

Energy Using Product (EuP) Directive Preparatory Study

Lot 11 'Circulators in Buildings'

Notes from: The Second Stakeholder Meeting

Held on: Tuesday 21st November 2006

Venue: Education Centre (BIZ), Research and Technology Center, WILO AG,
Nortkirchenstrasse 100, 44263 Dortmund, Germany

Attendees

Frank Ennenbach	ABS
Otello Zaccarelli	Caprari
John Fraser	Circulating Pumps
Ismo Gronroos-Saikkala	European Commission
Julia Oberschmidt	Fraunhofer ISI
John Bower	Flowserve
Jurgen Bach	Grundfos
Niels Bidstrup	Grundfos
Helle Nystrup	Grundfos
Horst-George Schmalfuss	Independent
Frank Hafner	KSB
Manfred Bartoschek	KSB
Robert Dodane	Salmson
Peter Knapp	Sterling SIHI
Friedrich Klutsch	VDMA
Armia Marko	Wilo
Markus Teepe	Wilo
Hugh Falkner	AEAT PLC
Charles Gaisford	AEAT PLC

These minutes record the main issues and outcomes discussed at this second stakeholder meeting. The details of this meeting were posted on the study web-site in advance of this meeting, and an e-mail sent to all registered stakeholders to alert them to these web-site updates. The discussion and questions raised were based on the contents of the second report also posted on this web-site in advance of the meeting (<http://www.ecomotors.org/files/Lot%2011%20Circulators%202nd%20report%20Nov%2006%20vW.1.pdf>.)

Between the first and second formal stakeholder meetings, Hugh Falkner also attended two meetings at the request of the Europump “Energy” Joint Working Group at which additional technical input to the study was received.

Key Decisions and Actions

CH1 - Definition

Circulators applications:

In the list of circulator applications the line ‘Drinking water’ circulation is to be removed from the list in favour of ‘Domestic hot water systems’.

Glanded Circulators

‘Glanded’ circulators are to be included within the ‘Water pumps’ study. This is because they are physically very different in construction, since the motor can be easily separated from the actual pump. They are also generally much larger in size. The EuP Directive does not give absolutely clear guidance to justify this categorisation, but the above reasons mean that it is sensible and reflects the differing market segments / applications that they are used in. In any case this decision to study these larger circulators in another part of the study will have no impact on the outcomes of the study.

Boiler Integrated Circulators

There was considerable debate about whether boiler integrated circulators should be included within the scope of the study; when interpreting the Lot 11 study definitions and Article 2 and Article 11 from the EuP Directive it can be seen that they must be analysed. There were concerns that the fans inside the boiler are not examined in the same way; they will however be considered within the EuP Lot 1 Boilers study, as part of a boiler. There was agreement that boiler integrated circulators will be studied as a separate base case and that the results of the study will be shared with the Lot 1 study team who are examining boilers. Further clarification about the definitions describing components and parts within the EuP Directive was requested, the study team will amend the report accordingly.

There was debate about how to separate a boiler integrated circulator from the rest of the components it is associated with; in some boilers the circulator and various valves are all integrated into the volute molding (manifold). It was agreed that this problem will be studied and a way forward proposed. *The initial eco analysis has indicated the greatest eco impact is likely to be due to electricity consumption. By comparison, the eco impact due to the material content of the manifold may not be significant. Therefore when analyzing the eco impact of different boiler integrated circulators the efficiency will likely dominate.*

Criteria defining the base cases:

It was agreed that the table that summarises the criteria should be split into two, one for stand alone circulators and one for boiler integrated circulators.

For stand alone circulators the maximum size limitation of 2500W should be removed to allow for larger glandless circulators in the future.

Test Standards

EN9906: - the latest version at Committee Draft level will be available at the end of January 2007; a copy will be supplied to the study team.

EN1151- 3: - development of this standard will start shortly and an initial draft will be made available to the study team, probably within one or two month's time.

Existing Legislation

Legislation affecting circulators exists in Denmark, Germany and Spain, the names of the respective legislation was promised from stakeholders. AEA will complement the information through direct contacts with the relevant countries for relevant parts.

Legislation outside of Europe that relates to circulators is still unknown and stakeholders are welcome to advise the study team of any they may be aware of. AEA will contact relevant actors outside Europe in order to complement the picture.

CH2 Economic and Market Analysis

Market statistics

It was agreed that the Eurostats data is unreliable. But in the absence of any better data, we will use this. To this end the study team will continue to look for other sources of data. The study team have also requested market data from Europump, and will define further how this data should be split, E.g. by size, circulator type, and efficiency class. *Europump are asked to submit their revised data by end January 2007. For any missing data, the study team will revert to existing sources of information – it is important that this part of the study is closed off very soon.*

An examination of boiler stock will also serve as a useful cross reference in gauging the installed base of circulators. It is particularly important that this study is consistent with that of the boiler study, and so we anticipate using this boiler study as our key reference.

CH3 Consumer Behaviour and Local Infrastructure

CH3.1 Real Life Efficiency

The relationship between circulator efficiency and noise should be analysed.

CH4 & 5

Load Profiles for Circulators

For stand alone circulators the load profile should be similar or the same to that used in the Europump Circulator Classification Scheme.

For the boiler integrated circulators the load profile is to be researched and developed; the study team will be consulting stakeholders about this.

The running hours patterns for circulators will be derived from the different heating control regimes and will also account for regional climatic variations. *(It should be noted that this is different from the Europump circulator scheme, which only compares relative*

energy performance and hence unlike this EuP study does not directly need to know actual running hours.)

CH6

Technical Analysis BAT

A future request will be made to stakeholders for BOMS for circulators that are considered to be typical Best Available Technology worldwide (BAT).

Charles Gaisford

1st December 2006