



IEA-APP-EU International Standby Workshop

Vienna, 2 March 2010

ARCOTEL Hotel Wimberger, Neubaugürtel 34-36, 1070 Vienna



Workshop Overview and Recommendations

Introduction:

In early March 2010, 31 participants from 20 countries met in Vienna, Austria, to discuss a wide range of programs and policies to quantify and reduce standby power consumption. The one day workshop, that involved standby practitioners, industry representatives, technical experts and government representatives from around the world, shared information on current standby activities and agreed on the need for close cooperation and continued sharing of information and collection methodologies at a national, regional and global level.

There were a total of 12 presentations at the workshop on various aspects of standby power ranging from measurement approaches, industry perspectives, on line databases, assessment tools, network standby, European and Swiss regulations on standby and the need for monitoring, evaluation and surveillance. The full program is included with this meeting summary and all the presentations are available from the 4E Standby Annex and SELINA websites: see <http://standby.iea-4e.org/> and <http://www.selina-project.eu>

The workshop concluded with a wide ranging discussion and a review of the information shared during the workshop. The workshop participants prepared a number of recommendations for consideration by governments and other authorities charged with the issue of standby power programs.

Welcome:

Shane Holt and Aníbal de Almeida gave the welcome to the participants. Shane Holt referred that “what we are going to see today is what is being done in the area of standby all over the world”.

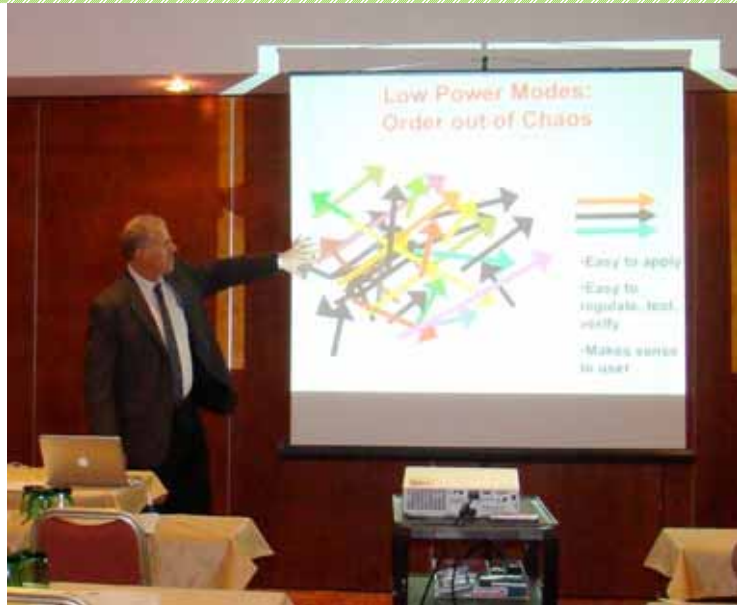
Aníbal de Almeida explained besides all efforts, no EC representative could join, because of agenda constrains.

Presentations:

In the next tables it can be seen the most important issues that were presented by the speakers. It can also be seen the main remarks made during the discussion of issues raised by each presentation.

**Alan Meier
(LBNL-USA)**

**Overview of
International Situation
in Standby and Low
Power Modes**



- Alan Meier spoke about the different programs that address lopomos all over the world. There are different definitions for the standby modes in each one of these programs that create a big confusion! Alan referred that there is a need to get “order out of this chaos”.
- Alan Meier explained the work that is being done in LBNL in order to try to characterize the different lopomo functions into a kind of periodic table:
 - equipment functions = atoms
 - standby modes = molecules
- “It is time to begin pointing the arrows to a straight line”

**Gerhard Fuchs
(CECED)**

**Perspectives of the
Household Industry**



- Gerhard Fuchs is the person responsible for the standby discussion inside CECEC;
- CCED has now 14 Direct Members and 26 national Associations;
- Gerhard Fuchs showed the “Industry perspective on standby”:
 - They defend the use of an Energy Efficiency Index” (EEI). This EEI should integrate all equipment power modes in one index;
 - Standby Law making and Standard making were misaligned. Gerhard showed a

graph with the Industry perfective for an ideally timeline.

**Aníbal de Almeida
(ISR-University of
Coimbra)**

**Introduction to the
SELINA EU Project**



- Aníbal de Almeida showed the disaggregation of end-use electricity consumption (source REMODECE), that shows the importance of standby energy consumption. Alan Meier referred that the percentages showed could be almost the same in USA, although with a lot more equipment, and Lloyd Harrington referred that in AU the air-conditioning has a higher percentage;
- Aníbal explained the objectives, main outcomes and activities of SELINA project;
- Aníbal referred that manufacturers should be obliged to insert on their equipments a label with the energy consumption in standby mode. Shane Holt referred that Korea has a system based on this remark.

**Bob Harrison
(Intertek)**

**Test methodology for
measurements in the
shops**



- Bob Harrison explained the issues consider to make the methodology for the “shop floor” measurement campaigns in SELINA project;
- All the participants that have already tested the Wattman equipment, have no doubts to affirm that for the “shop floor” campaigns this is a very good equipment;

**Ali Rahbar
(IT-Energy)**

**On-line database with
standby measurements**



- Ali Rahbar presented the main functionalities of the SELINA database and showed via web the online SELINA database.

**Melissa Damnics
(Australia)**

**IEA-APP Project
experience**



- Melissa Damnics explain what is APP and 4E, and what have been the main activities of the project;
- Melissa referred that the recent cooperation and exchange of experiences with SELINA project is strengthening their measurement methodology.

**Martin Lindinger
(TUG-IFEA)**

**Energy savings
evaluation tool**



- Martin Lindinger the energy consumption calculator tool
- Alan Meier said that the individual calculation of savings for a piece of particular equipment probably does not motivate the user to take actions because the number is very small.

**David da Silva
(Armines)**

**SELINA Measurement
results by equipment
types**



- David da Silva presented the progress of the measurement campaigns of SELINA project;
- David also presented an analysis to the data already inserted into the online SELINA database.

Lloyd Harrington

**Network standby –
issues and directions**



- Lloyd Harrington presented the 4E project;
- Daft report of 4E Standby Annex is expected in April 2010;
- Lloyd spoke about the “network standby”;
- Everyone agreed that manufacturers are not doing enough efforts in order to mitigate the “network standby” consumption. A proof of this is the fact that nowadays, we have mobile devices that can perform lots of web functions (with high velocities) with a very small amount of energy. The technologies have evolved sufficient enough to have network devices with smaller energy consumptions.

**Roland Bruniger
(Swiss Federal Office of
Energy)**

**Swiss standby
regulation in the EU
context**



- Roland Bruniger presented the Swiss Standby Regulations and volunteer actions;
- In Switzerland “coffee machine” is the equipment that represents the highest percentage of standby consumption;
- In Switzerland there is a special labelling for “coffee machines”;
- When Government entities make procurement for IT-equipment, one of the criteria is the LCC of the equipments.

**Barbara Schlomann
(Fraunhofer-ISI)**

**Actions and policy
instruments**



- Barbara Schlomann presented the present state of energy consumption for standby and off-mode in the EU and saving potentials;
- Barbara gave a general overview of the policies for market transformation of energy-efficient appliances in the EU;
- The SELINA approach on actions and policies for market transformation was also presented.

**Shane Holt
(Australian
Government)**

**Standby trends,
evaluation and
surveillance**



- Shane Holt referred that trying to encourage the normal consumer to take actions in order to reduce their standby energy consumption, probably is not the best way to solve the problem. There is an enormous number of different equipments in households making this an extremely complicated task for consumers. The way should be the R&D of manufacturers;
- Shane showed the evolution of standby power for TVs and DVDs. During the years, the values were dropping down. This was a direct result of the policies for manufacturers to reduce the values of standby consumption of their equipments.

Workshop Recommendations:

Methodology and Data Collection

1. It was recognized that equipment connected to networks is of growing importance. The participants recommended that increased efforts to compile data and measurements of networked products from a variety of sources in order to obtain better information on networked product characteristics needs to be made by all stakeholders. It was recognized that the current data collection methodologies may need to be adapted to adequately cover these types of products. This is an area where specific short term cooperation between APP/SELINA and 4E is likely to be very productive.
2. Workshop participants were impressed by the work undertaken within the SELINA project. There was strong support for the concept of a second phase of the SELINA measurement project in Europe to build on extensive experience and data collection achievements to date.
3. The workshop confirmed that agreed common products helps with the alignment of measurement approaches and provides a sound basis for quantitative international comparisons.
4. There was strong support from workshop participants to further develop the concept of a mode being a collection of distinct “functions” to assist in the characterization and classification of different low power modes. It was noted that this approach is now being used in relevant standards such as IEC62301 and IEC62542.

Regulation and Compliance

1. It was recommended that countries that regulate standby power consider in-store testing as a first stage screen test for compliance surveillance.
2. Participants supported the promotion and use of the international (standby) database as a tool to assist in surveillance and enforcement activities.
3. Support for the concept of a warning label on products with the worst standby was expressed – this appears to be a feasible approach for some products and modes. However, the workshop agreed that a warning label should not be necessary where there are mandatory requirements such as Minimum Energy Performance Standards (MEPS) that cover relevant products and modes.
4. A variety of approaches for speeding up market transformation were reviewed and these were generally supported (see Schломann presentation)
5. Workshop participants recognized that care is required when promoting low standby products (without consideration of other attributes) to ensure that there are no perverse effects such as the inadvertent promotion of products with low active mode efficiency or high energy consumption. It was agreed that a vertical approach to standby, where low power modes are combined with active modes to give total energy consumption, is preferable for products where the total energy consumption is significant. It was accepted that defining usage patterns under such a vertical approach is necessarily product specific and this could vary by region or country.

Cooperation and Information Sharing

1. It was agreed that a common database of store measurements is a useful asset for all stakeholders. Such a resource provides a sound footing for comparative studies as well as evaluation. The work undertaken within SELINA on development of an international standby database was strongly supported.
2. The workshop strongly endorsed the current practice of sharing information by those who undertake practical standby measurements. It was agreed that this information exchange and the associated cooperative efforts help all participants to improve on existing methods and encourages practitioners to keep striving for best practice through improved training, more robust collection systems and cooperative dialogue.
3. As a general recommendation, it was noted that information sharing and cooperation is a key strategy that underpins international standby projects. To this end, closer linkages and information exchange between projects under EIE (SELINA, REMODECE) and APP and 4E is recommended, such as sharing of public reports and inter-links between relevant websites.
4. Exchange of information and newsletters between the major international standby projects was strongly encouraged by the workshop.
5. It was noted that the Odyssee project is tracking product energy efficiency over time and this resource can complement and augment other more specialized data collection efforts on standby <http://www.odyssee-indicators.org/>
6. The workshop recognized that new technologies offer many opportunities for energy savings potential but also there are some threats which need to be recognized and understood. It was agreed that there is a need to ensure that energy saving paradigms and strategies become a core consideration in future product designs.

It was noted that a major international conference on standby power is being hosted in late October 2010 in Japan. Workshop participants were encouraged to come and further share their experiences and knowledge with the international community. Information will be provided on the major project websites as soon as the details are settled.

Audience/Participant photos:





International Workshop Agenda:

09:00-09:15	Welcome	Shane Holt, AU
09:15-09:30	Importance and relevance of this event	EU/AU Govt Officials
09:30-10:00	Overview of International Situation in Standby and Low Power Modes	Alan Meier (LBNL-USA)
10:00-10:20	Perspectives of the Household Industry	Gerhard Fuchs (CECED)
10:20-10:40	Introduction to the SELINA EU Project	Aníbal de Almeida (ISR-UC)
10:40-11:00	Test methodology for measurements in the shops	Bob Harrison (Intertek)
11:00-11:15	Coffee-Break	
11:00-11:30	On-line database with standby measurements	Ali Rahbar (IT-Energy)
11:30-12:00	IEA-APP Project experience	Melissa Damnic (Australia)
12:00-12:30	Energy savings evaluation tool	Martin Lindinger (TUG-IFEA)
12:30-14:00	Lunch	
14:00-14:30	SELINA Measurement results by equipment types	David da Silva (Armines)
14:30-15:00	Network standby – issues and directions	Lloyd Harrington
15:00-15:30	Swiss standby regulation in the EU context	Roland Bruniger - Swiss Federal Office of Energy
15:30-16:00	Actions and policy instruments	Barbara Schlomann (Fraunhofer-ISI)
16:00-16:15	Coffee break	
16:15-16:45	Standby trends, evaluation and surveillance	Shane Holt, Australian Govt
16:45-17:30	Panel discussion: <ul style="list-style-type: none"> • Identification of key issues • Communication and liaison opportunities • Outcomes and next steps 	Panel Moderator – Anibal de Almeida, panel of government officials

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