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BATTERIES DIRECTIVE – PART 1

Batteries directive – Part 1

The European Union adopted the 'Batteries Directive' (91/157/EEC) back in March 1991. This introduced restrictions on the use of mercury in most batteries and encouraged collection and recycling. However, the objectives of this Directive have not been achieved as most portable batteries are still being sent to landfill. As a result, the EU has introduced – and adopted – a new Batteries Directive (2006/66/EC) that will come into force on 26 September 2008 and replace the existing Directive. National legislation is also due by this date.

Producers' Obligations

Once the legislation comes into force, all battery producers will be obliged to register in each EU State where they place batteries on the market (with the possible exception of distance sellers in some States).

The approaches to compliance within each EU State are still under discussion but it is possible that portable batteries and industrial and automotive batteries might have different approaches. Collection rates for portable batteries are currently very low in most EU States, including the UK, whereas collection rates for many types of industrial and automotive lead-acid batteries are already very high. Therefore, two approaches are being considered for industrial and automotive batteries, whereas the most likely approach for primary batteries will be using producer compliance schemes.

Portable Batteries

Portable batteries are used by consumers and by industry and are defined as sealed batteries that can be hand carried and are not for industrial or automotive use. They are sold as individual batteries and also in equipment. Primary batteries reach end-of-life (when discharged) before the equipment, and so many waste primary batteries will be available for recycling.

Rechargeable batteries are sold as individual batteries or in electrical equipment and so many will reach end-of-life when the equipments' life ends. As a result, the user will remove some and others would be removed by WEEE recycling schemes. Therefore, any system for collection of portable batteries will need to account for all of these routes. Options include:

- Take-back by retailers: This could be similar to existing distributor take-back schemes that are available for waste electrical equipment.
- Take-back by battery or equipment supplier: This approach is mainly appropriate for professional and industrial batteries, although larger manufacturers could collect batteries from consumers.

- Use of compliance schemes: Several compliance scheme options are being considered, ranging from one single national scheme to many competing schemes, with or without a coordinating body (e.g. a clearing house).

It is probable that a combination of approaches will be used in a similar way that the WEEE Directive is implemented. One option is for the authorities to set targets for collection of waste batteries, either for individual producers that have opted to collect batteries or for schemes that collect on behalf of members. Targets are likely to be based on current market share.

Batteries are already collected by WEEE compliance schemes when waste electrical equipment is disassembled. Most of these batteries will be portable and should be recycled. The collection targets for portable batteries are 25% by September 2012 rising to 45% by September 2016.

Industrial and Automotive Batteries

Two options are being considered for batteries designed exclusively for industrial professional or automotive use, either to allow existing private arrangements to continue, or to set up producer compliance schemes. Compliance schemes may work with local authorities as is the case now with waste electrical equipment.

Although all producers must register, Member States may exclude 'small' scale producers (who sell only small numbers of batteries) from any obligation to finance collection and recycling of batteries. The directive does not define 'small' producers however.

The collection and recycling requirements will be enforced and, so, some form of evidence of compliance will be required from producers or the schemes that they join. The Directive specifies collection and recycling targets of 100%, which must be met by 26 September 2011. Disposal by landfill or incineration will be banned outright. ■

The second part of this article, to be published in the next issue of Electronics World, will look at substance restrictions, labelling requirements and the potential impact of the batteries directive on equipment design.

Please email your questions to:
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 marking them as RoHS or WEEE.