

Dear all,

We had a very successful meeting with European (and some US) power supplies stakeholder on March 31.

We agreed to follow the current US Energy Star specs for the on-mode efficiency (at 100% load) for 1.1 2007, and the proposed test method (we will only require 100 % load testing, plus no-load).

For no-load we will have 0.3 W up to 60W output power and above this wattage we will have 0.5W due to the need to have a PFC for EMC in Europe

At this stage I hope that US Energy Star will confirm this specs.

Please note that we will have lower on-mode efficiency level starting on 1.1.2005 (tier 1):

RATED OUTPUT POWER	100 % LOAD MINIMUM EFFICIENCY REQUIREMENTS
$0 < W < 1.5$	30
$1.5 < W < 2.5$	40
$2.5 < W < 4.5$	50
$4.5 < W < 6.0$	60
$6.0 < W < 10.0$	70
$10.0 < W < 25.0$	75
$25.0 < W < 50.0$	80
$50.0 < W < 150.0$	80

I attach the draft minutes

As indicated there are good chances that I will be in D.C. on June 17, so I would be please to meet you and any interested stakeholder to present the details of the EU revised Code of Conduct.

Best regards

Paolo Bertoldi

[From Attached Word Document]



EUROPEAN COMMISSION
DIRECTORATE-GENERAL JRC
JOINT RESEARCH CENTRE
Institute for the Environment and Sustainability
Renewable Energies Unit

Ispra, 5 April 2004
RE/PB /pb/

Subject: Minutes of the Meeting on the European Code of Conduct on Energy Efficiency of External Power Supplies. 31 March 2004; European Commission DG JRC, Ispra

Participants: see attached list

1. *Opening, welcome*

Mr. Bertoldi (European Research Centre JRC) opened the meeting and welcomed the people present. He introduced the current status of the Code of Conduct (CoC) for external power supplies. The CoC was finalised in year 1999 with the aim of reducing the no-load losses of external power supplies. Following the CoC meetings in 2003 it was agreed that the CoC was also to include the external power supplies on-mode efficiency. In particular targets for the period 1.1.2005 till 31.12.2006 were already agreed in 2003. He thanked the companies that already signed the Code of Conduct for their engagement. The goal of the meeting was to agree on the 2007 requirements. Last year several parts in the world (US, China, Australia) showed a strong interest in on-mode efficiency of power supplies. The people present introduced themselves.

2. Presentation by Mr. Meier (IEA) on the Energy Star draft requirements for external PSUs

See presentation attached.

3. Presentation by Mr. Ericsson (PanPower) on new technical development for linear power supplies

See presentation attached.

4. Presentation by Mr. Warin (ONsemiconductor)

See presentation attached.

Mr. Warin highlighted that power supplies with an input power of 75 W or more must apply power factor correction (to comply with EN61000-3-2 for EMC) if they are to be put on the market in the EU.

5. Final agreement on the revised Code of Conduct

Mr. Bertoldi distributed before the meeting a revised version of the Code of Conduct reflecting the results of the discussion of the last meeting and including a proposal for the 2007 criteria. The following items were discussed and agreed.

5.1 PERCENTAGE OF POWER SUPPLIES THAT SHOULD BE COMPLIANT

Mr. Viegand argued that all (100 %) power supplies (of a signatory) should comply, compared to the 90 % of the models (for the new Phase 2, i.e. 1.1.2007). However it was accepted that the Code of Conduct should leave some room for special models that for some reason could not comply. It was also understood that the non-complying models should not be more than 10 % of the total sales volume for all models (falling in the scope of the Code of Conduct).

5.2 2007 targets

The proposed no-load target of 0.3 W for all power categories was accepted. The target was also achievable for linear power supplies and power supplies with features, e.g. regulated secondary current. However, it was argued that power supplies that have a power factor correction (PFC) to comply with EN61000-3-2 (above 75 W input power) would need an 0.2 W allowance; this was accepted.

It was remarked that the targets could be met at no additional costs.

Regarding the active mode, the proposed targets – which are equal to the current targets proposed by Energy Star – were accepted. Also in this case it was argued that power supplies that have a power factor correction (PFC) to comply with EN61000-3-2 (above 75 W input power) would need reduction of 0.05 of the target (e.g. 0.80 in stead of 0.85); this was accepted.

6. TEST METHODS

The test method adopted by US EPA for the Energy Star specifications for external power supplies, was accepted, with the restriction that for the Code of Conduct only the no-load condition and the 100 % nameplate output current condition will be used. (The US EPA test method also requires testing at 75 %, 50 % and 25 % of the nameplate output current).

Mr. Bertoldi said that he would incorporate the results of the discussion and some other text modification in the Code of Conduct (e.g. scope and goal, inclusion of ac/ac converters) and it will be sent together with the minutes to all the stakeholders.

7. Status of reporting for the year 2003

Mr. Bertoldi has received reports for the year 2003 from all signatories, except Epson and ASTEC. He remarked that the reports should include the actual power level of the power supply (and not only the indication that the power supply complies with the Code of Conduct).

He announced that 99 % of the reported power supplies meet the Code of Conduct.

Mr. Bertoldi would make a short report on the results of the year 2003 for Member States and other interested parties.

8. Further steps to promote the Code of Conduct

Regarding promotion of the Code of Conduct it was suggested that Member States could use the Code of Conduct in their procurement specifications.

Furthermore, some manufacturers use the compliance with the Code of Conduct in their promotion material.

Mr. Bertoldi said he would contact ICLEI to stimulate the interest of local authorities.

9. Discussion on Internal Power Supplies

During the last meeting the possibility was raised that the Code of Conduct could be extended to internal power supplies. Mr. Siderius presented an overview of appliance categories and possibilities for internal power supplies. His conclusion was that the PC system unit would be the most suitable product to develop criteria for internal power supply. However, it would be best to first try to develop specification via the Energy Star programme and EU-USA agreement.

Mr. Viegand presented results of measurements (power consumption in various modes) of PC power supplies. No decision was taken on this agenda item, more measurements were needed. One participant also indicated that the INTEL PC specification include requirements for the power supply efficiency,

10. Conclusion

Mr. Bertoldi thanked all participants for their contribution and collaboration. A revised draft Code of Conduct will be circulated, and also information about the meeting outcome will be delivered to the US EPA.

The **next meeting** on the Code of Conduct for external Power Supplies will be held on 14 October 2004 in Ispra.