

Minutes of the 1st Stakeholder meeting

Ecodesign & Labelling Review household refrigeration appliances

Date: Wednesday 2015-01-07, 10.00-16.10h

Place: European Commission, Berlaymont building, Brussels

The list of attendants is attached as a table at the end of the document.

Introduction

Mr René Kemna (VHK, chair), opens the meeting for the Ecodesign and labelling Review of household refrigeration appliances. Structure of this meeting will follow the interim report published on the website.

Angeliki Malizou (ANEC/ BEUC) asks why the study is just 1 year. This is short compared to the white good studies (1,5 year) and at the website a Consultation Forum meeting is scheduled for December, while the final report is also due that month is this not too quick?

Andras Toth (EC) replies that for the white good studies also other DG's are involved e.g. DG ENV is involved in the washing machines study. Concerning the timing, we might prolong the contract as the study proceeds but nothing has been decided on that issue yet. The CF meeting date is not fixed anymore because of this uncertainty.

Hans-Paul Siderius (NL) adds that it is useful to have more time for the study. This study depends on the outcome of the new Energy Label and there is a new test standard which allows a more rigorous approach to check more aspects (correction factors etc.)

Scope Art. 1

Hans-Paul Siderius (NL) states that it is necessary to find objective criteria to separate Household (HH) from non-household (non-HH) if this is not possible then keep the scope as it is at the moment otherwise there might be potential loopholes. For HH appliances the Low Voltage Directive (LVD) is applicable and for non-HH the Machine Directive (MD) applies. This might not be 100% waterproof but this has significant consequences on how to test safety.

The chair replies that the LVD is self-declaration and it seems like a shift rather than a solution of the problem.

Edouard Toulouse (ECOS) adds to the discussion that if you only mention HH in the scope some products might not be labelled for instance fridges in hotels, work places etc. They do not see themselves as HH appliances, but energy labels make also sense for these groups.

Anette Michel (TopTen) agrees with ECOS. All minibars and wine coolers (no matter if for commercial or household use) need to be explicitly and clearly in the scope. At a lot 12 CF meeting in July 2014 the Commission had said that these product would be covered by the household refrigeration regulations, so this should be guaranteed. Accordingly, non-HH appliances should be kept in the scope, and it should be well coordinated with the regulations on professional and commercial refrigeration appliances – in order not to leave any loopholes.

The chair states that when adding more categories the market surveillance authorities will have even more difficulties to check the appliances due to the fact that all these categories will have different requirements. We have to be careful that we do not double regulate products in the HH appliances regulations and in the professions appliances regulation.

Hans-Paul Siderius (NL) prefers a technical definition of HH appliances and not declaration if a product is a HH appliance or not because this can create a shift (loophole) towards non-HH appliances. The requirements should be verifiable by market surveillance authorities.

The chair replies that it is not only a question of Market surveillance being able to test products, the question is also why would market surveillance test products that only represent 1% of the total. Should they spend resources on these products while others cover a larger share of the market? He agrees with the technical definition argument and adds that this is currently also added in the washing machines and ventilation regulation.

Bruno Vermoesen (BSH) states that he agrees with the proposed use of LVD and MD. In the LVD, "household and similar" is the term used, so examples of products mentioned by ECOS and TopTen would be included in this definition. HH appliances not installed in households would thus be still in the scope.

Mike Rimmer (UK) is a bit worried that by defining boundaries loopholes might be created or new market niches. Market surveillance not only checks Ecodesign requirements but also WEEE and other requirements that apply for this product on a pass or fail basis.

The chair asks to send in the rest of comments on this topic in writing.

Art. 2

Hans-Paul Siderius (NL) states that the new IEC standard has more streamlined definitions and they are useful for HH and/or similar use. When possible a more simple way is preferred to define the scope and avoid loopholes. In the Working Documents later on in the process the position (main text/ ANNEX) can be determined.

The chair adds that we are trying to get a clear unambiguous definition of the scope and a way to do this is look at technical definitions but also definitions in the regulation.

No problems or issues were raised by the stakeholders to define the scope with text/ definitions from the IEC standard.

Part 2.

BSH stated that there was a mistake on the slides, the minutes needed to be hours in the discussion of the temperature rise test.

Part 3. Energy efficiency

Edouard Toulouse (ECOS) states to be careful with compensation factors. It seems like the industry is asking for too many exemptions/ compensation. He would also like to see a more balanced analysis in the report. It seems that the industries point of view is overrepresented and asks to incorporate point of views of Intertek and Topten more in the report. Furthermore, he would like to see more explanations why household wine storage appliances have for instance glass doors, if this just is for aesthetics then you open a Pandora box and everybody wants an exemption or compensation factor.

The chair answers that issues addressed in the Omnibus study are discussed in this report. Different opinions, points of views and data are included in the report and not only the standpoint of the industry.

Anette Michel (Topten) shows some slides, addressing the issues of reference lines and correction factors. (The slides are on the project website)

Edouard Toulouse (ECOS) asks if built-in appliances are penalised based on energy consumption?

The chair answers that this is a complex issue and not all pros and cons are available at this moment to answer the question.

Martien Janssen (Re/genT) answers to the question of the glass door that this is not an issue. This comes from the wine coolers who installed glass doors for commercial markets. This is the main reason for their existence. Furthermore, we did not ask for a compensation factor for wine cooler glass doors, we (as industry) asked for a separate category.

Hans-Paul Siderius (NL) adds that if the focus is too much on discussing glass doors this will divert the discussion away from the technical discussion that in his opinion needs to be held. For instance a focus on non-linear possibilities (presented by the chair before break) would be better. In his opinion the built-in refrigerators can be in the same category as stand-alone but have a different compensation factor. A different component is not a reason to give those products a different treatment. Because this is a complex product he would propose a second stakeholder meeting to discuss technical issues in more detail. He adds that he would have expected the consultants more to give their own expert opinion rather than asking the stakeholders to respond to open questions.

The chair replies that at this stage we are trying to strike a balance between having an open discussion without influencing the stakeholders too much and supplying the information-ingredients that would allow the stakeholders to make an informed decision. This distinction, i.e. between opinions and information, can also be found in the interim report. The alternative is writing a report with a strong opinion that would be unduly polemic at a stage (Task 1 to 4) where we still have to do considerable research. As regards 'overly representing the industry position' [E. Toulouse], the chair explains that the study team tries to take everyone's opinion into account. In that context we work with and not against any of the stakeholders. For instance, we have reported and are fully aware of the NGO and MS opinion on the climate correction and other compensation factors. We have, in January, confronted the industry with the issue and, by the end of April, the industry - not without internal struggle - came forth with a proposal that completely eliminates the climate correction factor and proposes several issues that signify simplification and a better transparency. It does not mean that we would support everything (see questions on weighting factor, wine storage and built-in categories) but we believe in a dialogue. Likewise, we do not a priori agree on everything that MS and NGOs propose - e.g. the chair did not anticipate the strong support for the non-household part of the scope - but we will take it into account and try to work it out together with the stakeholders.

Ina Rüdenauer (Öko-Institut) asks how it is possible that fridge-freezers (combi) have a higher energy consumption up to 70%? Is there a technical reason for this?

Martien Janssen (Re/genT) answers this question that it is historically related. In 1995 reference lines were set up for fridges and combinations (fridge/freezer). These reference lines are very different in inclination. The one for refrigerators is almost flat, so when increasing the size it almost consumes the same energy, which is technically completely impossible. So most likely there was a bias in the data, but due to this factor you get a very different effect when adding a certain volume of fridge to a freezer in category 7 then when you just take that in category 1. We conclude that the one for fridges

is far too flat to be technical justifiable. So if the inclination of these lines would match each other better, the difference would disappear.

Jochen Haerlen (BSH) states what is defined in standard test conditions represents the usage conditions at home. Stand-alone appliances are described to stand alone in a test chamber and then are measured, but when looking into the market (e.g. Spain) 60-70% of the stand-alone fridges are built-in and this creates a complete different situation. The stand-alone appliance consumes significantly more energy when built-in. So while what is described in the standard for built-in appliances corresponds to reality, for stand-alone appliances in a lot of cases in some markets they are not placed in the middle of a room (like in the test standard) and the declared/ measured energy consumption is too low compared to real life. This is one of the reasons why the industry says we need two different categories and we need to make it more transparent and that happens with narrowing down the categories to stand-alone and built-in.

The chair replies that from testing alone the differences would be around 8-10% between stand-alone and built-in appliances.

Mario Vargas (Electrolux) tries to answer the question where the 70% extra energy consumption comes from (question Öko-institut). When he adds the energy consumption of a separate freezer and fridge the total energy consumption is almost equal to that of a combi with same capacity. E.g. Combi of 300 litre fridge and 100 litre freezer consumes 809Wh/d (A+). And two separate appliances 300¹l fridge 362Wh/d and 100l freezer 496 Wh/d total consumption is 858 Wh/d. The fridge compared to a combi is clearly a big difference because there is a freezing part included in the combi. We need to compare a combi with a freezer/ fridge combination not only compared to a fridge. So instead of saving energy we might be wasting energy.

The chair wants to remind the stakeholders that when talking about calculations the main question here was linearly 24 or 25°C? Does somebody have an opinion on this weighting factor between 16 and 32°C? 25 is what people are used to as a figure but 24 is what roughly gives the same outcome as what we have today, taking into account the efficiency of the Carnot cycle.

Hans-Paul Siderius (NL) has a preliminary preference for having the same outcome, i.e. 24 degree. Nobody will mind whatever you decide. The explanation of Martien underlines the necessity to look into a new technical/physical approach with a new test standard instead of continuing what we developed in the '90s. This could then eliminate the issues shown in Anette Michel's presentation.

Angeliki Malizou (ANEC/ BEUC) states that a compensation factor needs to have a strict explanation, why multi doors get compensation or not. Transparency is the corner stone to be trustworthy.

The chair explains that multi-door compensation is not a compensation for opening the doors but for the leakages. Each compartment has a different temperature to store different types of food as discussed in Task 3 of the report and presentation.

BSH states that 25°C is a recommendation from the standardisation body CENELEC, not only because it is a value that is well-known but also to solve a practical issue with portable cooling boxes that have a problem to reach the refrigerator-temperature (+4 °C) at 32 °C ambient temperature. These cooling boxes are in the scope of the regulation and - given that it was impossible to test them at 32°C - the idea was to continue to make them the exception that could be tested at a single ambient temperature of 25°C. But if we can solve that problem in another way, the industry is not against using a weighting factor based on 24 degrees (meaning weighting factor 0.5).

¹ Corrected to most likely values

The chair adds that when using 24 or 25°C you stay much closer to the original values and the (error in) recalculating the effect of the new standard on old standard data is much less. As regards the cooling box problem, he suggests to simply test at pantry-temperature (17 degrees inside) and at both ambient temperatures. That should be doable even for Peltier boxes.

Edouard Toulouse (ECOS) agrees with Hans-Paul to look into new classification, we have a new test standard so there is no need to stay with the old situation.

The chair agrees that we do not need to stay with the current situation, but we need to have a foundation to build-upon.

LCC/Resource efficiency

Edouard Toulouse (ECOS) asks the study writers to rethink the replacement of products. This might not be 1 on 1, people might decide to buy bigger ones. We would like to see more precise data and analysis behind this. Furthermore, he states that products will have similar lifetimes in the future so prolongation of lifetime and shipping to Africa seems unbelievable. He would like to see information requirements on spare parts and technical lifetime on the label.

The chair asks to get written comments on the lifetime prolongation issue. In the Netherlands there was a big scandal that second hand fridges were shipped off to Africa instead of being discarded/recycled. In Task 3 it was shown that at the current improvement rates the prolongation of the life time for this product is Not-A-Good-Thing for the environment and resources efficiency.

Market analysis Task 2

Ina Rüdener (Öko-Institut) asks why there was a sudden increase in sales of multi-use appliances in 2014? Additionally she asks what the reasons are for the increase of appliances with climate classes ST and T?

The chair thinks that there is a general trend that with current technology it is easier to meet the 'tropical' test conditions (i.e. at 43 °C ambient) and –given the advantage of a better energy label rating—manufacturers then declare their product as tropical. Concerning the multi-use sales it is not a market trend but more of a problem in the CECED database, where manufacturers since 2010 (when multi-use was significant) ignored or incorrectly classified their multi-use appliances and now - in view of updating the database for analysis - corrected this.

Marco Imparato (CECED Italy) agrees with the explanation of the chair.

User Analysis task 3

Hans-Paul Siderius (NL) states that a new regulation influences the end-of-life for new fridges. They become more energy efficient, use other resources/ materials, etc.. The figures shown in the presentation date back to 1990-1995. Updating this figure to current or future (2026) situation might change the end-of-life data.

The chair answers that most improvement (energy) took place between 1995 and 1999. This progress continued afterwards but it is slowing down and most likely will stop in the future, but when that is I cannot predict. But the study team, also taking into account the remarks of ECOS earlier, will add prominently in the report that there is a large uncertainty for a prediction so far in the future (i.e. in 2026 when newly regulated fridges will be discarded).

Edouard Toulouse (ECOS) adds that it is not only energy consumption that needs to be calculated but also CO₂, 1 to 1 replacement etc.

The chair answers that the current figures shows that circular economy does not work for this product and that there is no grounds to recommend to the Commission to take measures in that direction. The only thing, as mentioned, is to indicate that there is uncertainty whether in the long term future this will still be the case.

Jochen Haerlen (BSH) states that we need a solution for peak shaving but does not see freezers or fridges as a product that should be used. The end user should be in control what happens to the product and not the energy company. It is more advisable to cool down during the night to a colder freezer temperature and shut down the product during the day for a couple of hours.

The chair replies that the suitability to be used as a smart appliance would not necessarily be part of minimum ecodesign measures. It could be an icon to add to an energy label or even only product information in a technical fiche.

Hans-Paul Siderius (NL) states that this is not the correct place to discuss this issue as there is a complete study focussing on smart appliances.

Sarah Bogaert (VITO) adds that on the website <http://www.eco-smartappliances.eu> the first documents have been published and the discussion rather takes place in this study than in this meeting.

The chair adds that in the assignment and kick-off meeting the Commission explicitly asked the study team to look into the smart appliance issue for the Technology roadmap. But this could possibly be re-discussed.

Technical analysis Task 4

Jochen Haerlen (BSH), reacting to the slides, acknowledges that forced air circulation can improve heat exchanger temperature difference, but you have to consider the electrical energy you need in order to run the fan. Simple calculation: if you have an A+++ appliance (small) and you use a 2W fan in order to improve the condensing temperature, you increase the total energy consumption by 10% just by adding the fan. If you want to gain 10% by reduced condensing temperature you have to reduce this condensing temperature by at least 5K, but then you are just on the same level. When looking at the figure presented, the delta T is 8K and then you are already somehow at the physical limit.

Stephanie Barrault (Armines) answers we have to take into account the added consumption. But due to more efficient fans we are saving energy on this part. Anyway, we will take into account the various trade-offs.

Mario Vargas (Electrolux) states that most technologies presented by Stephanie are currently used in products except for the magnetic option.

The chair asks the stakeholder if they have more information on technologies or possible future technologies to let us know. He asks how many models currently in the market have anti-sweat heaters?

Jochen Haerlen (BSH) answers that these can be found in appliances with dispensers (drink/ ice etc.). A guesstimate is that they are present in less than 10% of the European household refrigeration appliances.

AOB

Andras Toth (European Commission) explains the current status of the Energy labelling Directive. The consequences for the current study are unclear, but we can propose class limits without putting a label on it.

The chair asks if according to rumours the upper 2 classes will stay empty compared to 1 at this moment. What do we need to take into account?

Hans-Paul Siderius (NL) replies that 6 classes can be made to 5 by combining 2 classes so he does not see a problem in that. He thinks it might be useful to take into account all features of the MEPS and discuss this in a second stakeholder meeting.

Jochen Haerlen (BSH) asks if there is any decision already what is the delta between the efficiency classes? Will it be kept at today as an absolute delta or will it be relative?

The chair answers that we have no idea at this moment. It will depend on research in later tasks.

The chair thanks everybody for coming and participating. Due to the holiday the stakeholders have 2 months' time to hand in written comments, i.e. deadline is 31st of August 2015.

Meeting closes at 16.10h.

List of participants

First name	Surname	Company / organisation name
Ciara	Leonard	AB Electrolux
Angeliki	Malizou	ANEC/BEUC
Stéphanie	Barrault	ARMINES
Andrea	Harrer	BAM Federal Institute for Materials Research and Testing
Jochen	Haerlen	BSH Hausgeraete GmbH
Bruno	Vermoesen	BSH Home Appliances Group
Félix	Mailleux	CECED
Matteo	Rambaldi	CECED
Marco	Imparato	CECED Italia
Marie	Baton	CLASP
Mike	Rimmer	Department of Energy and Climate Change UK
Chloe	Fayole	ECOS
Edouard	Toulouse	ECOS
Mario	Vargas	Electrolux
Simonetta	Fumagalli	ENEA
Andras	Toth	European Commission
Karim	Tarzi	Honeywell
Kevin	Lane	Kevin Lane Oxford Ltd
Edoardo Natale	Oldani	LG Electronics
Hans-Paul	Siderius	Netherlands Enterprise Agency
Ina	Rüdenauer	Öko-Institut e.V.
Martien	Janssen	RE/genT BV
Anette	Michel	Topten International
Rene	Kemna	VHK
Roy	van den Boorn	VHK
Sarah	Bogaert	VITO/Energyville
Enzo	Rivis	Whirlpool Europe