Energiebetriebene-Produkte-Richtlinie der Europäischen Union (EbP-RL)

Arbeitshilfe zu der Vorstudie zu <u>Los 7</u> (externe Netzteile und Akkuladegeräte) – <u>Begriffsbestimmungen</u>

Die Vorstudie enthält 16 Begriffsbestimmungen. Zwei weitere Begriffsbestimmungen zu den im Entwurf verwendeten Bezeichnungen entstammen anderen Quellen.

Energy Using Products-Directive of the European Union (EuP-Directive)

Help for the use of the preparatory study <u>Lot 7</u> (externale power supplies and batery chargers) – <u>definitions</u>

The working document contains 16 definitions. There are two additional definitions for terms, used in the working document, taken from another source.

Directive d'écoconception applicables aux produits consommateurs d'énergie

Aide à l'utilisation d'ètude préparatoire sur <u>lot 7</u> (chargeurs et alimentations externes) – <u>définitions</u>

Sprachangaben - Language specification - Indication des langues :

CS: čeština DA: dansk DE: Deutsch EL: ΕλληνικάES: españolFI: suomi

FR: françaisIT: italianoNL: Nederlands

PT: portuguêsSV: svenska

AA

(also called Mignon) battery: 1.5 V; diameter 14.3 mm; lenght 51 cm [source: http://en.wikipedia.org/wiki/Battery_%28electricity%29%20] **DE:** Mignonzelle; AA-Zelle

AAA

(also called Micro) battery: 1.5 V; diameter 10.3 mm; lenght 45 cm [source: http://en.wikipedia.org/wiki/Battery_%28electricity%29%20] DE: Microzelle; AAA-Zelle

active mode

The condition in which the battery is receiving the main charge, equalizing cells, and performing other one-time or limited-time functions necessary for bringing the battery to the fully charged state.

A La Carte Charger

A separable battery charger that is individually packaged without batteries. Batteries that the a la carte charger is designed to charge should be listed on the packaging, battery, and/or in the user materials.

ballast

A device used with electric discharge lamps and has two basic functions. At the start up, it provides the high voltage needed to cause an arc to jump from one end of the lamp to the other. Once the arc is established, the ballast allows the lamp to continue to operate by providing the proper reduced current flow to the lamp. Looking at the definition of EPS, they are not to be considered in the scope of lot 7. Further, an existing EU regulation* addresses the energy efficiency of ballasts.

* Directive 2000/55/EC concerning minimum energy efficiency for ballast for fluorescent lighting

BC \rightarrow battery charger

BAT \rightarrow Best Available Technology

Batch Charger

With some multi-port chargers, such as universal AA battery chargers, single cells are charged in batches (i.e., groups of batteries charged in series).

Battery Maintenance Mode

The condition in which the battery is still connected to the charger, but has been fully charged. This mode may persist for an indefinite period of time.

battery charger (BC)

A device intended to replenish the charge in a rechargeable battery. The battery charger will connect to the mains at the power input and connect to the battery at the output. The charger may be comprised of multiple components, in more than one enclosure, and may be all or partially contained in the end-use product.

For the purpose of the study, however, chargers integrated in the end-use product may not be analysed as it will be difficult to analyse such "internal chargers" in isolation from their main system.

DE: Akkuladegerät

Best Available Technology (BAT)

is a technology, leading to minimised environmental impacts, which is already available on the market or at least the technical feasibility has already been demonstrated (expected to be introduced at product level within 1-3 years).

Best Not yet Available Technologies (BNAT)

refers to technology, which has the potential to lead to further (environmental) performance improvements, but is still subject to research and development and is rather a future option / trend.

BNAT \rightarrow Best Not yet Available Technologies

EPS \rightarrow external power supply

external power supply (EPS)

A single voltage external ac-dc / ac-ac power supply:

- is designed to convert line voltage ac input into lower voltage dc output / into lower voltage ac output;
- is able to convert to only one dc / ac output voltage at a time;
- is sold with, or intended to be used with, a separate end-use product that constitutes the primary load;
- is contained in a separate physical enclosure* from the end-use product;
- is connected to the end-use product via a removable or hard-wired male/female electrical connection, cable, cord or other wiring;
- does not have batteries or battery packs that physically attach directly (including those that are removable) to the power supply unit;
- does not have a battery chemistry or type selector switch AND an indicator light or state of charge meter (e.g., a product with a type selector switch AND a state of charge meter is excluded from this specification; a product with only an indicator light is still covered by this specification); and
- has nameplate output power less than or equal to 250 watts.
- * "Physical enclosure" refers to the housing of the products themselves, not their retail packaging.

DE: eNT = externes Netzteil

Fairchild Power Switches (FPS)

are highly integrated off-line power switches with a fully avalanche rated SenseFET and current mode PWM IC offering Advanced Burst Mode Operation to meet low standby power regulations and achieve improved efficiencies. EMI¹ emissions are reduced through intelligent frequency modulation, According to manufacturer, in comparison to discrete MOSFET² and controller or RCC switching converter solution, the FPS simplifies designs by reducing total component count, design size, and weight while at the same time improving system reliability and lowering costs in target applications.

- ¹ EMI = Electromagnetic interference; also called radio frequency interference (RFI)
 DE: EMB = elektromagnetische Beeinflussung
 ES: Interferencia electromagnética
- ² MOSFET = MOS-FET = MOST = metal oxide semiconductor field-effect transistor
 DA: metal-oxid-halvleder-felteffekttransistor
 - **DE:** Metall-Oxid-Halbleiter-Feldeffekttransistor
 - **DA:** metal-oxid-halvleder-felteffekttransistor
 - **FR:** transistor à effet de champ (à grille) métal-oxyde
 - **IT:** transistor metallo-ossido-semiconduttore a effetto di campo
 - PT: transistor de efeito de campo de metal-óxido semicondutor

FPS → Fairchild Power Switches

Multi-Port Charger

A battery charger that, by design, is capable of simultaneously charging two or more batteries. These chargers also may have multi-voltage capability, allowing two or more batteries of different voltages to charge simultaneously or sequentially.

Multi-Voltage Charger

A battery charger that, by design, may charge a variety of batteries that are of different nominal voltages.

Stand-Alone Charger

A battery charger that, by design, charges separable batteries disconnected from the end-use product.

Standby (No-Load) Mode [IEC 62301]

Lowest power consumption mode which cannot be switched off (influenced) by the user and that may persist for an indefinite time when an appliance is connected to the main electricity supply and used in accordance with the manufacturer's instructions.

Toroidal Transformer

External power supplies based on linear technology commonly use an EI-core transformer. The geometry of this kind of core can be produced easily in high volumes but results also in inefficiencies due to magnetic flux directions vertically above and below the coils. The toroidal core geometry provides the same orientation for magnetic flux and magnetic domains, resulting in higher efficiency.

Uninterruptible Power Supply (UPS)

The fundamental purpose of a UPS is to provide an uninterruptible source of power for the equipment it protects. UPS is designed so that there is one source of power that is normally used, called the primary power source, and another source that kicks in, if the primary source is disrupted, called the secondary power source. The power from the grid is always one of these sources, and the battery contained within the UPS is the other. A switch is used to control which of these sources powers the equipment at any given time. The switch changes from the primary source to the secondary when it detects that the primary power has gone out. It switches back from the secondary power source to the primary when it detects that the primary power source has returned. Following the definition of the EPS, UPS are not considered to be in the scope of lot 7.

- **CS:** nepřerušitelný zdroj energie
- DA: nødstrømsforsyning
- **DE:** USV = Unterbrechungsfreie Stromversorgung
- EL: τροφοδοτικό αδιάκοπης παροχής; τροφοδοτικό αδιάλειπτης παροχής
- ES: SAI = Sistema de Alimentación Ininterrumpida; suministro continuo de energía
- **FI:** katkoton tehonsyöttö; alimentación ininterrumpida; katkeamaton tehonsyöttö; keskeytymätön tehonsyöttö; katkeamattoman tehonsyötön teholähde; keskeytymättömän tehonsyötön teholähde
- **FR:** ASI = alimentation sans interruption; alimentation sans coupure
- IT: gruppo statico di continuità; gruppo di continuità
- NL: Ononderbroken voeding; ononderbroken stroomtoevoer; storingsvrije stroomvoorziening; niet-onderbreekbare stroomvoorziening
- PT: unidade de alimentação ininterrupta
- SV: avbrottsfri kraftförsörjning
- **UPS** \rightarrow Uninterruptible Power Supply