

Ecodesign Preparatory Study DG ENER Lot 24: Professional washing machines, dryers and dishwashers Minutes of the Final Stakeholder Meeting on Laundry appliances

Place: Centre Albert Borschette (CCBA), 3rd floor room A
rue Froissart 36
1040 -Brussels

Date / Time: January 12th, 2011
10h00 – 16h30

Project contact: **Öko-Institut**
Carl-Otto Gensch (c.gensch@oeko.de)
Markus Blepp (m.blepp@oeko.de)
Tel: +49-761-45295-0

BIO Intelligence Service

Shailendra Mudgal (sm@biois.com)
Lorcan Lyons (lorcan.lyons@biois.com)
Thibault Faninger (thibault.faninger@biois.com)
Raul Cervantes (raul.cervantes@biois.com)
Tel: +33 1 53 90 11 80

Agenda:

10:00 – 10:15	Welcome of participants / Introduction and Scope of the Meeting
10:15 – 10:45	Brief overview on draft final state of Task 1 (Definition) and Task 2 (Market Analysis)
10:45 – 11:45	Presentation and discussion of draft final state of Task 3 (Consumer Behaviour)
11:45 – 12:15	Presentation and discussion of draft final state of Task 4 (Technical Analysis)
12:15 – 13:00	Presentation and discussion of Task 5 (Base Cases)
13:00 – 14:00	<i>Lunch break</i>
14:00 – 15:00	Presentation and discussion of Task 6 (BAT / BNAT Analysis)
15:00 – 15:45	Presentation and discussion preliminary results of Task 7 (Improvement Potential)
15:45 – 16:15	Presentation and discussion of preliminary results of Task 8 (Policy Options)
16:15 – 16:30	Further proceeding, any other business
16:30	End of meeting

The times of the agenda are the originally planned times, and may not reflect the reality of the events that occurred.

Annex: Stakeholders who read these minutes should also consult the powerpoint presentations of the meeting that are available on the project website (www.ecowet-commercial.org).

Participants:

European Commission

AC Alix Chambris EC – DG ENER

Lot 24 consortium

CG Carl-Otto Gensch Öko-Institut

MB Markus Blepp Öko-Institut

SM Shailendra Mudgal BIO Intelligence Service

LL Lorcan Lyons BIO Intelligence Service

TF Thibault Faninger BIO Intelligence Service

RC Raul Cervantes BIO Intelligence Service

Stakeholders

SA Sten-Hakan Almström CENELEC/Electrolux Laundry Systems

JK Jørgen Kjeldgaard Danish Technological Institute

HJ Hans Jager ECOS

LO Lars Örnholmer Electrolux Laundry Systems

VC Vincent Cornillon GDF Suez

OM Oliver Moslehner Kannegiesser GmbH

WD Wilfried Dreischmeier Kannegiesser GmbH

MK Marco Kirschner Jensen GmbH

JS Jürgen Schäfer Miele & Cie KG

DK Daniel Kopriva Primus CE

MJ Milan Janicek Primus CE

RN Rita Neumann VDMA

CR Christian Rotter Veit GmbH

DF Daniel Flicos Xeros Limited

NB Niels Bekkhus Confederation of Norwegian Enterprise (NHO)

MC	Marc Caralt	Girbau SA
SH	Sigvard Hoornaert	Alliance International bvba
JM	Jordi Martinez	Girbau SA
JT	Jun Toutain	Norwegian Water Resources and Energy Directorate
EV	Edward Vandermeersch	Agoria

1. INTRODUCTION

CG welcomed participants to the meeting and presented the agenda. CG directed the “tour de table”.

2. TASK 1

MB presented the results of Task 1.

Discussing Task 1 (led by MB)

JK explained that the IEC standards are international and are transformed to EN standards with some modifications. In the context of the study, the text should rather refer to EN standards.

Classification

RN said that they sent the project team some position papers to explain the particular situation of machines for industrial use. She asked whether these were taken into account. CG answered that they have been received but that no comment on the categorisation was included, so no amendment was made and all product categories were kept within the scope of the study. SA added that it is true that machines over 40kg have different safety standards but Electrolux also manufactures machines >40 kg using other safety standards. He believes the categorisation should not be changed.

SA noted a small mistake in the presentation (slides 10 and 11): the expression “for professional purposes” should be changed to “commercial and/or industrial purposes” to be consistent with the report terminology (discussed during the interim meeting).

Capacity

SH asked why the capacity of the machines is considered in kg in the study, and not in volume of the drum (the filling ratio is the link between the two parameters). JK answered that this discussion had been held at the Danish Technological Institute already. It was acknowledged that traditionally, household machines used kg while professional machines used volume. However, their conclusion was that setting a given ratio would not incentivise the improvement of the washing process for a given volume. Thus they decided to use a kg capacity, even if other parameters of the machine functioning are required to have an accurate description of the system. SA added that in the case of household appliances, the capacity of the machines is normally the capacity declared by the manufacturers (as for domestic

washing machines). In the context of the current study, having such a categorisation is fine although the discussion could be relaunched at a later date in the event of regulation being implemented. JS supported this opinion.

3. TASK 2

TF presented the results of Task 2.

Discussing Task 2 (led by TF)

JM said that the maintenance costs for heavy duty appliances should be different than for the other categories. This parameter will be updated after further discussion.

SA commented on the precision of the annual sales figures in Task 2. According to him, they should be rounded further because the current precision of the data does not seem warranted. JK suggested instead to add a note on the precision, perhaps giving a margin of error such as 5%, but to keep the estimates as they are.

JS commented that the ratio of sales between washing machines and dryers does not seem realistic for some categories.

4. TASK 3

MB presented the results of Task 3.

Discussing Task 3 (led by MB)

JK cautioned that a 40°C wash temperature might not kill all dust mites, etc. JK also expressed doubt that in some categories 100% of users use a drying temperature of 70°C. SA said that it is actually the typical programme used by customers for cotton and that 99% of the customers use the typical programme, even if there are programmes for delicate textiles.

SA mentioned that slide 7 should be corrected: “cotton” should be replaced by “cotton and blends”

MK said that the typical consumption for D 7 is more like 0.8 kWh/kg of laundry with a range of 0.7-0.9. JS agreed.

JS added that the drying cycle times should be much higher for D 1 than 35 minutes (D1 and D2 are very different). DF supported this opinion by indicating drying cycles of 50-70 minutes.

RN said that the increase due to misuse for dryers (5%, slide 15) is too low and should be around 10-15%. JS and SA agreed with the general point.

DF commented that the detergent use rate seemed low (slide 8) in comparison to detergent manufacturers’ recommendations (approx. 30 ml/kg) but that it is true that there can be large variations in practice (8-40 ml). CG explained that recent contacts were made with detergent associations and that these parameters will be checked.

SA asked what the label “electricity and gas” means (does it refer to internal gas heating or external heating?). CG explained that it was meant to be external. However, the first questionnaire sent seemed

not to be sufficiently clear and misunderstanding may have produced wrong answers. SA also underlined inconsistencies between the tables on the water supply and the energy options for the heating. Gas heating is not a common option for washing machines. **It was decided that a clearer questionnaire will be quickly released for revision of these infrastructure tables. Stakeholders agreed that they should be able to provide new information in response.**

5. TASK 4

MB presented the results of Task 4.

Discussing Task 4 (led by MB)

JS said that the links between the capacity, the drum volume and the filling ratio have to be double checked because some are currently not consistent (on presented data, slide 11). On slide 25, he thinks that the parameter “protect the clothes” would be too tricky to implement in practice in a test procedure. SA supported this and added that the domestic sector is currently carrying out some work on this issue (“gentleness of action”) in the context of CENELEC and that the situation for professional appliances should be based on its conclusions. Testing this parameter requires a very high precision (textile can require up to 250 washing cycles to be “destroyed”) and the influence of detergent, bleach, programme, etc. is also very important. MK added that heavy duty appliances customers choose their own detergent formula. JK said that the text could suggest leaving this parameter out for now but a possible revision in 3-5 years time could take it into account.

JM pointed out that the figure corresponding to the energy consumption of D 7 is too large. A tunnel washer normally has 3-5 batch dryers to achieve the same capacity per hour so that this figure should be divided by four for a single machine.

6. TASK 5

RC presented the results of Task 5.

Discussing Task 5 (led by RC)

JS said that the purchase prices for D2 and D3 should be different because these machines do not have the same capacity. This will be updated in the final version.

SA explained that for heavy-duty machines, the textiles are transported to the site to be washed and then transported back (200 km or more round-trip) and asked whether this transportation was taken into account in the analysis. SM said that the transportation usually has a negligible influence on the impact analysis. TF added that this parameter would be out of the scope of such a LCA, which is focused on the product itself, not on the activity of laundry washing (the travel of people bringing their laundry to laundrettes for smaller machines is not taken into account either). JK reiterated the point. SA suggested adding a text note to clarify this and CG agreed.

SH said that the table on slide should mention “energy” instead of “electricity”, because D 7 for instance consumes gas.

AC explained that gas heating should not be considered as an improvement option because the European Commission cannot favour one energy source over another. The different energy sources should lead to different analyses. JM mentioned that gas heating should be the most common option for

all categories of dryers and that warm water input (external heating of the water) is also used for all categories of washing machines. SA added that the calculation of this energy should take into account the typical programme temperature: if the programme uses water at 40°C, the water is heated from 15°C to 40°C.

On the analysis of the life cycle costs, AC was surprised by the high share of the detergent costs (from approx. 10 to 25% of the total cost) and the lower share of electricity costs. TF clarified that these figures are totals and include annual operating costs and all sales in a given year. JS will be able to exchange information with the project team on this matter. AC also asked for a more thorough analysis of the eutrophication impact to be made.

7. TASK 6

MB presented the results of Task 6.

Discussing Task 6 (led by MB)

JS explained that some improvement options are not described precisely enough. In particular, for the electronic stop control option, if it involves smart grids, such a system may not be relevant for larger machines. MB pointed out that it is not considered in WM 7 for this reason. CG suggested that it is only relevant for WM 1-4. On the option involving water consumption reduction, JS stressed that a reduction of the water quantity leads to a rise of the dirt concentration in the water which can cause water management problems for local water organisations since city drainage systems would need more maintenance. JS also suggested that the issue of ozone could be clarified in the report with discussion of the technology in terms of impact of energy consumption; some research is being done but the results are inconclusive.

RN supported this point of view and added that cutting down consumption and costs is a complex system and is not limited to single parameters. MK gave another example: if the temperature is decreased for the washing process, detergent consumption is normally increased and the cost analysis is not straightforward. He added that for category WM 7, a water recovery system is not an option but should be part of the base-case product. SA said that for smaller machines, it not very common but that the system can be installed for several machines together.

On this topic, HJ said that as many parameters as possible should be taken into account to make a balance but this looks possible. According to him, BAT should not be reserved to technologies already used by 80% of the manufacturers but should also include very ambitious technologies.

SA claimed there is no substantial water savings potential for washing machines (especially under 15 kg) as manufacturers have already been working on this topic for a long time. Only small incremental changes are likely. However, the energy savings potential for dryers is much higher.

HJ asked if energy could not be saved by using high temperatures only long enough to kill dust mites etc. and then reverting to a lower temperature for the rest of the wash. Girbau said that this depended on the programme not the machine and SA said that this would not apply to delicates.

DF presented the polymer beads technology: it is a different approach for laundry and remains Best Not yet Available Technology today. The arrival on the market is not expected before 2012.

JS commented on the proposal to have the performance levels measured by independent institutes. This is not the case for household appliances. CG answered that this has indeed already been discussed for the dishwashers and that self measurement may be appropriate. It will be up to the Commission to decide. JK added that the Danish Technological Institute perform testing if manufacturers provide their machines and the results are posted on the website of the energy authority. In a small number of cases, products have been taken off the market as a result of these tests. CG said that this is more of a market surveillance issue.

During the presentation of Task 6 Annexes, MC said that user friendly systems may enable time savings, but not significant money savings. DF claimed that misuse can also result in beneficial results (less detergent, overload of machine, etc.).

8. TASK 7

TF presented the results of Task 7, stressing the fact that these interim results will be updated given that another questionnaire will be launched to consolidate Task 6.

Discussing Task 7 (led by TF)

JK asked how the BA product was established. TF answered that it is presented in Task 6: as the BA product can present several single design options, the savings are not linear and do not necessarily add up to the sum of savings of all single options implemented. Thus its parameters are assessed separately.

NB asked how the different energy sources (gas, electricity, etc.) should be considered in the base-cases. TF said that it will depend on the new market data that will be gathered on the shares of the different types of appliances. Sub base-cases with different heating options may be created.

MC asked what improvement the automated weighting system brings to the machine. TF explained that it can be estimated that it reduces most of the misuse error (specified in Task 3).

Because of the short timeline of the project, CG said that the manufacturers will be able to provide data to the project team until the end of January at the latest. They are thus kindly asked to answer the two last questionnaires that will be published as quickly as possible.

LO said that some options are not described precisely enough (for instance, T 1.10 and T 2.10). The project team agreed to describe these in more detail.

9. TASK 8

TF presented the future content of Task 8.

Discussing Task 8 (led by TF)

SA described the current state of discussions going on within the CENELEC working group, in charge of developing the standards for professional machines. So far, there have been three meetings but many more will be required before anything concrete comes out. There is no deadline and no precise timetable. If they were mandated by the EC (following a potential regulation), the process would be speeded up depending on the requirements. JK added that in the case of household appliances, the

mandate planned 18 months to tackle the main parameters, and 30 months for the secondary ones. SA explained that it is tricky to obtain reliable and repeatable results of performance measurement.

SA asked what the overall goal of the study is: is it the reduction of CO₂ emissions or cost reduction? CG answered that it is normally both of these. SM explained that the objective is to remove the worst products from the market, taking into account the needs of manufacturers and consumers. Thus, policy recommendations can consist in voluntary agreement in industry, labelling, etc.

CG invited stakeholders to make comments on the published tasks during the next two weeks.

SM presented the next steps of the legislative process, once the study has been validated by the Commission. Ordinarily, Task 8 comments may be sent to the Commission directly. The Commission will draft a working document which will go through an Impact Assessment (it can be done internally or with experts). It is then presented and discussed in a Consultation Forum, with relevant stakeholders (no individual companies are represented, usually only associations, NGOs and Member States).