Readers of this article will be familiar with the concept of in-service inspection and testing of electrical equipment, commonly but misleadingly referred to as portable appliance testing (PAT). Although IET and Health and Safety Executive (HSE) guidelines are available, the subject of PAT still causes confusion and concern for business. People are not clear about which equipment needs to be tested and uncertain about how often it should be done. We want to ensure that you, as electrical contractors or electricians understand what is required so your clients and customers can get the best advice.

The myth that all electrical equipment needs to be tested every year by a qualified electrician was one that HSE refuted in its ‘myth of the month’ series back in 2007. More recently the issue of PAT has been raised in the course of Professor Löfstedt’s independent review of health and safety legislation. He considered PAT an example of a regulation that is being applied too widely and disproportionately largely because there are many instances of equipment being inspected and tested too frequently and tested unnecessarily. He recommended that HSE further clarifies what is necessary and what is not.

As you know there is a legal requirement to maintain electrical equipment if not maintaining it would result in danger. But there is no legal requirement to test equipment or that such testing should be carried out at any particular frequency. Despite this, some companies offering PAT services cite health and safety legislation as a reason for them. In fact checks and inspection of equipment by users may be the only action needed for portable appliances that are at low risk of developing hazardous faults.

HSE therefore welcomes this recommendation from Professor Löfstedt as it reflects our position in relation to maintaining electrical equipment, including portable appliances, that are at low risk of developing hazardous faults and which are not subject to excessive wear and tear. It also supports HSE’s view that the focus should be on an appropriate risk-based maintenance regime for electrical equipment (portable appliances and other forms of equipment).

HSE is clear that testing equipment including portable appliances can be a useful, and in some instances an essential, part of an effective maintenance regime but testing, if undertaken, is only one element of this. Visual checks by users and regular inspections of the equipment are also vital parts of any maintenance regime and...
particularly for appliances that are at low risk of developing hazardous faults, they may be the only action required.

When someone is thinking about testing portable appliances, in addition to visual inspection and the frequency at which this should be done, it is appropriate to take a risk-based approach. The type of equipment, what it is being used for and the environment in which it is being used are all factors that will influence the need for and how often it should be tested. For example, for a business that uses equipment robustly in aggressive environments - such as a jobbing builder on construction sites - frequent visual inspections and testing may be appropriate. Conversely, for businesses where portable equipment is rarely moved and sits in a benign environment such as computer equipment in an office then testing may only be required rarely, if at all.

And just to assure you, HSE is leading by example. Having reviewed the results of our annual tests of portable appliances in all our offices over the last five years, we have decided that further tests are not necessary for certain types of equipment for the foreseeable future, if at all. We will, of course, continue to monitor any faults reported as a result of user checks and visual inspections and review this decision if necessary.

Both inspection and testing, if required, should be undertaken by someone competent to do it. Businesses can easily arrange for a member of their staff to be trained to carry out formal visual inspections which are not technically demanding. This may be particularly valuable for low risk businesses where inspection may identify most, if not all, problems with their equipment and thus avoid any unnecessary testing.

HSE is now taking forward Professor Löfstedt’s recommendations and so will review and refresh its guidance on PAT in the next few months. We will work with key stakeholders, such as ESC, IET, NICEIC, SELECT, ECA, NAPIT, APAT and representatives of small businesses and user groups such as facilities managers to make sure that clear messages about PAT reach all those with an interest.

We need your help too, to challenge the myths. You are ideally placed to help businesses by providing proportionate advice and only promoting portable appliance testing when assurance about safety of electrical equipment cannot be obtained in any other way. If you have any comments and ideas on how we might tackle this together then please get in touch with us to discuss them further.