ANNEX I

Method for setting generic Eco-design requirements (referred to in Article 15)

Generic ecodesign requirements aim at improving the environmental performance of EuPs, focusing on significant environmental aspects thereof without setting limit values. The method according to this Annex will be applied when it is not appropriate to set limit values for the product group under examination. The Commission shall, when preparing a draft implementing measure to be submitted to the Committee referred to in Article 19, identify significant environmental aspects which shall be specified in the implementing measure.

In preparing implementing measures laying down generic ecodesign requirements pursuant to Article 15 the Commission will identify, as appropriate to the EuP covered by the implementing measure, the relevant ecodesign parameters from among those listed in Part 1, the information supply requirements from among those listed in Part 2 and the requirements for the manufacturer listed in Part 3.

Part 1. Ecodesign parameters for EuPs

- 1.1. In so far as they relate to product design, significant environmental aspects are identified with reference to the following phases of the life cycle of the product:
- (a) raw material selection and use;
- (b) manufacturing;
- (c) packaging, transport, and distribution;
- (d) installation and maintenance;
- (e) use;
- (f) end-of-life, meaning the state of an EuP having reached the end of its first use until its final disposal.
- 1.2. For each phase, the following environmental aspects are to be assessed where relevant:
- (a) predicted consumption of materials, of energy and of other resources such as fresh water;
- (b) anticipated emissions to air, water or soil;
- (c) anticipated pollution through physical effects such as noise, vibration, radiation, electromagnetic fields;
- (d) expected generation of waste material;
- (e) possibilities for reuse, recycling and recovery of materials and/or of energy, taking into account Directive 2002/96/EC.
- 1.3. In particular, the following parameters will be used, as appropriate, and supplemented by others, where necessary, for evaluating the potential for improving the environmental aspects mentioned in the previous paragraph:
- (a) weight and volume of the product;
- (b) use of materials issued from recycling activities;

- (c) consumption of energy, water and other resources throughout the life cycle;
- (d) use of substances classified as hazardous to health and/or the environment according to Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packing and labelling of dangerous substances⁽¹⁾ and taking into account legislation on the marketing and use of specific substances, such as Directives 76/769/EEC or 2002/95/ EC;
- (e) quantity and nature of consumables needed for proper use and maintenance;
- (f) ease for reuse and recycling as expressed through: number of materials and components used, use of standard components, time necessary for disassembly, complexity of tools necessary for disassembly, use of component and material coding standards for the identification of components and materials suitable for reuse and recycling (including marking of plastic parts in accordance with ISO standards), use of easily recyclable materials, easy access to valuable and other recyclable components and materials; easy access to components and materials containing hazardous substances;
- (g) incorporation of used components;
- (h) avoidance of technical solutions detrimental to reuse and recycling of components and whole appliances;
- (i) extension of lifetime as expressed through: minimum guaranteed lifetime, minimum time for availability of spare parts, modularity, upgradeability, reparability;
- (j) amounts of waste generated and amounts of hazardous waste generated;
- (k) emissions to air (greenhouse gases, acidifying agents, volatile organic compounds, ozone depleting substances, persistent organic pollutants, heavy metals, fine particulate and suspended particulate matter) without prejudice to Directive 97/68/ EC of the European Parliament and of the Council of 16 December 1997 on the approximation of the laws of the Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery⁽²⁾;
- (l) emissions to water (heavy metals, substances with an adverse effect on the oxygen balance, persistent organic pollutants);
- (m) emissions to soil (especially leakage and spills of dangerous substances during the use phase of the product, and the potential for leaching upon its disposal as waste).

Part 2. Requirements relating to the supply of information

Implementing measures may require information to be supplied by the manufacturer that may influence the way the EuP is handled, used or recycled by parties other than the manufacturer. This information may include, where applicable:

- information from the designer relating to the manufacturing process;
- information for consumers on the significant environmental characteristics and performance of a product, accompanying the product when it is placed on the market to allow consumers to compare these aspects of the products;
- information for consumers on how to install, use and maintain the product in order to minimise its impact on the environment and to ensure optimal life expectancy, as well

as on how to return the product at end-of-life, and, where appropriate, information on the period of availability of spare parts and the possibilities of upgrading products; information for treatment facilities concerning disassembly, recycling, or disposal at end-of-life.

Information should be given on the product itself wherever possible.

This information will take into account obligations under other Community legislation, such as Directive 2002/96/EC.

Part 3. Requirements for the manufacturer

1. Addressing the environmental aspects identified in the implementing measure as capable of being influenced in a substantial manner through product design, manufacturers of EuPs will be required to perform an assessment of the EuP model throughout its lifecycle, based upon realistic assumptions about normal conditions and purposes of use. Other environmental aspects may be examined on a voluntary basis.

On the basis of this assessment manufacturers will establish the EuP's ecological profile. It will be based on environmentally relevant product characteristics and inputs/outputs throughout the product life cycle expressed in physical quantities that can be measured.

2. Manufacturers will make use of this assessment to evaluate alternative design solutions and the achieved environmental performance of the product against benchmarks.

The benchmarks will be identified by the Commission in the implementing measure on the basis of information gathered during the preparation of the measure.

The choice of a specific design solution will achieve a reasonable balance between the various environmental aspects and between environmental aspects and other relevant considerations, such as safety and health, technical requirements for functionality, quality, and performance, and economic aspects, including manufacturing costs and marketability, while complying with all relevant legislation.

- (1) OJ 196, 16.8.1967, p. 1. Directive as last amended by Commission Directive 2004/73/EC (OJ L 152, 30.4.2004, p. 1).
- (2) OJ L 59, 27.2.1998, p. 1. Directive as last amended by Directive 2004/26/EC (OJ L 146, 30.4.2004, p. 1).