

## **Advice on Digital Technology (Version for Lecturers) – November 2008**

### **Background**

The NADFAS Education Department (ED) issued papers in 2005 advising how Societies and Lecturers might approach the issue of digital technology. Inevitably technology and the external world have changed over this time, and so NADFAS must take account of these changes and will amend its guidance accordingly as and when required.

Societies, at the Annual General Meeting 2007 and Area meetings, asked for more structured guidance on migration to digital technology. The ED completed a consultation with NADFAS Lecturers in autumn 2007 to ascertain how many of you will be moving to digital technology and within what timescale.

This guidance for Lecturers is based on the ED's consultation with Societies, Areas and Lecturers and complements the guidance for Societies which was issued in November 2007. The guidance comprises these introductory notes on facts, assumptions, opinions and a view of the likely future scenario, along with specific recommendations on equipment.

### **Facts**

1. Most NADFAS Societies use Kodak carousel slide projectors. Kodak stopped the manufacture of slide carousel projectors in December 2004, although other companies do still produce slide projectors (Simda and Kindermann, for example.)
2. Kodak does not produce projector parts anymore, however the Education Department can put Societies in touch with suppliers of spare parts and repairers. Over time, the number of available parts will inevitably decrease.
3. Many universities, colleges, museums, galleries and other like-minded organisations now use digital technology to illustrate art lectures, although some (such as the Courtauld Institute) continue to use slide carousels as well. The corporate world uses digital technology as the norm, for presentations etc.
4. Currently, 83 NADFAS Lecturers have all or some of their titles available in digital format (this is 29% of NADFAS Lecturers). These lecturers can be identified by the symbol (D) which appears after the lecture title in the Directory of Lecturers. However, forty-seven Lecturers have indicated that they will move to digital technology only when there is no alternative. A further thirty-seven Lecturers have said they will not move to digital technology at all.
5. While an increasing number of new-to-NADFAS Lecturers use digital technology, not all do (it is probably about half). The panel which selects Lecturers currently judges on the quality of their presentation and the quality of the images they use, but not the type of technology.
6. A few Societies now meet in venues with digital only technology.

### **Opinions**

NADFAS does not feel it is necessary to make a judgement on the relative qualities of digital images and that of 35mm slides as the technologies have their own

benefits and issues. Rather, NADFAS advocates the use of good quality images in either format.

Some NADFAS Lecturers have strong opinions about the relative qualities of digital and 35mm technology. Concern over the quality of digital images was given as one of the main reasons for Lecturers not switching to digital technology in the survey of Lecturers which was carried out to inform this guidance. However, interestingly, a number of comments recently received from Societies criticizing the quality of some 35mm images when compared with digital ones. Other barriers included the cost of digital equipment and the cost and time which would be required to digitise 35mm slides or to re-take photographs.

Survey results indicate that 37 NADFAS Lecturers will not convert to digital technology. Issuing a deadline would force these lecturers to leave the Directory and as we wish to offer Societies as wide a choice of subjects as possible this would be undesirable and, as the selection of lecturers is based on quality of presentation, this would be self-defeating.

### **Assumptions**

The assumptions set out below will be reviewed regularly. So, for example, if it appears that slide projectors will become obsolete sooner than 2012, assumptions, and guidance based on the assumptions, will be amended.

NADFAS assumes that:

1. Top quality digital images compare well with well maintained 35mm slides;
2. The external world is moving over to digital technology, and will continue to do so, possibly at an accelerated rate;
3. Slide projectors will be serviceable for at least the next three to five years;
4. Lecturers will continue to migrate to digital technology at a steady rate. 39% of the NADFAS lecturers who responded to the ED's recent consultation exercise said that they would probably move to digital technology within 5 years, with 34% saying it was likely that they would move within 3 years.
5. The main risks for NADFAS might be summarised as:
  - i) The financial and administrative burden for Societies coping with two types of technology;
  - ii) Being overtaken by a move to digital technology and a rapid redundancy of 35mm slide technology;
  - iii) The acquisition by Societies or Lecturers of incompatible digital equipment;
  - iv) The loss of Lecturers from the NADFAS Directory of Lecturers if NADFAS is not supportive in the transition to digital technology.

### **Future Scenario**

For the above reasons Societies and Lecturers are encouraged to begin considering the transition to digital technology. However, there is no panic to rush into the purchase of equipment. It appears that most Societies have their programmes settled for the next 18 months to 2 years and so will be aware if they are due to have a visit from a lecturer who uses digital technology. Programme secretaries will have discussed with such Lecturers whether the Society or the Lecturer will be providing the equipment. If it is to be the Society, and they do not already possess suitable equipment, then digital projectors can be hired by the day.

To address the above lists, the NADFAS guidance is based on a flexible future scenario.

### Lecturers

All costs associated with the production of digital images will be borne by the lecturers. This will include the conversion of existing 35mm slides to digital and the provision of a memory device to transport the images to the Society venue. Lecturers may be able to offer Lectures in either digital or slide format.

NADFAS is considering the facilitation of advice and training initiatives to support Lecturers with the transition as part of next year's business plan.

### Societies

It is anticipated that costs associated with the visual presentation during lectures will be covered by the Societies, as they are currently. This will include the purchase or hire of digital projection equipment and its maintenance and upkeep. This will ensure that Societies have the digital equipment most suited to their particular venue. By maintaining 35mm slide equipment for as long as possible, Societies will be maximising the options they have regarding lecture choice. The costs associated with acquiring and maintaining traditional carousel equipment are not considered to be prohibitive.

### **Alternative Scenario**

A significant number of the Lecturers who currently use digital technology own their own digital projector. While NADFAS advises that Societies should buy a digital projector, Lecturers might feel that they would like to use their own projector when presenting to NADFAS Societies as they will be familiar with how it works and will be confident that it is compatible with the laptop which they will use for presentations. Many Lecturers do not lecture solely for NADFAS and might find that owning a digital projector would be useful for their other engagements. Owning a digital projector would also mean that Lecturers can easily fulfil bookings with all Societies, including those who have not yet purchased a digital projector (currently, most of these Societies will hire a digital projector if needed).

Those Lecturers who wish to buy their own projector might find the information in the appendices helpful.

### **Going Forward**

NADFAS is committed to supporting both 35mm and digital technology for as long as is viable. However, the rest of this Advice is intended for those Lecturers who are thinking of transferring to digital technology to illustrate their lectures to NADFAS Societies.

Please note that this Advice will be reviewed and updated on an ad hoc basis. Further guidance on the taking and editing of digital images is forthcoming.

## Thinking of 'Going Digital'?

So, what do you need to do to 'go digital'?

1. A computer (see 1. for the standards)
2. Digital images. There are three options for obtaining these:
  - i) Convert existing 35mm slides to digital format;
  - ii) Buy digital images;
  - iii) Take digital photographs
3. A slideshow of the images using presentation software
4. A digitally equipped venue (or own projector)

These requirements are explained in detail in the following pages.

# Transferring to Digital Technology

## 1. COMPUTER HARDWARE

A great many Lecturers already own a computer. It is likely that, if it has been purchased recently, the computer will be suitable for storing digital images and for altering the images using digital imaging software (explained later). NADFAS suggests as standard the use of a PC laptop running Windows software. A laptop might be more useful given its portability. While there appears to be issues about running (some) projectors from an Apple Mac, there is no reason why presentations with, for instance, Powerpoint, should not be put together on a Mac and then transferred to a PC via CD or memory stick.

## 2. DIGITAL IMAGES

### a) Conversion of Slides

Lecturers have two options on how to carry out a conversion of existing 35mm slides into digital format.

#### i) Scanning Slides Yourself

Choosing the correct scanner for the job is key if you intend to do the job yourself. There are two basic types of scanner: the dedicated slide scanner and the flatbed-scanner. The flatbed scanner is the type used to scan documents but it can also be used to scan slides, though an attachment or holder will probably be needed. It is generally considered that dedicated slide scanners will yield the best results for scanning 35mm slides, however a good flatbed scanner should produce a workable image.

Listed in the appendices are some commercially available scanners that might be suitable for the needs of NADFAS Lecturers. We have divided the suggestions into two lists: one of dedicated slide scanners and one of flatbed scanners. These are not finite lists but, rather, starting points, and it is recommended that Lecturers carry out their own research into which scanner will suit their needs best. For example, it might be useful to read reviews on some of the various internet forums or digital technology sites, or to talk to colleagues who use digital technology about the equipment they use. If possible, test a few slides to check the quality of the scan. Scanners might differ significantly on colour-matching and the depth of shadow produced in an image.

The main downsides to scanning your own slides are: the time taken to learn the skills required to use the conversion equipment; the time needed to scan the slides; the capital outlay. However, if mastered the skills allow for cheaper conversion of slides in the long run, independence, and control over the process and the resultant library of images. When scanning oneself it is better to go for a higher quality (resolution) than the presentation requirement and then reduce down to the size needed. Scaling up is likely to create a less-well defined image.

## **ii) Employing a Company or Individual to Scan Slides**

A great number of companies offer 35mm slide-scanning services, inevitably at various costs and with variable results. The usual cost seems to be between £0.50 and £1.00 per slide. Some companies will clean up scanned images – removing dust, scratches etc. - and correct the colours automatically whilst others will charge more for this. If Lecturers plan to use a company to convert their slides it is advisable to have a few test slides done to check that the quality of the digital image produced, and also that the condition of the returned 35mm slide, is acceptable. Discounts are sometimes available the more slides submitted so, for example, the cost of scanning 1000 might be cheaper per slide than scanning 100.

While employing a company to scan your slides might be more expensive than scanning slides yourself, particularly in the long-run, it might be the simplest solution for those Lecturers who are pressed for time and who want a quality assurance. However, you might not have the level of control over the final images that scanning slides yourself would give. It is wise to be very specific to the supplier about the requirements of your images, for example, file size, resolution, corrections, sharpening etc.. File sizes and quality can always be reduced for presentations but as previously mentioned attempting to increase an image size might result in the image being distorted. Therefore, Lecturers might wish to specify that their images should be scanned at a higher quality (resolution) than they might use for presentations.

We have listed some companies and individuals Lecturers might wish to contact in the appendices to this *Advice*. While NADFAS cannot make recommendations, we have clearly marked which companies have been suggested to us by NADFAS Lecturers. We would welcome details of additional companies or individuals to add to this list.

## **iii) Cleaning Slides Before Conversion**

Reviewing your slides and cleaning them if necessary before they are scanned will probably yield better results from the scanning process whether you are converting the slides yourself or employing a company to do it as fewer corrections to the resulting digital image will be required. Some of the slide-scanning companies will offer a slide-cleaning facility should Lecturers prefer not to clean slides themselves.

## **iv) 'Digital Ice' Technology**

Many scanners are advertised as being equipped with 'Digital Ice'. This is an in-built technology which identifies dust or scratches on the 35mm slide or negative which is being scanned and removes these defects from the resulting digital image. This it does by passing infrared light through the film during the scan, which will pass through the film but not the 'specks' on it. The scanner then has a picture of the specks (the dust or scratches) and can eliminate them from the final image.

This means that it is not necessary to clean every slide before it is scanned, although as previously suggested this cleaning might be beneficial. Additionally, if slides are very dusty or dirty, it is best to remove as much dust or

dirt as possible prior to scanning so that dust does not find its way into the scanner's mechanics.

We suggest asking about this feature if you are considering buying a scanner.

**v) Digital Imaging Software (bundled to go with a scanner)**

Some scanners are sold with software packages such as Photoshop or Silverfast. These packages allow the user to alter the image, for example correcting or enhancing colours, cropping the image etc.. These are explained in more detail below. It is worth asking about these bundled deals if buying a scanner. Basic re-naming and organisation of image files can be done through Windows utilities. Digital imaging software, which can be used to alter images, for example correcting the colours within them, or brightening dark images, might be useful.

**b) Buying Digital Images**

Lecturers might wish to buy digital images rather than converting existing 35mm slides into the digital format. Many galleries and museums now sell images of the works in their collections in digital format. These images are usually supplied on CD. There are also specialist libraries of digital images and some of these are listed in the appendices to this Advice. These libraries might require a membership fee plus the cost of the images and most are likely to stipulate limitations on the use of the images for commercial ventures. The costs can vary greatly. The Education Department is in contact with many galleries and museums with regard to the sale of digital images and can give some guidance to Lecturers on the likely cost of images.

**c) Taking Digital Images**

With advances in digital camera technology, Lecturers might feel that the achievable picture quality is suitable for presentations to NADFAS Societies. NADFAS will soon be issuing further guidance on how to take and edit digital photographs.

As with previous equipment, it is suggested that Lecturers research which camera will most suit their needs. Please see the section below *Managing Digital Images*.

**d) Managing Digital Images**

**i) Storage**

Once images have been scanned or downloaded from your camera to your PC or from a CD to your PC, they will be stored on the PC's hard-drive. You might wish to organise these images into folders, e.g. by the subject of the image or the lecture title to which it relates. It is advisable to keep back-up copies of your digital images on CDs or other storage devices.

**ii) Format**

Most images will be saved with the suffix .jpeg or .tiff. Images can take up much of your computer's memory so you might wish to compress images (reduce the size of the file) to lessen the amount of memory used. Remember, however, that compressing a file might mean that some information is lost and

the image might be affected. An external hard drive or other memory device might be usefully employed to store a large number of files/images.

PowerPoint only uses jpeg images and the usual guidance is to use files of approximately 5Mb in size. It is advised that software corrections of images be made in the tiff format, and ideally this file retained as a master, then converted to jpeg for the presentation.

### **iii) Resolution**

The resolution or 'dpi' of a file relates to the number of dots per inch of an image. A good image is a combination of Megapixels and dpi. For example, a 5 Megapixel image at 72 dpi will appear larger but with less 'resolution' than a 5 Megapixel image at 300dpi. Therefore, it is advised that Lecturers use a resolution of 300dpi when taking photographs or scanning from an original. It is better to start with a larger file and reduce the size if necessary.

It is important that images are not only to a reasonable size (5Mb) and resolution (300dpi -see format above) but also are sharpened if necessary. Original digital images are inherently unsharp although many camera sharpen automatically.

The forthcoming NADFAS advice on how to take and edit digital photographs will discuss in more detail the issues of resolution and sharpness, particularly when scanning.

## **3. PRESENTATION**

To use the images to illustrate a lecture, you will need to put them into 'slide-show' software. There are many different presentation packages which can be used with a PC but Microsoft's PowerPoint is the most common. Lecturers are asked to ensure their presentations are compatible with the latest version of PowerPoint. As Microsoft upgrades, changes are made to programmes such as PowerPoint, and presentations created on later versions might not run on computers which have earlier versions installed.

## **4. BOOKINGS WITH NADFAS SOCIETIES**

It is imperative that a Lecturer discusses with the Programme/Study Day Secretary at the time of booking whether s/he or the Society is providing the equipment required for a digital presentation to be shown. This equipment will include digital projector, memory stick or laptop, necessary cabling, and a CD of images if required. General lecture equipment such as a screen, lectern, microphone etc. should also be discussed. If the situation changes, for example either the Society or the Lecturer buys a projector between the booking and the engagement and are willing to use it for the engagement, it would be helpful to let the other party know as soon as possible.

## **5. A WORD ON COPYRIGHT ISSUES**

The Technical Advisory Service for Images (TASI) has put together comprehensive advice on the copyright issues relating to digital images and this advice can be found on their website [www.tasi.ac.uk](http://www.tasi.ac.uk). It should, however, be noted that neither

the advice offered by TASI or NADFAS constitutes legal advice and so for specific, individual issues on copyright a specialist copyright lawyer should be consulted.

It is the responsibility of each Lecturer to establish the copyright origin of their slides. This Advice from NADFAS assumes that Lecturers will convert only those 35mm slides to digital format for which they hold the copyright or have obtained permission from the copyright holder.

## **Technical Specifications**

NB. We have tried not to use technical jargon, or at least explain it where we have!

### **Projectors**

- There are currently three types of multimedia projector available; LCD (Liquid Crystal Display), DLP (Digital Light Processing) and LCoS (Liquid Crystal on Silicon). We have suggested that Societies choose an LCD projector as these give good quality, sharp computer images with good colour balance. ADFAS, NADFAS's Australian sister organisation, has chosen to advocate the use of DLP projectors, which can handle moving pictures to a higher standard.
- Projector brightness is measured in lumens. We suggest that most NADFAS society venues will require a minimum brightness of 2500 lumens. Larger venues are likely to require a projector which gives out more lumens than this. The larger the image the projector needs to give out, the brighter the projector will need to be. If the Society venue does not have complete blackout, again the number of lumens required will be higher. Lecturers planning to purchase their own projector might wish to bear these numbers in mind.
- Resolution refers to the number of pixels (dots) on a screen. It is shown as:

number of horizontal pixels x number of vertical pixels

The different resolutions have different names such as SVGA, XGA, WXGA and so on. We suggest that Societies buy an XGA projector. XGA means that the projector displays 1024x768 pixels and this is used by most computers with 15" monitors. Larger screen computers will use a greater number of pixels. Best results are achieved when the resolution of the projector matches that of the computer screen.

- Multimedia projectors can be used for rear projection (if a rear projection screen is provided). As with slide projectors, different lenses are available for use with digital projectors. A long-throw lens can be used for when the projector is positioned a long way from the screen. Short throw lenses can be used when a projector is mounted near to a screen to display a large image, such as with rear projection.
- Multimedia projector lamps (the 'bulb') have an average life of 2,000 hours - the light output of the lamps will deteriorate over time and the lifespan denotes when the bulb is likely to be giving out less than 50% of its original brightness.

The lamp's life will be reduced further if it is not allowed to cool before the projector is switched off. Projectors have a built-in cooling system which keep running when the projector is on standby, however switching the lamp off at the mains does not allow for this facility and can shorten the lamp's life. As lamps are expensive, Lecturers using their own equipment might wish to stipulate to Societies that they (the Lecturer) will be responsible for turning the equipment on and off.

### **Other Equipment**

- Societies' existing screens should be adequate for digital presentations.
- Many suppliers sell laptop PCs equipped with PowerPoint software, ensuring compatibility.

- The laptop PC requires a CD/DVD drive and an output which can be connected to a digital projector. Please check with the individual supplier.
- The laptop can be positioned at the front of the hall in front of the Lecturer so that s/he can see what the audience is seeing behind her/him. This will require cabling from the laptop to the projector, which the Society will probably provide. Long cabling might affect the quality of the image, although this can sometimes be rectified by the addition of a booster, and of course there will be health and safety issues as cables will need to be taped down.

The laptop could be connected to the projector by a short cable and the presentation operated by a remote control, which is usually supplied with the projector at the time of purchase.

A third possibility is the use of wireless or 'wi-fi' technology. Wi-fi is an unobtrusive computer networking system that uses short range radio communications to replace cables. A wi-fi enabled laptop (most new ones are) and projector would be able to communicate without the need for cabling. However, this is likely to be a more expensive option.

## List of Companies and Individuals who offer Slide-Scanning Services (those marked with \* have been suggested to us by NADFAS Lecturers)

**NB. This is not a finite list. It is a starting point giving suggestions of companies and individuals that offer services which might be suitable for the needs of NADFAS Lecturers. The Education Department would welcome suggested additions.**

- ◆ Click 2 Scan  
[www.click2scan.co.uk](http://www.click2scan.co.uk) Tel: 0845 873 8600
- ◆ Digitise Your Memories  
[www.digitaliseyourmemories.co.uk](http://www.digitaliseyourmemories.co.uk)  
Images are supplied on a DVD which should be compatible with Windows, Mac or Linux. Colour restoration and scratch/dust removal as standard.
- ◆ John Ericson \*  
[john@ericson.org.uk](mailto:john@ericson.org.uk) Tel: 01722 413370  
NADFAS Lecturer and current Lecturers' Representative offering advice and slide-scanning services to fellow NADFAS Lecturers.
- ◆ The Fine Art Print Company  
[www.fapc.co.uk](http://www.fapc.co.uk) Tel: 01225 333177  
Run by former museums curator Katharine Cockshaw and photographer Dunstan Baker, this is a specialised service based in Bath offering fine art reproduction services to artists, museums and galleries and art historians. Mention NADFAS for a possible discount.
- ◆ Jessops \*  
[www.jessops.com](http://www.jessops.com)  
Individual stores might vary in what they offer.
- ◆ Microquiz \*  
<http://microquiz.net> Tel: 01909 470 607
- ◆ Mr Scan Professional  
[www.mrscan.co.uk](http://www.mrscan.co.uk) Tel: 0845 6432105  
Based in Farnham, Surrey. Images are cleaned and colour-corrected.
- ◆ Pandis \*  
[www.cam.ac.uk/cs/pandis/scanning.html](http://www.cam.ac.uk/cs/pandis/scanning.html) Tel: 01223 334 390  
Operated by the University of Cambridge but open to all.
- ◆ Pix Studio  
[www.pixstudio.co.uk](http://www.pixstudio.co.uk) Tel: 0845 226 3205  
Based in Winchester. A free trial is available.
- ◆ Slides on DVD \*  
[www.slidesondvd.co.uk](http://www.slidesondvd.co.uk) Tel: 01525 875 349  
Dunstable. Slides are scanned to either DVD or CD. Contact Lucy or Peter Ward.
- ◆ Snappy Snaps  
[www.snappynaps.co.uk](http://www.snappynaps.co.uk).  
High-street chain offering slide-scanning services.

## Scanners

(those marked with \* have been suggested to us by NADFAS Lecturers)

**NB. These are not finite lists. Rather, they are starting points giving suggestions of scanners which look suitable for the needs of NADFAS Lecturers. The Education Department would welcome suggested additions.**

### List of dedicated slide scanners

- ◆ Canon CanoScan 4400F \*  
This is equipped with a built-in film adapter unit, allowing for 6 x 35mm negatives or 4 mounted slides to be scanned at a time. Built-in retouching technology. £62
- ◆ Epson Perfection V700 Photo Scanner  
Film holders allow for batch-scanning, rather than one at a time. Digital Ice included. c. £350
- ◆ Epson Perfection V750 Photo Scanner  
Big sister model to the above scanner, the advertised price is less (£180). The set-up for PCs and Macs is different although the scanner will work with both.
- ◆ Nikon SF 210  
Up to fifty slides can be loaded to scan in one go although reviews say it is better not to mix thick and thin slide mounts as this can cause the scanner to jam.  
c.£410
- ◆ Nikon Coolscan V ED-LS50 Film Scanner  
Digital Ice technology in-built. Very positive review. c. £550
- ◆ Plustek Opticfilm 7200 \*  
A comprehensive review of this scanner was written when it was launched in 2006 and can be viewed at <http://www.ephotozine.com/article/Plustek-OpticFilm-7200i>  
c.£125
- ◆ Summit Two Photofix Scanner  
No dust/scratch removal facility. Compatible only with Windows XP or Vista, not Macs. Reviews suggest that scans from negatives are much more successful than those from 35mm slides. c. £90

### List of Flatbed Scanners

- ◆ Brother MFC 7420 \*  
All-in-one laser flatbed printer, copier, fax and colour scanner. c.£140
- ◆ Epson 4870  
Scans at a resolution of 4800dpi and includes multi format film scanning and DIGITAL ICE for both film and print scanning. Transparency Unit and the slide holders are included in the package. C. £170
- ◆ Epson Perfection 4990 Pro

Restores faded or damaged film and photos with Epson Easy Photo Fix and Digital Ice. c. £200

- ◆ Epson V700 Photo Scanner  
Digital Ice included. c. £350
- ◆ Hewlett Packard Scanjet 5300C \*  
This model, recommended to us by a Lecturer, is no longer available but similar models are.

## **Art Image Libraries**

- ◆ Art and Architecture  
[www.artandarchitecture.org.uk](http://www.artandarchitecture.org.uk)  
The Courtauld Institute's collection online. More than 40,000 images available to view. Unclear if digital images can be bought directly from the site, although prints are available.
- ◆ Bridgeman Art Library  
[www.bridgeman.co.uk](http://www.bridgeman.co.uk)  
Images from over 8,000 collections and 29,000 artists. NADFAS is investigating the possibility of a group discounted access for NADFAS Lecturers – we will keep you posted!
- ◆ British Library Images Online  
[www.imagesonline.bl.uk](http://www.imagesonline.bl.uk)  
"A unique resource for commercial picture buyers, enabling you to license thousands of images from the British Library's unparalleled collections". Particularly useful for maps.
- ◆ Getty Images  
[www.gettyimages.com](http://www.gettyimages.com)  
General site of fine and decorative art images with links to the websites from where they can be bought.
- ◆ iStockPhoto  
[www.istockphoto.com](http://www.istockphoto.com)  
Digital images, and their copyright, can be bought from this site. Probably better for architectural images rather than fine or decorative art pieces.

## **Other Helpful Websites**

- ◆ The Technical Advisory Service for Images (TASI)  
[www.tasi.ac.uk](http://www.tasi.ac.uk)  
Lots of helpful information, but of particular use are the following sections:  
*Copyright and Digital Images* - discusses what copyright is, who owns it and what it applies to. A useful section on the duration of copyright.  
*Converting your Slides into Digital Form*

*Scanners* - advice on which scanner to buy/use if you intend to convert your 35mm slides to digital yourself.

*Finding Art, Architecture and Design Images* - advice on where to find images of art on the Internet.

- ◆ Copyright Licensing Agency (CLA)  
[www.cla.co.uk](http://www.cla.co.uk)  
Information on copyright, including how to apply for a licence.
  
- ◆ Scan Tips  
[www.scantips.com/faq.html](http://www.scantips.com/faq.html)  
A general interest website which answers general questions on scanning issues. Might be useful as a trouble-shooting reference.