

Dear Sirs,

Thank you for the opportunity to comment on the above document. The Electrical Safety Council offers the following comments:

Question 3 – *Do you have any comments on the proposed approach to ensuring consumers have a positive experience of the smart meter rollout (including the required code of practice on installation and preventing unwelcome sales activity and upfront charging)?*

Comment – Paragraph 2.32. We believe that the opportunity presented during the installation visit could and should be used to provide the householder with information relating to electricity and gas safety issues. For example, information could be provided on what to do if there is a smell of gas together with advice on not storing combustible items on or near the electricity meter and/or consumer unit.

Question 6 – *do you have any comments on the functional requirements for the smart metering system we have set out in the Functional Requirements Catalogue?*

Comment – The decision to include or reject additional functionalities beyond the high-level list of requirements should be based on the level of risk as well as on a cost benefit basis.

We recommend that the requirement for a temperature sensor to detect overheating in the electricity intake equipment due, for example, to loose connections, should be reinstated into the functional requirements for the smart electricity meter. We are concerned that the number of fires in domestic premises attributed to poor connections at the electrical intake position (service head, electricity meter and consumer unit) may increase as a direct result of the smart meter installation programme unless suitable steps are taken to ensure good workmanship and the use of appropriate materials.

In particular, we believe that the incidence of electrical fire will increase if meter installers do not check the tightness of connections at the main switch in consumer units as part of the meter installation process, as those connections may be loosened when the cables ('meter tails') are disturbed.

The attached report by East Sussex Fire and Rescue Service dated June 2010 '*Fires caused by electrical supply cut-out fuses*' supports our concerns. Whilst the report recognises that there are a relatively small number of reported fires involving cut-out fuses, electricity meters and consumer units, the consequences can be significant. With in excess of 27 million smart electricity meters being installed in domestic premises, even a very tiny percentage of connections being loosened could result in a large number of avoidable fires across the UK. Any such increase in fires would be detrimental to the public's acceptance of the smart metering programme.

Lessons could perhaps be learned from Australia where a government programme to improve loft insulation resulted in a spate of house fires caused by downlighters overheating, several electrocutions, considerable media attention, the energy efficiency programme being suspended, and the Minister responsible being demoted!

To address the potential problem of loose connections, we suggest the use of cables having an increased number of conductor strands to help ensure sound connections in equipment terminals. Should this not be accepted, we would endorse the advice given by at least one training provider

that the conductor strands should be flattened out when appropriate before being inserted into equipment terminals.

We would also encourage and support the introduction of a nationally-recognised qualification for installing smart meters for electricity and gas services. Moreover, we feel that checking the tightness of connections at consumer unit main switches should be included as part of the meter installation process, as referred to previously.

Whilst not included in the list of items to be excluded in the functional requirements, we recommend that consideration should be given to incorporating a means of isolation in smart electricity meters. This design approach, which has previously been adopted in Siemens meters in the Midlands, provides a safe means for isolating the electricity supply to facilitate electrical installation work, such as the replacement of a consumer unit, without the need to arrange for the supplier or meter operator to remove the cut-out fuse, as is the current situation.

Regards



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