

## Disposing of old equipment

## **E-Sussex, E-Safe**

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Provided by East Sussex County Council

These days, it is not unusual to find that families have a lot of equipment that is no longer needed or used.

Items such as outdated mobile phones, PCs, Laptops, or games stations often gravitate into the loft or a drawer in the kitchen.

There are recycling centres where electronic equipment can be disposed of securely. There are now regulations covering the disposal of old electronic equipment. It can't just be put in a skip or in the bin.

The latest regulations can be found here. <u>https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/292632/bis-14-604-</u> weee-regulations-2013-government-guidance-notes.pdf

There are also companies who will dispose or recycle your old mobile phone or games stations.

Be aware, though, that a lot of information is stored in the average mobile phone, and it may remain recoverable even if the data is deleted.

This is also true of computer hard drives. You can delete all the information on a hard drive, and it may remain recoverable.

#### Is old equipment of interest to thieves?

Yes – not so much for the equipment itself, but for the information it may contain. Even the new(ish) PC in the lounge may be of interest not so much for what it is, but for what it may contain. Thieves have been known to sell on old hard drives. They can fall into the hands of identity thieves or fraudsters.

#### What happens when I change my computer at home?

You will want to read the manufacturer's instructions carefully and transfer your personal files and folders from the old computer to the new one. This can be done using either Windows Files and Folders transfer wizards, or by copying your files and folders onto removable storage and then copying them back onto your new machine.

#### Can I "securely" delete everything on my old hard drive?

Yes, you can. There are "secure deletion" programs available, but you could also reformat the disk. This will wipe all the information off the disk. There is more information about formatting hard drives here.

#### WARNING – Formatting a hard drive is a non-reversible process.

http://pcsupport.about.com/od/windows7/ht/format-hard-drive-windows-7.htm

I'm still not convinced I don't want to let my information out of my sight – even to a safe recycler, what can I do?

DISCLAIMER – We strongly recommend the use of properly licensed and registered disposal companies for all computers and electrical devices. Please remember that working on any electronic equipment may carry with it the risk of electric shock as some components hold a charge even when disconnected from the mains. If you are in any way unsure, ask a properly qualified person to undertake this work for you.

## Warning – there are very strong magnets in these units. Keep them well away from pacemakers credit cards and similar data devices.

The inside of a computer contains many components and wires, and they may be in different places to the illustration below. There will, however, be one area that has multiple wires coming from it and they plug into different areas of the computer. This is the power supply. Under NO circumstances remove it or open it. There are components in there that store electrical charge and there is a real risk of shock. Identify the Power Supply first, then steer well clear of it, even if, (as it should be) it is disconnected from the mains supply.



If you make sure your PC is disconnected from the mains, you can remove its case. Inside you will be able to find something that looks like this.



This is your computer's hard drive, and it is on this device that all your information is stored. There will be two cables at the back of this device. Unplug them, then unscrew the mounting screws and remove the device.

You can now physically destroy it. They are rugged, and you may need a workout with a sledge hammer!

Inside there are one or more disks. Once these have been rendered unserviceable, the information on them is lost. (Technically, even a fragment of a hard drive disk might be readable, however, highly specialised equipment is needed.)

This is what they look like inside.



The discs contain the information – everything from the operating system to your files and folders and programs. The arms read and write data to the discs.

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#### What about Laptops?

Laptops also have hard drives, although they are physically smaller. They may have no moving parts at all. The laptop will need to be opened (no easy task sometimes!) and the hard drive identified.



#### Disposing of old equipment.

Again, this is the component you need to extract and destroy to ensure your private information is unrecoverable.

#### What about my memory sticks?

Memory sticks can also be recycled, however some people prefer to physically destroy them. They contain no moving parts. Inside you would find a microchip. They are, in fact, micro-computers. They may have one or more "chips" and may be capable of installing their own drivers onto systems in a variety of formats.



USB cases are designed not to be opened in order to protect the contents from moisture, electrical static and physical shock.

### If you do decide to destroy hard drives or flash drives, please dispose of the pieces responsibly.

#### So what about my old mobile phone?

The most frequently overlooked component of an unused mobile phone is the SIM card. While it may have been deactivated by the mobile phone network, the SIM card may well have contact information on it together with other, recoverable data.

Step one is to locate the SIM and physically destroy it by cutting it across the gold terminals.



There may also be a micro SD memory card in the phone. Older phones did not have these, but many released in the last 10 years or so have the capacity for the user to add a card here. The card is usually used to hold images. They can be tiny, and easily overlooked.



Sometimes they fit inside the phone itself, and sometimes in a small slot in the side of the case. Once you have located and removed the SIM and the micro SD card, you can power the phone up (It may need connecting to a charger) and ensure that all your contacts are deleted from it, together with any web browsing history, stored messages and emails.

Some phones can be reset to factory condition and this process usually carries a warning that all user data will be eliminated. This is what you want, so if this facility exists, go ahead.

You should now be left with an empty, recyclable mobile phone with none of your personal data remaining.

#### So what about iPads, iPods etc?

Apple do an excellent recycling offering and you may even be able to make some money out of your old device, especially if it is good condition. It is worthwhile taking it to your nearest Apple store and asking about their recycling scheme.

More on the Apple recycling scheme can be found here.

#### https://www.apple.com/uk/recycling/computer/

It is very difficult to get inside an Apple device without causing it damage. Recycling it through the company is the best way.

#### To sum up....

- We need to dispose of old equipment responsibly, but we also need to make sure that any of our information is removed from the device first.
- > Once we let a device out of our control, we lose control of anything it contains as well.
- There are licensed, reputable recycling companies who will treat your old equipment with regard to your safety. Always use a properly registered company. Your local Authority can help to put you in touch. Local Authority recycling centres may be able to take old electronic devices.
- If you want to destroy your data yourself, try to do so through electronic means first such as secure deletion or reformatting.
- If you want to physically destroy memory storage devices, please take precautions against exposure to magnetic fields and electrical shock. Use the services of a properly qualified person if you are in any way unsure.
- > Dispose of any debris responsibly.