AMDEA response to BEIS "Consultation on Proposals regarding Smart Appliances."

1. Do you agree that the Government should take powers to allow for regulation on standards for smart appliances?

Not with a view to a UK-specific Regulation. There is already prospective EU legislation, and ISO/IEC standardisation is already underway – BSI is actively engaged in this work.

Also in the document, BEIS defines "standards" and "technical standards" — while we understand the reasons for trying to distinguish between BSI/EN/ISO etc. Standards and minimum parameters, we think that this duplicate terminology is confusing, so BEIS's use of the word "standard" should be reviewed/changed.

2. Do you agree that a label is a good way to engage consumers with smart appliances? Please include your views and experiences with key aspects of labels which are most effective at engaging consumers, including analysis on uptake of the relevant device.

Our experience is with the European energy labels which have achieved a high level of recognition among consumers. However, the Energy Labelling Regulation specifically prohibits the use of any label that may be confused with the energy label, so it is not sensible to look at a separate labelling scheme along these lines. This also applies to the proposals for a label related to cybersecurity. Also, there are discussions at European level of how to identify "smart appliances" which need to be considered. We would also note that while there is almost universal recognition of the energy label among consumers, our impression is that the success of the label has owed more to the industry's decision to invest in energy efficiency R&D than to consumer demand for it.

3. The consultation stage Impact Assessment published alongside this consultation document explores the costs and benefits of the options considered for this policy. It indicates that mandating standards for smart appliances provides the greatest net benefits, compared to voluntary standards. Do you agree with our analysis? In particular, please consider the following, and provide analysis to back up your views:

Mandating minimum requirements for smart appliances entails the development of Standards to measure them. BSI already has working groups set up and they are engaged with the joint ISO/IEC work on developing international Standards for "smart" which will ultimately lead to Harmonised Standards for Europe. There is already EU legislation in the pipeline. Any UK proposals will need to align with these efforts.

a) Likely consumer uptake of smart appliances, including which type of consumers and anticipated time frame;

We are not currently seeing significant interest from consumers in smart domestic appliances. This may reflect the lack of any incentive in terms of meaningful variable tariffs. There are always early adopters of new technology and those who resist it. UK consumers are accustomed to a 24 hour supply of electricity on demand so consideration of that supply will entail a shift in attitudes.

b) Consumer use of the smart function provided by smart appliances in relation to different types of tariffs, including fixed and variable;

It is difficult to predict how much consumers would be influenced by variable tariffs if they did become widely available. The extent of such influence would depend on how significant the cost savings might be. But there is also the issue of convenience —

consumers are used to "smart" functions offering greater convenience rather than options to defer energy use and it is not clear how much they would be willing to pay to retain instant access. We have certainly seen demand for washing machines that offer a quick wash because many consumers resent the time taken by the more energy-efficient programmes; although there has been a significant shift to washing at lower temperatures which is arguably the most successful impact of the energy labels.

- c) Potential financial benefits to consumers through smart appliance usage in combination with smart tariffs and offers;
  - See previous replies. This may reflect the lack of any incentive in terms of meaningful variable tariffs and the unavailability of smart domestic appliances (i.e. The chicken and egg scenario). Also, there is a barrier to shifting appliance use patterns in that the LFB and some other Fire and Rescue Services advise consumers not to run large appliances unattended. In the UK there is still considerable scope for consumers to save money on energy bills by switching to more energy efficient appliances and the carbon savings for, say, all UK consumers swapping to the most energy efficient washing machines, are still likely to be more significant than the potential for shifting demand.
- d) Monetised and non-monetised costs for industry to comply with standards, including consumer businesses, smart appliance manufacturing businesses, smart appliance service providers, supply chains and the electricity industry (such as Distribution Network Operators);
  - We cannot comment on costs. There will be costs and they will affect the prices of domestic appliances
- e) Potential impact on the price of smart appliances which comply with standards compared with non-smart appliances.
  - Considering the costs of development, additional components, testing and compliance costs, they would be more expensive. The amount of the expense will vary from manufacturer to manufacturer and on the product category.
- 4. In this document, we have proposed minimum functionalities for each principle. Do you agree with these functionalities? What functionalities should be considered in addition to those listed above? Please divide your responses according to:
  - i) Interoperability; Agreed.
  - ii) Grid-stability and cyber-security; Agreed on both counts.
  - iii) Data Privacy; Agreed.
  - iv) Consumer Protection. Agreed, but on reviewing this section, it is believed that "Product Safety" should be the 1st functionality instead of it being part of consumer protection.
- 5. Do you consider that we have correctly outlined above the risks associated with smart appliances? Are there any that are missing and need to be addressed? Please provide evidence.
  - It is believed that the risks associated with smart appliances have been outlined correctly.
- 6. Consumer protection is important to the Government, and we will continue to monitor and engage with this to ensure consumers are protected in a smart energy system. This work will include assessment of distributional impacts of smart appliances and consideration of product safety

provisions. Do you consider there to be major principles of protection which have not been covered above which will be developed into standards for smart appliances?

A principle that should be considered with product safety and smart in mind is that if the smart product should fail, it should fail safely. Safety is the primary consideration for manufacturers designing appliances so any estimated savings should be tempered by the expectation that appliances will default to a safe mode, i.e. not smart, in the event of fluctuations in mains current. This may require the consumer to reinstate the smart function or potentially for it to require enabling by the manufacturer. Product safety Standards will incorporate such provisions.

7. Do you agree that the standards should be applied as uniformly as possible across smart appliances, for example, horizontally, and should be catered to individual appliances only where necessary?

On the above point(s) there is agreement when considering minimum requirements for interoperability, grid-stability, cyber-security, and data privacy. Although horizontal measures are by their nature minimalist in order to avoid excluding less complex products from the market by virtue of requirements that do not apply to them. But each product category has its own safety and performance Standards – whether the appliance is smart or not. These will evolve to include any smart aspects of those products and could potentially add product-specific enhancements to any minimum horizontal requirements.

We would reiterate that such Standards will be international not even just European – appliances are no longer made for a specific national market, they are made for an entire region or indeed a global market. The majority of the domestic appliances sold in the UK are imported, so any UK-specific requirements that differ from those developed elsewhere would constitute a barrier to trade. It should also be noted that in some product categories there is significant UK-based manufacturing – these products are exported to Europe, and beyond as well as being sold in the UK, so UK manufacturers would also face additional costs of compliance if the UK imposed different requirements for products placed on the UK market.