Mandate to CEN and CENELEC for the Elaboration and Adoption of Measurement Standards for Household Appliances: Vacuum Cleaners.

I. Justification

This standardisation mandate is related to Council Directive 92/75/EEC which lays down the legal basis for a compulsory system of energy labelling and information provision for certain energy using household appliances, where significant energy savings are likely to be achieved. Currently vacuum cleaners consume of the order of 7-8 TWh in the EU. The industry expects this to rise to 10 TWh by 2010. There is scope for a substantial reduction in this consumption.

In order to provide this information on a comparable basis it is necessary that suppliers of these appliances use a uniform measurement standard. Existing European, and International standards (EN 60-312, IEC 312) provide a basis for obtaining this information, but common standard is required to ensure that all appliances covered by an implementing directive are measured on a comparable basis. Council Directive N° 92/75/EEC and its implementing directive can best be applied, following the adoption of a standard to be provided under this mandate. This will require that existing standards are revised so as to ensure that they provide measurement methods for consumption of energy based on the methodology in the annex and for supplementary information, which are representative and reproducible.

II. Description of mandated work

1. The Commission hereby requests CENELEC to elaborate and adopt European measurement standards for household vacuum cleaners. These should lay down the methods of measuring consumption of energy, performance, and supplementary information, with a view to meeting the requirements of Council Directive 92/75/EEC. This standardisation work shall take into account any international and European standards in this field, in particular EN 60-312 and IEC 312. The standard should define the performance characteristics to be measured for standardised vacuum cleaning cycle(s).
The priority is to measure mains operated dry vacuum cleaners

The measurement methods should,

- as far as possible, be independent of the type of vacuum cleaner being tested;
- reflect energy consumption when actually vacuum cleaning;
- cover the variety of household vacuum cleaners which are or are likely to be placed on the EU market and for which there will be a requirement for reliable information on the comparative consumption of energy and other resources, and their performance;
- avoid distortion or bias which would unfairly favour one type of product relative to another;
- avoid any danger of an appliance being programmed to recognise the test cycles, and reacting specifically to them.

2. Characteristics to be dealt with in the standard

The standard should define the performance characteristics to be measured in the standard including:

- Energy consumption
- Cleaning performance (dust pick up) on representative floor (e.g. hard floor, carpet)
- Dust emission and filtration performance of the appliance taking into account the composition (particle size classes) of the dust entering and emitted by the vacuum cleaner. This should place particular emphasis on dust particles of sizes 4 to 0.4 or 0.2 microns, which are thought to pose particular problems for human health.
- Useable size of dust receptacle
- Radius of operation, and
- Supplementary information.

The characteristics of standard test dust/dirt should as far as possible allow accurate prediction of the performance of vacuum cleaners in picking up and retaining (not emitting) dust/dirt in real life.

For all the characteristics used in the standard, methods of estimating the accuracy (margin of error) of the test results should be adopted.

3. Enlargement of the scope of the standard

In a second step, the measurement standards should cover other types of vacuum cleaner such as 'wet and dry’, battery operated appliances or central vacuum cleaning systems.
III. Execution of request

1. The European Standards (EN) taking into account the characteristics referred to above will be adopted by 31 December 2005. Priority shall in accordance with the timetable in annex. In executing this mandate, the order of priority should be
   i) The development of basic measurement methods for dry vacuum cleaners.
   ii) Definition of the measurement errors of test methods. Methods to determine the accuracy (error margin) of any particular test.
   iii) Extension of the test methods to include other appliances such as wet and dry models, and battery operated appliances.
   (Point ii may require round robin or other testing)

2. The standards will be available at adoption in three languages (DE, EN, FR), together with the correct titles in the other Community languages.


4. The Commission will communicate to CEN/CENELEC the implementing directive adopted pursuant to Council Directive 92/75/EEC, and reserves the possibility of specifying the minimal requirements more precisely, on this basis.

5. CEN and CENELEC will ensure a close collaboration between them in order to maintain a coherent set of European standards.

6. CEN and CENELEC may choose to adopt the harmonised standard on the basis of the International bodies' standardisation activities, via the parallel vote procedure. However, if CEN or CENELEC notes that the target date referred to above, will not be met, they will undertake to do the necessary in order to prepare a European standard, after consulting with IEC and ISO, at their own level.