reasonably helpful in the fight against hard goods piracy.

The MPA also pursues repeat infringers from time to time, and encourages local initiatives designed to secure criminal enforcement against Internet piracy that is commercial, organised, or large scale. Since 2001, FACT has been a member of the Internet Enforcement Group (IEG), a cross-industry body of Internet investigators representing the book publishing, music, games, software, merchandising and film industries. The IEG meets to share

knowledge, develop best practice techniques and enhance expertise in this area of enforcement. This includes the development of standard 'take down' notices to be issued to ISPs.

US digital tracking firm BayTSP acts on behalf of several Hollywood Studios, monitoring P2P file usage, looking for offending material, then issuing several Cease and Desist emails to those sharing illegal movie files. According to the company, 85% of individual users who are notified do not reappear again.

One factor that has been highlighted by many recent investigations, such as the January 2004 raid profiled above and the P2P phenomenon, is that piracy is a cross-industry problem. Increasingly, investigations in the UK are unearthing large caches of pirated films, music and computer software, with joint operations being undertaken by FACT, the BPI, MCPS and the games industry, through the Entertainment and Leisure Software Publishers' Association (ELSPA). Moreover, Internet piracy that takes place is also across the board – files most commonly traded tend to be music, films and games. This then raises the question of whether a single unified enforcement body might not be a more cost-effective and efficient method of dealing with the matter. Such a cross-industry body could have both a policymaking role (for example, in terms of consumer education) and an enforcement remit across all three sectors – the film, music and games industries.

It is understood that all four organisations have been in discussion and are about to commission an audit to evaluate the cost benefits of merging their operations.

Though there is currently a cross-industry Memorandum of Understanding in place regarding the investigation and prosecution of copyright theft (see Appendix iv), there is a view that a merger of some sort could create a definitive, nationally robust enforcement structure – providing more efficient use of

money and manpower. The areas covered by a unified authority – which are all currently covered for the film industry by FACT – would be:

- Investigation of possible offences and the follow-up of leads and complaints;
- The prevention of offences being committed (so far as is possible) by initiating self-help industry measures;
- Extending the work to other organisations;
- Computer forensic services; and
- Product examination services.

Enforcement at local level

The Cinema Exhibitors' Association describes cinema exhibition staff as the 'eyes and ears' of the industry. Whilst such staff certainly play a key role in trying to keep a look-out for illicit camcording of film performances, there are limits to the extent of patrolling of auditoria that can be undertaken by cinema employees. Moreover, until the law is changed to make such camcording a criminal activity (see earlier section on copyright protection in the UK), the only recourse for cinema staff is to eject offenders under the cinema's conditions of entry clauses.

Finding ways to improve the extent of in-cinema enforcement would be welcomed by most of the industry, but this will have to be done carefully. For instance, while limited use has already been made of night-vision goggles to scrutinise audiences in some UK public film performances, some have questioned the practice on Human Rights and Health and Safety grounds⁴⁷.

As mentioned earlier, in the US, the Motion Picture Association of America recently introduced a Anti-Camcording Rewards Program, under which projectionists stand to receive \$500 payouts if they successfully stop suspects trying to record movies being

screened in their cinemas. However, consideration of the introduction of any such scheme in the UK should be coupled with the outlawing of in-cinema camcording so as not to encourage cinemas staff to do something that could put them in an untenable position.

When it comes to physical piracy, local council and Trading Standards Officers (TSOs) are often in the front line where illicit trading is taking place. This is especially so when dealing with distribution of physical piracy at computer fairs, market stalls and car boot sales, otherwise known as 'occasional points of sale'. What makes these places so difficult to regulate centrally is the irregular nature of the activity. Authorities tend to have little notice of such events taking place, and in this way, they provide perfect and common cover for selling counterfeit product. To this end, it is an area that appears particularly suited to enforcement at local level.

TSOs have to date ably assisted organisations such as FACT, BPI, MCPS and ELSPA in making in-roads into tackling distribution of pirated material at the point of sale. In 2002, the Trading Standards Institute donated 17.5 tonnes of seized and counterfeit goods to be recycled, with funds going to the Birth Defects Foundation charity. The goods, which encompassed counterfeit DVDs and CDs were accumulated as a result of work by 130 local Trading Standards offices.

In early 2004, the Patent Office established the IP Crime Group. This new cross-industry, cross-agency and cross-government department body is, as part of its remit, looking at enforcement of copyright law by TSOs and local authorities. This follows from a June 2003 Patent Office national scheme to train TSOs in not only tackling copyright infringements, but also taking counterfeiting and piracy seriously. One of the Patent Office's initiatives is the development of a database of contacts so that the key individuals can be contacted speedily to inspect a seized delivery of suspect goods held

by Customs Officers.

On 21 April 2004, the Patent Office convened a meeting of government agencies and industry representatives to discuss its proposals for a national IP enforcement strategy. The Patent Office had met with the National Crime Intelligence Unit (NCIS), which had provided valuable guidance as to the strategic approach needed to tackle organised IP crime, drawing on its existing models for drug-related and other organised criminal activity.

The result is that a national strategy to combat intellectual property crime was formally announced by the Industry Minister, Jacqui Smith, on 10 August 2004. Developed by the Patent Office, this IP Crime Strategy brings together brand owners, police, trading standards and customs with the declared aim⁴⁸ of:

- Increasing the sharing of intelligence between different agencies;
- Improving training for those working at the front-line;
- Better co-ordinating the agencies involved in the fight against intellectual property crime; and
- Monitoring progress and success by publishing an annual national enforcement report.

The IP Crime Strategy offers a real prospect of securing significantly improved enforcement against piracy in the UK. Central to the strategy is an annual National Enforcement Report (inspired by the National Intellectual Property Law Enforcement Co-ordination Council Report presented annually to the US President and Congress), which will establish the status of enforcement efforts by all relevant agencies. The report will inform the setting of priorities for prevention and enforcement by a Strategic Tasking and Co-ordination Group, which will include industry representatives.

An analytical model for data is being developed, based on that used in high-level policing against illegal drugs. An intelligence hub will be set up

within the Patent Office to gather key facts for planning and decision-making. This will address three separate areas: local issues; cross-border crime; and serious and organised crime. An IP Crime Group will meet twice a year as a forum for public officials and industry to discuss best practice and review progress.

The data and strategies developed in the process of implementation will inform the UK's outreach to priority foreign countries. The annual report is intended to allow measurement of the impact of the strategy against its objectives.

The position of enforcement of copyright law at local level remains inadequate. Most pressingly, there is no duty imposed on local authorities to combat copyright infringements. This is in contrast to the law on trademarks; TSOs are duty bound by amendments in the Trademarks Act 1994 to combat violations.

The imposition of a duty on local authorities to deal with copyright has languished as an amendment (s107A) to the Copyright Designs and Patents Act 1988 that has never been enacted. There appears to have been no logical reason for this not to have become law apart from a series of historical issues tied to Parliamentary time and the former Conservative government's reorganisation of local government funding.

This oversight has had a two-pronged effect.

First, it has left a key gap in local copyright enforcement. Until s107A is enacted, TSOs have no powers to pursue cases of pure copyright infringement (ie when no other offence – such as trademark infringement – appears to have been committed. At present, central government is unwilling – outside of the education sphere – to dictate ('ring-fence') how local authorities spend allocated capital. Therefore, without an explicit duty to deal with a specific task, any extra capital given to a local council is likely to be spent on many different concerns. In other words, even if extra capital is

given to local authorities to combat copyright piracy, it may never be spent to this effect.

Second, by leaving the burden of funding in piracy cases largely to the discretion of individual councils, a UK-wide disparity exists in England and Wales – which may lead to piracy 'black-spots'. For instance, as noted earlier, Kent County Council (KCC) enacted the Kent Act 2001, making it easier for TSOs to monitor sales of illegitimate products because they have advance notice of them taking place. However, Shropshire County Council, as an example, has stated that it would cost up to £50,000 to pass similar legislation and has shown no intention of doing so, choosing to spend funds elsewhere. In a 2003 questionnaire compiled by the Trading Standards Institute, 42 local authorities stated that they had no proactive policies to deal with counterfeiting. Moreover, 54 authorities cited staff and 52 cited money as the main barriers to doing more to tackle counterfeiting at a local level.

It is arguable that until s107A is enacted, and an obligation imposed on local authorities to investigate and prosecute copyright offences, local enforcement will remain piecemeal, under-funded and ultimately not as effective as it could be. The burden of funding is unlikely to be significant. According to a 2002 survey conducted by the Local Authorities Coordinators of Regulatory Services (LACORS)⁴⁹, it would cost £3.53 million for TSOs to enforce copyright in England and Wales.

The Alliance Against Counterfeiting and Piracy has argued for a comprehensive package of legislative reform to address the problems posed by local markets in a co-ordinated national manner⁵⁰. Measures proposed are:

- New powers to allow TSOs to close down occasional sales that persistently include trading of counterfeit goods. It is suggested that this could be done via an enforcement order under the Enterprise Act (formerly "stop now" orders). This would require the recipient of the order (the sale organiser) to comply with

the local authority order to cease allowing the illegal practice. In default an injunction can be sought. Alternatively an offence could be created for failure to comply with the notice;

- A requirement for the person giving registration details to the authorities on behalf of the trader to be over 18 years. This is intended to clamp down on the habit of traders using under-age children as a front for their illegal activity in order to avoid liability. While it will not be able to stop this entirely, it will ensure that an adult has to be present when registration is taking place and will remain within the precinct of the market;
- Amendment of the Proceeds of Crime Act to enable trading standards to recover the costs of prosecution of IP offences. This would help address the problem of local authorities not having sufficient funds to allocate to prosecution of IP crime and ensure that serious IP offences could be pursued in the courts;
- Enaction of Sections 107A and 198A to give TSOs the power to enforce copyright;
- Make it a legal obligation for Trading Standards to submit information on investigations and prosecutions being undertaken for IP infringement to the Patents Office. This would require amendment to Copyright Designs and Patents Act (in tandem with implementation of s107A) and to the Trade Marks Act 1994, and possibly to TDA as well to allow disclosure to the Patents Office and to include investigations; and
- Introduction of an improved registration scheme that would require owners and organisers of occasional sales to notify the local Trading Standards authority 21 days in advance as well as place an obligation on the organiser to gather names, address and vehicle licence details of all dealers at the sale. The Alliance also recommends pressing for an obligation on organisers also to note the type of goods being sold (eg anyone selling new DVDs is going to be of interest).

The need for international co-operation

The international element in computer-related crime creates new problems and challenges for criminal procedural law. Systems may be accessed in one country, the data manipulated in another and the consequences felt in a third. Pirates can operate physically in one country, move electronically across the world from one network to another and access databases on a different continent. The result of this is that different sovereignty jurisdictions and laws come into play. More than in any other trans-national crime, the speed, mobility and flexibility of computer crime challenge the existing rules of criminal procedural law.

Law enforcement agencies have argued for the preservation of a minimum of traffic-related data considered as essential for investigating and prosecuting computer crime offences. Co-operation between industry, law enforcement/judiciary and privacy authorities in identifying whether this could be acceptable and what, if any, these minimal elements could be, is clearly needed.

Given the trans-national nature of these crimes, the need for enhanced co-operation in the enforcement of copyright is therefore particularly acute. Yet the trans-border character of offences enters into conflict with the territoriality of national criminal law⁵¹.

An Internet strategy must include an understanding that activities contemplated may require defensive litigation in a foreign country because of the uncertainty as to what law governs electronic contracts. A premise in international copyright law is that copyright protection is territorial: each country determines what is the scope of copyright protection and the remedies available in case of infringement. This territorial approach is under strain with regards to the digital world. Which law is applicable in the case of online exploitation? This is a crucial question if one is

to determine the author of the work, whether the work is still copyright protected, the penalties to an act of copyright infringement, or the jurisdiction in charge of enforcing the right.

In relation to intellectual property rights enforcement where does the copyright owner pursue infringement? In the country where the operator (s) of the website(s) is (are) located? Or where the online service carries the website? Copyright protection may become illusory if the claim must be pursued in a multiplicity of places.

Some international experts advocate the view that the law applicable for enforcement purposes is the law of the country in which the server that hosts the alleged infringing content is located, provided this law is consistent with the Berne convention and WCT norms.⁵²

Others believe that authors' rights would be better protected by applying the law of the country of emission – to obtain damage for the whole prejudice – coupled with the law of the different countries of reception with a view to obtain damages in the different countries where infringement takes place.⁵³ Another suggestion would be to apply the law of the country where the right holder resides or is established (France – Conseil d'Etat).

These debates notwithstanding, it appears essential for the UK government to prioritise co-operation with its partners in the European Union, as well as international trade organisations and others to further harmonise international regulatory and anti-piracy enforcement measures.

Security measures

The issue of security falls into two broad categories: physical security in the filmmaking process and the value chain, and security of the content itself. The former is largely a question of work practices and ethics whilst the second is largely one of technology.

The filmmaking process and value chain

Though there is debate as to its findings, the AT&T research⁵⁴ into the sources of 'leaks' in the filmmaking process does throw up one important issue: a number of films find their way onto P2P filesharing networks from somewhere within the production, post-production and marketing process.

In recent years, studios and distributors have been putting into place measures to plug security gaps in the supply chain. These have primarily included the banning of photographic equipment from test and preview screenings (enforced by security guards with night vision goggles), an embargo on pre-release 'screener' copies to film critics and the members of various film academies around the world, and the extensive use of 'watermarking' of copies used internally and within the post-production process.

Indeed, the studios are spending substantial amounts of money to upgrade movie print security and have retained security companies to conduct routine bag examinations and handheld metal detector inspections at pre-theatrical screenings. Warning signs have also been posted prohibiting camcording and alerting audiences that they might be observed by guards using night-vision monoculars, or other methods⁵⁵. The Motion Picture Association of America (MPAA) has also recently introduced a new Anti-Camcording Rewards Program, under which projectionists stand to receive \$500 payouts if they

successfully stop suspects trying to record movies being screened in their cinemas.

However, whether or not these measures have been sufficient is open to debate. One need only look back at the mass of evidence suggesting that movie titles are appearing more and more, earlier and earlier, on P2P networks to question whether enough is being done (see Chapter 4 for an analysis of P2P movie filesharing).

The UK film industry needs to conduct a thorough review of security risks and potential sources of 'internal leaks' in the pre-production, production, post-production and distribution process. Such a review could draw on lessons from the research undertaken by AT&T (discussed in chapter 4, 'Sources of internet piracy').

The Film Distributors' Association (FDA) has already undertaken work in this area through its film print working group that now includes the UK Film Council. For some time this group has been working towards improved procedures and an extensively revised Film Print and Digital Disk Management Protocol was issued in July 2004.

Controlling content in the digital domain

There are several types of technologies that can help control copyright content in the digital domain. The motivation is to keep content secure when it is stored on a device and when it is transferred in a digital format between devices. Ideally, these solutions should enhance the business choices open to the rights owner as to how to exploit their content, while at the same time maximising the control, choice and convenience for the consumer. This is often referred to as Digital Rights Management (DRM). However, many of the issues involved in the deployment of these systems have been contentious, resulting in lengthy disputes between the content owners, regulators and

consumer hardware manufacturers (the latter often presenting their case as the voice of the consumer via organisations like the Home Recording Rights Coalition).

New digital TV sets and digital video devices launched into the US market are increasingly incorporating secure interfaces that allow content to be securely transferred from one device to another. As far as recording is concerned, content owners and digital broadcasters have the facility to apply varying 'usage rules' to content travelling over the digital connections. The three basic levels are:

Copy Freely: broadcast signals that are provided to viewers free of charge can be recorded by digital machines much like VCRs do at present.

Copy Once: Pay-TV subscription programming such as the BSkyB movie channels in the UK, or HBO and Showtime in the US, can be set to only be recordable once for archiving purposes, but preventing additional copies from being made.

Copy Never: Aimed at pay-per-view (PPV) and video-on-demand (VoD) service providers, programmes can be set so as to not to be recordable by a digital home recorder.

There are many contentious issues still being debated, particularly in the US. These include the proposal to protect digital free TV from unauthorised redistribution via the Internet using a so-called Broadcast Flag. This would insert a trigger signal in digital broadcasts that could be used to limit the recording and retransmission capability of free TV programming. The controversial dimension is that consumers have been used to freely being able to record free TV programming and this technology would permit broadcasters to limit that in the future in the interests of preventing further unauthorised redistribution.

Another divisive proposal being aired in the US is that to allow so-called 'downresolution' to limit the dangers of recording HDTV content

via the 'analogue hole'. This would allow content providers to remotely degrade the signal coming from analogue outputs. Given that most existing HDTV sets only have analogue inputs, this could disadvantage a majority of early adopters.

Developments in copy protection and Digital Rights Management (DRM) technology are becoming increasingly important to the future of all content industries, not least the film industry. And, with a few exceptions⁵⁶, most of the key debates over the selection and implementation of these systems are happening on the other side of the Atlantic. The UK and European film industries could usefully learn to engage with these debates and the implications which flow from them.⁵⁷

There may also be a case for UK Government and regulators to learn from the US experience of the Federal Communications Commission (FCC) – particularly with respect to its rule-making actions that seek to find a 'middle-way' through contentious technology and copyright issues. The FCC seeks to work with key stakeholders and encourage them to reach a consensus that can then be cemented and subsequently enforced by government or regulator action.

A recent report on DRM by the Broadband Stakeholder Group concluded that "none of the available solutions cater for all content types and platforms and there remain major issues of interoperability and access. If content services are to provide a significant push to the take up of broadband there must be a concerted effort by industry and government to create the optimal conditions for the development of DRM enabled solutions and their adoption by the widest possible range of content providers."⁵⁸

Education and consumer awareness

Consumer education and awareness is crucial in the war against piracy, especially given that much piracy and unauthorised copyright use is in some form or another a response to consumer demand. Most initiatives focus on awareness of one or more of several primary messages:

- Pirated goods are of inferior quality;
- Piracy fuels organised crime;
- Piracy has a negative economic impact on the film industry; and
- Piracy is illegal (particularly for online piracy).

FACT, the BVA and the UK Film Council have been involved in several initiatives along these lines. In November 2003, the UK Film Council launched a Christmas awareness campaign urging consumers not to buy pirated DVDs and videocassettes. This campaign focused on all the points highlighted above. The BVA repeated its pre-Christmas PR campaign which received national media coverage and, most recently, FACT worked with a GMTV presenter and consumer affairs champion, Lynn Faulds Wood, who has been highlighting unwitting consumer contributions to organised crime by visiting the counterfeit trading hotspot, the Barras Market in Glasgow.

FACT has also been running anti-piracy trailers produced by the industry over the last few years, with organised crime being a special target. FACT's most interesting move was to use cinema advertising to dissuade 'camcorder pirates' in the UK. As a preventative measure, a 20 second copyright warning was introduced as a trailer, beginning with the release of *X-Men 2* on 1 May 2003, to educate film viewers that cinema camcording is a crime. It also provided a hotline number to FACT investigators for those who wish to report illegal activities. The text reads as follows:

WARNING FROM THE FEDERATION AGAINST COPYRIGHT THEFT LTD (FACT) "IT IS A CRIMINAL OFFENCE TO COPY OR ATTEMPT TO COPY ANY FILM, OR FILM RELATED ARTICLE, SHOWN OR DISPLAYED IN THIS CINEMA. PUNISHMENT OR CONVICTION IS AN UNLIMITED FINE AND IMPRISONMENT UP TO A MAXIMUM OF 10 YEARS. YOU ARE NOT PERMITTED TO BRING ANY CAMERA OR RECORDING EQUIPMENT INTO THIS CINEMA. THIS WILL BE TREATED AS AN ATTEMPT TO BREACH COPYRIGHT. ANY PERSON DOING SO CAN BE EJECTED AND THE POLICE MAY CONFISCATE SUCH ARTICLES. WE ASK THE AUDIENCE TO BE VIGILANT AGAINST ANY SUCH ACTIVITY AND REPORT ANY MATTERS AROUSING SUSPICION TO CINEMA STAFF. THANK YOU.

In the US meanwhile, the MPAA has gone one step further. It has been heavily pushing its anti-piracy message in 36,000 classrooms – especially targeting the nine-12 age range. In a campaign similar to the 'Just Say No' anti-drugs campaign of the mid-1980s, trained instructors are pushing a message of 'Digital Citizenship' to 900,000 school children highlighting the problems of downloading, and the economic and emotional impact of film piracy on artists, creators and producers. Schoolchildren are given stickers bearing slogans such as: 'Copying a movie or a CD for a friend is illegal' and 'If you haven't paid for it, you've stolen it'.

Recently, the MPAA launched a website initiative, www.respectcopyrights.com, as part of its ongoing education campaign. There are also two international trailers produced by the MPA, one to address physical piracy and the other Internet piracy. These are being rolled out in several territories world wide in conjunction with local anti-piracy consumer awareness campaigns. In the UK they were released along with the launch of the Industry Trust for IP Awareness (see below). Since then the FDA has requested that exhibitors play these specially-

produced films as it is obviously more impactful if these films are played in front of all features in every site across the country. The UK version of this has been showing in British cinemas on a regular basis since 15 July 2004.

Another key UK initiative has been the establishment of the Industry Trust for IP Awareness, which has been created by all sectors of the British video industry with an initial budget of £1.2 million. This has been registered as a non-profit making company with the objective of creating a fighting fund to tackle copyright theft. The founding company members (ten distributors and six retailers) will decide how funds will be spent across a range of tactics, including retail training, government lobbying, additional support for FACT, and to raise consumer awareness of the links between counterfeiting and serious and organised crime. An official launch event for the Trust took place on 12 July 2004. There is a web component to the initiative at www.piracyisacrime.com.

The needs of educational institutions

One important factor that must be acknowledged in any level of copyright control and enforcement is the needs of educational institutions. It is undoubted, and has been seen by debate in the US, that limitation of any sort of use of copyrighted material creates an environment in which schools and universities find it more difficult to legally access content for educational purposes.

In the UK, the S32-36 CDPA 1988 legislation recognises the need for providing leeway in this scenario. The Act explicitly provides an exception to copyright, enabling teachers to make use of dramatic works for educational purposes – in particular ensuring that classroom screenings, in the course of teaching, are not defined as a public performance.

Under the CDPA, the Educational Recording Agency (ERA) was established⁵⁹ providing a licensing framework for schools and universities that wish to record and use copyright content in an educational context. Many industries are already represented and participate in the ERA's scheme – including the BPI, BBC, MCPS, ITV, Channel 4, Channel 5 and the Author's Licensing and Collecting Agency. Notably, there is at present no clear affiliation from film industry bodies such as the BVA (though the British Universities Film and Video Council [BUFVC] is involved). Anecdotal evidence from within the film industry itself indicates a reticence from certain quarters of the film industry to enable educational establishments from legally acquiring content for classroom purposes – not least so from the MPA and members of the BVA.

This attitude is somewhat surprising given the MPAA's initiatives in the US to work more closely with schools to educate children about the impact of piracy (see above). It also sits uneasily alongside UK Film Council initiatives to promote the development of young filmmakers and to encourage media literacy and film education.

The problem appears to be a failure by some elements of the film industry to view education as an ally. Entering a dialogue with education, and enabling schools to license content at a fair and reasonable price is likely not only to push forward film education in the UK, but also to foster a spirit of quid pro quo co-operation. To this end, the film industry can enlist the support of schools to pass on its anti-piracy message to a demographic that is very susceptible to infringing activity – teenagers and students. Indeed, film distributors have a long history of engaging with the education sector and began to commission resources for teachers from the organisation Film Education as far back as 1985 (and have done so every month since). Earlier this year, Film Education began developing plans for an anti-piracy resource for UK primary and secondary schools.

This initiative is a good example of co-operation that should be further developed.

Another positive move is that the British Film Institute (*bfi*) now has the support of the Hollywood studios for its ScreenOnline⁶⁰ Internet movie archive. This initiative is premised on the *bfi* acting as intermediary to UK education by providing secure access online to clips to schools, colleges and libraries, using its own digital rights management solution. Educational use of digitised material is now an important goal in many countries. In the US, this has led to the emergence of the Creative Commons movement and the establishment of a range of Creative Commons licences, which provide for rightsholders to offer limited rights to any user.

The inherent potential for viewing, copying and creative reuse of audiovisual content is inhibited by the strict application of commercial exploitation rights, and this has led to non-commercial activities being included under the all-embracing piracy umbrella. Such activities might be better understood as useful contributions to a society's learning and encouraged as part of the necessary structure of innovation and invention. Furthermore, it is likely that rightsowners will gain wide public support for the vigorous protection of all commercial exploitation against commercial piracy where they agree to apply a Creative Commons licence to their material.

Developing new business models

Not all action, however, has to be defensive. The Hollywood studios have been open to the possibilities of developing new business models and using the Internet for the digital delivery of content to the PC and TV set – an example that could be followed by other content rights holders. Internet video-on-demand (VoD) strategies, and the delivery of broadband entertainment to the TV set, can be a positive step in the face of the potentially damaging long-term impact of the type of piracy that has damaged the music industry. Such strategies, subject to adequate digital rights management (DRM) and other security measures, may allow studios and distributors to establish valuable 'direct' relationships with their customers.

The concept of Internet VoD at present is simple. In return for a one-off fee (typically between \$2-\$5) or a monthly subscription (usually around \$9.95), the customer is allowed to download a copy-protected digital movie file onto their PC hard drive, where it is generally 'active' for a month. Typically, during that period, the user can watch the full movie on their PC at any time, but once viewing has started, the user has a 24-hour 'window' to watch it in. Once the 24 hours are over, the file expires from the hard disk. An alternative approach is to 'buffer' and stream the film within a 24-hour window, providing more-or-less instant access, though this theoretically provides less control for the customer. The film can be viewed on the PC screen or can be viewed on the TV via a simple cable link from the PC.

In November 2002, all the Hollywood studios, with the exception of Fox and Disney, launched the Movielink Internet VoD platform. The service started with a library of 175 titles, including some titles released to video rental only a few weeks earlier, but following a number of licensing deals, this has risen to more than 500 – offering titles from practically

every studio and significant mini-major except Fox and its subsidiaries.

The only details Movielink has so far revealed about its experience to date are some facts about the demographics of its users – which are predominantly male and between the ages of 25 and 49 – contrary to early expectation that the target market would be the 18-25 year olds (this could be explained by the tendency of the 18-25 year olds to favour illegal P2P file sharing). The company has subsequently planned for a multi-million dollar ad campaign through traditional print and TV media to extend its consumer base.

In early 2004, Movielink struck a deal with computer chip manufacturer Intel to collaborate on marketing and technology. Importantly, the two companies have announced the start of co-operation to develop content-protection and home networking solutions, enabling consumers to wirelessly transfer Movielink content from their PC to the TV and other portable storage devices.

Movielink has a number of competitors. There are three other start-up initiatives of note in the US and Europe – CinemaNow, Moviesystem and NetFlix. US venture CinemaNow is supported by Microsoft, amongst others, whilst Moviesystem is a pioneering French VoD content provider acquired recently by Canal Plus. NetFlix, the US online DVD rentals firm, has only recently unveiled its plans for an Internet VoD platform, but has the implicit support of PVR company TiVo. All the services have shown intent to use the open Internet (or IP solutions) to eventually deliver on-demand movies to the TV set as well as the PC.

It is unlikely that the studios expect to generate much profit from the ventures – at least in the short term. Nevertheless, this is an acceptance that demand for the delivery of online movies does exist, and if legal providers don't get there first with a coherent business model, then the pirates will. Moreover, an Internet VoD service (or at least a platform based on open-standards

Internet solutions that will deliver movies to the TV) could eventually create an opportunity to extend the direct sell model of retail DVD into the digital distribution arena.

It should be noted that such services still have to resolve a number of important issues. For example, titles on Movielink are only available after the DVD release, with most VoD services only being able to access content in the PPV window. The window in which titles become available on new platforms will be of significance when dealing with piracy, though other business factors (such as the current size and success of the retail DVD market, which a movement of the windows may cannibalise) will have to be taken into account.

6 Consumer issues

What some education and awareness initiatives have so far failed to acknowledge is that consumers who buy or download pirated films may well be more aware of the issues than they are given credit for. Specifically, they may be aware of the illegality of the act, the link with organised crime and the content quality risks they may be running in acquiring counterfeit products. As will be explained in Appendix i ('Lessons from the music industry'), the latest surveys suggest that most people across Europe know that nearly all file-swapping is illegal.

Increased consumer awareness of the issues involved in piracy needs to be complemented with an understanding of consumer demand.

One needs to only go back 20 years, when Universal Studios tried unsuccessfully to bury VCR home recording under a mountain of litigation, to see that many of the issues and fears arising today are just the latest symptom of the tension between the film industry's desire to protect existing revenue streams and the development of new technologies.

It may be necessary to recognise that the digital age has brought to an end an era during which the industry could fully dictate the chain of distribution from theatrical release to home video to TV. It has ushered in an era in which the business needs to be more understanding of consumer demands and to communicate accordingly on that level: whether in terms of pricing, value proposition of content, the

quality of films made, or the impact of piracy as something other than a 'victimless crime'.

The extent of the challenge can be illustrated by the campaigning tactic of trying to attach 'victims' to piracy. This approach has been to point out the economic loss to the industry, a message that can perhaps appear contradictory in the context of an industry that thrives on a historic image of glamour, wealth and superstardom.

Respect for the consumer in the field of copyright has been a point of debate for many years, especially in the US. At what point does tackling piracy end and infringement of a consumer's moral, civil and human rights begin? A number of organisations have taken the entertainment content industries to task on some of these issues. The Home Recording Rights Coalition (HRRC) and the Electronic Frontier Foundation (EFF) have both been vocal advocates of protecting consumer rights – and have considerably raised public awareness of the issues. However, both bodies have been criticised for having more than just consumer interests at heart – allegedly upholding the vested interests of specific industry sectors (primarily consumer electronics manufacturers, IT, retailer and Internet interests).

Established in 1981, and supported by consumer electronics, Information Technology and retailer organisations, the HRRC was instrumental in a landmark legal victory in 1984, when Sony defeated Hollywood



attempts to outlaw the VCR. Since then, the coalition has gone from strength to strength, focusing most of its efforts against the DMCA legislation. Some of the organisation's major claims are that the restrictions on circumvention devices have had a negative impact on free speech, consumer right of 'fair use' (eg making back up copies), technological competition and scientific research. The last point was supported in October 2002 at MIT by the White House head of Cyber Security Richard Clarke, who called for legal reform, expressing concern that the ban on circumvention was holding back legitimate software research.

The EFF meanwhile was founded in 1990 in response to what the organisation viewed as oppressive behaviour by the US Secret Service in tracking down pirated government-sensitive software. The group, which is a donor-supported organisation, now defends what it believes are the interests of consumers in the electronics landscape and those of the technology industry. It has to date supported defendants in high-profile 'hacking' cases, such as that of 2600 Magazine, which was responsible for posting DeCSS DVD copyright hacking software (see above).

In Europe, the protection of consumer rights has been mostly left to the national watchdogs – which represent themselves as a truly independent barometer of consumer expectation. As explored in the context of the

music industry, consumer groups in Europe are, much like the HRRRC, becoming increasingly vocal in their opposition to limits placed on consumer rights in the name of piracy.

Looking at developments in the various spheres, such as the compromises within the DMCA in the US, or the activity of the HRRRC, it becomes clear that consumer empowerment is driven by technological developments in a number of different sectors: namely consumer electronics, telecommunications and new media technologies. To this end, not only are there the consumer bodies to think of, but there are also powerful industrial interests at work, creating an environment in which the film industry can no longer work in isolation – as the music industry largely tried to do to its detriment. Given that content is key to the growth of many of the new economy business models (such as, for example, broadband Internet), it may be advisable for the film industry to enter some form of permanent dialogue with these industries to develop mutually acceptable strategies and greater co-operation in the effort to combat piracy.

In this context it is worth noting that, while the Government's key advisory group on the roll-out of broadband services – the Broadband Stakeholders Group – has over 450 members, only about a dozen could be described as representing content interests (and this includes games, music and TV, in addition to film). Another group, called the Internet

Enforcement Group (IEG)⁶¹, has been operating since 2001. One of the objectives of the IEG – which represents the book publishing, music, games, software, merchandising and film industries – is to create an environment for enforcement bodies and ISPs to work co-operatively towards fighting Internet piracy, with a view to promoting a best practice approach.

Part of the ideology of the consumer interest lobby is that, in the modern economy of competing interests, the consumer dictates everything. According to this logic, if consumers are showing a demand for a particular type of distribution channel, such as the Internet, then it is the obligation of the content owners to supply that. If consumers demand lower prices, then it is up to the content owners to address the issue. Any failure to do so will result in the consumer getting product from other sources of distribution – that is, they will get it from the pirates or simply indulge in unauthorised copying or distribution themselves.

While no one should assume that consumer interest lobbying groups represent the interests of all consumers, there is no doubt that a greater understanding of the consumer should be a top priority for the industry in the 21st century.

7 Recommendations

The analyses in the previous chapters point to one important conclusion: film piracy in the UK is a major concern and demands immediate attention. Although the industry has been implementing strategies against piracy for many years, resources are limited and the industry must depend on assistance from the State and its enforcement agencies. There is no single magic bullet that will eradicate piracy.

If anything, the little reliable empirical evidence that currently exists on the scale and impact of the problem only serves to suggest an industry that has some work to do in order to prepare for the rapidly changing digital entertainment environment already upon us.

The film industry is used to a structured and controlled approach to the distribution of its own content, with a high degree of power over each facet of the value chain. However, this is a position that is now under threat. Moreover, there is a fear about the emergence of potential new 'gatekeepers' in the value chain, such as information technology companies and consumer electronics manufacturers. This is exacerbated by a legal system that fails to quite recognise the full social and economical implications of copyright infringement. Although there has been reform, much still needs to be done.

The following is a list of recommendations for the UK Government, film industry, Government-backed and other film sector stakeholders such as the UK Film Council and

FACT. It is anticipated that the Government recommendations contained in this report will be evolved in partnership with the Government's recently formed Creative Industries Forum on Intellectual Property.

The UK Government

In the short term

1 Extend the legal concept of 'exemplary damages' to cases of copyright infringement. Exemplary damages are paid as a punitive measure rather than compensating for actual loss in cases where, simply put, there has been some form of malicious intent behind the actions. Given that much organised piracy is carried out with a clear intent to reap a reward from another's loss, the extension of the principle makes perfect jurisprudential sense. Such a move will act as a disincentive by considerably increasing the financial risk to organised piracy. It would also bring UK law in line with Ireland and several other Commonwealth territories.

(See Chapter 5, sub-heading: 'Copyright protection in the United Kingdom'.)

2 Make a provision for rights holders to be able to claim pre-established or statutory damages. This is particularly appropriate where it is difficult for a rights owner to prove the scale or extent of its losses (which also includes disclosing often confidential information). The

judge would then be able to award an appropriate amount within a set range. Such damages are available in other countries such as the US, Canada and Israel, and constitute an effective remedy in an area where it is often impossible to assess the extent of infringing activity. The criminal nature of piracy usually means that records showing the extent of pirate sales do not exist, or any that do exist are unreliable.

(See Chapter 5, sub-heading: 'Copyright protection in the UK'.)

3 Introduce a comprehensive package of legislative reforms designed to curb the sale of pirate products at street markets, car boot sales and via other forms of informal trading⁶²

These reforms would include:

- Enactment of amendment s107A of the Copyright, Designs and Patents Act 1988 (CDPA) so that trading standards professionals have the power to enforce copyright law, bringing the sector into line with the law of trademarks;
- Introduction of an improved registration scheme that would require owners and organisers of occasional sales to notify the local Trading Standards authority 21 days in advance as well as place an obligation on the organiser to gather names, address and vehicle licence details of all dealers at the sale. The scheme should also oblige organisers to also note the type of goods being sold (eg anyone selling new DVDs is going to be of interest);
- Introduction of new powers to allow Trading Standards Officers to close down occasional sales that persistently include trading of counterfeit goods. This could be done via an enforcement order under the Enterprise Act (formerly "stop now" orders). It would require the recipient of the order (the sale organiser) to comply with the local authority order to cease allowing the illegal practice. In default an injunction can be sought. Alternatively an offence could be created for failure to comply

with the notice;

- Introduction of a requirement for the person giving registration details to the authorities on behalf of the trader to be over 18 years. This is intended to clamp down on the habit of traders using under-age children as a front for their illegal activity in order to avoid liability. While it will not be able to stop this entirely, it will ensure that an adult has to be present when registration is taking place and will remain within the precinct of the market;
- Amendment of the Proceeds of Crime Act to enable trading standards to recover the costs of prosecution of IP offences. This would help address the problem of local authorities not having sufficient funds to allocate to prosecution of IP crime and ensure that serious IP offences could be pursued in the courts; and
- Make it a legal obligation for Trading Standards to submit information on investigations and prosecutions being undertaken for IP infringement to the Patents Office. This would require amendment to the Copyright Designs and Patents Act (in tandem with implementation of s107A) and to the Trade Marks Act 1994, and possibly to TDA as well to allow disclosure to the Patents Office and to include investigations.

(See Chapter 5, sub-heading 'Enforcement at a local level'.)

4 Introduce legislation to make the act of camcording a film in a cinema a criminal offence. It is implausible that someone camcording in a cinema would be doing so for any other reason than financial gain. This is already being done in a number of US states.

(See Chapter 5, sub-heading 'Copyright protection in the UK'.)

5 Through the Creative Industries IP Forum, and working in conjunction with Ofcom and other appropriate organisations, promote the development and spread of open cross-platform global standards related to Digital Rights Management (DRM), maintaining the

option of intervention to ensure compliance with standards agreements or where the parties fail to agree. (This echoes a recommendation of the Broadband Stakeholders Group⁶³ and the European Commission's High Level Group on Digital Rights Management.)

(See Chapter 5, sub-heading 'Controlling content in the digital domain'.)

6 Ensure that the Patent Office's national IP enforcement strategy remains sufficiently flexible to respond to changes in the sourcing and supply of illegally copied films.

(See Chapter 5, sub-heading 'Enforcement at local level'.)

In the medium term

7 Through the European Union, prioritise co-operation with other EU Governments to further harmonise regulatory and anti-piracy enforcement measures and to proceed with the aim of smoothing out conflicts in criminal procedural law to enable greater co-operation amongst national enforcement agencies. Work with other international trade organisations (eg the World Trade Organisation) as appropriate to encourage enhanced protection of intellectual property rights across the globe, especially in those countries which have been identified as significant sources of pirated material.

(See Chapter 5, sub-heading: 'UK legal enforcement in the global picture'.)

8 Implement judicial training exercises to raise awareness as to the nature and impact of physical and Internet piracy.

(See Chapter 5, sub-heading: 'Copyright protection in the UK'.)

9 Review the extent to which the increasing availability of pirate copies of films to British young people through multiple distribution channels undermines the entire system of

content regulation in the UK (including the functions of the BBFC and Ofcom).

(See Chapter 4, sub-heading: 'The loss to the global film industry from Internet piracy'.)

10 Recognise that the Government target for "the UK to have the most extensive and competitive broadband market in the G7 by 2005" needs to be supported by complementary measures which ensure protection of intellectual property rights.

(See Chapter 4, sub-heading: 'Internet piracy'.)

11 Ensure that the Creative Industries IP Forum on Intellectual Property results in a productive dialogue between rights holders and Internet Service Providers on the most effective means to stem piracy.

The French Government is encouraging such a dialogue with particular regard to the music sector.

(See Appendix i 'Lessons from the music industry', sub-heading 'Legitimate online services'.)

In the long term

12 Aim to bring diplomatic pressure for changes in policy on the part of governments of countries that currently do little or nothing to prevent organised physical piracy from taking place within their borders and those that allow large quantities of pirate product to be exported to the UK.

(See Chapter 4, sub-heading: 'Professional piracy', and Chapter 5, sub-heading 'UK legal enforcement in the global picture'.)

The film industry

In the short term

13 Conduct a thorough review of security risks and potential sources of 'internal leaks' in the pre-production, production, post-production and distribution process.

(See Chapter 4, sub-heading: 'Sources of Internet piracy', and Chapter 5, main-heading: 'Security measures'.)

14 Review all possible procedural measures to tighten security and then implement optimal physical security measures throughout the production, post-production, pre-distribution and distribution process. Options to consider should include some form of a 'chain of responsibility' system, ensuring that responsibility for any professional copies of a film throughout its life reside with named individual persons. Important steps have already been taken under the aegis of the Film Distributors' Association, which has a Film Print and Digital Disk Management Protocol that was extensively revised and updated in July 2004.

(See Chapter 5, main-heading: 'Security measures'.)

In the medium term

15 Maintain a watching brief and regular review of both new technological developments that pose novel threats to the industry as well as those that offer security solutions and new means of commercially exploiting filmed entertainment in the digital domain. This should include review of – and where appropriate, adoption of – copy protection and digital rights management (DRM) technologies. Special attention should be paid to existing security vulnerabilities, not least the risks posed by the so-called 'analogue hole' – particularly in relation to DVDs, but also in relation to other consumer technologies.

(See Chapter 4, sub-heading: 'Consumer home recording' and Chapter 5, main-heading: 'Security measures'.)

16 Develop clear commercial strategies in relation to Internet film distribution. These strategies are likely to involve co-operation and partnership with a variety of companies working in different sectors (eg consumer electronics manufacturers, computer companies, broadband operators, etc). The key point is that survival and success for the UK film industry in the 21st century will mean throwing off the harness of insularity and increasingly looking outwards to new opportunities.

(See Chapter 4, sub-heading: 'Internet piracy', Chapter 4, main-heading: 'The future digital home', Chapter 5, sub-heading: 'Controlling content in the digital domain', and Appendix i, 'Lessons from the music industry'.)

17 Work with the Government's Creative Industries IP Forum and individual government departments to develop a strategy to deal with unauthorised Internet P2P filesharing that fairly balances consumer interests with the legitimate rights of the industry to exert copyright ownership and contain misuse.

In the first instance, an effective method is the issue of 'cease and desist' notices against Internet downloaders, although this can only be done with the co-operation of Internet Service Providers (ISPs) as film companies will not normally be able to identify uploaders or downloaders without ISP co-operation. In order to minimise the risk of negative public relations and maximise the containment impact, legal action against individual Internet users should be kept as a measure of last resort, and only then used against carefully selected high volume users.

(See Chapter 4, sub-heading: 'Internet piracy', and Appendix i, 'sub-heading: 'Enforcement measures' (music).)

18 Through the relevant trade associations, work with the *bfi*, Film Education, First Light and other appropriate organisations to help ensure that young people are aware of the damage that piracy can inflict on their enjoyment of films.

In return for facilitating use of copyrighted material for educational purposes, schools and universities can become allies in pushing through the anti-piracy education message to young people.

(See Chapter 5, sub-heading: 'The needs of educational institutions'.)

In the long term

19 Through the relevant trade associations, work with Ofcom, the UK Film Council and other relevant stakeholders to ensure that regulatory barriers to the development of new, legitimate business models for the online delivery of film are minimised. This will involve an examination of existing film distribution business models with a view to minimising the commercial opportunities left open for exploitation by pirate operators. This should include a thorough appraisal of release windows (both those between the US and UK/Europe and rest of world, and those between different media – theatrical, home video, pay TV, etc), pricing strategies and the possibility of opening a new Internet release window as early as possible in the distribution chain. The industry should ensure that copy protection and DRM technologies are used in a manner that maximises control, choice and convenience for the consumer, while at the same time ensuring a viable and secure business model for the industry.

(See Chapter 4, main-heading: 'The business of film', Chapter 4, main-heading: 'Film piracy in the UK', Chapter 4, sub-heading: 'Internet piracy', Chapter 5, main-heading: 'Education and consumer awareness' and Appendix i, 'Lessons from the music industry'.)

Government-backed and other film sector stakeholders

In the short term

20 Consult with all relevant stakeholders and with research experts on developing improved methodologies to quantify effectively the scale and impact of all forms of film industry piracy, paying particular attention to the impact of Internet P2P filesharing.

This methodology must take into account potential losses across all windows of distribution – primarily, theatrical, video and pay TV. It should also assess and highlight the financial loss to the Treasury from the illegal trading of films. Consideration should be given as to how a standardised methodology could be developed to address the issue of measuring losses suffered by the music and games industries in addition to the film sector. Such a cross-industry initiative could benefit from a co-ordinated approach to the research as well as the funding to support it.

(See Chapter 4, sub-heading: 'The loss to the industry'.)

21 Implement a special investigation into all the impacts of Internet P2P filesharing services on the film industry.

(See Chapter 4, sub-heading: 'Internet piracy'.)

22 Develop best practice security procedures for the handling of film prints and digital materials throughout the production process and make these procedures a condition of support schemes administered by the UK Film Council and other public sector funders. These procedures to build on the Film Print and Digital Disk Management Protocol published by the Film Distributors' Association in July 2004.

(See Chapter 5, main-heading: 'Security measures'.)

23 Further develop public campaigns to highlight the dangers of piracy, in particular

focusing on the links between piracy and organised crime, the illegal nature of piracy and file-sharing; the threat to the development of creativity and culture in the UK and the dangers of unsuitable material becoming available to children and teenagers younger than 18.

(See Chapter 5, main-heading: 'Education and consumer awareness'.)

24 Through the UK Film Council, forge links with EFAD (the forum of European Film Agency Directors) to further European co-operation in the fight against copyright theft.

Building on EFAD discussions to date, this should initially focus on information exchange about activities in each country, but then also encompass discussion about the best ways to develop and maximise new forms of distribution for European film (especially online distribution).

(See Chapter 5.)

In the medium term

25 The UK Film Council to convene discussions to consider ways to expand the financial resources available for enforcement activities.

These could include mandatory levies on companies receiving financial support via schemes administered by the UK Film Council, as well as the Industry Trust for IP Awareness set up by the British Video Association.

(See Chapter 5, main-heading: 'Enforcement'.)

26 Develop a 'carrot and stick' strategy to combating piracy – such as 'reward for information' schemes to incentivise the public to provide information that may lead to piracy convictions.

(See Chapter 5, sub-heading: 'The demographics of piracy', and Chapter 5, sub-heading: 'Understanding the consumer'.)

27 Consider the introduction of a reward scheme to incentivise cinema staff to patrol

auditoria looking for unauthorised camcorder usage. This should be done in conjunction with the introduction of legislative measures to make in-cinema camcording a criminal offence (see recommendation 4). Such a scheme was recently introduced in the US by the Motion Picture Association of America and details of this programme should be critically reviewed.

28 Develop innovative educational schemes to teach young people the social and financial implications of film piracy. For example, this could include integration of an understanding of copyright theft into the UK Film Council's First Light scheme for introducing eight-18-year-olds to filmmaking, as well as into wider educational initiatives on media literacy. This could build on Film Education's initiative to develop anti-piracy resources for primary and secondary schools.

(See Chapter 5, main-heading: 'Education and consumer awareness'.)

29 Facilitate further dialogue between educational institutions and film industry in an effort to foster a spirit of co-operation in the fight against piracy.

(See Chapter 5, sub-heading: 'The needs of educational institutions'.)

30 Establish new platforms and where appropriate support existing platforms for communication between the film industry and technology companies, such as broadband ISPs, consumer electronics manufacturers and Internet technology firms. Closer dialogue is crucial for the UK and European film industry to become cognisant of developments in technology that could pose future threats as well as new technological opportunities and counter measures. Decisions and information on these matters should not be left solely to US-based companies. These communication platforms could help resolve potential business interest conflicts that may facilitate film piracy as well as build on areas of mutual interest (eg the growing determination of broadband

operators to exploit media content to help grow their subscription businesses).

(See Chapter 4, sub-heading: 'Internet piracy', Chapter 4, main-heading: 'The future digital Home', and Chapter 5, sub-heading: 'Controlling content in the digital domain'.)

The recommendations should be read in conjunction with the action plan on the following pages, which sets out the timetable to which the recommendations will be delivered.

The Task Force, with additional members, will remain in existence for a further year, working with industry and Government to take forward the action plan.

Specific recommendations falling to the Government will be delivered in partnership with the new intellectual property rights forum recently announced by DCMS/DTI.

Action plan

Implementation date

The UK Government

Short term

Make it legally possible to extract financial damages from organised pirates by extending the legal concept of 'exemplary' and 'statutory' damages to cases of copyright infringement

Introduce a comprehensive package of national legislative reforms designed to curb trading of pirate products at street markets and occasional sales

Make the act of camcording a film in a cinema a criminal offence

Promote the development and spread of open cross-platform global standards related to Digital Rights Management (DRM)

Support the Patent Office's national IP enforcement strategy

Medium term

Prioritise co-operation with European and international partners to further harmonise international regulatory and anti-piracy enforcement measures



The film industry

Review security risks and potential sources of 'internal leaks' in all facets of the industry and then implement optimal physical security measures throughout

Engage with technological developments that pose novel threats to the industry and those that offer security solutions and new means of commercially exploiting filmed entertainment in the digital domain

Government-backed and other film sector stakeholders

Consult on research methodologies to quantify effectively the scale and impact of all forms of film industry piracy, paying special attention to the affects of Internet P2P filesharing

Make implementation of approved security procedures a condition of financial support schemes administered by the UK Film Council and other public sector funders

In advertising and public relations efforts, highlight: the links between piracy, organised crime and international terrorism; the threat to grass-roots UK film development and long-term creativity; the dangers of non-certified films becoming available to the young; and the fact that piracy is illegal

Forge closer links with film agencies in other European countries to further international co-operation in the fight against copyright theft

Consult on innovative approaches to expanding the financial resources available for enforcement activities

Continued on following page

Action plan (continued)

Implementation date

The UK Government

Medium term

Implement judicial training exercises to raise awareness as to the nature and impact of physical and Internet piracy

Review the extent to which the increasing availability of uncontrolled pirate copies of films to British young people undermines the UK system of content regulation

Recognise that initiatives to promote 'Broadband Britain' and wider broadband access should be coupled with complementary initiatives and measures to protect and enforce copyright ownership

Consider possibilities for facilitating co-operation between content owners and Internet Service Providers

Long term

Apply pressure for changes in policy on the part of governments of countries that do little or nothing to prevent organised physical piracy from taking place within their borders and those that allow large quantities of pirate product to be exported to the UK

The film industry

Develop clear commercial strategies in relation to Internet film distribution

Develop a strategy to deal with unauthorised Internet P2P filesharing that fairly balances consumer interests with the entirely legitimate rights of the industry to exert copyright ownership and contain misuse

Foster a spirit of co-operation with educational institutions so that they may become allies in pushing through the anti-piracy education message to young people

Examine existing film distribution business models with a view to minimising the commercial opportunities left open for exploitation by pirate operators

Government-backed and other film sector stakeholders

Develop schemes to incentivise the public and industry staff to provide information that may lead to piracy convictions

Develop innovative educational schemes to teach young people the social and financial implications of film piracy

Facilitate dialogue between educational institutions and film industry in an effort to foster a spirit of co-operation in the fight against piracy

Establish new platforms or support existing platforms for communication between the film industry and technology companies, such as broadband ISPs, consumer electronics manufacturers and Internet technology firms

Appendices

Appendix i: Lessons from the music industry

The plight of the music industry in the face of growing piracy has been a cause célèbre. Spurred on by popularisation of the MP3 compression format and proliferation of Internet distribution, digital piracy is widely perceived to have cut a swathe through the music industry's profits.

Many theories have been put forward to explain just how the industry found itself in such a predicament. The primary accusation has been that the business showed a lack of insight: not only in the face of rapidly developing technology, but also the changing behavioural patterns of its customer base. The experience of the music industry holds valuable lessons for the challenge facing the film industry.

As seen in previous chapters, broadband speeds are increasing exponentially and movie filesharing on P2P networks is growing in popularity.

The size of the problem

Music piracy takes very similar forms to that of film piracy.

In the first instance, activity can be commercial or private; that is, it either takes place as a highly organised venture using large-scale production outfits, or is carried out privately by

the consumer using standard home equipment such as a PC or CD burner. Secondly, music piracy can either take physical form (such as a counterfeit music CDs) or be digital (song files on a PC).

According to the International Federation of the Phonographic Industry (IFPI), commercial physical piracy has been fairly consistent in its share of the global market (though it varies greatly across territories, with Eastern Europe, for example, having much higher degree of illegal music sales, compared with the EU). In 2001, the revenue share of pirated material was estimated to be 11.3%, down 1% from 1996. In real terms however, the global sales value of physical commercial piracy in the period 1996-2001 dropped from \$5.1 billion to \$4.3 billion. These figures, however, do not take into account the impact of CDs copied or 'burnt' in the home or the impact of P2P filesharing.

Internet piracy has ballooned; driven by the growth of broadband, P2P networks, and the proliferation of home storage devices. According to the British Phonographic Industry's (BPI) most recent annual piracy report, 1 billion song files are illegally downloaded in the UK every year⁶⁴. In the consumer survey carried out jointly by the BPI, FDA and BVA in 2003, it was found that 26% of the UK's weekly Internet users download

music, more than half of whom burn on average 4.2 CDs a month. The IFPI estimated that there was an estimated 900 million infringing music files on the Internet as of January 2004, from an estimated 6.2 million simultaneous P2P users.

In the UK, where commercial piracy statistics also take into account illegal 'home burning' of CDs in conjunction with an Internet downloading service, the picture is quite alarming. In 2000, the UK CD sales market amounted to 314 million units, of which 31% were thought to be illegitimate copies. By 2002, where the total market was 406 million units, legitimate sales held practically unchanged whilst the unauthorised market share was said to be 45% and rising fast.⁶⁵ The BPI estimates that in 2004, the number of CDs illegitimately burnt in the home will overtake those legitimately bought in shops. It is calculated that consumers are annually burning in excess of 120 million CDs from music downloaded from the Internet.

Annual sales of CD albums in the UK

	2000	2002
Legitimate sales	217m	226m
Unauthorised sales	97m	184m
Total sales	314m	406m

Source: BPI

The ease of downloading and recording in the home is also enabling the business models of professional commercial pirates to evolve. The BPI's Anti-Piracy Unit is increasingly encountering commercial pirates who are operating 'CD factories' from a garage or spare room at home and then selling the product via car boot sales or places of work.

The impact for individual companies of the downturn in the music market has been devastating. Sony Music Entertainment, for example, has been forced to streamline its operations and cut advertising costs. Despite this, the company still reported quarterly losses of \$50 million in mid-2003, showing quarterly sales to have capitulated below \$1 billion.

Why digital music piracy exploded

The major record labels were hit hard by digital piracy because they failed to respond from the outset to threats and opportunities raised by the development of broadband Internet. Though Strauss Zelnick, the former CEO of BMG, praised the development of online music distribution as far back as July 2000, expecting it to 'more than double' the music business, the practical stance adopted by the music industry was to 'sit back'. That is, the majors took the view that they could wait and see rather than pioneer, believing that content, deep pockets and marketing muscle would

enable them to jump into any business model that emerged out of the Internet environment. Added to this was a desire to maintain the value of existing physical distribution, which it was feared electronic distribution would cannibalise, as well as preventing technology companies such as Microsoft, Apple or Sony from becoming gatekeepers to music distribution.

What this sit-back approach failed to acknowledge was that a growing base of young music fans wanted music online, quickly and cheaply, regardless of business considerations. As the majors dawdled, the business model that emerged was Napster.

Napster was a first generation P2P music sharing service – one that has given birth to the new generations of filesharing services such as Kazaa and eDonkey. The controversial Napster site listed thousands of unlicensed tracks from popular artists, which consumers could download and share with its user-friendly software. In December 1999, the company was sued for copyright infringement by the Recording Industry Association of America (the RIAA).

Armed with a study⁶⁶ indicating that one-third of Napster users access the file-sharing software to get songs for free, the RIAA and the National Music Publishers' Association⁶⁷ asked in June 2000 for a preliminary injunction forcing Napster to remove from its directories the songs that are allegedly violating their members' copyright. In a surprise decision, U.S. District Court Judge Marilyn Patel granted the RIAA's request for a preliminary injunction on 26 July 2000. The judge ordered Napster to come up with a software programme to remove the infringing material. In her decision, Judge Patel shot down Napster's defence that the software is being used for non-infringing purposes such as promoting new artists. She also determined that Napster cannot claim fair use under the Audio Home Recording Act and dismissed the company's claim that its

technology is protected under the Sony Betamax case ruling, which found that the courts could not hinder technological advancements.

The ruling was described by the music industry as an important step in the development of a legitimate international online music market. However, in the context of the Napster litigation, the majors were accused of preventing the emergence of new services by refusing to license their repertoire. If anything, the Napster case shed light on a huge gulf in understanding between the majors and their young customers. In a survey of 1,170 US teens and young adults, aged 12 to 22, carried out by Forrester Research in June 2003, it was found that there was general contempt across the board for the high cost of CDs and the perceived greed of music executives and artists.⁶⁸

It was only after the Napster case that the music industry really began investing in its own alternatives – such as Sony/Universal's 'Pressplay', Listen.com, and AOL MusicNet. However, by then, the lack of a serious legitimate alternative had already rationalised (if not legitimised) illegal P2P filesharing in the eyes of downloaders. Moreover, the open-source nature of the MP3 has meant that putting technical limits on the technology has proved very difficult.

Dealing with music piracy

In an attempt to turn back the tide, the music industry has tackled piracy from a number of angles, with varying degrees of success. These have included:

- Security measures;
- Enforcement measures;
- Education and consumer awareness; and
- Legitimate online services.

Security measures

The major record companies supported copy protection from the very beginning. If they could somehow encrypt digital files or their equivalents, then they reasoned they could control online distribution. To this end the majors put a great deal of faith in the Secure Digital Music Initiative (SDMI), a 200-strong industry body set up to develop open technology specifications that protect the playing, storing and distributing of digital music. The announcement of SDMI in December 1998 by the RIAA signalled the industry's attempt to leverage its position in the online music boom. The music companies also announced that they intended to have songs by major artists available for online purchase by the end of 1999.

Unfortunately, anything that can be encrypted can also be hacked. In September 2000, SDMI put out an open letter offering \$10,000 to anyone that could hack its encryption or erase its digital watermarks. The response was almost immediate and most of the hack challenges were successfully met. This was despite a general boycott of the offer by most of the hacking community.

As a result, SDMI effectively ended its efforts in May 2001. With it, it took the music industry's initial hopes to use copy protection as a way of controlling digital transaction of files at consumer level. It also took away hopes of

creating an open-standards Digital Rights Management (DRM) solution.

Current measures for music DRM are a mixed bag of proprietary technologies. Microsoft Windows Media Player 9 and Apple's iTunes, for example, have brought to bear years of experience in software DRM to create systems that are actually proving difficult to beat (although, as seen below, it's a constant battle with hackers, and both have been supposedly cracked at one point or another). Microsoft especially trumpeted its music Windows Media DRM 9. Other companies, such as OD2 in Europe, also provide their own solutions.

Proprietary DRM technologies though create a major conundrum for the music majors: how much control to hand over to the technology firms? This is a question that raises its head in the context of online music services (see below).

Where the music industry has decided to take the lead, such as in the use of copy protection on CDs, it has encountered heavy opposition – predominantly because the solutions have not worked exactly as planned.

In January 2004, Belgian consumer watchdog Test-Aankoop⁶⁹ launched a legal action against four of the five major music companies (except Warner), on the grounds that their use of copy protection technology on major CD releases short-changed consumers. This was because some of the technology used by the major labels to block consumers from ripping tracks onto their computers allegedly also prevented them from being played properly in certain CD players. Tied into the lawsuit is also a 'fair use' accusation, questioning the right of labels to stop consumers putting tracks from legally purchased CDs onto computers or MP3 players for personal consumption. The test case is based on 200 individual complaints filed with Test Aankoop by consumers. If the case is successful before the Belgian courts, it could trigger similar actions by other consumer rights groups across Europe. The action was refused on 25 May 2004. An appeal has since been

lodged by Test-Achats.

Aside from copy protection, a technique for marking recordings – called watermarking – is extensively used in physical copies of music used for pre-release and preview purposes. Although the impact this has on piracy is not yet determined.

Enforcement measures

A significant weapon in the majors' arsenal has been legal enforcement. Many believe that the music industry has wielded this tool clumsily – serving to entrench anti-industry feeling. However, the industry's strategy of bringing lawsuits against consumers does appear to have brought some results.

The BPI's Anti-Piracy Unit (APU) has been extremely active in the battle against music pirates in the UK. With piracy being more widespread than ever before, the BPI has expanded its workforce at a regional level so that the network of investigators covers the entire country. Internationally, the BPI works very closely with the IFPI, sharing intelligence with other national groups. During the course of 2002, the APU attended or gave evidence in almost 700 criminal cases, and was involved in 125 raids at premises throughout the UK to seize illegal recordings and replication equipment.

Most recently, in December 2003, the APU carried out its largest ever joint anti-piracy raid with FACT and ELSPA⁷⁰ at an open-air market near Edinburgh. Over 100 officers from the Lothian and Borders police force took part in the raid where they seized an estimated £10 million worth of counterfeit CDs, DVDs, as well as business and games software.

A further six raids involving BPI investigators were subsequently carried out on private addresses in the Rochdale area, Greater Manchester. Three people were arrested under the Trade Marks Act and a large amount of copying equipment with thousands of

counterfeit music and film discs were seized.

The operations were part of a concerted drive to crack down on piracy in the run-up to Christmas. Many high-profile releases are launched in the final quarter and the music pirates are quick to react with counterfeits of the best-selling new titles.

However, it has been the behaviour of the RIAA in the US, targeting the 'consumer' pirates rather than professional outfits, which has captured the headlines. In August 2003, the organisation took the battle to the downloaders by simultaneously suing 261 P2P filesharers tracked down by their Internet Protocol addresses and file usage.

What was unfortunate from a public relations angle was that one of the first defendants turned out to be a 12-year-old girl, Brianna Lahara, who claimed she had no idea that she was doing anything wrong. Convicted and fined \$2,000, the venture went some way to frightening children and teenagers from using P2P services – and showing that the record business means business. However, it only served to widen the gulf between customers and record companies, and enflame anti-industry feeling. Grokster President Wayne Rosso branded the music industry as 'bullies' and show-business' 'version of the Taliban'. P2P United, a coalition of "peer-to-peer" song-swapping networks, and New York radio disc jockey Brother Wease offered to pay Brianna's legal bill, whilst online music retailer MusicRebellion.com said it would allow her to download \$2,000 worth of free music from its legitimate music website.

This hasn't deterred the RIAA. In November 2003, 15-year-old Megan Dickinson was sued for a similar infringement to Brianna Lahara. Megan also claimed that she had no idea what she was doing was illegal. The lawsuit demanded the family either pay a \$3,500 settlement, or fight the suit and go to court.

Out of the 261 lawsuits, more than 50 had

settled by the end of 2003.

In January 2004, a US survey of 1,400 Internet users by the Pew Internet & American Life Project and comScore Media Metrix, a Web tracking firm, found that the percentage of Americans who download music online has halved since the lawsuits began. Whereas 29% of Internet users surveyed in May 2003 had said they sometimes download songs to their computers, by December 2003, this figure had dropped to 14%. The figures also showed that the usage of Kazaa fell 15% from November 2002 to November 2003, whilst other P2P networks also experienced usage declines. The drop at BearShare, was 9%, while WinMX lost 25% of its audience and Grokster plunged 59%.

Though Mitch Bainwol, the chairman and CEO of the RIAA, openly embraced the findings, the figures have been greeted with mixed reaction. Rob Glaser, the chief executive of RealNetworks, which makes software that plays music and video, has pointed out that in light of the lawsuits there is likely to be unwillingness amongst downloaders to admit to their activity. Cindy Cohn, legal director for the Electronic Frontier Foundation, a lobbying civil liberties group, has echoed these sentiments, saying that most people are aware of the RIAA lawsuits, so “probably figure telling a stranger on the phone about their downloading isn't a very good idea”.

P2P monitoring firm BigChampagne meanwhile has said that its empirical evidence shows that the use of services like Kazaa, both in terms of the number of users and in terms of the volume of material, is still rising dramatically.

There is also the possibility that some of the decline in use of the likes of Kazaa, Grokster Bearshare has been due to users moving on to new P2P protocols such as eDonkey, BitTorrent, and Overnet (see Chapter 4).

Whether or not the RIAA lawsuits are working to reduce filesharing is open to debate. What is

clear is the importance of educating the consumer and raising awareness. What the RIAA lawsuits have also highlighted is the negative publicity generated for an industry should it litigate against potential customers.

The RIAA is meanwhile proceeding with the lawsuits against individual P2P users into 2004.

In the UK, the BPI has so far kept its lawsuits to more PR-friendly defendants. In April 2003, the organisation scored a legal victory against EasyInternet Café, when the latter agreed to pay compensation to the record industry for copyright infringement. EasyInternet had been charging customers to burn illegally downloaded tracks from the Internet onto recordable CDs.

However, in January 2004, the BPI caused a public backlash, when it took legal action against websites offering cheap CDs. It alleged that CDWow.com, whose business model is based on buying legitimate products in cheaper territories and offering them for sale into the UK, was breaching EU importation laws, and forced the supplier to substantially up its prices. Much of the press surrounding the litigation, which was settled out of court, painted the BPI in a very negative, anti-consumer light. In terms of P2P, the BPI recently made clear that it would soon follow the RIAA's experience, and adopt a strategy of suing individual users.

According to the IFPI⁷¹, the music industry's campaigns against illegal file-swapping have sharply raised public awareness both in the US and in Europe. In a recent IFPI-commissioned survey of consumers in four major European markets – Denmark, France, Germany and UK – more than two thirds of respondents stated they were aware that distributing music online without permission is illegal and an average of 54% of consumers surveyed support legal action being taken against infringers. These very high levels of awareness are put down to the escalation of the industry's Internet anti-piracy efforts in 2003. In addition to lawsuits

against hundreds of large-scale Internet users, the campaign has included the dispatch of millions of 'instant messages' emailed to file-swappers' computers, mass information campaigns in colleges and universities in over 20 countries, and the launch of the international educational website www.pro-music.org.

The IFPI also claims that the anti-piracy campaign has dented Internet piracy levels worldwide. After doubling to 1 billion files between 2002 and the start of 2003, the number of files illegally on the Internet at any one time has fallen over the last nine months by 20% to 800 million in January 2004. However, the organisation acknowledges that, while the overall fall in the number of files on peer-to-peer services is driven by a sharp reduction in files on the best-known FastTrack network (which hosts the Kazaa service), there has been an increase in the number of files on other peer-to-peer networks.

Education and consumer awareness

The music industry has never quite got its act together in terms of educating the consumer – fostering a siege mentality, relying on litigation to educate, choosing to concentrate on lobbying government.

In the UK, the BPI has been carrying out a programme of regular visits to CD manufacturing plants, record companies and enforcement groups around the country. The organisation has also been staging one-off events, such as hosting a stand at the North East Fraud Forum in March 2003 to profile anti-piracy activities to the audience of delegates.

The organisation has also been involved in supporting cross-industry initiatives, and was instrumental in ensuring that the private member's bill – Copyright, etc and Trade Marks (Offences and Enforcement) Act 2002 – became law in November 2002 (see Chapter 5).

Elsewhere, individual music majors have been lobbying of their own accord. For example, Alain Levy, the CEO of EMI, has been drumming up support for the fight against piracy in Brussels for some time. It is believed that this was instrumental in getting the European Council to pass its anti-piracy resolution in March 2003.

Legitimate online services

As of mid 2003, there were no more than ten legitimate online music services offering anything resembling a realistic consumer proposition. Of these, the most prominent have been AOL MusicNet, which costs \$8.95 per month and already has over 100,000 subscribers, MusicMatch and RealOne Rhapsody.

The music industry's own direct efforts to offer online services have somewhat dried up, with the much touted Pressplay.com website now leading straight to the reborn legitimate Napster website. Pressplay in its original form was a good example of the music industry getting the online business proposition wrong. It tried to operate on a monthly subscription basis; the problem was that if you cancelled your subscription, all the files you had downloaded would cease to function and your investment became worthless.

However, the real light at the end of the tunnel has proved to be Apple's iTunes online music service. The iTunes Music Store was launched in April 2003 in the US, selling music files encoded using a proprietary format (not the widely used MP3 format) at 99 cents per track. Initially only available to Apple Mac users in the US, and subsequently extended to Windows PC owners, iTunes was an immediate success. By the end of December 2003, 25 million songs had been downloaded on the service, with downloads at the end of 2003 averaging around 1.5 million per week – translating into about 75 million downloads a year on an annualised basis. US

music consumers are now buying almost twice as many 'singles' in digital form over the Internet as they are on CDs from retailers.

The success of iTunes really goes hand in hand with the success of Apple's iPod personal music storage device. By leveraging the 'sexy' desirable brand of the iPod, on which downloaded music can be listened to on the move, Apple has single-handedly created an environment in which people are prepared to pay for downloading music simply because of the 'must-have' status of the iPod technology amongst young demographics. By 20 December 2003, 1.32 million iPod devices had been sold since the device's launch in 2002.

iTunes brought with it an important change in attitude: the music industry has had to come to terms with the fact that it will never completely control the digital domain, but has to work within it. Moreover, by doing nothing at the outset, by sitting back and observing, the opportunity to build online music services has been lost to the gatekeepers they most feared; in iTunes' case, Apple, whilst Microsoft is planning to launch its Windows equivalent of iTunes and the iPod towards the end of 2004. The distrust of these ventures on the part of the music industry still lingers. Despite the demonstrable success of the iTunes service, some record companies are still holding back their content – or in some cases, only distributing older titles in the digital format (leaving new releases only available legitimately on CD).

Other third party companies are also getting in on the act. In a bizarre twist, Coca Cola is throwing its lot into the marketplace. In January 2004, the myCoke Music⁷² site went live in the UK, with the drinks manufacturer promising a selection of over 250,000 songs from 8,500 artists at a cost of 99p each. Like most of the European services, the myCoke Music offering is being operated by the 'white label'⁷³ online music distributor and DRM supplier OD2. The latter also provides a service to a range of other operations, including MSN

Music Club, Virgin Downloads, Tiscali Music Club, HMV Digital Downloads, Fnac, TDC musik, Karstadt and MTV. According to OD2, the number of aggregated online users in Europe has gone from 380,000 at the end of 2002 to 450,000 at the end of 2003.

On the independent front, Warp Records has launched its popular Bleep.com service, offering tracks from dance music producers on paid download. Germany's cross-industry business-to-business platform Phonoline, another independent venture, was due to launch in early 2004 with 250,000 tracks available.

In the US, the situation has been no different. In January 2004, retail chain Wal-Mart began testing a digital service and Sony announced the launch of its Connect downloads service for April 2004, featuring 500,000 tracks. As in Europe, the market is beginning to increasingly see 'white label' download stores designed for third parties to build branded digital music services.⁷⁴

It appears that finally, after sustaining heavy losses, some sort of sea change is taking place in the music industry's relationship with the online business model. According to the IFPI⁷⁵, some half a million people are already signed up to more than 30 different legal websites in Europe and the trade body predicts this figure will rise sharply this year as 20 new services launch worldwide and record companies continue to license their catalogue for legitimate distribution online.

As broadband penetration increases, ISPs are also looking to content to attract and retain customers. In Europe, T-Online, Tiscali, Wanadoo, AOL, Spain's Telefonica, the Netherlands' KPN and BT are amongst a host of companies offering music download services.

Other innovative business models are also appearing – such as Wippit and PlayLouder MSP in the UK. Wippit is the world's first subscription-based P2P music service to secure legitimate licences in a bid to offer its 5,000 subscribers (as at end 2003) access to music

files for an annual fee.

While a critical mass of legitimate online services is taking hold in Europe, the IFPI reports that consumer awareness of them is still very low. The number of tracks available rose from 220,000 to 300,000 (up more than 30%) in the last three months of 2003 – but only one in four consumers surveyed are aware they can get music online legally.

Nevertheless, music downloading is now beginning to expand beyond the PC, with mobile operators looking to launch services as part of their multimedia offering. In the UK, O2 launched its download to mobile service in November 2003, allowing users to download music and transfer files to a player device manufactured by Siemens. The appearance of multimedia handsets, such as the Microsoft-enabled Mpx200 Motorola handset, which offers a fully functioning Windows Media Player, is making mobile music more and more a reality.

There is however an unwelcome footnote to the iTunes and legitimate download story. In November 2003, Jon Johansen, a 19-year-old tried for cracking the CSS DVD copy protection code (see Appendix ii), surfaced again, having allegedly developed a programme to circumvent iTunes copy protection. The software, called QTFairUse, was posted on his website. It legally opens and plays a protected music file, but then, essentially, drains the unprotected music data into a new and parallel file; thus creating a perfect clone of the original music file. In its current form, the software leaves the unprotected music data in a form that is unplayable without additional software.

Some European Governments are looking at facilitating solutions for P2P piracy by bringing together content owners and ISPs. On 28 July 2004 representatives of the French Government, the French music industry and French ISPs signed a charter of commitments to promote: the development of legal Internet services, respect for intellectual property and the fight against digital piracy. The specific

commitments listed below are to be undertaken respectively by ISPs, signatory music authors' rights holders, signatory music producers/online distribution platforms, and together by the aforementioned groups and Government. Broadly, the commitments relate to:

- Education/awareness activities;
- Dissuasive actions (instant messaging, testing of filtering systems);
- Repressive actions (possible termination of subscriber access, legal cases to be brought by rights holders);
- Promotion of legal services (augmenting the catalogue of available works, making them available on non-discriminatory terms, obligation to supply/license); and
- Agreement to pursue, with Brussels, initiatives to lower VAT rates on disks, and prepare an initiative to secure lower VAT rates for related on-line services.

The battle for online music still goes on, and the lessons can be best summed up as follows:

- It is important to act early; the digital revolution is here, it's impossible to hold back the tide of consumer demand.
- Offering legitimate online services is imperative in the war against Internet piracy. The iTunes experience shows that the consumer is willing to pay for Internet download of entertainment content as long as the cost, content range and product positioning is done effectively (see Movielink analysis in Chapter 5).
- Technology and hardware companies have an important role to play in encouraging use of legitimate online services and developing DRM solutions (albeit proprietary ones).
- Lawsuits may be an effective method of discouraging filesharing, especially among teenagers and children. However, if they are too confrontational or are perceived to target the 'weak', they can lead to anti-industry feeling and negative publicity among consumers.

Appendix ii: Technical solutions to the problem of piracy

The use of technology to protect film content is a critical part of security measures designed to combat piracy. Different technologies are appropriate to the protection of films during distinct parts of its exploitation life cycle and to deal with specific threats. However, the use of technological solutions must be coupled with the complementary adoption of all the other types of measure outlined in this chapter (ie more secure industry practices, legal instruments, enforcement actions, and educational/awareness initiatives).

For instance, a number of different solutions have been proposed to counter the unauthorised use of camcorders in cinemas. However, none of these has yet won the confidence of the whole industry, with a view to mainstream deployment.

Extensive use is already made of 'watermarking' techniques to trace copies of films used internally and within the post-production process.⁷⁶ For example, in October 2003, Universal Pictures entered a multi-year agreement with technology firm Verance to use the latter's audio watermark on film and video entertainment. The Verance watermark contains inaudible information designed to be read and understood by consumer and computer devices. The mark will impart usage information about the content, including content identification, forensic tracking and copy control information. There are also similar moves underway for watermarking files used for the play-out of films in digital cinema screens.

In terms of specifically protecting content on DVD and videocassettes, there are several solutions currently in use:

- CSS (Content Scrambling System): an algorithm-based method used primarily to scramble pre-recorded content on DVD to prevent unauthorised duplication. A part of the DVD specification, CSS can be used by any DVD

licensee without further charge.

- Macrovision: a copy-protection system built into VHS and DVD releases (and into hardware, which protects the analogue output signal. This is a proprietary technology that incurs a royalty charge for its use.

- CGMS (Copy Generation Management System): analogue copy-protection system built into the DVD specification, designed to stop consumer DVD recorders copying from a DVD player via an analogue output. A part of the DVD specification, CGMS-A can be used by any DVD licensee without further charge.

However, the use of these technical solutions in the home video sector has been far from smooth.

First, hackers broke the CSS digital copy protection system soon after it was first implemented. 'DeCSS' is a small piece of software that breaks the CSS encryption and allows the reading of encrypted DVDs by personal computers and home DVD players. A simple Internet search returned over 50 sites offering DeCSS software, including a DeCSS solution that consisted of only seven simple lines of code, and 42 ways to distribute the software.

The film industry has tried to prosecute the hackers, with mixed results.

In 2000, the MPAA won a landmark court case when a US federal judge ruled that DeCSS violated the US Digital Millennium Copyright Act. However, in December 2002, the California Supreme Court held that out-of-state Internet users who post DVD copying software on the Internet cannot be sued in California courts unless they have business interests in that state. The decision means that the studios will have to sue individuals separately in their own jurisdictions, rather than en masse in California.

In January 2003, a court in Oslo, Norway, cleared teenager Jon Johansen of DVD piracy

charges in a similar DeCSS case brought by the MPA on behalf of the main Hollywood studios. The charges filed against Johansen were brought under the Norwegian criminal code section 145.2, which outlaws bypassing technological restrictions to access data that one is not entitled to access. Johansen's prosecution was the first time that this law has been used to prosecute a person for accessing his own property. The data theft law had been used in the past only to prosecute those who illegally access another's bank or phone records or data that they have no lawful right to access.

The Oslo court ruled that Johansen (who was 15 years old at the time) had not broken the law by helping to write the DeCSS code for Linux systems. This point was contested in the case, but Norway is not in the EU and therefore the MPA could not rely on the Copyright Directive. Even more significantly, the court rejected the MPA's claim that it had the right to control the way in which an individual viewed a DVD after purchase. The court raised the spectre of consumer rights once again, stating that 'someone who buys a DVD film that has been legally produced has legal access to the film.'

Norway's Economic Crime Unit (ECU) appealed the loss and Johansen was retried between 2-11 December 2003, again in Oslo. Since Johansen's is a test case, it is not unusual for the case to be retried on an appeal. However, on 22 December 2003, the appeals court upheld the acquittal. The ECU chose to drop plans to appeal further, accepting defeat.

So the position in some European territories, at least those few outside of the EU, differs considerably. Had Johansen been tried in the US, he would have been found in violation of the Digital Millennium Copyright Act, as he may have been if Norway had been in the EU and under the jurisdiction of the Copyright Directive.

Another issue is a lack of cohesion in film industry practice as to the importance of

analogue copy protection.

In November 2001, Macrovision CEO Bill Krepick, in announcing slowing sales, stated that major studios selectively reduced the number of DVD titles that have Macrovision copy protection in an effort to cut costs, noting that content owners consider copy protection a discretionary expense.

Indeed, a number of high profile titles have in recent times been made available without Macrovision protection. This is largely due to commercial considerations and individual negotiations between studios and Macrovision and probably should not be construed as a lack of concern over the threat of piracy. However, the net result is a greater availability of DVDs with reduced protection.

When it comes to protecting against analogue recording, the alternative to the proprietary Macrovision is the (free) CGMS-A standard that is built into the DVD specification. However, as discussed in Chapter 4, not all DVD players implement the CGMS-A system correctly. As a result some DVD players/recorders – especially those in PAL territories such as the UK – can copy DVD movie discs onto blank DVDs. According to some estimates, 60% of DVD players are not doing what they should to stop a DVD recorder copying a DVD movie disc. Low cost mass-market machines, usually retailing for £50 or less, are the main culprits.

According to the MPA, its member companies have begun enforcement activities to ensure compliance with the CGMS-A specifications amongst manufacturers. However, even if the specification were enforced amongst all manufacturers, this would not address the millions of machines already installed in homes that do not implement the technology correctly.

The Macrovision issue also highlights a degree of underestimation as to the nature of analogue piracy. 'Digital' is the buzzword, therefore there is a tendency for anything

analogue to be considered a 20th century problem. This is not so. Analogue copying of DVDs can be easier, cheaper and far more convenient than digital copying, with very little loss in picture quality.

With the increasing proliferation of DVD recorders in UK homes (see Chapter 4), millions of consumers will within the next five years be able to copy DVDs by simply running a standard video lead from the analogue output of a DVD player to the analogue input of a DVD recorder. Moreover, other devices – like PCs and portable digital video players – often do not implement any analogue copy protection schemes. The net result is that the ‘analogue hole’ is likely to become an increasingly important issue into the future.⁷⁷

This has been recognised by those involved in negotiating standards for a next-generation DVD system to succeed current DVDs. Next-generation DVDs will have vastly larger storage capacity compared with today’s discs; this will enable them to hold movies (and other content) in a high-definition format. However, Hollywood studios are determined not to repeat the mistakes made with the current DVD standard. Thus, the issue of copy protection – both analogue and digital – is at the heart of the current discussions between the studios and the manufacturers. Some studios are even suggesting that next-generation DVD machines should have no analogue output at all. If adopted, this would mean that such devices would not be compatible with most of the legacy TV sets currently installed in consumer homes.

Meanwhile, the industry has begun to engage with the problem of digital copying of DVDs, often termed ‘ripping’. This has been the subject of extensive legal efforts through the case against 321 Studio⁷⁸, but the problem now is that most DVD ripping software now available is not sold through commercial channels by companies like 321 at all. Instead, it is being made freely available as so-called freeware by individuals who are difficult to trace.

It is estimated that there are now 50 different DVD ripping solutions available for free download on the Internet⁷⁹, of which the most popular is called DVD Shrink⁸⁰. These not only strip out the copy protection on DVDs, but also allow the user to compress the resulting recording on to a single blank DVD-R disc as well as make their own edits of the original content.

So far, two different products have been developed to combat DVD ripping – one from Macrovision (RipGuard) and another from Sony (ArccOS). Both have to be introduced during the process of making a new DVD and are currently being evaluated by the industry.

When it comes to technical solutions designed to combat Internet distribution of media files – and particularly P2P networks – developments are at a relatively early stage. One measure that has proven effective is the use of so-called ‘spoofing’. This involves the deliberate distribution of huge numbers of dummy files that appear to be counterfeit film copies, but actually contain nothing, or just a film trailer or warning against illegal downloading. Some systems can effectively ensure that the spoof files are returned at the top of the P2P search results. Many downloaders who spend hours downloading files only to find they are spoofs tend to be put off the practice thereafter.

This has been taken further by specialist companies like Macrovision, MediaDefender and Overpeer, which have been evolving elaborate technical counter-measures to combat illegal file trading. Media owners must first contract these companies to protect certain named titles. As soon as these named titles are found on the Internet, these companies go to work. The basic principle is to use a combination of the spoof files discussed above with systems that interfere with the download process itself. Initial results suggest these technical counter-measures can be very effective. However, it may be some time until the majority of the industry can afford to employ such measures to protect all their content.

Appendix iii: Copyright and Related Rights Directive Regulations 2003 – How the new law affects the film and video industries

- The European Union passed the “Directive on Certain Aspects of Copyright and Related Rights in the Information Society” (2001/29/EC) on 22 May 2001.
- On 31 October 2003, the Copyright and Related Rights Directive Regulations 2003 (2003 No. 2498) came into force in the UK. These regulations implement the EU’s Copyright Directive.
- The Regulations adapt the basic rights of copyright holders to the Internet Age, clarify the exceptions to copyright, grant enhanced protection to technological measures, protect electronic rights management information and create new criminal offences to protect works against unauthorised electronic communication to the public and the supply of tools and services for circumvention of technological measures.
- Implementation of the Directive will allow the EU and its Member States to ratify the World Intellectual Property Organisation’s Copyright Treaty of 1996. The Treaty (already signed by 42 states, including the US in 2002) sets the international standard for copyright protection.

The Regulations amend the Copyright, Designs and Patents Act 1988 (“CDPA”) and came into force on 31 October 2003. The following summary refers only to provisions relevant to the film and video industries. For a precise understanding of the new law, direct reference should be made to the text of the Regulations.

The basic rights

The Regulations create a broad right of electronic communication to the public. It is now clear that right holders have the right to control not only the broadcasting of their

works, but also their transmission over the Internet. The new communication right includes making a work available in an electronic on-demand service.

The Regulations reformulate the exclusive rights relating to broadcasting and cable transmission, redefining the broadcasting right to include cable transmission and non-interactive Internet transmission (scheduled audio or audio-visual Internet services, live webcasts and simulcasting) and deleting the former exclusive right to prohibit inclusion of a work in a cable programme service. Retransmission by cable or otherwise of a broadcast is deemed to be a separate act of broadcasting.

A new criminal offence is created in relation to the unlicensed communication of a work to the public (s. 107(2A), CDPA). Where a person infringes copyright by an electronic communication to the public carried out in the course of a business or to such an extent as to prejudice the copyright owner, he commits an offence. He is liable, however, only if he knows or has reason to believe that he is infringing copyright in the work communicated. The maximum sentence is two years’ imprisonment and a fine.

Fair dealing exceptions (‘permitted acts’)

The Regulations provide that, where certain conditions are satisfied, it is not an infringement of copyright to make a temporary copy which is “transient or incidental”. The conditions are that the making of the copy (i) is an integral and essential part of a technological process; (ii) has as its sole purpose the enabling of a transmission of the work in a network between third parties by an intermediary or a

lawful use of the work; and (iii) has no independent economic significance. This exception protects, for example, certain telecommunications providers whose equipment is used by customers for infringing transmissions on the Internet. It does not affect the liability of the user responsible for the transmission.

The existing fair dealing exception for criticism and review of a copyright work (s. 30, CDPA) is limited by addition of a requirement that the work has legally been made available to the public. The exception for news reporting (*ibid.*) is tightened by requiring the user to give a sufficient acknowledgment of the copyright holder, unless it would “for reasons of practicality or otherwise” be impossible to do so.

The making of copies by teachers for purposes of instruction and examination in film and television schools (s. 32, CDPA) remains permitted, but a sufficient acknowledgement is now required, unless this would be impossible (as above). The exception for instruction is now limited to that carried out for a non-commercial purpose. Similarly, the exception for copying of broadcasts by or for educational establishments (s. 35, CDPA) now requires sufficient acknowledgment of the broadcast to be given and limits the exception to non-commercial educational purposes. The revised section permits electronic transmission of such a copy within the school or college concerned, providing the transmission is limited to the premises of the establishment.

The existing exception for time-shifting (s. 70, CDPA) is tightened by a requirement that the copy be made “in domestic premises”. Such a copy may not be sold, hired out, offered or exposed for sale or communicated to the public. This means that copies of films and programmes recorded for later viewing cannot be used for other purposes. Similarly, the taking of a photograph of a broadcast work from the television screen for private and domestic use

(s. 71, CDPA) remains excepted from liability, but the photograph must be taken in domestic premises and may not subsequently be dealt with.

The cable retransmission of a wireless broadcast remains excepted in certain circumstances (s. 73, CDPA). The Regulations now provide that for these purposes cable retransmission includes microwave transmission between terrestrial fixed points.

Currently, designated, not-for-profit bodies are permitted to copy broadcasts in order to provide sub-titled or otherwise specially-adapted copies to handicapped persons (s. 74, CDPA). The Regulations make it clear that such bodies may, in addition to rental or transfer, provide adapted copies by way of loan.

Protection of technological measures

The CDPA already provide protection for copy-protection measures (s. 296). With the advent of digital media and the Internet, such technical protection is of great importance to the video industry. The Regulations substantially amend the existing provision, giving much enhanced protection for right holders.

The circumvention of an effective technological measure (a copy- or access-control measure or a process of scrambling or encryption) applied to a copyright work is a civil wrong (s. 296ZA, CDPA). The copyright holder, his exclusive licensee or a person who issues copies of the work or communicates it to the public with the benefit of such technological protection may sue any person who carries out the circumvention with reasonable grounds to know that he is pursuing that objective. Those carrying out research into cryptography are not liable, unless the rights of the copyright holder have been prejudiced.

An offence is committed by anyone carrying out the commercial manufacture or importation of devices primarily designed, produced or adapted to circumvent

technological measures, dealing with such devices in the course of a business or distributing them otherwise than in the course of a business to such an extent as to affect prejudicially the copyright owner (s. 296ZB(1), CDPA).

Similarly, anyone who provides, promotes, advertises or markets a service the purpose of which is to circumvent such measures is guilty of an offence, where the dealing takes place in the course of a business or is carried out to such an extent as to prejudice the copyright owner (s. 296ZB(2), CDPA). The maximum sentence is two years' imprisonment and a fine. It is a defence to prove that the defendant did not know and did not have reasonable grounds for believing that the device or service concerned enabled or facilitated circumvention of effective technological measures. Search warrants and forfeiture orders are available as with existing illegal decoder ("smart card") offences.

Civil liability will arise from dealing with devices or services (i) promoted, advertised or marketed for the purpose of circumvention; (ii) which have only a limited commercially significant purpose other than to circumvent; or (iii) are primarily designed, produced adapted or performed for the purpose of enabling or facilitating circumvention of technological measures (s. 296ZD, CDPA). The right holder may sue a person who manufactures, imports, markets, hires out or has in his possession for commercial purposes any such device, or provides such a service. The right of action extends to any exclusive licensee of the copyright, to any person who issues copies of the work or communicates it to the public with the benefit of such technological protection and to the owner or exclusive licensee of the protection technology. Such violations are treated as copyright infringements.

Where technological measures prevent those with lawful access to a work from carrying out

an act which is exempted from copyright infringement liability under the CDPA and there is no voluntary scheme to address the issue, the Secretary of State may give directions to the copyright holder or his exclusive licensee to provide to the person concerned the means necessary to carry out the permitted act (s. 296ZE, CDPA). This does not apply, however, where works are made available to the public on agreed contractual terms through an on-demand system.

Electronic rights management information

Right holders may include electronic data in a copy of a work, such as the identity of the author or the terms of its use. Where a person knowingly and without authority removes or alters such rights management information or distributes, imports for distribution or communicates to the public copies of a work thus tampered with, he will be civilly liable to the copyright owner, his licensee or a person issuing copies of the work to the public, on the same basis as if he had infringed copyright (s. 296ZG, CDPA). This liability arises only if the defendant knew or had reason to believe that he was contributing to copyright infringement by his act.

Enforcement

The Regulations expand the remedies available to right holders in two important respects. First, where a person uses the services of an Internet Service Provider to infringe copyright, the High Court may grant an injunction against the service provider to prevent continued infringement, where the service provider has actual knowledge of the user's infringing activity (s. 97A, CDPA). Second, a non-exclusive licensee of copyright may sue for infringement of copyright, where the infringing act is directly connected to a prior licensed act of the licensee and his licence expressly grants to him a right of action under the section (s. 101A, CDPA).

Appendix iv: Alliance against Counterfeiting and Piracy: Views on the EC Enforcement Directive

The Alliance welcomes the Commission's intention to legislate on enforcement, and wishes to help ensure an effective and harmonised enforcement of IP law across all Member States. This is a brief outline of our main concerns:

- The scope of the Directive (Article 2) is unclear and should extend to all IP infringements to avoid a burdensome, two-tier enforcement system and prejudice to development of online services. Also this is inconsistent with Article 41 of TRIPs.
- On the right to sue (Article 5), representative bodies should have standing only where they have actually been authorised by the right holder.
- Presumptions (Article 6) should extend to the subsistence of copyright and (for *droit d'auteur* countries) the related rights of producers.
- On evidence (Article 7) the Directive should permit the use of reasonable samples to establish that a bulk load of goods infringes the rights of the claimant. Anonymous evidence from hotlines and insiders should, at the judge's discretion, be admissible in applications for interim measures.
- On evidence protection measures (Article 8) the Directive should refer to seizure of all forms of evidence (see Article 50(1), TRIPs). The 31-day time-limit should run from service of the order (as per Article 50(6), TRIPs), not from the "seizure". The same error affects Article 10(3) (provisional measures). Any system of guarantees to be harmonised as per new Customs Regulation.
- The right of information (Article 9) should cover all participants in the supply chain (as per Article 47, TRIPs and Norwich Pharmacal), not just those with commercial motives. Sanctions required for failure to comply with court orders.
- The Directive's provision on disposal outside the channels of commerce (Article 13) should be clarified by a Recital, to make it clear that goods may not re-enter the distribution chain (as, eg, by donation to charity shops). Destruction of goods (Article 14) should be the rule, unless the right holder opts for other disposal.
- Courts should have the power to grant preventive measures (Article 15) against any similar infringement of the claimant's rights.
- The Directive's provision on damages (Article 17) is valuable, but recovery of the infringer's profits should always be granted to the claimant in addition to compensatory damages, to ensure deterrence. Pre-established damages (as in Canada – and see Article 45(2) of TRIPs) and exemplary damages (as in Ireland) make best use of judicial and investigative resources.
- The criminal law provisions (Article 20) seek to rewrite Article 61 of TRIPs, creating a subjective test of liability. The law should penalise knowing or negligent acts of infringement (as per s. 107, CDPA), where direct or indirect economic advantage is sought or substantial damage inflicted.
- Technical devices (Article 21) detectable only by enforcement officials and those applied after manufacture (eg holograms) should be protected.
- Codes of Conduct (Article 22) for the use of optical disc identification codes (an essential investigative tool) should be mandatory in the EU.

Appendix v: Signatories of the Memorandum of Understanding on the Co-operation in the Field of Detection, Investigation and Prosecution of Intellectual Property Rights Offences

The Association of Chief Police Officers of England Wales and Northern Ireland (ACPO)

The National Criminal Intelligence Service (NCIS)

The National Crime Squad (NCS)

Her Majesty's Customs & Excise (HMCE)

The Trading Standards Institute (TSI)

The Local Authorities Co-ordinating Body on Food and Trading Standards (LACOTS)

The Medicines Control Agency (MCA)

The Anti Counterfeiting Group (ACG)

The British Phonographic Industry (BPI)

The Mechanical Copyright Protection Society (MCPS)

The Federation Against Copyright Theft (FACT)

The Federation Against Software Theft (FAST)

The Entertainment and Leisure Software Publishers' Association (ELSPA.)

Anti Copying in Design (ACID)

The Business Software Alliance (BSA)

The European Anti-Counterfeiting Network (REACT UK)

Appendix vi: Glossary

AACP – Alliance Against Counterfeiting and Piracy

AEPOC – European Association for the Protection of Encrypted Works and Services

BAFTA – British Academy of Film and Television Arts

BBFC – British Board of Film Classification

BPI – British Phonographic Industry

Broadband – high-speed Internet connection, on average ten times faster than normal dial-up connections (see below)

BSA – Business Software Alliance

BVA – British Video Association

CA Systems – Conditional Access technology regulating viewer access to digital pay-TV services

CGMS – Copy Generation Management System; analogue copy-protection for DVD

Compression – technology enabling large audio-visual or computer data files to be digitally compacted to a smaller size, enabling easier download/upload

Copy protection – technology designed to prevent unauthorised copying of content

CSS – Content Scrambling System; digital copy protection for DVD

DeCSS – software designed to disable CSS copy protection

Dial-up – basic Internet service that uses a simple telephone line to dial a connection to the Internet

Download – transferring of content or data from the Internet to a terminal (which can be a PC, personal digital assistant, mobile phone or some other Internet-enabled digital device)

Downresolution – downgrading of high-definition images during copying

DRM – Digital Rights Management; systems for

controlling access to digital content

DSL – Digital Subscriber Line; broadband technology used in traditional copper-based telecommunications networks. Most common type of DSL in the UK is ADSL (asymmetric digital subscriber line).

EFF – Electronic Frontier Foundation

ELSPA – Entertainment and Leisure Software Publishers' Association

FACT – Federation Against Copyright Theft

FDA – Film Distributors' Association

HDTV – High-definition television; a television broadcast and playback standard offering more than twice the screen resolution of standard television images

HRRC – Home Recording Rights Coalition

IFPI – International Federation of the Phonographic Industry

IIPA – International Intellectual Property Alliance

ISP – Internet Service Provider

Kbits/s – Kilobits per second; measurement of Internet and network connection speeds

Linux – computer operating system designed to provide PC users with a free or low cost alternative

Mbits/s – Megabits per second; 1 Mbit/s is equal to 1,000 Kbits/s (see Kbits/s)

MPA – Motion Picture Association (international counterpart of the Motion Picture Association of America)

MPAA – Motion Picture Association of America

Ofcom – UK Office of Communications

P2P Filesharing – peer-to-peer filesharing; communications applications in which Internet users can exchange files with each other directly

PPV – Pay-per-view television

PVR – Personal Video Recorder; consumer

recording device that stores programmes on a hard disk rather than conventional tape.

RIAA – Record Industry Association of America

Timeshifting – consumer recording of broadcast programming for later viewing.

TRIPs – Trade Related Aspects of Intellectual Property agreements

Upload – transfer of content or data from a personal device to the open Internet

Watermarking – placing of digital identifiers on a piece of audio-visual content; watermarks survive subsequent copying, allowing identification of a copy's source.

WIPO – World Intellectual Property Organisation

Appendix vii

Anti-Piracy Task Force

Members

Nigel Green (Chair)

Mark Batey (Film Distributors' Association)

Stephen Bristow (UK Film Council)

Colin Brown (Cinesite)

Pete Buckingham (UK Film Council)

Lavinia Carey (British Video Association)

Carol Comley (UK Film Council)

Dara MacGreevy (Motion Picture Association Europe)

John McVay (Producers Alliance for Cinema and Television)

Chris Marcich (MPA Europe)

Richard Paterson (*bfi*)

Marc Samuelson (Samuelson Productions)

Nigel Sharrocks (Warner Bros. Distributors)

Margaret Taylor (UGC Cinemas)

Neil Watson (UK Film Council)

John Wilkinson (Cinema Exhibitors' Association)

John Woodward (UK Film Council)

Observer

Emma Cockell (Department for Culture, Media and Sport)

Research and analysis

Arash Amel (Screen Digest)

Ben Keen (Screen Digest)

Additional research

Kern European Affairs

Alliance Against Counterfeiting and Piracy

Lavinia Carey, Chair, Alliance Against Counterfeiting and Piracy; Director General, British Video Association; Director, Federation Against Copyright Theft

The Alliance Against Counterfeiting and Piracy is a cross-industry pressure group, representing the video, film, music, games and business software industries, branded goods manufacturers, publishers, designers and retailers. Included in the membership are several industry enforcement bodies, including FACT, BPI APU, ELSPA, BSA, FAST.

The Alliance has been promoting the value of intellectual property rights and lobbying for legislative reforms for the last six years, during which time several new pieces of legislation have successfully been achieved, including the increase in penalty for copyright theft from two to ten years' imprisonment. It has built up strong relationships with the Trading Standards Institute and works with LACORS and the LGA to improve enforcement by local authorities. The Alliance participates in the Patent Office's IP Crime Group and is part of the Creative Industries IP Forum launched by the DCMS in July 2004.

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British Film Institute

Richard Paterson, Head of Knowledge and Project Director of screenonline

The British Film Institute recognises the dangers of piracy to the financial stability of the film industry. In its operations the British Film Institute is careful to ensure full copyright clearance is obtained for all its activities.

However, it has endeavoured to maintain the right to educational fair use of film material, recognising that protection of the rights of the owners of intellectual property have to be balanced with the gains to society of educational endeavour and creativity from the intellectual property's reuse.

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British Video Association

Lavinia Carey, Director General, British Video Association; Chair, Alliance Against Counterfeiting and Piracy; Director, Federation Against Copyright Theft

The BVA represents the interests of the home entertainment market. Our members include the UK distribution divisions of the major film studios and independents, television companies and independent video publishers, plus the manufacturers and suppliers to the industry. In all they represent 90% of the UK market.

The BVA supports FACT in its PR and lobbying activities. The BVA has also registered a new company, the Industry Trust for IP Awareness, a non-profit making company limited by guarantee. It is an all industry partnership whose members contribute to the Trust to create an anti-piracy fund. The approx £1.5 million budget will be distributed between contributions to FACT, to the Alliance and to a national consumer awareness building campaign that will support the Motion Picture Association's new anti-piracy cinema trailers with press, posters and PR and a 4,000 store promotion to increase retail and consumers understanding of the importance of IP protection, the links with organised crime and

where to report incidents of video piracy.

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Cinema Exhibitors' Association

John Wilkinson – Chief Executive

The Cinema Exhibitors' Association is the dedicated industry body for those involved in cinema exhibition in the UK. It represents the interests of almost every UK cinema exhibitor including Odeon, Vue (Warner), UCI, UGC, Cineworld, National Amusements, Apollo Cinemas, Ster Century and smaller circuits.

In their conditions of entry into cinemas, exhibitors remind customers that recording of films and music within a cinema is not allowed. Staff training highlights the importance of being alert to the possibilities of illegal copying and the action to be taken. The CEA encourages cinema staff to patrol cinema premises when the public is present and member operators follow the industry protocol for receipt, storage and dispatch of films in their cinemas. Operators can act as the eyes and ears of the industry, reporting breaches of copyright rules to the distributor, FACT, local licensing officers and local trading standards offices. The new rules under Section 182 of the Licensing Act 2003 will enhance the importance of cinema staff in the fight against misuse of copyright material.

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Federation Against Copyright Theft

Raymond Leinster, Director General

Jim Angell, Director of Operations

The Federation Against Copyright Theft Ltd (FACT) is a non-profitmaking company set up to protect the Film and Broadcasting Industry against copyright and trademark infringements in the UK. FACT, although not a statutory authority or public body, is an accepted prosecuting authority in its own right. This has been achieved over a period of 21 years by custom and practice. It has involved FACT in prosecuting major criminals within the film piracy scene through the criminal courts. It has resulted in many custodial sentences of a significant length. In terms of anti-piracy effectiveness, FACT seized nearly 2 million units of all types of film work in 2003.

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Film Distributors' Association Ltd

Mark Batey, Chief Executive

The Film Distributors' Association (FDA) is a long-standing member of the FACT Council and of the cross-industry Alliance Against Counterfeiting and Piracy. It compiles and publishes the UK's Film Print Management Protocol, which seeks in practical ways to make it as difficult as possible for piracy to originate from the UK theatrical sector. The FDA invests in research, jointly with the BVA and BPI, to gauge levels of downloading among UK cinemagoers, and also encourages, and contributes frequently to, press coverage of film piracy. Anti-piracy activity is a regular topic at FDA Council meetings and in its dealings with other industry bodies.

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Motion Picture Association – Europe

Chris Marcich, Senior Vice President & Managing Director

Dara MacGreevy, Vice President & Regional Director Anti-Piracy

MPA represents:

Buena Vista International, Inc.

Columbia TriStar Films Distributors International Inc.

Metro-Goldwyn-Mayer Studios Inc.

Paramount Pictures Corporation

Twentieth Century Fox International Corporation

Universal International Films Inc.

Warner Bros. Pictures International, a division

of Warner Bros. Pictures Inc.

The MPA supports 34 Anti-Piracy Organisations (APO) covering 42 countries in the EMEA region. The MPA and the APOs implement and strengthen existing copyright protection legislation, assist local government and law enforcement authorities in the investigation and prosecution of piracy cases, initiate civil litigation on behalf of its member companies against copyright infringers and conduct education outreach programmes regarding the harmful effects of piracy.

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Founded in 1991, PACT is the UK trade association that represents and promotes the commercial interests of independent feature film, television, animation and interactive media companies.

UK Film Council

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The UK Film Council is the lead agency for film in the UK ensuring that the economic, cultural and educational aspects of film are effectively represented at home and abroad.

Footnotes

- 1 For full details see: http://www.culture.gov.uk/global/press_notices/archive_2004/dcms089_04.htm. This forum is hereafter referred to as the Creative Industries IP Forum.
- 2 Target as set out in UK National Broadband Strategy, 2004 available at: http://www.dti.gov.uk/industry_files/pdf/uknational_broadband_strategy_2004.pdf
- 3 There are also additional windows such as in-flight entertainment and hotel pay-per-view (PPV), which tend to sit between the theatrical and video window, as well as a new Internet PPV window, which tends to fall after the video release.
- 4 According to the MPA, only one in ten films ever gets its investment returned through theatrical exhibition alone.
- 5 HM Customs & Excise seized 342,616 DVDs and 1,151 videocassettes in 2003 according to a House of Commons written answer to Don Foster, MP, 11 February 2004. However, this estimate of DVD seizures has been questioned by the MPA.
- 6 This issue has been highlighted in particular by the technical journalist Barry Fox. See http://www.screendigest.com/events/peve2004.html/NSMH-5QYJW4/PEVE03_Barry_Fox_text.pdf See also further discussion in the next chapter.
- 7 The MPA maintains that the DVD CSS Procedural Specification unambiguously provides that DVD players with PAL or SECAM outputs shall implement CGMS-A in accordance with a specific European Telecommunications Standards Institute (ETSI) specification, and that DVD player manufacturers must be more diligent in fulfilling the technical requirements of the system. The MPA's member companies have begun enforcement activities to ensure compliance with the DVD-CCA specifications.
- 8 321 Studios released a product called DVD X Copy in 2002 and was engaged in a protracted legal dispute with Hollywood studios which was finally settled in August 2004 in favour of the studios. The company claimed that its product was designed solely for consumers to make back-up copies of their own media and that this should be legal under 'fair use' provisions. The Hollywood studio rejoinder was that back-up copies are not fair use or fair dealing. The MPA maintains that there is no provision in UK law that would have allowed a 321 Studios-type argument to be mounted in British courts.
- 9 321 Studios has now gone out of business, perhaps in part due to the proliferation of free software on the Internet that has similar functionality to the commercial software it produced.
- 10 GfK Gruppe, CD-Writer Study 2003.
- 11 See FACT website: <http://www.fact-uk.org.uk>
- 12 House of Commons written answer to Don Foster, MP, 11 February 2004.

- 13 See <http://www.iipa.com/pdf/2003SPEC301\METHODOLOGY.pdf>. It is understood that the MPA is currently reviewing its methodologies.
- 14 However, the BVA has been commissioning pioneering research designed to quantify UK industry losses from Internet piracy (see section on P2P file sharing later in this chapter).
- 15 House of Commons written answer to Don Foster, MP, 11 February 2004.
- 16 See website: <http://www.oftel.gov.uk>
- 17 The fieldwork was conducted November/December 2003 by TNS.
- 18 According to TNS survey.
- 19 Such as DivX and XviD.
- 20 *Los Angeles Times*, 7 January 2004.
- 21 Although there are important distinctions between these applications, the basic principle is that they allow multiple users to simultaneously download different parts of a large file, while at the same time start sharing bits of the file already downloaded with others before the whole file is in place. The applications allow downloads to be stopped and re-started numerous times and intelligently re-create the original file structure from many fragments.
- 22 The main US legal cases on this issue are on appeal and the MPA contends that the Amsterdam Supreme Court ruling on this did not address the main issue. The US case against the Aimster P2P service was won by the MPA.
- 23 AT&T Research and CIS Department, University of Pennsylvania *Analysis of Security Vulnerabilities in the Movie Production and Distribution Process* 2003. See <http://www.research.att.com>
- 24 In December 2003, district judge Michael Mukasey granted a temporary restraining order against the ban, leaving it up to individual members to decide on the issue. In response, the MPAA said it would appeal, and the matter appeared to be a significant cause of division in the industry. *The Guardian*, 5 December 2003.
- 25 Viant Corporation, *The Copyright Crusade* 2001.
- 26 See www.yankeegroup.com
- 27 See <http://www.mpa.org/MPAAPress/>
- 28 Source: Latens, a CA system manufacturer.
- 29 Smart cards are credit card-sized cards with an embedded microchip and data storage capability.
- 30 *The Guardian*, 13 March 2002.
- 31 *The Problem of Piracy Against Conditional Access Systems*, <http://www.aepoc.org/inter/2.htm>
- 32 Report from the Commission to the Council, the European Parliament and the European Economic and Social Committee on the Implementation of Directive 98/84/EC of the European Parliament and of the Council of 20 November 1998 on the legal protection of services based on, and consisting of, conditional access, p.19.
- 33 One initiative worth mentioning in this context is the work of the European Digital Video Broadcasting group on Content Protection and Copy Management. This has focused on the idea of an "authorised domain" within the digital in-home network. The idea is to enhance functionality (such as moving and copying works) within the domain, but prevent unauthorised moves outside the domain (eg unauthorised retransmission over the Internet). The domain can extend beyond the main home to cars, vacation homes, etc.
- 34 For example, the 'Cinema to Go' devices from Archos do not recognise the analogue copy protection systems that have been designed to secure DVDs.
- 35 See http://pr.caltech.edu/media/Press_Releases/PR12356.html

- 36 A study conducted by OTX in conjunction with the MPA found that European movie downloaders cited their perception of movies being too expensive as a major reason for Internet downloading. See <http://www.mpa.org/MPAAPress>
- 37 The MPA argues that the term 'filesharing' is a misnomer and should be acknowledged to be file copying rather than sharing.
- 38 <http://www.aacp.org.uk/index.html>. The Alliance is a coalition of British trade associations and industry enforcement organisations, including the music, audio-visual, retail, brand manufacturing and business and games software industries. It was established in 1999. Its main purpose is to persuade the Government to reform intellectual property laws and to introduce legislation to strengthen the hand of enforcement agencies in the battle against counterfeiting and piracy.
- 39 According to Shropshire County Council sources.
- 40 See later section on US copyright law.
- 41 According to interview with Mr Randhawa Sukhwant, Vice President of Legal Affairs from Eros Entertainment. Mr Sukhwant cited the case of a man who was caught 12 times by customs authorities at the Heathrow airport transporting suitcases full of counterfeit DVDs, but went unpunished. Mr Sukhwant blamed both the lack of resources of enforcement authorities and the lenient attitude of courts towards piracy to explain the high rate of counterfeit goods in the UK. <http://www.erosentertainment.com>
- 42 See report of the Whitford Committee, Cmnd 6732 (1977)
- 43 See *Redrow Homes v Bett Bros* (House of Lords, 22 January 1998)
- 44 Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce') Official Journal L 178, 17 July 2000 p. 0001 – 0016
- 45 See <http://www.fact-uk.org>
- 46 See FACT news releases: <http://www.fact-uk.org>
- 47 See letters, *The Times*, 26 & 28 July 2004.
- 48 Patent Office press statement 10 August 2004. The paper Counter Offensive – An IP Crime Strategy is available at: <http://www.patent.gov.uk/about/enforcement/ipbook.pdf>
- 49 www.lacors.gov.uk
- 50 Proposed Strategy for Local Markets – Legislative Proposal, Alliance Against Counterfeiting and Piracy.
- 51 Within the European Union, Directive 95/46/EC harmonises the conditions of the protection of the right to privacy enshrined in the legal systems of the Member States. This Directive gives substance to and amplifies the principles contained in the European Convention for the Protection of Human Rights of 4 November 1950 and in Council of Europe Convention No. 108 of 28 January 1981 for the Protection of Individuals with regard to Automatic Processing of Personal Data. Directive 97/66/EC particularises the provisions of this Directive in the telecommunications sector. Both Directives apply to processing of personal data on the Internet. A basic data protection principle (see Articles 6(1)(c) and 7 of directive 95/46/EC) is that the personal data collected in any situation should be limited to that which is necessary and relevant to the purpose, for example connecting to the Internet and using the services provided over it. Directive 97/66/EC specifies this with particular regard to traffic data by prohibiting storage longer than necessary for billing purposes. The consequence is that, after erasure of these data, the individual is again anonymous. In addition, Article 5 of this Directive obliges

- Member States to ensure the confidentiality of communications.
- 52 Ginsburg – WIPO Group of Experts, December 1998 – Geneva – *Private International Law Aspects of the Protection of Works and Objects of Related Rights Transmitted through Digital Networks*.
- 53 Prof. Lucas – *Aspects de droit international privé de la protection d’oeuvres et d’objets de droits voisins transmis par réseaux numériques mondiaux* – December 1998 – Geneva.
- 54 See Chapter 4.
- 55 Night vision surveillance was, for example, used in the UK by the distributor Warner Brothers to protect screenings of *Harry Potter and the Prisoner of Azkaban*. However, the film was unfortunately camcordered in one UK cinema that had apparently declined to use the equipment provided. See also discussion in later section on local enforcement.
- 56 One of the main exceptions is the work of the Digital Video Broadcasting (DVB) Group’s Copy Protection Commercial and Technical Module groups. The DVB project is an important “voluntary standards body” formed in part at the insistence of the European Commission as a forum wherein industry could promote the “harmonious and market-driven development of digital broadcasting via cable, satellite and terrestrial means, including broadband wireless (MMDS, LMDS, etc.), [and] interactive services”. The DVB essentially operates as a “giant patent pool”. While still somewhat Euro-centric, DVB has grown to become an international body with over 300 members (CE, IT, broadcast, content owners, regulatory bodies, etc). All DVB specifications have been adopted by European standards bodies (mostly ETSI). A number of DVB specs have been adopted beyond Europe.
- 57 While the Government-sponsored Broadband Stakeholder Group has authored a report on DRM, this organisation has very few members from the film industry.
- 58 DRM – Missing links in the broadband value chain. The Broadband Stakeholder Group. www.broadbanduk.org
- 59 www.era.org.uk
- 60 www.screenonline.org
- 61 See www.ieg-uk.org
- 62 In support of the measures proposed by the Alliance Against Counterfeiting and Piracy.
- 63 Digital Rights Management: Missing links in the broadband value chain, Broadband Stakeholder Group. www.broadbanduk.org
- 64 The British Phonographic Industry Piracy Report 2003, 16 May 2003
- 65 The BPI Piracy Report 2003, 16 May 2003.
- 66 For the study, commissioned by the RIAA, Field Research polled 3,218 college students from May 10 to May 24. In the survey, 482 of the 500 who had used Napster said they downloaded music so they didn't have to buy CDs and 33% said they had downloaded more than 75 songs over the past four months. More than 40% said their Napster use has had “some” or “a great deal of impact” on their music purchases.
- 67 In a consumer study Jupiter communications surveyed 2,300 online music users and concluded that 46% of Napster users are more likely to buy music. *Billboard*, 29 July 2000.
- 68 Forrester Research, *From Disc to Download*, August 2003
- 69 <http://www.testaankoop.be>
- 70 Entertainment & Leisure Software Publishers Association
- 71 *Online Music Report*, published by IFPI 22 January 2004. See <http://www.ifpi.org/site-content/press/20040122.html>
- 72 <http://www.mycokemusic.com>
- 73 A ‘white label’ service is a ready-to-go service that is supplied on a wholesale basis for another company (in this case Coca Cola) to

retail under its own brand.

74 See www.loudeye.com

75 Online Music Report, published by IFPI 22 January 2004. See <http://www.ifpi.org/site-content/press/20040122.html>

76 Watermarking was successful used to trace leaked 'screener' copies back to Academy members in 2004.

77 Although new technical solutions have been proposed, including the use of embedded watermarking technologies, these will involve the inclusion of watermark detectors in all analogue-to-digital converters. No legacy systems are fitted with such detectors.

78 See 'Copyright protection in the UK' section.

79 Although most of these use a very similar underlying 'engine'.

80 See <http://www.dvdshrink.org>

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