

2.1.5. EN STANDARDS FOR LEGAL METROLOGY

Following Harmonised European Standards is one of the methods that manufacturers can use to demonstrate compliance with the essential requirements of European Directives in many fields.

Directive 2009/23/EC dealing with Non-automatic weighing instruments (NAWI) details the essential requirements that NAWI must meet before they can be placed on the European market and/or be taken into use in the EC. When the Directive was adopted in 1990, the European Commission issued a mandate to CEN/CENELEC, two of the bodies that develop European Standards, to produce a Standard that would ensure compliance with the Essential Requirements of the Directive. They came up with EN 45501, which was then recognised by the European Commission as being a Harmonised Standard giving as presumption of conformity to the Essential Requirements. The Standards making organisations in each of the Member States then transposed EN 45501 into a national standard. So in the UK, we now have BS EN 45501:1994 Specification for Metrological aspects of non-automatic weighing instruments, which is the exact equivalent of EN 45501:1992 as amended and corrected.

EN 45501 was itself an almost exact copy of OIML R 76-1 1992, Non-automatic weighing instruments Part 1 Metrological and technical requirements – Tests.

When the Measuring Instruments Directive 2004/22/EC was drafted, the provision regarding the use of Harmonised Standards was include, but the Directive also introduced a new concept, that of the “Normative Document”. Under this provision the European Commission can adopt documents developed by other organisations which will provide the same presumption of conformity as a Harmonised Standard.

Using this principle, the EC has agreed, with the advice of the Measuring Instruments Committee to give a number of OIML Recommendations the status of Normative Documents. This will avoid the need for CEN/CENELEC to go through the process of turning the Recommendations into European Standards and will overcome the problem that now exists with EN 45501 in that it did not keep up with the amendments to R76-1 1992, and is now even further out of step as a new revision of R76 was adopted in 2007.

The following list details the OIML Recommendations that have been adopted as Normative Documents:

R50-1:1997	Continuous Totalising automatic weighing instruments
R51-1: 2006	Automatic Catchweighing instruments
R61-1:2004	Automatic Gravimetric Filling instruments
R106-1:1997	Automatic Rail weighbridges
R107-1:2007	Discontinuous totalizing automatic weighing instruments

WELMEC have published Guidance documents detailing the Essential Requirements of the Measuring Instruments Directive and the corresponding provision of the OIML Document. These documents can be downloaded from the WELMEC website. They are:

WELMEC Guide 8.16-1	Automatic Catchweighers
WELMEC Guide 8.16-2	Automatic Gravimetric Filling Instruments
WELMEC Guide 8.16-3	Discontinuous Totalisers
WELMEC Guide 8.16-4	Continuous Totalisers
WELMEC Guide 8.16-5	Rail Weighbridges