

FAO Smart metering Implementation Team (e-mail: smartmetering@decc.gsi.gov.uk)

Thank you for inviting Health Protection Agency (HPA) to provide comments in DECCs Smart Metering Implementation Programme Consultation.

Please find HPA's response below.

HPA's general position on Smart Metering Implementation Programme

The Health Protection Agency supports the stated policy aim (in italics below) but are not aware of any evidence yet that introduction of smart meters will decrease energy usage. It will be important to collect information on this aspect and also to check that this technology does not lead to vulnerable people inadequately heating their homes, there are as yet no data on impacts on vulnerable groups. We would like to draw your attention to the soon-to-be-published English Department of Health Cold Weather Plan which reinforces the importance of adequate heating for good health.

"The Government's vision is for every home in Great Britain to be equipped with smart meters, with businesses and public sector users also having smart or advanced energy metering suited to their needs. The roll-out of smart meters will give people far better information about, and control over, their energy consumption and deliver other significant benefits to consumers. For example, it will bring an end to estimated billing and make it easier to switch energy supplier. Smart metering will also play an important role in our transition to a low-carbon economy and help meet some long-term challenges, such as ensuring an affordable, secure and sustainable energy supply."

Specific response to consultation questions

[A Consultation on Draft Licence Conditions and Technical Specifications for the roll-out of gas and electricity smart metering equipment](#) Reference Number: 11D/836

Consultation question 53. Do you agree with or have any comments on the Government's proposals for the outstanding issues from the Response? Please explain your reasoning.

[A Consultation on Draft Licence Conditions for a Code of Practice for the installation of smart electricity and gas meters](#) Reference Number: 11D/837,

Consultation question 7) Would the licence conditions as drafted and/or existing rules deliver the policy intentions on customer information and advice, vulnerable consumers, avoiding undue inconvenience and complaint-handling?.

HPA provides advice on standards of protection for exposure to non-ionising radiation, including the radio frequency electromagnetic fields (radio waves) associated with smart metering technologies. HPA welcomes the proposal to ensure compliance with the ICNIRP guidelines as this will be an important part of ensuring safety and should help to allay concerns about electromagnetic fields.

HPA recommends that the manufacturers and developers work closely with the standards bodies to implement appropriate standards for comparing exposures from Smart metering devices with the ICNIRP restrictions. The Radio and Telecommunications Terminal Equipment (RTTE) Directive requires that measures of a technical nature should be prescribed in order to ensure that "temperatures, arcs or radiation which would cause a

danger are not produced". Thus, in fixing the CE mark to their products, manufacturers of radio devices provide an affirmation that this is the case.

<http://ec.europa.eu/enterprise/sectors/rte/documents/>

Technical standards bodies, such as CENELEC, have developed standards for manufacturers to use in assessing their products.

<http://www.cenelec.eu/>

These standards are designed to ensure that product emissions do not cause exposures above the ICNIRP restriction values, as in the European Council Recommendation (1999/519/EC). Compliance with these harmonised standards allows a presumption of conformity with the Directive's requirement.

http://ec.europa.eu/enterprise/sectors/electrical/files/lv/rec519_en.pdf

The issue of EMS is a difficult one to address and conformance with the ICNIRP guidelines will not necessarily allay the fears of individuals who complain of this condition. These people have real and unpleasant symptoms that they attribute to exposure to electromagnetic fields. A report on the public health aspects of the condition was published by HPA in 2005.

<http://www.hpa.org.uk/Publications/Radiation/HPARPDSeriesReports/HpaRpd010/>

In recent years, considerable effort has been put into investigating symptoms in relation to EMF exposures, with large and well-conducted studies managed under the auspices of national research programmes. The results of these studies and reviews of groups of studies can be found in the scientific literature. This evidence shows that, whilst people have symptoms that they attribute to EMF exposures, these symptoms are not related to the exposures themselves but are presumably due to other factors. There is only limited evidence to guide the management of affected individuals. The majority of conventional medical effort to date has been directed at avoidance of triggers and psychological therapy, such as cognitive behavioural therapy. Evaluation of psychological therapy has been limited to date, but shows some potential for success. However psychological treatments are not acceptable to some sufferers.

Finally, HPA would also like to draw DECCs attention to the SAGE process which was set up by the Department of Health to "To bring together the range of stakeholders to identify and explore the implications for a precautionary approach to ELF EMF (extremely low frequency electric and magnetic fields) and make practical recommendations for precautionary measures". SAGE came about, in part in response to the National Radiological Protection Board (NRPB, now HPA) view published in its 2004 advice on protection the public from electromagnetic fields:

<http://www.hpa.org.uk/Publications/Radiation/NRPBArchive/DocumentsOfTheNRPB/Absd1502/>

NRPB recommended "The government should consider the need for further precautionary measures in respect of exposure of people to EMFs. In doing so, it should note that the overall evidence for adverse effects of EMFs on health at levels of exposure normally experienced by the general public is weak. The least weak evidence is for the exposure of children to power frequency magnetic fields and childhood leukaemia."

SAGE considered whether public exposures to ELF-EMFs could be reduced by changing domestic electricity meters from the rotating disc type to electronic meters. SAGE did not discuss radio-frequency emissions from communications applications within electronic meters. The SAGE First Interim Assessment (2007) recommended that:

“Use of rotating-disc electricity meters should be phased out. There is already a strong trend to this and 95% of meters currently being installed in new properties, and to meet re-certification requirement, are electronic. However, it is not clear how this can be made mandatory. Alternatively, depending on how effectively a move to electronic meters can occur, DCLG

(formerly ODPM) should modify the Building Regulations to specify that electricity meters and consumer units for new homes should not be located close to high-occupancy areas.

<http://www.sagedialogue.org.uk/SAGE%20first%20interim%20assessment%20-%20Main%20Report.pdf>

HPA wishes to affirm its readiness to work with DECC as it develops responses to requests for information and challenges about health effects, including concerns about electrical sensitivity. All relevant information about exposure levels should be produced at an early stage and made available to those with concerns about EMF exposures.

The Smart Metering Implementation Programme Consultations launched and Call for Evidence issued

On 30 March 2011, the Government and Ofgem jointly published the Government's [Response to the Smart Meter Prospectus](#). This set out conclusions about the approach to be taken to developing the regulatory framework for the roll-out of smart meters.

Building on those conclusions the Government has published [two consultations and a call for evidence](#), as well as two updated Impact Assessments.

A Consultation on Draft Licence Conditions and Technical Specifications for the roll-out of gas and electricity smart metering equipment

Reference Number: 11D/836, Open Date:18/08/2011, Close Date:**13/10/2011**

Draft licence conditions are set out in order to gain stakeholder views on the roll-out completion date, the point from which any meter installed will have to be smart and on the provision of In-Home Displays. There are also a number of related policy questions. In addition this consultation describes proposals to establish the technical

specifications for smart metering equipment and proposed approach to developing these specifications, including a number of detailed technical questions.

A Consultation on Draft Licence Conditions for a Code of Practice for the installation of smart electricity and gas meters

Reference Number: 11D/837, Open Date:18/08/2011, Close Date:**10/11/2011**

Draft licence conditions are set out in order to gain stakeholder views on the requirements on electricity and gas suppliers to develop and adhere to code(s) of practice governing the installation of smart meters at domestic and micro-business sites.

A Call for Evidence on data access and privacy

Reference Number: 11D/838, Open Date:18/08/2011, Close Date:**13/10/2011**

This call for evidence seeks views and further evidence to support the Government's development of data access arrangements and a privacy policy framework for smart metering. This builds on the position set out in the Government Response to the Prospectus published in March 2011.

Impact Assessment: Smart Meter rollout for the domestic sector (GB)

Reference Number: 11D/841

This IA presents new analysis carried out since March 2011. In particular it sets out and seeks views on the costs and benefits of different options for the configuration of the communications equipment within the home. It also presents updated analysis on outage detection costs and benefits; consumer access to data over the smart metering home area network; and enduring Pre-payment interface for meters in difficult position.

Impact Assessment: Smart Meter rollout for the small and medium non-domestic sector (GB)

Reference Number: 11D/842

This IA presents new analysis carried out since March 2011. In particular it sets out and seeks views on the costs and benefits of different options for the configuration of the communications equipment within the premises. It also presents updated analysis on outage detection costs and benefits; and consumer access to data over the smart metering home area network.

For further information contact: