

Study on Interoperability  
Gas Quality Harmonisation  
Cost benefit Analyses

## CONSULTATION QUESTIONS

### • Do you agree with the high-level conclusions of this report?

We agree with the conclusions of this report. The report mentioned the harmonisation towards the EASEE-gas specification. This specification does not focus on methane number (very important for gas motors and can cause severe problems in electricity supply) and rate of change. So these costs are not taken into account.

You could clarify the conclusions by adding the phrase that it is better that the countries stay with their gas specification as it is.

Be aware that the EASEE gas specification has no support from the end users.

### • As a manufacturer do you maintain an inventory of installed appliances?

Yes, as an end-user we are at the start of a major conversion towards new gas which will be imported in the Netherlands (Hcal). So we need to know for every appliance (approx. 8500 burners) what the status is. We have a pretty good view.

### • Are there any specific gas quality related issues not recognised within this report?

Yes. Our Government refuses to specify the gas quality on major components such as methane number and rate of change. The TSO is not (yet) responsible for the quality of gas. The full Wobbeband which will be valid in the Netherlands as from the year 2014 (48,3 - 55,7 MJ/m<sup>3</sup> at 0 °C) is not fully supported (yet) by manufacturers of comfort appliances. The missing of clear specifications gives us insufficient security.

Be aware that there could be a misunderstanding of the Wobbe bandwidth in your report. In the NEN-EN 437+A1 (Test gases) the Gross Wobbe index is specified at 15 °C while some TSO's (such as Gas Transport Services (GTS)) specify it at 0 °C. This causes a difference of about 2 - 3 MJ/m<sup>3</sup>. Try to use one unit (e.g. MJ/m<sup>3</sup> at 0 °C) and show the conversion as a foot-note. I do not recognize the figures of The Netherlands on page 9 (Lcal?)

### • Do you manufacturer appliances that can operate over the full EASEE-gas specification without loss of efficiency or increased of emissions?

So far as we know: NO. In the Netherlands we are used to a very narrow bandwidth. Appliances are constructed and tuned on the basis of this fact. This will change.

### • Do you have evidence of damage or failures caused by appliance operating on gas that is not compliant with the local gas quality specification?

Up till now we have received gas within a narrow bandwidth. So, we did not experienced any damage. But we are not certain for the nearby future (as from October 2014, when new gas will flow without quality restrictions). When the methane number is lower than 80 damages can occur. Or too much hydrocarbons can cause problems with comfort appliances.

### • Would you support the adoption of the proposed EUROMOT gas quality specification, (Appendix B)

Partly. The specification is more complete than the EASEE gas spec. I miss however the rate of variation of the Wobbe index. The max. variation is mentioned, but not the time of change (change in seconds or in hours?)

Furthermore we believe that the Wobbe bandwidth is too large. Appliance constructors told us that they could handle a bandwidth of  $\pm 5\%$  around test gas G20 for safe operation.

**• Are there any specific circumstances that should be assessed in detail?**

Yes. I would welcome a paragraph on the issue what countries should do when different gasses from different locations will enter their geographic market. This is a situation which will occur in the near future when domestic supply is running out (e.g. The Netherlands). So who is going to adapt: the supplier, grid operator or end user? Or all of them? What would then be the best specification with the lowest overall cost?

**• Do you consider that the data used to undertake this analysis is sufficient to support the conclusions presented in this report?**

Yes

**• Should significant effort be made to improve the data used in the analysis presented in this report?**

Yes. You have focussed on replacement of all appliances. But what if only a change of setting or only changing firing blocks is possible. It will give some kind of risk limits.

**• Do you have access to further data that could (if it were made available) improve the quality of the data used in the analysis presented in this report?**

No. All we have encountered can be found in this report.

**• Can you provide typical detailed gas composition at cross border points?**

No.

**• If so, can this data be made available (respecting confidentiality, as required)?**

N.A.

**• How should data be collected for such a study?**

No comment.