

Summary of Final Stakeholder Meeting, EuP Vacuum Cleaners Brussels, 19 January 2009

Present:

Mathew Kestner, European Commission (Chair)
Martin Buchele, European Commission
Laurent Caro, Groupe SEB
Maya de Groot, Federale Overheidsdienst Volksgezondheid
Harry Langdon, Numatic
Hakan Messler, Electrolux
Sandra Mueller, BSH
Peter Mueller-Baum, EUnited Cleaning
Dietlinde Quack, Oeko Institute
Matteo Rambaldi, CECED
Morris Rollo, Hoover
Harald Schellenberg, BSH
Wolfgang Siefert, Miele
Paul van Wolfren, Philips
Steffen Reiser, Kaercher
Steve Ogilvie, AEA (Project manager)
Grahame Capron-Tee, Intertek
Chris Evans, Consumer Research Associates
Phil Dolley, AEA

Purpose of the Meeting:

To review the consultant's findings and the technical assessment contained in Task 7. If time allowed, Task 8 to be discussed.

Discussion

a) Tasks 1 to 6 – further comments were requested, none were raised. The presumption was that stakeholders are content with the findings of Tasks 1 to 6.

b) Task 7 – SO gave a brief presentation of the key findings and results. Several questions were raised:

Is it possible to go beyond 40% efficiency?

Key limitation is **fan design** and its influence on fan efficiency. If more attention was paid to developing more refined fan blades then efficiency gains could be realised. Stakeholders queried the assumed cost increment for such design saying there would be significant tooling costs and some material costs per fan.

Other **design types** are possible such as coaxial fans and displacement technology. Both would result in physically larger vacuum cleaners though. Neither is being considered for production.

Robot designs are expected to increase market share in coming years. They may evolve to be able to sense the amount of dirt present and alter their energy consumption accordingly.

There may be some efficiency to be gained in **motor design** (e.g. switched reluctance motors with electronic control) but the consultant's work has assumed that current technology remains dominant for some years to come, only such switched reluctance motor powered vacuum cleaner design exists for sale on the Japanese market but is very much a premium price product. For reasons of cost, stakeholders agreed. Lower speed, higher torque motors, whilst an option, would require up to an additional 40% by weight of materials and cost perhaps up to an extra five euros . .

How was BNAT chosen?

Difficult area to discuss as producers are unwilling, for obvious reasons, to discuss their R&D work. The identified BNAT solutions are those that the study team's experience of VC development has allowed them to identify.

How did the consultants identify consumer behaviour parameters (hours spent cleaning etc)?

From the limited information available and in discussion with stakeholders at earlier meetings. Experience from surveys in the USA also suggests that consumers typically spend around an hour a week cleaning. Whilst all parties accept the same for Europe the ideal would be for a European survey to be conducted. This would have additional benefits – for example, it would help correlate test method protocols with actual cleaning behaviour - a subject presently not well understood.

The above discussion was completed with plenty of time remaining. MK remarked that he was pleased with the Task 1 to 7 work and the input stakeholders have made facilitating such an efficient discussion today. MK progressed the meeting to discuss Task 8.

c) Task 8 – SO gave a brief presentation of the key findings and results. There are a number of key issues for EuP implementing to take into consideration:

- that VC ownership is increasing,
- that input power ratings have increased markedly since the 1970s,
- energy efficiency has decreased over this period,
- CECED has developed proposals for an Energy Label,
- Current EN test standards are flawed,
- There is good technical potential for achieving energy savings,
- These savings can be won at little cost to producers and significant savings to consumers,
- Technology developments can be accommodated within existing design cycles.

Broadly the discussion centred on:

- Limiting rated input power (caps). Some stakeholders oppose caps arguing that high power allows consumers to clean to a certain level more quickly. Others are supportive if the time frame for implementation was adjusted to a later date. MK remarked that additional market data would be helpful to inform the Commission what the outcome of a cap might be.
- Active brush head. Canister VCs can achieve better cleaning performance with a motorised head. MK asked the consultants to include active brush heads in the scenario work – what are the benefits and costs?

- A proposal for an Energy Label. Both the consultants and CECED have identified that an Energy Label would drive product improvement. However, the two approaches differ in one key regard; that CECED's proposal combines energy consumption and cleaning performance into a single parameter. The consultants argue that the assumption that consumers will change their behaviour and use high powered VCs for less time is questionable. It is more likely that consumers will continue to use their VC for the same length of time. DQ advised that consumers would want energy and cleaning performance kept separate. CE remarked that there is a precedent for this in the Energy Label for washing machines where energy, cleaning and drying performance are all separate items leading to very good designs being 'triple A rated'. DQ added that consumers would also want additional information e.g. regarding noise and dust emissions included in the Energy Label.
- Test methods. The proposed CENELEC Working Group method produces an average result of the testing on a carpet and a hard floor. Results are skewed by the hard floor test where it is not uncommon for VCs to achieve 105% or higher. The issue is recognised and accepted by some stakeholders. It was noted that the ASTM method uses four different carpet types so producers cannot 'tune' their VC to a single type to achieve good performance. MK remarked the Commission will consider the case for a new test method. GCT added that the correlation between EN test methods and actual home cleaning is not known.
- Carpet cleaning. GCT noted that some carpets are easier to clean than others. MK remarked that this is part of the 'system' – perhaps carpets should be labelled. He asked the consultants to note the point in their report.

Actions

- Task 7 to include a scenario for active brush heads
- The effect of an Energy Label to be factored into the scenarios. What might it achieve if the worst performing products are phased out?
- Are there any differences in the way VCs are used in different member states that need to be considered? The consultants will comment in their report.
- The consultants will provide further commentary regarding the perceived need for updating test methods.
- Reported results to make clear whether data and figures refer to rated power or max input power.
- Need to review the proposed definition of commercial vacuum cleaners

MK requested the meeting not to provide feedback on the Task 8 discussion. He said that the development of policy options was the responsibility of the Commission.