**Input to the draft preparatory study on the revisions of the washing machines and washer-dryers energy labelling and ecodesign regulations, Tasks 5-7**

9 December 2015

## Part I – Energy efficiency: Key topics and comments

1. **The size issue needs to be addressed**

**We urge the study team to thoroughly address the issue of increasing washing machine capacities. There is ample evidence that this trend is putting expected energy savings at risk**:

- The Topten market monitoring study shows that the trend towards larger capacities is very strong and fast. In 2014, nearly 60% of the WM sold had capacities of 7 kg and more.
- Whereas according to the consumer survey, the average load is 3.4 kg, and as mentioned during the stakeholder meeting by Prof. Dr. Stamminger from the University of Bonn '*users do not wash larger loads in larger machines'*.
- Data on half load performance shows that while some machines reduce the energy consumption by up to 30% for half load (60°C half load compared to 60° full load, data from Topten.eu), some machines do not show any reduction at all. Clearly the strategies are very different, and obviously the average reduction is far less than 50% for the tested loads and programmes. For all loads and programmes that are not tested, nothing is known about whether and to what extent consumption is adapted to smaller loads. Since products are known to be very much optimised to test standards, we have to assume that the adaptation in programmes and at loads that are not tested is far lower than for the declared programmes, or even non-existent. **We ask the study team to use very careful assumptions for the 'real life consumption' and to make sure not to overestimate the consumption adaptation to smaller loads. The underloading of WMs should not be treated as an efficiency option, as it wastes a significant amount of energy and water.**

The Topten market monitoring report[1] based on sales data has shown:

- A very clear correlation between efficiency classes and capacity ('efficient' WM are large), but a very weak correlation between efficiency classes and energy consumption (only 1 kWh/year reduction from A+ to A++). **Obviously good efficiency levels are mainly reached by adding capacity instead of reducing energy consumption**.
- The Portuguese are buying more energy-efficient WM than the EU average and France, but the average declared energy consumption is higher in Portugal – because the WM are larger. Obviously **the capacity is more important for determining a machine's energy consumption than the energy efficiency class**. This means that the energy label is misleading consumers who are looking for an energy-saving WM, meaning they end up with so-called energy-efficient but larger machines. Smaller machines of lower efficiency can have a lower declared energy consumption.
  This effect is even stronger when considering the increased part-load washing that occurs in the larger, 'more efficient' machines.

If this trend continues, small, low-consuming WMs will disappear from the market. New MEPS that are leading to energy savings are not possible based on this efficiency definition.

[1] www.topten.eu/uploads/File/WhiteGoods_in_Europe_June15.pdf

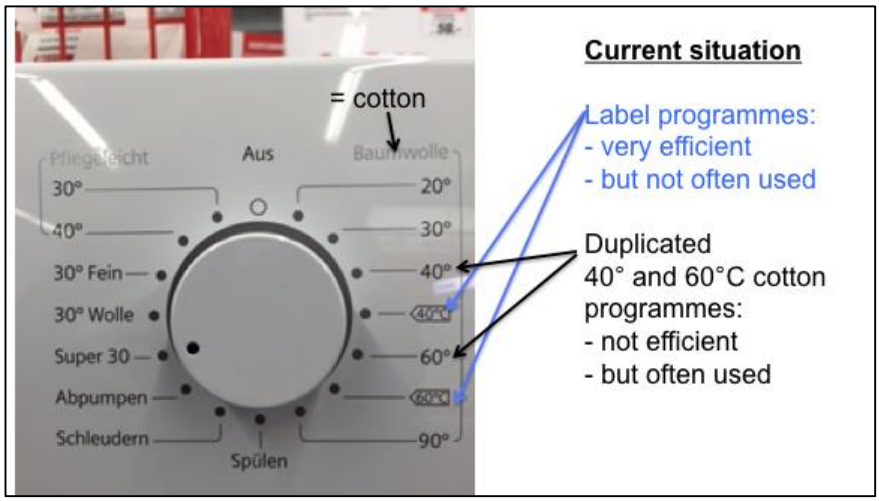
**To address the issue, we suggest the study team to make the following changes in the report:**

- **Include a fixed small load (2kg)** to the test, and have an efficiency and consumption declaration (e.g. instead of half load). This can improve the consumption adaptation to small loads for the label programmes. Small loads (such as only white underwear) are a reality in each machine. A fixed load would facilitate the tests.
- **Introduce a digressive reference line** (Standard annual energy consumption, SAEc) that allows for only small or no additional energy consumption per added kg capacity for large machines. Today's SAEc is strictly linear and allows for a 30% higher energy consumption if the capacity increases by 30%. This change (with an SAEc ambitious enough) would remove the incentive for larger machines.
  **Aiming at a better adaptation to underloading will not be enough to stop the trend to larger machines,** because this can never be verified for all loads and programmes apart from the standard loads and programmes.

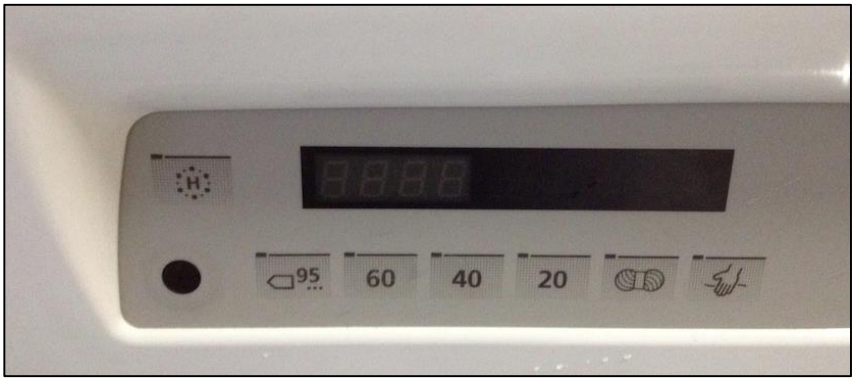
## 2. Label programmes need to be user-friendly and easy to find, with no duplication

The policy scenarios presented in the study are quite complex 'packages', we do not consider any of these combinations suitable to address today's key problems.

Today, the two standard programmes are only used in 17% of the cases. 'Normal' cotton 60°C and 40°C programmes, that are not declared in the energy label, are used more often (around 26%), and use considerably more energy (around 60% more).



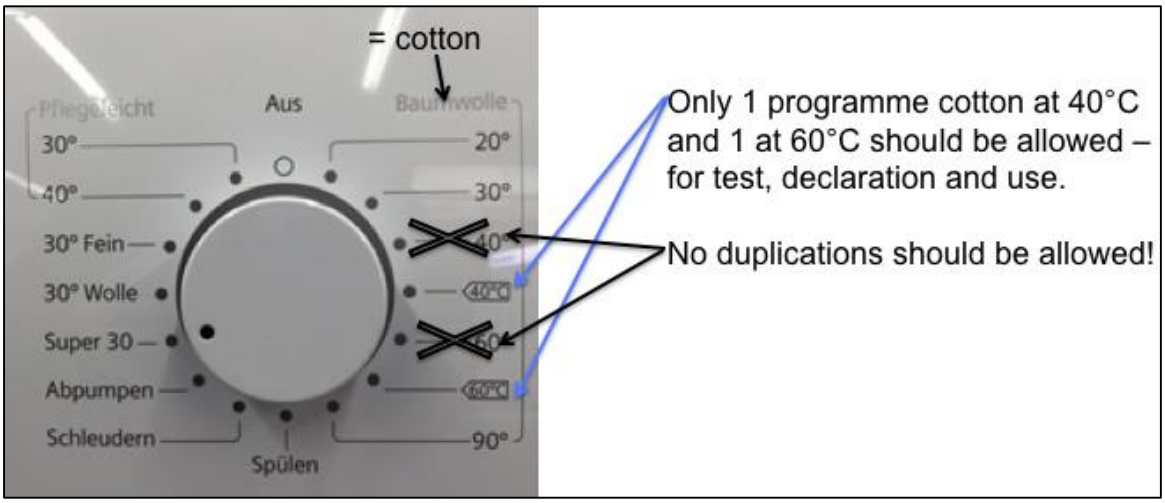

In some cases, the standard programmes can even be hidden, while the 'normal' 40° and 60° cotton programmes are easily accessible:




**It is important to have label programmes that are also relevant for real life use.** This means that the standard programmes should not only be optimised regarding energy

efficiency, and the duplication of the 40°C and 60°C cotton programmes (one for declaration, one for use) should be prevented. Instead, manufacturers should make real trade-offs between energy consumption/efficiency and programme time. We are recommending the following set of requirements related to the label and ecodesign programmes:

- **The 40°C and 60° cotton label programmes shall be named 'standard' or 'normal'** (no change needed),
- They shall be **recommended for normally soiled cotton laundry** in the booklet of instructions (no change needed),
- They shall be **clearly identifiable** on the programme selection device (no change needed, but maybe clearer/stricter guidelines),
- **They need not be the most energy-efficient programmes** (deletion of current requirement),
- **There must be no other general 40°C and 60° cotton programmes** (new),
- **Programme duration of the standard programmes should be declared on the label. A time cap could also be considered,**
- The standard programmes should still meet minimum washing performance requirements.




**Manufacturers would have to make trade-offs between energy efficiency/consumption and programme duration.** The declared energy consumption of washing machines might become higher when these new rules are applied, but the declared values would be more relevant for real life use.
Manufacturers would have the possibility to offer 'Eco' programmes with lower consumption thanks to longer duration or other slight disadvantages.

### 3. Introducing new MEPS banning high-consuming WM

A suggestion for new minimum energy performance standards seems to be missing in the report. There are policy option combinations that have a lower life cycle cost than the base case (and even more so when comparing to the current MEPS level), and we are asking the study team to explore the possibility for new, energy-saving MEPS.

We see no possibility to introduce new MEPS based on today's EEI formula without banning small, low-consuming models. Hence, new MEPS would have to be based on an appropriately progressive efficiency formula. Another possibility would be to ban washing machines consuming more than 200 kWh/year (based on today's metrics).

Future MEPS would also have to consider changes to the label/ecodesign programme, as suggested above.

## 4. Demanding minimum requirement for the spin-drying efficiency

Spin-drying efficiency B prevents the EU and consumers from making large energy savings as once the machine is bought, its spinning efficiency cannot be improved during the 12.5 years of its lifetime! In contrast: in WMs with a spin efficiency A, the spinning performance can be lowered by those consumers who desire to do so.

We are recommending the introduction of stringent requirements regarding the spin-drying efficiency (class A). The argument that the machines then can no longer be distinguished is not convincing. This is certainly not a problem if all products are good. Further, there are enough other aspects where washing machines can be very different (e.g. trade-off programme duration and energy efficiency, see above).

## 5. Hot fill: Declaration on the Energy label

The study shows that hot fill can lead to considerable energy savings. However, the potential of hot fill does not only depend on the washing machine, but also, and mainly, on the household hot water production system. Therefore, we do not consider hot fill as an option to be considered for ecodesign requirements. Instead, the energy label would be a good place to promote hot fill: an icon on the label should show if a model is suitable for hot fill, while the label fiche could provide more information about when hot fill should be considered by consumers (see also our comments for dishwashers).

## 6. Washer-dryers: declaration of wash cycle in line with washing machines and according to the continuous wash&dry cycle for the drying function

We welcome the suggestion to test and declare the wash function of washer-dryers in line with washing machines. We are also supporting the suggestion to have a chapter on washer-dryers in the washing machines ecodesign and energy label regulations, covering both the washing and drying functions. For the drying function we support the suggestion to base the declaration on the continuous cycle.

## 7. Including learning curves

Applied by the US Department of Energy, and currently mentioned in the Ecodesign methodology for new preparatory studies, the use of learning curves when predicting future cost benefits allows to 'account for price and efficiency effects of technological learning in the period between data recording and a regulation taking effect' (Ecofys, 2014). It is currently partly missing. We invite the study team to apply this methodology and thereby reach cost estimations that are closer to reality and allows for more effective policy measures. We understand that the data on costs is scarce, as is data on future development. We recommend assuming a constant cost reduction rate of a few percents per year for each option.

## 8. Other issues

Apart from these issues we support the following suggestions:

- **Rescale**: The energy classes for the WM-label have to be reclassified (many large WM are in the best energy class) to go back to A to G, initially leaving the best classes empty.
- Declaration of energy and water consumption **per cycle** instead of per year.
- **Low-power-modes** can be excluded from the calculation formula of the Energy Efficiency Index EEI provided that no loophole is created and it is ensured that all modes (including delayed-start and left-on) are covered by maximum power limits – be it in the horizontal or vertical regulations.

- Introduction of minimum requirements for the **rinsing performance**.
- **Cold wash** (20°C) offers very high energy savings. The implementation of requirements for the washing performance at 20°C does not seem to be realistic at the moment (no liquid detergent option in test standard, but liquids are needed to reach good performance at 20°C; added verification burden not welcome). Consumers should be informed about this programme (suitable for lightly soiled laundry, energy-saving). Other ideas to make use of this high potential and shift usage towards more cold wash are welcome!
- **Tolerances:** The ecodesign and energy label regulations are asking for an assessment of the verification tolerances. We ask the study team to assess the possibility of removing tolerances, as it is common in the US. Also for the noise emission verification according to the energy label, there is no tolerance today. Manufacturers would have to include uncertainties into their declarations and declare all values 'on the safe side' for all aspects.

## Part II – Material efficiency & end-of-life aspects

On 2 December 2015 the European Commission launched its Communication "Closing the loop - An EU action plan for the Circular Economy". As a first measure the Commission announced to put more emphasis on circular economy aspects in future product requirements under the Ecodesign directive from 2016 onwards. As objectives of this work it states that better design can make products more durable or easier to repair, upgrade or remanufacture. It can help recyclers to disassemble products in order to recover valuable materials and components. Overall, it can help save precious resources.

We expect that the ongoing Ecodesign studies for white goods take these considerations into account when presenting their findings and conclusions on material efficiency and end-of-life aspects. In this context, we stress the argument made in the common position paper from the EEB, ECOS, RREUSE and the Coolproducts Campaign of August 2015. In the light of the discussions held during the second stakeholder meetings in November 2016 and the draft task 6 and 7 reports, we would like to reiterate the following points and strongly recommend the study team to integrate some further analysis on these issues in the final reports:

### 1. Suggest a procedure to prove non-destructive disassembly & re-assembly as a precondition for improving reparability

In our original response to the questionnaires in May 2015 we included evidence from the RREUSE network of which key components and parts need to be accessible (neither glued nor welded) in order to repair or replace them. At a minimum, we expect the study team to investigate an equivalent information requirement as was implemented for vacuum cleaners:

*"The technical documentation and a part for professionals of the free access websites of manufacturers, their authorised representatives, or importers shall contain the following elements: information relevant for non-destructive disassembly for maintenance purposes, in particular in relation to the hose, suction inlet, motor, casing and cable."*

### 2. Information on the availability of spare parts and repair manuals should be indicated not only on the website but also at the Point of Sale

In the draft task 7 reports, a proposal on "basis reparability grades" was mentioned as one of the policy options related to material efficiency and end-of-life. We would like to express our support that this kind of information, or even warning (if neither spare parts nor repair manuals are being made available), should be communicated e.g. in association with the label. The second best option would be on the packaging or on the product fiche, in order to be handed over on request with internet links where to order spare parts and to download the repair manual.

### 3. Provision of end-of-life information for recyclers in a standardised format

A recent study by the JRC concludes that the resource efficiency of dishwashers could be significantly improved by the extraction of key parts before any non-specific shredding treatment takes place. The latter could result in the contamination of other recyclable parts, lower recycling rates e.g. for steel, copper, gold, silver, and platinum-group metals (PGMs) or eliminating the possibility for recovery of Critical Raw Materials (CRM, e.g. Indium).

Therefore, we suggest including the following requirements as policy options:

- Ensure separate extraction/ treatment of PCBs - if not manually feasible, it should be mentioned which recycling process should be used to get those separated;
- Allow only for a single polymer or recyclable polymer blend for plastic parts above 25g and marking different plastic pieces in alignment with the provisions foreseen in the Ecodesign regulation for electronic displays;
- Provide information in the product fiche of the SVHC as required by art 33 REACH.

Such Ecodesign requirements could increase the consistency on how obligations to inform recyclers stipulated in different EU directives (REACH art 33, WEEE art 15 etc) are actually being implemented in a harmonised and legally binding way.

### 4. Mentioning the full warranty time on the Energy label

This kind of information should cover the whole period during which consumers or customers can have the product changed or repaired without any further burden of proof.