Preliminary Danish comments to Discussion Points of WG3
meeting part 1 – Calculation
Regarding review studies of Commission Regulations No. 811, 812, 813, 814/2013 – EcoDesign and Energy Labelling of space
heaters and water heaters

Question 1 (general):

Given that the approach and parameters in the Regulation(s) can now be considered largely proven, would it not be clearer and legally more robust to describe and integrate the complete test and calculation method as much as possible in the Regulation(s) instead of several source documents?

Yes, Denmark is in line with the European Commission.

Question 2 (hybrids):

Independent of the exact method (e.g. as proposed hereafter or otherwise), would the experts agree that the issue should be handled comprehensively?

Denmark is in line with the European Commission, since hybrids can be important for achieving CO2 emission reductions, which are otherwise not attainable with individual renewable energy solutions. A part of the issue to be solved regards the seasonal space heating energy efficiency definitions of the supplementary heat generator, which could be defined more clearly.

However, the new calculation principles for hybrids must not end up being very complex and incomprehensible for the consumers and installers, since this would impede the practical use of the hybrids.
Question 3 (working with harmonised testing points):

Do the experts support the logic (assuming that problems of costs etc. can be solved) of working with harmonised testing points for central hydronic space heaters that should perform the same function? If not, what is the alternative and how should we accommodate hybrids in the future?

Note that at the WG3 meeting the study team hopes to demonstrate more in detail the simplifications that the harmonisation would bring.

Yes, Denmark finds that it is worth perceiving a more logical and fair energy labelling for hybrid solutions through harmonization of testing points.

Question 4

Do stakeholders find it acceptable to limit boiler testing to the suggested 4 points and derive the missing points through inter-/extrapolation? Are there suggestions for alternatives, e.g. further simplification at lowest temperature test point of HT and LT?

Yes, Denmark finds it acceptable to limit boiler testing. It seems reasonable to harmonise testing points for central hydronic space heaters performing the same function, which could be done by limiting boiler testing to 4 points. This will require two extra tests, which increase test costs for hydronic space heaters.

It seems possible to make a simple and robust model for inter-/extrapolation as a way of decreasing the need for further test points. This will assumingly help minimize the increased costs, and maintain Market Surveillance Authorities’ ability to conduct an appropriate level of market monitoring.

Question 5 (solar):

Do you agree continue to exclude solar devices from the scope of the Ecodesign regulation?

Denmark agrees with the European Commission to continue the exclusion of solar devices from the scope of the Ecodesign regulation, since it is difficult to set minimum Ecodesign requirement for solar devices. However, Denmark is open for robust proposals from stakeholders at WG3 meeting part 2.
Question 6 (solar):

Do stakeholders agree using the SHE method, based on look up tables for the solar contribution.

Yes, Denmark agrees to keep using the SHE-method, but welcomes any robust proposals for a less complicated version of the method.

Question 7 (cogeneration with supplementary heater)

It seems preferable to have one method for assessing the efficiency of a cogeneration package and not two. It also seems preferable to weigh the efficiency in one way or another by using the relative proportion of the rated powers of the cogeneration heater and the supplementary heater. Do stakeholders agree? Discussion

Denmark is in line with the European Commission to have one method for assessing the efficiency of a cogeneration package.

Furthermore, Denmark agrees that weighing the efficiency is a reasonable way forward and anticipates practical proposals from stakeholders.

Questions 8 (combined method)

What will be the timeline to establish a reproducible, accurate, reliable test and calculation method (not necessarily a test standard yet) for the combined method? What would be the set-up (type of packages) budget required to do the round-robin tests for the combined method? Do experts already have an idea of the verification tolerances, possible loopholes, etc. that can be expected?

Denmark finds the separate method as the more preferable method, since the development of the combination method will be comprehensive. Especially in terms of reproducibility and standardization work, e.g. considering the increasingly more advanced temperature control settings on the market. Our technical experts estimate the timeline to be at least 5 years.

However, if the combination method is chosen as the way forward, it is important to keep the complexity of method and labelling at an absolute minimum, since a complex method and label could otherwise impede the spreading of clean technologies, such as heat pumps.
Questions 9 (separate method)

Would stakeholders agree that despite the disadvantages and problems to be solved, it appears that the separate method is currently the most robust way forward? If not, what would be the alternative? What do stakeholders think of the proposed calculation method in the Task 6 report? Where is agreement and where are disputes?

Denmark is in line with the European Commission to focus on improving the separate method. Issues to be clarified include the declaration of supplementary heat pumps’ efficiency.

Question 10 (short term limit)

What is the stakeholder’s opinion of the proposed limit-calculation for packages? Alternative suggestion?

At the current level of information detail, Denmark cannot comment on the limit-calculation proposal and has no alternative suggestions. We hope to get this clarified during the WG3 meeting part 2, e.g. if industry associations could provide market data into this discussion.

Question 11 (NOx limits)

Are the corrections of the limit value by 1.30 for appliances tested with reference gas G30 and 1.20 for appliances tested with reference gas G31 acceptable? Should these corrections extend to gas-driven heat pumps (or cogeneration)?

Yes, Denmark finds it relevant to extend corrections to all gas-driven products, including gas-driven heat pumps as well as cogeneration.

Questions 12 (temperature controls)

Do experts agree with the proposals on the temperature control factor $F(1)$, in principle?

In principle, Denmark supports seasonal space heating efficiency values to reflect reality, and the actual effect of flow rate controls and feed temperature controls.
Question 13 (sound power test conditions).
What is the practical proposal for the test conditions for sound power, i.e. how can it be defined clearly and without the risk of loopholes?

Denmark’s position is unchanged since our previous comments. For air-to-air heat pumps, the sound power level in heating mode should be determined at or near full capacity, e.g. in test condition “A” at 88% capacity and -7 °C heat source temperature. It seems far more relevant to measure the sound power level, when heating is most needed rather than at a lower capacity. (For example, the maximum sound power level from an outdoor unit may determine whether an installation can comply with local restrictions on noise).