

By Email:

**Department of Energy & Climate
Change**

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Our ref 12/1236

16 October 2012

Dear

POTENTIAL HEALTH EFFECTS OF SMART METERS

Further to my letter of 18 September, I am writing to respond in full to the clarified request that you sent on 20 August 2012 and in which you wrote:

“To clarify, I do not expect you to examine any information in relation to the EIR for this request.

I am interested primarily in any communications, particularly written reports and emails, between DECC and the Department of Health, health campaigners, smart meter campaigners such as Stop Smart Meters, health workers or government departments on the subject of the potential effects on householders’ health when smart meters are installed/in place.

Anything from October 2008 onwards would be fine, or if that date is too long for the purposes of cost, any date from May 2010 would suffice.”

As I explained in my letter of 18 September we are required to deal with your request under the Environmental Information Regulations 2004 (“EIR”), since the information held by DECC that falls within your request (the “Relevant Information”) is, in our view, covered by the definition of “environmental information” contained in those Regulations.

I attach communications contained in e-mails and letters, with separate attachments, regarding the potential effects on householders’ health when smart meters are installed/in place that this department holds and that were exchanged between DECC and the following groups and organisations between 1 October 2008 and 20 August 2012:

- Department of Health
- The Department for Business, Innovation and Skills
- The Health Protection Agency
- Campaigning groups.

We have not been in correspondence with health workers other than those that may be members of the above organisations.

Although we are disclosing the majority of the Relevant Information, some of the information that you requested has been withheld under the following exceptions to the EIR:

- regulation 12(4)(d) – material in the course of completion, unfinished documents and incomplete data
- regulation 12(4)(e) – disclosure of internal communications.

The regulations above are qualified exceptions, which means that it is necessary to consider the public interest when deciding whether to release or withhold such information. The factors we considered in deciding where the public interest lay are set out below.

We appreciate that there is a public interest in releasing much of the Relevant Information: smart meters will be installed in 30 million households throughout Great Britain as well as to over 2 million small non-domestic sites. The Government's consideration of the evidence on the health implications of smart meters is therefore of significant interest to the public. There is a general interest in promoting greater transparency, which makes government more open and accountable, and providing further information could provide a full picture of the decision making process.

We have concluded that it is in the public interest to release the majority of the Relevant Information that is covered by the above exemptions. In relation to the remaining information we have concluded that the public interest in maintaining the exemption outweighs the public interest in disclosing the information. Disclosure of some of this information would be likely to inhibit free and frank discussion needed to inform decisions and policy development that are still in the course of completion. There is a need to ensure that officials have the space in which to develop their thinking and explore options in communications and discussions without fear that their views will be disclosed to the public, particularly when the relevant policy is still being developed or the decision-making process is still underway. As a result, the department has decided to withhold a small number of documents covered by regulation 12(4)(e) and regulation 12(4)(d).

Some of the information withheld includes internal discussions between policy officials and health experts about drafting of correspondence or presentation of information to the public. It is in the public interest that the Government avoids providing or publishing material which is misleading or inaccurate, and that the public are provided with clear and accurate information on smart meters and similar technologies. We have therefore concluded that the public interest in providing drafts of material which do not meet these standards is outweighed by the public interest in withholding them.

Some of the information provided to you has been redacted under regulation 12(3) of the EIR. This exception provides an absolute exemption for personal data, which then falls to be dealt with under the Data Protection Act (DPA). Personal data of third parties can only be disclosed in accordance with the data protection principles. In particular, the first data protection principle requires that disclosure must be fair and lawful and must comply with one of the conditions in Schedule 2 of the DPA. We do not think that it is fair to release the names and contact details of junior members of staff or third parties and do not think that any of the relevant conditions in Schedule 2 of the DPA apply.

DECC also holds Relevant Information that is already in the public domain, and was not included in the table of publicly available information attached to my letter of 18 September. This information is exempt under regulation 6(1)(b), because the information is easily accessible to you. I have attached an updated version of the table sent with my last letter to include links to this further relevant publicly available material.

If you are dissatisfied with the handling of your request, you have the right to ask for an internal review. Internal review requests should be submitted within two months of the date of receipt of the response to your original letter and should be addressed to DECC Information Rights Unit (foi@decc.gsi.gov.uk).

Please remember to quote the reference number above in any future communications.

If you are not content with the outcome of any internal review, you have the right to apply directly to the Information Commissioner for a decision. The Information Commissioner can be contacted at: Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF.

If you have any queries about this letter, please contact me.

Yours sincerely,

Fuel Poverty & Smart Meters
Department of Energy and Climate Change

Please note that attachments are available upon request from smartmetering@decc.gsi.gov.uk as file sizes are too large for website publication.

Email from Electrosensitivity UK to DECC with attached consultation response, 31/7/09

Please find attached my Response submission on Health and Safety issues.

I have written it as a Trustee of the charity ElectroSensitivity UK (www.es-uk.info). Many of our supporters feel very strongly about any imposition of radiation from microwave transmitters in their own or a neighbour's home or a system of data transfer which will increase the total level of electromagnetic pollution in their environment.

Attachment 1

Email from DECC to Ofgem, 23/6/10

NAME REDACTED and I met NAME REDACTED and NAME REDACTED of HPA's Centre for Radiation, Chemical and Environmental Hazards.

2. We broadly described the current state-of-play on process and policy, including the position on meter functionality, comms systems from meters, the 100% target with a "reasonable steps" clause etc.

3. HPA went over the existing medical evidence base, including the extensive research undertaken into reactions and hypersensitivity to mobile telephones. Some studies had highlighted the fact that subjects felt that they had symptoms if they believed they had been exposed to EMF, irrespective of whether they actually had. The whole issue was complicated by the fact that claimed EMS symptoms could arise for other reasons – symptoms with entirely different causes might, therefore, be attributed to EMF. This could be an issue for the smart meter programme. HPA mentioned that Caroline Lucas, the interested MEP, now had a Westminster seat. Pressure on EMS in general was likely to be stepped up as campaigners lobbied new MPs and Ministers

Email from MCS-AWARE to DECC, 25/8/11

Subject: Smart Meters

Dear Sir/ Madam,

I have read with interest the Government's response to the Smart Meter consultation. I would be grateful if you could tell me what considerations are being made for people affected by Electrical Hypersensitivity, ie those who will not be able to tolerate the WiFi communications as I could not find any references to this in the document.

I look forward to hearing from you as soon as possible.

Many thanks

Email from Department of Health to DECC, 5/9/11, titled: EMS and Nick Clegg letter

Your reply to Nick Clegg is fine. NAME REDACTED already has the latest information that the HPA and DH have and there is nothing more we can add at present for this case.

More generally.

I enclose recent examples of replies concerning radiofrequencies (these cover about 3 kilohertz (kHz) to 300 gigahertz (GHz) including DECT/wireless technology WiFi/mobile phones/smart meters), and extremely low frequency 50 hertz (ELF EMF) concerning power lines and electricity supply. These cover the points that usually arise in correspondence.

Details of our mobile telecommunications and health (MTHR) programme are available at :<http://www.mthr.org.uk/> . Several projects on this programme concerned electrosensitivity.

Recent matters:

The International Agency for Research on Cancer (IARC) classified radiofrequency EMF as category 2B "possibly carcinogenic". This was not unexpected and is in line with our present policy. More detail on this is available at:http://www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208_E.pdf .

Its important to put this in proportion-coffee is also in this category.

There was also a Council of Europe report which campaigners refer to. This can be found at:

<http://assembly.coe.int/main.asp?Link=/documents/workingdocs/doc11/edoc12608.htm>

This mentions electrosensitivity and asked for WiFi to be banned in schools.

(See attached file: CMO TO 639052 minus address.doc)(See attached file: CMO TO 637454 WiFi, mobile phones

schools.doc) Hope this helps-let me know if you need further info kind regards.

Attachment 2

Attachment 3

Email from DECC to MCS Aware, 8/9/11, titled: Smart Meters

Thank you for your interest in smart meters.

Smart meters will play a crucial role in delivering a low carbon economy. The roll out of smart meters will deliver £7.1bn net benefits to consumers, energy suppliers and networks. Domestic customers will be provided with near real-time information on energy consumption via their smart meter and in-home display, enabling them to monitor and manage their energy consumption, save money and reduce carbon emissions. Bills will be accurate and switching between suppliers will be smoother and faster. New products and services will be supported in a vibrant, competitive, more efficient market in energy and energy management.

The roll out of smart meters by energy suppliers in Great Britain will take place in two phases. The first is Foundation Stage which began in April 2011. During this stage Government will be working with industry, consumer groups and other stakeholders to ensure all the necessary groundwork is completed for mass roll out, which is the second phase. The Government expects the mass roll out to start in early 2014 and to be completed in 2019.

At the moment, communications technology solutions have not been selected for the smart metering system and we are currently consulting on the detailed technical specification. Both wired and wireless technologies exist that could be used and, for practical and technical reasons, both wireless and wired solutions will need to be utilised by installers during the roll out, depending on local circumstances.

Where wireless technologies are used in deploying smart meters they will have to comply with relevant regulations, best practice and international standards as set out by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). In 2009 the ICNIRP published an evidence review, it updated and reconfirmed its guidance. Further information can be found on the website . Suppliers will have a licence obligation to use smart metering equipment that meets these requirements.

As you would expect, we have worked with the Department of Health and the Health Protection Agency during the development of the programme to date and continue to liaise with them to ensure we continue to act in line with the best information and guidance. At the same time we recognise that there will be some customers who have concerns about

receiving a smart meter, including people with concerns about electro-magnetic sensitivity. As the programme develops, we will be considering further, together with the energy companies who will be responsible for the rollout, how best to respond where individuals have concerns about a smart meter installation in their home.

I hope this provides you with the information you need.

Regards,

Email from DECC to Department of Health, 18/11/11, titled: EMS and smart meters

Thank you for your help a few weeks ago with my questions about EMS and smart meters.

We've been considering our position here and what information we need in order to answer the kinds of questions we get already, and the challenges that we know we will get as the roll out of smart meters begins in earnest.

We clearly need to have a strong narrative on the current evidence base on EMS and electromagnetic fields, as well as how this relates to smart meters, the technical solutions being developed and the options for consumers.

NAME REDACTED (my colleague here) is pulling together some of the context and outline evidence base over the next month, and we wondered if we might use this as an opportunity to meet with you (in December?) to update you on our Programme, our understanding of the issues, and to see how we might work together. We don't want to duplicate work, use unhelpful messages and so on, and it would also be useful to understand the most effective ways that we should work with you, and also with the HPA.

One of our key challenges at the moment is an online petition set up about the dangers of smart meters and health impacts. It has quite a few inaccuracies in it, and we need to consider how to respond. I don't know if you might also have any advice for us in relation to these kinds of lobbying tactics, as presumably you have had to deal with similar issues in relation to wifi and schools and so on? The smart meters petition has a list of contacts for people to write to, and this includes Andrew Lansley, and also recommends that people write to their MP and ask them to raise these issues with the SoS for Health.

We have a couple of specific questions to help us with the research and in understanding our response to the petition, and I wonder if you might help us with these?

- There is clearly a massive amount of evidence out there about EMFs, EMS and so on. We see that the Institute of Engineering and Technology

(IET) has a committee which has undertaken work to summarise existing evidence and updates this on a bi-annual basis. It would be useful to know if you think that the IET is a respectable source for us to use, and whether there is anything we need to be aware of in this area.

- The petition is calling for people to get letters from their doctors about their EMS so that they can refuse a smart meter. I also wanted to check with you on the status of EMS as a “disability” or a recognised condition in relation to (equalities) legislation and in respect of a diagnosis from a GP. I’m sure I’ve seen that EMS is not a recognised condition, and I wondered if this has any implications that we ought to consider?
- Various lobby groups claim that around 2-4% of the population suffers from EMS. I also wondered (linked to the question above) whether you had any evidence of the prevalence of EMS?
- The petition says that – because of smart meters – there will be wireless RF signals all over the country, and that people who suffer from EMS will not be able to work, will lose their homes etc. I would guess that this isn’t an issue that is confined to smart meters, and that you might receive similar letters in relation to mobile phones and so on? Is there a standard line that you use in response to these kinds of questions?

We were also wondering how we might get across the facts of smart meters in a simple and helpful way, and whether a leaflet might be a useful starting point. I’ve seen this one that is published on your website, and we were wondering if this might be something we could talk about doing in relation to smart meters?

http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_124899.pdf

If you think an early meeting might be useful, the please let me know.

Thanks again for your help

Attachment 4

Email from DECC to Health Protection Agency (HPA), 18/11/11

Thank you for your emails and help with my questions about EMS and the HPA’s work in this area. Thank you also for your recent response to our consultation on smart meters roll out.

We’ve been considering our position here and what information we need in order to answer the kinds of questions we get

already, and the challenges that we know we will get as the roll out of smart meters begins in earnest. We clearly need to have a strong narrative on the current evidence base on EMS and electromagnetic fields, as well as how this relates to smart meters, the technical solutions being developed and the options for consumers.

NAME REDACTED (who I think you met several months ago) is looking to pull together some of the context and outline evidence base over the next month, and we wondered if we might then come and visit you (in December or early January?) to update you on our Programme, our understanding of the issues, and to see if you're thinking is also developing – and how we might work together.

I don't know if you have seen – but there is an online petition set up about the dangers of smart meters and health impacts. It has quite a few inaccuracies in it, but we'll need to consider how to respond.

We have a couple of questions to help us with the research and in understanding our response to the petition, and I wonder if you might help us with these?

- There is clearly a massive amount of evidence out there about EMFs, EMS and so on. We see that the Institute of Engineering and Technology (IET) has a committee which has undertaken work to summarise existing evidence and updates this on a bi-annual basis. It would be useful to know if you think that the IET is a respectable source for us to use, and whether there is anything we need to be aware of in this area.
- The petition is calling for people to get letters from their doctors about their EMS so that they can refuse a smart meter. I also wanted to check with you on the status of EMS as a "disability" or a recognised condition in relation to (equalities) legislation and in respect of a diagnosis from a GP. I'm sure I've seen that EMS is not a recognised condition, and I wondered if this has any implications that we ought to consider?
- Various lobby groups claim that around 2-4% of the population suffers from EMS. I also wondered (linked to the question above) whether you had any evidence of the prevalence of EMS?

Many thanks again for your help

Email from HPA to DECC. Text is reproduced from earlier DECC email with HPA comments added in red, 21/11/11, titled: Electromagnetic sensitivity

Following on from NAME REDACTED's e-mail, NAME REDACTED will contact you shortly to arrange the date for the meeting.

It will also be an opportunity to discuss our thoughts on investigating these exposures. Highlighted in red are some short

answers to your questions:

There is clearly a massive amount of evidence out there about EMFs, EMS and so on. We see that the Institute of Engineering and Technology (IET) has a committee which has undertaken work to summarise existing evidence and updates this on a bi-annual basis. It would be useful to know if you think that the IET is a respectable source for us to use, and whether there is anything we need to be aware of in this area.

The IET is the professional body which represents engineers and technologists, and it is better to focus on the views of recognised authorities in the area of health, such as AGNIR, ICNIRP, SCENIHR and WHO, in addition to the HPA:

- <http://www.theiet.org/about/vision/index.cfm?origin=foot-about>
- <http://www.hpa.org.uk/Topics/Radiation/RadiationAdvisoryGroups/AdvisoryGroupOnNonIonisingRadiation/>
- www.icnirp.org
- www.who.int/peh-emf (see <http://www.who.int/mediacentre/factsheets/fs296/en/>)
-
- http://ec.europa.eu/health/scientific_committees/emerging/index_en.htm
(see http://ec.europa.eu/health/ph_risk/committees/04_scenihr/docs/scenihr_o_022.pdf, page 40),

NAME REDACTED, who is a member of AGNIR, has also produced some useful reviews of the science in the peer-reviewed literature on EMS:

<http://www.psychosomaticmedicine.org/content/67/2/224.full>

<http://onlinelibrary.wiley.com/doi/10.1002/bem.20536/abstract>

The petition is calling for people to get letters from their doctors about their EMS so that they can refuse a smart meter. I also

wanted to check with you on the status of EMS as a “disability” or a recognised condition in relation to (equalities) legislation and in respect of a diagnosis from a GP. I’m sure I’ve seen that EMS is not a recognised condition, and I wondered if this has any implications that we ought to consider?

Electrical sensitivity is not a defined medical diagnosis. However doctors will be able to report that patients have symptoms which the patients believe are caused by exposures to EMFs. The main message is that there remains no proven link between symptoms and EMF exposures. 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.

A report on the public health aspects of the condition was published by HPA in 2005:

http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb_C/1247816558210?p=1197637096018

Various lobby groups claim that around 2-4% of the population suffers from EMS. I also wondered (linked to the question above) whether you had any evidence of the prevalence of EMS?

Different countries have different estimates and there are no UK data, although there is a useful WHO fact sheet no 296, as referred to above, which gives some general estimates of prevalence:

Please feel free to call me if you wish to discuss further.
Kind regards

Health Protection Agency

Email from Department of Health to DECC, 25/11/11, titled EMS and smart meters

A few thoughts on your questions below in advance of our meeting on 8 Dec:

We are used to lobbying on EMF issues, the last WiFi petition we are aware of was in 2009, when the lines given (by DCSF) were the HPA's advice.

Since then HPA studies on WiFi in schools have been published which reinforces their original advice that there is no consistent evidence to date that exposure to radio signals from Wi-Fi and wireless local area networks adversely affects the health of the general population.

An adjournment debate was held on mobile phones and health on 20 Dec 2010.

We would need to watch for identical letters to different Departments'

Ministers as part of the campaign, and, should they get enough signatures, a possible debate.

The petition documentation has a number of inaccuracies. For instance:

1) It mentions that "when the smart meter network is installed the combined exposure is likely to exceed the recommended levels for non-thermal radiation". This is extremely misleading. The only EMF guidelines accepted in the UK are the 1998 ICNIRP guidelines. I should think it is unlikely that these guidelines will be exceeded. (HPA can advise on smart meter RF levels and likely exposure combined with that from other sources in the home) Is the petition referring to ICNIRP or much more stringent unofficial levels supported by campaigners such as outlined in the BioInitiative report. The BioInitiative levels have not been accepted in the UK or by the EC. The petition does not state the source of these limits or what the limits are.

2) It is assumed that symptoms suffered are caused by EMFs where WHO, the EC's scientific committee SCENIHR and scientific studies do not support this hypothesis.

3) Regarding the doctor's letter, the statement that "Heart rate variability testing indicates that it [EMF] interferes with their heart rhythm in a negative, objectively measureable and reproducible way" is based on comments by NAME REDACTED, a known campaigning scientist. We have some doubt about the accuracy of this statement which appears not to be borne out by other critical reviews of the available science. Again, we can discuss with the HPA.

4) We need HPA advice concerning the petition's statements about shielding.

Regarding IET, its Biological Effects Policy Advisory Group (BEPAG) 2011 factfile "Electromagnetic Fields and Health" is available at:

<http://www.theiet.org/factfiles/bioeffects/index.cfm>

IET advice is similar to DH/HPA/WHO advice.

It is a respectable source and offers professional qualifications for engineers and technicians. Its advice on EMFs has no legal status.

Electrohypersensitivity EHS also called Electrical sensitivity ES Our line is: The Department is aware that some people report hypersensitivity that they attribute to electromagnetic fields (EMF). They suffer from a range of symptoms that can intrude on

their daily lives.

However there is little scientific evidence demonstrating that it is the EMF exposure that causes the symptoms.

In the UK, mobile phones, base stations (masts) and Wi-Fi are expected to comply with the 1998 International Commission on Non-Ionising Radiation Protection (ICNIRP) guidelines for public exposure to electromagnetic fields.

The current view of the World Health Organisation (WHO) and the European Scientific Committee on Emerging and Newly Identified Health Risks is that there is no consistent evidence of adverse health effects occurring at levels within the ICNIRP exposure guidelines.

The HPA looked at how electrosensitivity can be defined, its prevalence, and possible options for managing it in the 2005 document "Definition, Epidemiology and Management of Electrical Sensitivity (ES)". This document is available on the HPA's website <http://www.hpa.org.uk/Publications/Radiation/HPARPDSeriesReports/HpaRpd010/>

It states that "the use of the term ES in this review does not imply the acceptance of a causal relationship between symptoms and attributed exposure however".

The report notes that, with the exception of facial skin symptoms and visual display units, there is no consistent symptom type and attributed source association. Some people are only symptomatic to specific sources; others report sensitivity to a range of sources.

The HPA's report also states "Facial skin symptoms and their attribution to VDUs are largely a phenomenon of the Nordic countries, and Sweden in particular. In other countries, ES sufferers tend to describe general symptoms attributable to a wide range of EMF sources."

"There is geographical variation in terms of symptomatology, the attributed source of exposure and the estimated prevalence of ES."... "From what little description of the UK experience exists in the published literature and from some case reports on support group websites, the general symptom group appears to predominate in the UK. However, no useful estimate of prevalence in the UK was found."

"There is considerable overlap between ES and other conditions known as symptom-based conditions, functional somatic syndromes or idiopathic environmental intolerances."

WHO factsheet 193 (June 2011) extract:

"research has not been able to provide support for a causal relationship between exposure to electromagnetic fields and self-reported symptoms, or "electromagnetic hypersensitivity"."

WHO factsheet 296 (Dec 2005) extracts:

“There is a very wide range of estimates of the prevalence of EHS in the general population. A survey of occupational medical centres estimated the prevalence of EHS to be a few individuals per million in the population.

However, a survey of self-help groups yielded much higher estimates. Approximately 10% of reported cases of EHS were considered severe.”

“There is also considerable geographical variability in prevalence of EHS and in the reported symptoms. The reported incidence of EHS has been higher in Sweden, Germany, and Denmark, than in the United Kingdom, Austria, and France. VDU-related symptoms were more prevalent in Scandinavian countries, and they were more commonly related to skin disorders than elsewhere in Europe. Symptoms similar to those reported by EHS individuals are common in the general population.”

“The majority of studies indicate that EHS individuals cannot detect EMF exposure any more accurately than non-EHS individuals. Well controlled and conducted double-blind studies have shown that symptoms were not correlated with EMF exposure.”

EHS is characterized by a variety of non-specific symptoms that differ from individual to individual. The symptoms are certainly real and can vary widely in their severity. Whatever its cause, EHS can be a disabling problem for the affected individual. EHS has no clear diagnostic criteria and there is no scientific basis to link EHS symptoms to EMF exposure. Further, EHS is not a medical diagnosis, nor is it clear that it represents a single medical problem.

The WHO also say for Physicians: "Treatment of affected individuals should focus on the health symptoms and the clinical picture, and not on the person's perceived need for reducing or eliminating EMF in the workplace or home. This requires:

- a medical evaluation to identify and treat any specific conditions that may be responsible for the symptoms,
- a psychological evaluation to identify alternative psychiatric/psychological conditions that may be responsible for the symptoms,
- an assessment of the workplace and home for factors that might contribute to the presented symptoms. These could include indoor air pollution, excessive noise, poor lighting (flickering light) or ergonomic factors. A reduction of stress and other improvements in the work situation might be appropriate.

For EHS individuals with long lasting symptoms and severe handicaps, therapy should be directed principally at reducing symptoms and functional handicaps. This should be done in close co-operation with a qualified medical specialist (to address the medical and psychological aspects of the symptoms) and a hygienist (to identify and, if necessary, control factors in the

environment that are known to have adverse health effects of relevance to the patient).

Treatment should aim to establish an effective physician-patient relationship, help develop strategies for coping with the situation and encourage patients to return to work and lead a normal social life.”

“Governments: Governments should provide appropriately targeted and balanced information about potential health hazards of EMF to EHS individuals, health-care professionals and employers. The information should include a clear statement that no scientific basis currently exists for a connection between EHS and exposure to EMF.”

We might need a line about the BioInitiative report:

DH is aware of the BioInitiative report. However we believe that such reports should not be taken in isolation, but considered with the total science where there are robust and well-conducted studies.

The Department takes account of the available scientific evidence which is kept under regular review.

We would need a line about the International Agency for Research on Cancer (IARC) classification of radiofrequencies as "category 2b possibly carcinogenic". We have: The focus of the IARC report is on the frequencies used by mobile phones. We understand that this classification largely reflected an analysis of part of the Interphone study concerning mobile phone use and also the uncertainty inherent in certain types of epidemiological studies. The IARC classification is consistent with current Department of Health and Health Protection Agency advice that there is no clear scientific evidence of a cancer risk from exposure to radiofrequencies at levels below international guidelines, but the possibility remains, so a precautionary approach is recommended. We understand the full IARC report will be available later this year. Also, the HPA's independent Advisory Group on Non-Ionising Radiation (AGNIR) is currently reviewing the scientific evidence on the possible health effects of radio waves and is due to publish its findings in 2012.

Regarding a leaflet, it might be helpful to produce one about smart meters. At present our mobile phones one is on the DH website. Due to comms budget restrictions we can't distribute a printed one, but can supply the pdf. We would need to think about the best way to distribute a smart meters one. HPA could probably help with RF facts and figures.

Hope this helps for now
kind regards

Email from Department of Health to DECC, 12/12/11, titled EMS lines for petition

I said that I would send info on our MTHR programme:
General info is available at:<http://www.mthr.org.uk/index.htm>

The MTHR electrosensitivity projects are at:

http://www.mthr.org.uk/research_projects/mthr_funded_projects/wessely.htm

http://www.mthr.org.uk/research_projects/hypersensitivitysymptoms.htm

http://www.mthr.org.uk/research_projects/Fox2.htm

I'll send the answers to the recent PQs later-doesn't seem to be in Hansard yet.

NAME REDACTED

re your email below, the new AGNIR radiofrequency report is not out yet-expected Spring next year I think. Their previous report was in 2003, see link:

http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb_C/1254510602951 .

AGNIR advise the HPA on the science and what research is needed.

The document you enclosed was an EC Scientific Advisory Committee on Emerging and Newly Identified Health Risks (SCENIHR) 2007 Opinion on EMF.

SCENIHR has produced one since in 2009 at the following link:

http://ec.europa.eu/health/archive/ph_risk/committees/04_scenihr/docs/scenihr_o_022.pdf

and also recommendations for research in July 2009 at:

http://ec.europa.eu/health/ph_risk/committees/04_scenihr/docs/scenihr_o_024.pdf

The SCENIHR Opinions are well-respected and inform EC policy. We have just had notification that SCENIHR will be producing an updated Opinion on EMF and health by December 2012. The mandate for this has just been released and is available at:

http://ec.europa.eu/health/scientific_committees/emerging/docs/scenihr_q_029.pdf

hope this helps

kind regards

Email from HPA to DECC, 12/12/11, titled Electromagnetic sensitivity - DECC/HPA

As promised, here are references to the US studies on Smart meters:

1- Maine Center for Disease Control and Prevention. Executive summary of review of health issues related to smart meters. 2010 Nov 8. http://www.maine.gov/dhhs/boh/smart_meters.shtml

2- EPRI (Electric Power Research Institute) 2010. An Investigation of Radiofrequency Fields Associated with the Itron Smart Meter. Dec 22. http://my.epri.com/portal/server.pt?Abstract_id=00000000001021126..

this study is now peer reviewed and published as a paper:

Tell RA, Sias GG, Vazquez A, Sahl J, Turman JP, Kavet RI, Mezei G. Radiofrequency fields associated with the Itron smart meter. Radiat Prot Dosimetry. 2012 Jan 10;[Epub ahead of print].

3-CCST (California Council on Science and Technology) 2011 Health impacts of radio frequency from smart meters. <http://www.ccst.us/publications/2011/2011smartA.pdf>

Best Regards

Email from Department of Health to DECC, 19/12/11, titled: EMS lines for petition

largely OK with this

This includes the WHO/International Agency for Research on Cancer (IARC) report in the summer which classified radiofrequency electromagnetic fields as “possibly carcinogenic” (Group 2B) for users of wireless telephones which was based on research reporting some increased risk for glioma, a type of brain cancer associated with wireless phone use. This places mobile phone use in the same risk category as some common foods such as coffee.

However, there is no conclusive evidence of risk from other environmental electromagnetic exposures – for example signals from wireless telecommunication, including smart meters.

Email from Department of Health to DECC, 26/1/12, untitled

Thanks for your email. NAME REDACTED is away till Monday so I hope I can help. NAME REDACTED and I are in regular contact with NAME REDACTED and NAME REDACTED, copied in here, on smart meter policy issues.

UK policy is that telecommunications equipment that emits electromagnetic fields is expected to comply with the 1998 International Commission on Non-Ionising Radiation Protection (ICNIRP) guidelines for public exposure to electromagnetic fields. Along with other member states, the UK supports European Council Recommendation EC 519/1999 on limiting exposures to EMF. This recommendation incorporates the 1998 ICNIRP guidelines. The Health Protection Agency considers that the National Radiological Protection Board's 2004 advice to adopt the 1998 ICNIRP guidelines for limiting exposure to electromagnetic fields remains appropriate.

For mobile phones and base stations this is complied with on a voluntary basis by the manufacturers and operators. With base stations requirement to demonstrate compliance with ICNIRP is stated in DCLG document planning policy guidance 8 which covers telecommunications development (see link: <http://www.communities.gov.uk/documents/planningandbuilding/pdf/1705360.pdf>), and also in the proposed simplified planning policy framework (on page 24) which DCLG have just consulted on, see link: <http://www.communities.gov.uk/documents/planningandbuilding/pdf/1951811.pdf>

We could discuss whether a similar voluntary commitment/ approach with guidance might be a way to go with the smart meter and communications network suppliers. They would also comply with relevant EC standards for telecoms equipment.

We would be happy to meet to discuss further if you would like to. Will check with NAME REDACTED on Monday when he might be free.

For info further detail regarding electrosensitivity is below:

Electrohypersensitivity EHS also called Electrical sensitivity ES

Our line is: The Department is aware that some people report hypersensitivity that they attribute to electromagnetic fields (EMF). They suffer from a range of symptoms that can intrude on their daily lives. However there is little scientific evidence demonstrating that it is the EMF exposure that causes the symptoms.

In the UK, mobile phones, base stations (masts) and Wi-Fi are expected to comply with the 1998 International Commission on Non-Ionising Radiation Protection (ICNIRP) guidelines for public exposure to electromagnetic fields.

The current view of the World Health Organisation (WHO) and the European Scientific Committee on Emerging and Newly Identified Health Risks is that there is no consistent evidence of adverse health effects occurring at levels within the ICNIRP exposure guidelines.

The HPA looked at how electrosensitivity can be defined, its prevalence, and possible options for managing it in the 2005 document "*Definition, Epidemiology and Management of Electrical Sensitivity (ES)*". This document is available on the HPA's website <http://www.hpa.org.uk/Publications/Radiation/HPARPDSeriesReports/HpaRpd010/> It states that "the use of the term ES in this review does not imply the acceptance of a causal relationship between symptoms and attributed exposure however".

The report notes that, with the exception of facial skin symptoms and visual display units, there is no consistent symptom type and attributed source association. Some people are only symptomatic to specific sources; others report sensitivity to a range of sources.

The HPA's report also states "Facial skin symptoms and their attribution to VDUs are largely a phenomenon of the Nordic countries, and Sweden in particular. In other countries, ES sufferers tend to describe general symptoms attributable to a wide range of EMF sources."

"There is geographical variation in terms of symptomatology, the attributed source of exposure and the estimated prevalence of ES."... "From what little description of the UK experience exists in the published literature and from some case reports on support group websites, the general symptom group appears to predominate in the UK. However, no useful estimate of prevalence in the UK was found."

"There is considerable overlap between ES and other conditions known as symptom-based conditions, functional somatic syndromes or idiopathic environmental intolerances."

WHO factsheet 193 (June 2011) extract:

"research has not been able to provide support for a causal relationship between exposure to electromagnetic fields and self-reported symptoms, or "electromagnetic hypersensitivity"."

WHO factsheet 296 (Dec 2005) extracts:

"There is a very wide range of estimates of the prevalence of EHS in the general population. A survey of occupational medical centres estimated the prevalence of EHS to be a few individuals per million in the population. However, a survey of self-help groups yielded much higher estimates. Approximately 10% of reported cases of EHS were considered severe."

"There is also considerable geographical variability in prevalence of EHS and in the reported symptoms. The reported incidence of EHS has been higher in Sweden, Germany, and Denmark, than in the United Kingdom, Austria, and France. VDU-related symptoms were more prevalent in Scandinavian countries, and they were more commonly related to skin disorders than elsewhere in Europe. Symptoms similar to those reported by EHS individuals are common in the general population."

"The majority of studies indicate that EHS individuals cannot detect EMF exposure any more accurately than non-EHS individuals. Well controlled and conducted double-blind studies have shown that symptoms were not correlated with EMF

exposure.”

EHS is characterized by a variety of non-specific symptoms that differ from individual to individual. The symptoms are certainly real and can vary widely in their severity. Whatever its cause, EHS can be a disabling problem for the affected individual. EHS has no clear diagnostic criteria and there is no scientific basis to link EHS symptoms to EMF exposure. Further, EHS is not a medical diagnosis, nor is it clear that it represents a single medical problem.

The WHO also say for Physicians: "Treatment of affected individuals should focus on the health symptoms and the clinical picture, and not on the person's perceived need for reducing or eliminating EMF in the workplace or home. This requires:

a medical evaluation to identify and treat any specific conditions that may be responsible for the symptoms,

a psychological evaluation to identify alternative psychiatric/psychological conditions that may be responsible for the symptoms,

an assessment of the workplace and home for factors that might contribute to the presented symptoms. These could include indoor air pollution, excessive noise, poor lighting (flickering light) or ergonomic factors. A reduction of stress and other improvements in the work situation might be appropriate.

For EHS individuals with long lasting symptoms and severe handicaps, therapy should be directed principally at reducing symptoms and functional handicaps. This should be done in close co-operation with a qualified medical specialist (to address the medical and psychological aspects of the symptoms) and a hygienist (to identify and, if necessary, control factors in the environment that are known to have adverse health effects of relevance to the patient).

Treatment should aim to establish an effective physician-patient relationship, help develop strategies for coping with the situation and encourage patients to return to work and lead a normal social life.”

The WHO say for Governments: Governments should provide appropriately targeted and balanced information about potential health hazards of EMF to EHS individuals, health-care professionals and employers. The information should include a clear statement that no scientific basis currently exists for a connection between EHS and exposure to EMF.”

kind regards

Letter from Safe Schools Information Technology Alliance to DECC, 22/2/12

BCM SSITA London WC 1N 3XX

www.ssita.org.uk

Rt.Hon. Edward Davey. MP
Secretary of State for Energy and Climate Change

Department of Energy & Climate Change
3 Whitehall Place
London
SW1A 2AW

Dear Secretary of State,

I write on behalf of SSITA and the organisations who have endorsed this letter. Many of these organisations have already conducted well –orchestrated campaigns on the issue of health concerns about wireless smart meters, and you will find links to a smart meter petition on many of our respective websites.

We join together here to ask the Government one question:

Who is taking responsibility for any adverse health effects from the wireless smart meters?

We write this as an open letter and wish to make you aware that this letter and your reply will be treated as such, and may therefore appear on our websites.

Different organisations within SSITA have their different emphases, but all are concerned with health effects from electromagnetic radiation. SSITA itself is primarily concerned with the issue of Wi-Fi and wireless technologies in schools and other settings in which children are cared for and educated.

We concern ourselves with issues relating to the proliferation of wireless technologies and its effect in increasing the electromagnetic overload within these settings, on both children and adults.

Some of these settings I would describe as “corner shop nurseries” and many children are cared for by day- carers in terraced housing where there may well be radiation emanating from adjacent properties. This will not give children a good start in life and the Government should be mindful of this. (This takes no account of the home environment).

We would ask you to bear in mind that the Council of Europe has asked all Member States to take measures to decrease, not increase, this electromagnetic overload within the entire environment, be it work school, home, or out and about.

We draw your attention to the fact that ICNIRP guidelines allow for special categories of people (for example those more vulnerable such as young children, the elderly, and presumably also those with electrosensitivity), to be given special consideration, and therefore we take issue with the fact that these people, or those caring for them, will be discriminated

against by having to pay higher consumer charges. This puts such people as child-minders and nursery care providers at a distinct financial disadvantage, simply in some cases by their attempt to exercise their social responsibility. Many of these businesses are struggling anyway, and now they are to be penalised if they choose a precautionary/ non-discriminatory option with regard to the children and people being cared for or working in those premises. Indeed, the Government may wish to recognise its moral obligation in taking the onus of responsibility by providing clear guidelines with regard to the best options for such premises.

Please see the link below where you will find a great deal of information:

http://www.radiationresearch.org/index.php?option=com_content&view=article&id=138%3Asmart-meters-smarter-practices-&catid=1%3Anews&Itemid=25

I particularly refer you to the report by Dr. Isaac Jamieson available on this link, and we wish to state that we support the proposition for a fibre optic alternative, as made in this document, "Smart Meters ,Smarter Practices, Solving Emerging Problems."

We formally submit a request here that non-wireless, wired, options be available for both the WAN (Wide Area Network) and the HAN (Home Area Network). Wired options could include VLC (light-based) if that technology develops sufficiently quickly in the time space available, to be practically viable.

Many of our organisations and individuals within them have written to various energy suppliers, and both they and the suppliers are aware of legal cases on this pending in Holland, and of the huge concerns that are ongoing in the United States and Canada. We attach here a list of the organisations who endorse this letter.

Yours Sincerely,

NAME REDACTED

On behalf of SSITA (Safe Schools Information Technology Alliance)

www.ssita.org.uk

Please see attached a list of organisations within SSITA endorsing this letter:

<http://wifiinschools.org.uk/>

The science behind the health concerns over wireless technologies in schools. Information about a precautionary approach, the concerns of scientists, ...

<http://wiredchild.org/>

Wired Child - Protecting Our Children from Wireless Technology.

<http://www.powerwatch.org.uk/>

Powerwatch is an independent organisation with a central role in the UK Electromagnetic Field and Microwave Radiation health debate. We work closely with ...

<http://www.cavisoc.org.uk/>

The CAVI Society seeks to safeguard children from the effects of electro-magnetic radiation in

the environments in which they spend the greatest amount of ...

<http://archive.radiationresearch.org/index.asp>

The Radiation Research Trust is an independent body that provides the facts ...

<http://www.es-uk.info/>

If you appreciate the work of ES-UK and wish to promote the charity, please feel free to print off our ES-UK flyer for distribution. ...

<http://www.starweave.com/>

Radical New Scientific Books by the Creator of Starweave HERE. Radical New Scientific Concepts HERE. "All truth passes through three stages. ...

<http://www.mast-victims.org/>

10 May 2005 ... Mobile phone masts, cell phone towers, wifi, cell phones, mobile phones and wireless are making people sick worldwide

<http://www.teamaroundthechild.com/>

30 Mar 2011 ... The home of Team Around the Child (TAC) by Interconnections, founded by Peter Limbrick in 1995.

<http://www.mobilewise.org/>

How safe are mobile phones for kids? Facts about radiation from mobiles. Staying safe: MobileWise Safe Mobile Code. Easy steps to reduce the risks. ...

<http://www.mastsanity.org>

Bio Electromagnetic Research Initiative

The Bio-Electromagnetic Research Initiative (BEMRI) has been formed to create a research portal, for the scientific community and interested members of the ..

[Microwaves - Natural Science](#)

This is why The *World Foundation for Natural Science* has been warning for ..

www.pamt.co.uk

Email from EM Radiation Research Trust to DECC, 21/3/12, titled Progressing Matters 5 - Smart Meter Health Warnings from Overseas

Very much appreciated the opportunity to meet up yesterday to discuss possible ways to optimise the UK initiative and create 'Win/Win' situations.

Would it be possible for you to forward me a copy of your presentation? I forgot to take the one you gave me yesterday and it would be useful to refer back to.

A couple of points I forgot to pick up on yesterday:

1) With regard to HAN, as many individuals who claim to be electrohypersensitive (EHS) - or simply do not wish to be exposed to raised levels of manmade electromagnetic fields - have shielded their homes against RF/microwave signals; wireless Smart Meters located within such dwellings (as most meters are in the UK) would be unable to connect to utility Home Area Networks (HAN) outdoors. Another reason alternatives are required is that many materials used to construct standard dwellings (and many commercial buildings) shield, at least in part, emissions from such units. At present, all proposals for HAN in the UK are for wireless networks, though one of these systems, M-Bus was conceived as a wired network for smart meters. The wired option is used in several European countries. Fibre-optics (plastic optical fibre) can also be used for this purpose and is easy to install.

According to 'The Worldwide Smart Grid Market in 2011: A Reality Check and Five Year Outlook Through 2015', "Nearly 3/4 of all utilities either have no plans for home area networking, or have not yet made a decision. Only 2% have already committed to a business venture, with another 12% considering such a move," (Berst 2011).

2) Powerline Communications

Forgot to ask if you were referring to PLC being used outdoors or indoors. Resistance to PLC use in the UK has come from the BBC, Civil Aviation Authority, Electromagnetic Compatibility Industry Association and The Radio Society of Great Britain, which are all extremely concerned over the possible damage PLC "would cause" to radio broadcasting and the electromagnetic environment (EMCIA 2011, Ray 2010, RSGB 2011). A report commissioned by Ofcom additionally found that PLC devices tested failed to satisfy essential requirements of the Electromagnetic EMC directive (Smith 2008).

The increased use of High speed Power Line Communication (HS-PLC) for Smart Meters may create unforeseen demands in the energy usage of shortwave broadcasters worldwide. The frequencies created by PLC are biologically active and are associated with a number of health conditions.

The following link is to a studies matrix I created a few years back for HESE-UK which gives various recommended maximum exposure limits and reported biological effects at various power densities from peer reviewed literature:
http://stakeholders.ofcom.org.uk/binaries/consultations/3Glicences/responses/CAVI_Society_attachment.pdf

As can be seen from it there are a number of guidelines suggesting public exposure levels should be substantially lower than ICNIRP's maximum exposure limits. The list of peer reviewed studies indicating biological effects at levels below those ICNIRP state may give cause for concern has steadily increased since I put together the matrix in 2007. Some of these are covered in the RRT Smart Meter document which can be accessed in full, including the Addendum I gave Peter yesterday, at the following link:

http://www.radiationresearch.org/index.php?option=com_content&view=article&id=173

As indicated in that document, there are a number of bodies who consider ICNIRP levels too high. Also research findings, such as those undertaken on Comet Assays (Adelkofer 2004), page 87 of the RRT report, provide reason for caution with regard to increasing RF/microwave exposure. As noted by ICNIRP (2002), "... *children, the elderly, and some chronically ill people might have a lower tolerance for one or more forms of [non-ionising radiation] exposure than the rest of the population.*" [Note: other Comet assay tests which found "no effect" from RF/microwave exposure used methods 10-100 times less sensitive than those shown].

On the positive side research, which again indicates that RF/microwaves can be biologically active, has shown that cancer cell proliferation can be inhibited by specific modulation frequencies:
<http://www.nature.com/bjc/journal/v106/n2/abs/bjc2011523a.html> Unfortunately, the RF/microwave emissions presently emitted by smart meters are indicated as being potentially harmful.

There are major health and liability issues to be addressed regarding the use of wireless units, not least the fact that RF/microwaves are now recognised by the WHO/IARC as a possible Class 2B carcinogen. As noted in Medscape Medical News (<http://www.medscape.com/viewarticle/743673>), "*Given the potential consequences for public health of this classification and findings, it is important that additional research be conducted Pending the availability of such information, it is important to take pragmatic measures to reduce exposure*" IARC Director Christopher Wild, PhD. [Incidentally if you wish to find out further background details about the IARC decision you can refer to the following link: <http://www.microwavenews.com/IARC.RF.Decision.html>]

Comments by experts such as the Director of IARC, and the adoption of standards advocating significantly lower levels of maximum exposure to RF/microwave radiation by other countries and provided as best practice measures, would seem to indicate the need for precaution and to strongly reassess the type of meter that should be specified, as mistakes, both financially and to national wellbeing (regardless of well intentioned they are) could be very difficult to rectify - *there is no room for complacency over this matter*. As an example, from abroad of such concern, the Division of Ratepayer Advocates (DRA) of the California Public Utilities Commission state that "*Unless the public's concerns can be put to rest, there is a very great risk that Smart Meter deployment will turn out to be a \$2.2 billion mistake that ratepayers can ill afford*". (At present 50 local Governments in California have said no to smart meters).

It may be prudent to take on board precautionary principle measures - as documented in the RRT report. The unintended consequences of some roll outs could add so much to the real costs of the programs to national economies that they may make them financially unviable even if they achieve their stated goals. Taking on board best practice measures, and reassessing the situation in this light, could turn the whole

situation around.

The Precautionary Principle - "*The precautionary principle applies where scientific evidence is insufficient, inconclusive or uncertain and preliminary scientific evaluation indicates that there are reasonable grounds for concern ...*" European Commission Communication on the Precautionary Principle 2nd February 2000.

Independent assessments of potential health effects from exposure to smart meters and related smart appliances before their possible wide scale adoption, particularly with at risk members of the population (including children, the elderly and those with EHS) would seem wise. There is growing anecdotal evidence from a number of countries that quite severe health effects are being experienced by individuals as a result of the roll outs (http://www.radiationresearch.org/images/Documents/115-123_SM_Smart_Meter_Health_Impacts_Testimonials_0120130.pdf). You may also wish to refer to Appendix 1 of the RRT report (http://www.radiationresearch.org/images/Documents/208-208_SM_Appendix_1_Health_Smart_Meter_safety_survey_0120130.pdf) which shows the results of an online survey of experienced health impacts from smart meters (even before smart appliances come in to general usage which would further increase RF/microwave exposure and likely occurrence of detrimental health impacts).

"Good health is a major resource for social, economic and personal development and an important dimension of quality of life. Political, economic, social, cultural, environmental, behavioural and biological factors can all favour health or be harmful to it. Health promotion action aims at making these conditions favourable through advocacy for health." Ottawa Charter for Health Promotion - International Agreement signed in 1986.

As previously mentioned, the number of people suffering from EHS in the UK may be presently around 6% - *significantly greater than the number of UK wheelchair users* - and it is likely that this figure would rise with the proliferation of RF/microwave radiation that the mass introduction of wireless smart meters using present technology would cause. It appears prudent to take this factor into account (and the possible cost to the national economy of other health related issues that may be exacerbated through experiencing increased RF/microwave exposures) when making decisions on the metering systems proposed.

It is worth noting that some individuals abroad have been forced out of their homes, or from using parts of their homes, as a result of smart meter radiation. Some individuals in the UK have also been forced to move home as a result of increased RF/microwave exposure. This, along with other health issues, raises a whole set of potentially costly Human Rights issues that might be avoided if the right choices are made early enough in proceedings.

There is much we can learn from the errors and successes of others implementing smart meter programs abroad and by taking in consideration further factors, such as EMP and cyber security risks at an early stage. There are a number of measures which can be taken on board to achieve such aims which could if handled correctly further improve streams of

revenue for UK plc whilst safeguarding National security and public wellbeing.

Hope this feedback helps. As previously mentioned, if you would like assistance in compiling a more detailed report on the best ways to progress to optimise outcomes for this quite complex subject area, I am available on a consultancy basis.

Best wishes

Email from EM Radiation Research Trust to DECC, 23/3/12, titled Progressing Matters 5 - Smart Meter Health Warnings from Overseas

As mentioned in my previous email, shown below, could you possibly send me a copy of the PowerPoint you went through during our meeting? Thanks!

Also thought you, NAME REDACTED, NAME REDACTED and the rest of the team would find the following of interest as related to smart gas meters. The link: <http://www.navetas.com/products/showcase/smart-gas-index/> (the text for which is shown below) is to Navetas Energy Management who have a fibre-optic connection for such units. Thought this would be of interest to your team as it can get round the problem of RF/microwave emissions. If there is any reason why such a system could not be used please let me know.

Feedback on other matters also appreciated.

Best wishes to all,

Smart Gas Index

One of the main challenges that smart gas meter manufacturers have is how to access the consumption readings from the meter regularly as it is not possible to power a gas meter directly as it would be a major hazard and therefore it is necessary to rely on battery power only.

The Navetas Smart Gas Index is a low cost solution to delivering Smart Gas Meters that solves this problem through using low power, intrinsically safe two way communications through precision fibre optic cable.

The Navetas Smart Gas Index is compatible with and can be fitted to standard diaphragm gas meters that are currently fitted in consumers' homes across Europe.

The Smart Index can be fitted to new or refurbished gas diaphragm meters and is compatible with leading brands such as GWi and Itron diaphragm gas meters. Factory refurbishment of existing basic gas meters to smart meters could generate

significant financial and environmental cost savings, enabling the re-use of existing assets.
The Navetas Smart Gas Index measures the instantaneous gas flow, supports load profiling and enables load management and prepayment applications through the operation of an optional internal valve.

Email from EM Radiation Research Trust to DECC, 27/3/12, titled Progressing Matters 5 - Smart Meter Health Warnings from Overseas

Would appreciate if you could get back to me on the matters I raised in my previous two emails.

Also thought you would be interested in taking the following, which gives a rough indication on the possible additional energy costs use that may arise with the use of PLC.

The increased use of High speed Power Line Communication (HS-PLC) for Smart Meters may create unforeseen demands in the energy usage of shortwave broadcasters worldwide.

Marshall (2010) predicts that in order to match these additional power requirements worldwide “Each year this would require the installation of a further electrical generation resource equivalent to some 30,000 wind turbines!” Extract from RRT document.

Reference

Marshall, R. (2010), Environmental Effects of the widespread deployment of high speed Power Line Communication Cumulative Effects on Signal/Noise ratio for Radio Systems, The EMC Journal, Issue 87, pp. 33-41.

Best wishes,

Email from DECC to EM Radiation Research Trust, 27/3/12, titled Progressing Matters 5 - Smart Meter Health Warnings from Overseas

Note: the attachment referred to below is Attachment 12

Thank you for your emails and the links – and sorry I haven’t responded sooner, I’ve been out of the office for a couple of

days.

Thank you for your thoughts below, and for coming to see us. It was useful to get your input and I hope you found it useful as well.

I'm attaching the presentation, though I would ask that you don't publish this or pass it on, as it was developed for use at the workshop (which was held under Chatham House rules) and clearly the presentation of the material and the discussions around it are important – we are keen that the information isn't used out of context. I hope this is ok, and you're happy to keep it for your own personal use.

On the HAN, we are looking at wired options as well as wireless. Whilst most of the smart metering kit being installed now is using wireless technology, this is being done ahead of the technical specifications being published for compliant smart meters, and ahead of decisions on the HAN technology.

When I talk about PLC, I generally mean external / WAN use. I tend to use "wired solution" for comms within the house, and this might be PLC or other wired solutions.

Thank you for your other thoughts too on the IARC and ICNIRP. We work closely with the Department of Health and the Health Protection Agency for their guidance on these issues, as they are the experts for the UK government and set the policies in this area. They continually review the evidence in this area and we are in close contact with them.

Once again, thank you for your thoughts, and we'll be in touch as the programme develops.

Email from EM Radiation Research Trust to DECC, 27/3/12, titled Progressing Matters 5 - Smart Meter Health Warnings from Overseas

Many thanks for getting back to me, much appreciated.

Will keep keep to the Chatham House Rule. It will be useful going through the presentation again to see if it brings up anything else that may be of use to us in future discussions we have.

Incidentally, any thoughts on the possible use of fibre-optics for smart gas meters using a system similar to the one I emailed?

Look forward to receiving further feedback on other areas too, including the RRT Report, if/when you have the time.

Very aware of the HPA's views on the potential health effects of RF/microwave radiation and also the potential cost to the national economy if those views are incorrect or my views are incorrect!

Best wishes,

Email from DECC to EM Radiation Research Trust, 27/3/12, titled Progressing Matters 5 - Smart Meter Health Warnings from Overseas

Thanks

I passed on your email with the thoughts about fibre optics to NAME REDACTED for consideration alongside the on-going development of the technical specifications.

Email from EM Radiation Research Trust to DECC, 27/3/12, titled Progressing Matters 5 - Smart Meter Health Warnings from Overseas

Some more information, just received, this time on health concerns from overseas related to smart meters.

Best wishes,

American Academy of Environmental Medicine (AAEM) Issue Stern Warning on Biological and Health Effects from Electromagnetic Field Exposures

In its new report, "Electromagnetic and Radiofrequency Fields Effect on Human Health," AAEM is calling for:

1. An immediate caution on Smart Meter installation due to potentially harmful RF exposure.
2. Accommodation for health considerations regarding EMF and RF exposure, including exposure to wireless Smart Meter technology.
3. Independent studies to further understand the health effects from EMF and RF exposure.
4. Recognition that electromagnetic hypersensitivity is a growing problem worldwide.
5. Understanding and control of this electrical environmental bombardment for the protection of society.

6. Consideration and independent research regarding the quantum effects of EMF and RF on human health.
7. Use of safer technology, including for Smart Meters, such as hard-wiring, fiber optics or other non-harmful methods of data transmission.

For further details: http://aaemonline.org/emf_rf_position.html

Austrian Medical Association Objects to Smart Meter Rollout

The Austrian Chamber of Physicians is calling for a reconsideration or suspension of “the planned timetable of the mandatory introduction of ‘smart meters’” in Austria, “pending clarification and solution of open questions.”

“The Austrian Chamber of Physicians strictly rejects another, in this case actually state-mandated, expansion of the electrosmog exposure on the Austrian population.”

“The expected health consequences would be an increase in symptoms and diseases that fall into the category of so-called multi-system diseases. This illness is characterized by involving several organs or functional systems at the same time and in interaction.”

I have attached translated copies of the AMA Press release of February 2012 and the earlier letter by the Austrian Chamber of Physicians to the Austrian Federal Ministry for Economics, Family and Youth from January 2012.

Attachment 5
Attachment 6

Letter from DECC to Safe Schools Information Technology Alliance, 2/5/12,

Our ref: TO2012/03537/KH

Thank you for your e-mail dated 22 February, about smart meters in schools and care settings. I have been asked to reply and I sincerely apologise for the delay in doing so.

I understand you took part in a DECC and Consumer Focus-organised joint workshop on 23 February 2012 to discuss the smart meters programme in Great Britain and to understand better the health concerns that a number of groups have expressed. I hope that you found the workshop helpful, and that other groups who were there – including many who have endorsed your letter – also found the day informative and constructive.

The Government is requiring energy companies to install smart meters for their customers, and is setting out rules to ensure that they do this in a way that is in the interests of consumers, including rules around privacy and data access, security, technical standards for the smart metering equipment, and meeting the needs of vulnerable consumers.

The roll out of smart meters by energy suppliers in Great Britain will take place in two phases. The first is 'foundation' stage which began in April 2011. During this stage Government is working with industry, consumer groups and other stakeholders to ensure all the necessary groundwork is completed in preparation for mass roll-out. As a part of this, some suppliers are starting to offer smart-type meters to their customers.

The Government expects the mass roll-out to start in 2014 and to be completed in 2019. Smart meters will play a crucial role in delivering a low carbon economy. The roll out of smart meters will deliver £7.2bn net benefits to consumers, energy suppliers and networks. Domestic customers will be provided with near real-time information on energy consumption via their smart meter and in-home display, enabling them to monitor and manage their energy consumption, save money and reduce carbon emissions. Bills will be accurate and switching between suppliers will be smoother and faster. New products and services will be supported in a vibrant, competitive, more efficient market in energy and energy management.

While smart metering brings significant benefits, it will not be a legal obligation for a householder to have one. We have also made it clear that we do not expect suppliers to take legal action to fit a smart meter if they cannot get the householder's co-operation.

As was discussed at the workshop, for any large scale rollout of a new technology, we do recognise the importance of considering the potential short and long term health risks and are drawing on expert advice in making our decisions.

At the moment, communications technology solutions have not been selected for the national smart metering system. The Government has published its conclusions regarding the smart metering equipment technical specification (SMETS), and an initial version of the SMETS has been developed to deliver key functionalities. However this did not cover the technologies by which communicate within the home and outside the home, where work is ongoing. Both wired and wireless technologies exist that could be used and, for practical and technical reasons, both wireless and wired solutions will need to be utilised by installers during the roll out. We plan to consult in the summer on further areas to be included in SMETS, which will include the communications technology to be used in the home. We expect final decisions on both the communications used within the household, and those used between the household and the energy suppliers, to be made in 2013.

Where telecommunications technologies are used in deploying smart meters they will have to comply with relevant regulations and international standards as set out by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). The ICNIRP guidelines are based on a critical in-depth evaluation of the established scientific literature and represent the international consensus about this evidence. They were endorsed by the European Commission in Council

Recommendation 1999/519/EC, which can be found at: http://ec.europa.eu/enterprise/sectors/electrical/files/lv/rec519_en.pdf.

In 2009 the ICNIRP published both an evidence review, and updated and reconfirmed its guidance. Further information can be found at: <http://www.icnirp.de/PubEMF.htm>.

As you would expect, we have worked with the Department of Health and the Health Protection Agency (HPA) during the development of the programme to date. We continue to liaise with them to ensure we act in line with the best information and guidance, and to keep the latest evidence under review.

We recognise that there will be some customers who will continue to have concerns about receiving a smart meter, including people with concerns about electro-magnetic sensitivity. As the programme develops, we will be considering further, together with the energy companies who will be responsible for the roll-out, how best to respond to these individual concerns.

Yours sincerely,

DECC Correspondence Unit

Email from DECC to HPA, 23/5/12, titled new HPA document on health effects and EMFs

I've just been alerted to the new report of AGNIR, that was published in April.

We've seen the relevant section on smart meters (thank you for including some text on this), and just wanted to make sure that you were happy for us to quote from the report, and to provide a link to it as part of our standard lines in the future? It looks like a really useful report, and the House of Commons Library Briefing note has already made reference to it in its briefing on smart meters.

It would be really useful if you could let us know if you're publishing anything similar in the future, so that we can make sure it's reflected in our briefing material too.

Many thanks

Email from HPA to DECC, 23/5/12, titled: RE: new HPA document on health effects and EMFs

My apologies for not informing you personally about this. The report is the culmination of a large amount of work and should

be quoted from. It is important to describe the report as from an independent expert group that reports to the HPA, rather than as HPA report per se. It is also important to refer to and quote the HPA response, as here.

http://www.hpa.org.uk/Publications/Radiation/HPAResponseStatementsOnRadiationTopics/radresp_AGNIR2012/

Regards

Email from DECC to attendees of a workshop, including Department of Health, HPA and health campaign groups, 25/5/12

Thank you for attending the recent stakeholder workshop jointly organised by DECC and Consumer Focus to discuss 'health concerns related to electromagnetic fields emitted by smart metering technologies'. We appreciated your participation in what we felt was a constructive and informative discussion.

Attached are the following documents from the meeting:

- 1) Presentations from the morning sessions:
 - a. DECC
 - b. Consumer Focus
 - c. Health Protection Agency
 - d. Powerwatch (presentation and additional note)
 - e. Radiation Research Trust/Electrosensitivity UK

- 2) Summary of the afternoon discussion session

We would ask you please to treat these presentations in the spirit in which they were delivered: as part of a series of presentations held under Chatham House rules to promote and facilitate discussion and understanding.

DECC and Consumer Focus hope that you will continue to engage with us during the on-going development of the smart meters programme and if you have any questions, or would like any further information, then please do get in touch.

Kind regards

Attachment 7

Attachment 8

Attachment 9

Attachment 10

Attachment 11

Attachment 12

Attachment 13

Email from Department of Health to DECC, 14/6/12, titled: Canadian Open Letter in Support of Smart Meters-links to DECC

I am writing on behalf of SMART meter Department of Health contacts NAME REDACTED and NAME REDACTED. You may be interested to note that as the Energy Board in Quebec considers plans to install smart meters throughout the province, a group of Canadian scientists has issued an open letter in support of smart meter technology. See link

http://www.polymtl.ca/phys/doc/Lettre_ouverte_de_scientifiques_quebecois_les_compteurs_intelligents.pdf

I hope this is helpful.

Kind regards

Email from DECC to Department of Health and HPA, 20/6/12, titled: Subject: 08-06-2012, Contribution Request for TO2012/08823

I've been passed your details by NAME REDACTED from the Smart Metering Implementation programme at DECC. We recently received a piece of correspondence from an electromagnetic sensitivity sufferer, and she referred us onto a book titled 'Electro Sensitivity and Electro Hypersensitivity – A Summary' by Michael Bevington. In our response we promised to send a reference to the book onto your respective departments, so please find attached a link to the book and a copy of our response.

http://www.es-uk.info/news/20100415_es_and_ehs.asp

Best regards,

Explanatory note: Michael Bevington is named here as a published author. He is not a staff member of the Department's involved in this correspondence.

Email from DECC to HPA, 25/6/12, titled: smart meter testing - evidence base

Hope all is well with you.

Please find attached the reply from the meter manufacturers with respect to testing they currently undertake and how they communicate the results.

Attachment 14

Email from HPA to DECC, 27/6/12, titled: smart meter testing - evidence base

Thanks for sharing this document. It is good that industry is planning to show compliance with EN62311, which includes the Council Recommendations as a normative reference.

I can share some good news in that my team is in the process of securing funding for a 2.5 year project to investigate the exposures associated with smart metering systems. It would be good to meet with DECC after the summer for discussions on accessing the technical information available and how best to get in contact with manufacturers with a view to obtaining some samples of smart meter devices, ideally programmed to operate at maximum output capacity.

The aim would be that the project results can feed into advice on the HPA website, much like our work on Wi-Fi did (see link at the bottom of this page:
<http://www.hpa.org.uk/Topics/Radiation/UnderstandingRadiation/UnderstandingRadiationTopics/ElectromagneticFields/WiFi/>).

The key contacts for the smart meters project will be NAME REDACTED, who leads the EMF Dosimetry Group and NAME REDACTED who will be the project officer.

HPA is aware of the following reports on smart meter systems:

Maine CDC (Center for Disease Control and Prevention) (2010). Executive summary of review of health issues related to smart meters. Available at www.maine.gov/dhhs/boh/smart_meters.shtml

EPRI (Electric Power Research Institute) (2010). An Investigation of Radiofrequency Fields Associated with the

Itron Smart Meter. Available at http://my.epri.com/portal/server.pt?Abstract_id=00000000001021126

CCST (California Council on Science and Technology) (2011). Health Impacts of Radio Frequency from Smart Meters. Available at www.ccst.us/publications/2011/2011smartA.pdf

AMI Meter Electromagnetic Field Survey

<http://www.dpi.vic.gov.au/smart-meters/publications/reports-and-consultations/ami-meter-em-field-survey-repor>

We may be able to consider banks of meters in the project

Regards

Email from DECC to HPA, 28/6/12, titled: Subject: Contribution Request for TO2012/10071

We've received the attached correspondence questioning the impartiality of the ICNIRP guidelines. Grateful if you could supply lines on the funding links for the ICNIRP and any other points you feel necessary.

Copying to DoH colleagues for info.

Regards,

From: [correspondence@decc.gsi.gov.uk] NAME REDACTED **Sent:** 26 June 2012 11:26

To: NAME REDACTED (Fuel Poverty & Smart Meters)

Cc: TO2012/10071/CON1@itportal.decc.gsi.gov.uk

Subject: Due: 03-07-2012, Contribution Request for TO2012/10071

You are being asked to make a contribution to a correspondence case.

This is a follow up to the letter pasted below, in which the correspondence questions the consultation into the health effects of wireless technology. Please could you advise if there's anything further to add?

thanks

In your letter you ask whether we will be consulting with people who have concerns about the potential health impacts of smart meters. We have received responses to consultation documents on the smart meters programme from individuals and organisations on health issues, including Electrosensitivity UK, the Bio-electromagnetic Research Institute, and the Health Protection Agency. In addition, we are currently working with Consumer Focus on a workshop to understand the issues further, and this session will include representatives from a range of interested groups.

Over the coming year we will be launching a number of consultations that cover parts of the Smart Meter Programme that may be of interest to you. All of our consultations are open to responses from members of the public.

In looking at the issues you have raised we have consulted with the Department of Health, as they keep the evidence base on these issues constantly under review, looking at all sources, nationally and internationally. ICNIRP also keeps the science under review and we understand that, as part of a regular cycle, it will be reviewing its guidelines on limiting radiofrequency exposure for the general public and occupational groups.

As you will know from the initial letter you received from DECC, at the moment communications technology solutions have not been selected for the national smart metering system and we are consulting on the detailed technical specification for the smart meter. Both wired and wireless technologies exist that could be used and, for practical and technical reasons, both wireless and wired solutions will need to be utilised by installers during the roll out. We expect decisions on both the communications used within the household, and those used between the household and the energy suppliers, to be made in 2013.

In making these decisions, we will need to comply with the relevant regulations and international standards as set out by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) as mentioned in our previous correspondence.

Smart meters will be rolled out as standard across the country by 2019, but it will not be a legal obligation on individuals to have one. The roll-out of smart meters is an important national modernisation programme which will bring significant benefits to consumers and the nation. We expect consumers to welcome the benefits smart meters will bring.

As in our previous letter, we are continuing to consider how best to respond to individual concerns, as well as to a range of other issues, such as those related to installing meters in multi-occupancy dwellings.

Please reply via email by 03-07-2012.

Correspondence Unit

Note: the letter attached to this email is out of scope as it does not refer to smart meters.

Email from HPA to DECC, 28/6/12, titled: Contribution Request for TO2012/10071

The paragraphs below may be of assistance. Please can we receive a copy of the final reply.
Regards

The International Commission on Non-Ionizing Radiation Protection (ICNIRP) is an independent scientific organisation formally recognised by the World Health Organisation. HPA is not involved with ICNIRP's finances, but funding is addressed on the ICNIRP website (<http://www.icnirp.org/what.htm>) in the following manner. In particular, there are clear statements that its income does not come from industry.

"ICNIRP is a non-profit making organisation and is legally registered as such in Germany. All its modest income is used to offset the year-on-year costs of its various activities including carrying out its scientific programme, organising scientific meetings and producing scientific publications. Its income derives from various sources with the exception of industry. In the same way that individual ICNIRP Commission members cannot be employed by industry, ICNIRP as an organisation does not accept funding from industry. The regular income that ICNIRP receives is an annual grant from IRPA. It also receives support from national governments, most notably from the German Environment Ministry for ICNIRP's Scientific Secretariat based in Munich. All other income is generated by the Commission through contract work (to the exclusion of any work for industry), organisation of scientific meetings and sales of its scientific publications. Currently, ICNIRP's contract income comes from contracts placed by various organisations including, the European Commission, EC, the WHO (contract to carry out scientific reviews of the epidemiology, biology and physics and engineering aspects of exposure to extremely low frequency electric and magnetic fields). ICNIRP also receives income from the sales of its publications that defray some of the cost of producing these. ICNIRP members are not paid for their work for the Commission - it is entirely voluntary. Only travel and necessary costs for attendance at meetings are reimbursed to members."

Within the UK, the Health Protection Agency (HPA) advises on the public health aspects of exposure to electromagnetic fields (EMFs), including standards of protection for the general population and measures that should be taken to protect sensitive groups. The HPA advises that exposures to EMFs should comply with the guidelines published by ICNIRP and the government supports this advice in the terms of a 1999 EU Council Recommendation. In the particular case of mobile phones, which can produce exposures approaching the ICNIRP levels, a precautionary approach is advised, including that

children should be discouraged from non-essential use. In the case of other devices that produce exposures much lower than those from mobile phones, HPA considers that community or individual measures to reduce exposures are not necessary.

The Advisory Group on Non-ionising Radiation (AGNIR) is an independent expert group that reports to the Health Protection Agency and which has the remit to review work on the biological effects of non-ionising radiation relevant to human health and to advise on research priorities. AGNIR has recently undertaken a comprehensive review of the scientific evidence relevant to health effects from exposure to radiofrequency EMFs and this was published by the HPA at the end of April. AGNIR's main conclusion was that, although a substantial amount of research has been conducted in this area, there is no convincing evidence that RF field exposures below guideline levels cause health effects in adults or children. The report is available here:

<http://www.hpa.org.uk/Publications/Radiation/DocumentsOfTheHPA/RCE20HealthEffectsfromRFElectromagneticFields/>

AGNIR made specific mention of smart meters in its report (page 55) and referred to evidence regarding exposure levels contained in three reports from the USA. These reports found exposures well within guideline levels, even if meters were to malfunction and transmit constantly. The details of the technology to be deployed in the UK are not yet known but, given the low output power of typical devices, AGNIR did not expect that people's exposure will exceed the ICNIRP restrictions.

SOME STATEMENT HERE ABOUT WHAT DECC IS DOING TO ENSURE EXPOSURES ARE WITHIN GUIDELINES WITH THE UK SYSTEMS??

In between the publication of formal reviews, the HPA monitors emerging scientific studies covering all electromagnetic frequencies and health, including those relevant to smart meters, and keeps its advice under review.

SOME STATEMENT ABOUT HOW DECC WILL TAKE ANY FUTURE HPA ADVICE INTO ACCOUNT IN MOVING FORWARD??

Email from HPA to DECC, 10/7/12, titled: smart meter testing - evidence base

Thank you for this message. My colleagues and I agree that it will be important to develop and promulgate appropriate communications lines to describe the scope and rationale for this work so that the most probable questions can be answered suitably and consistently. This was done with the HPA Wi-Fi in Schools project, where there were similar concerns about mixed messages/unintended consequences. We should discuss these matters when I am in London on the morning of 24 July. Until then, the following answers to your questions may help.

HPA has ongoing programmes of research and horizon scanning to evaluate and identify technologies likely to cause

exposures, health effects and/or concern to the general population. One such programme addresses exposures to electromagnetic fields (power frequencies and radio frequencies). Smart meters were identified as a priority for research in January 2010 following introductory discussions with DECC on the roll-out plans. We began thinking in more detail about what work could usefully be done in the following autumn when it was becoming clear from experiences elsewhere that the roll-out of meters was likely to lead to expressions of concern about possible health effects and that there would be a need for relevant exposure data to be gathered as part of addressing these concerns.

The possibility of a research project and our attempts to find a source of funding, were also discussed at a joint meeting with DECC (NAME REDACTED and NAME REDACTED) in January 2012. We have been seeking opportunities to fund the research since then and in June this year this was one of a number of projects that secured funding from HPA's Strategic R&D Fund.

The smart meter work also carries forward the following recommendation from the independent Advisory Group on Non-ionising Radiation (AGNIR) in its 2012 report on Health Effects from Radiofrequency Electromagnetic Fields:

Emphasis should be placed on studies into the characteristics, exposures and dosimetry associated with new and emerging radiofrequency (RF) technologies, especially those to which the public are likely to be exposed, such as smart meters and airport security scanners.

The AGNIR report is here (see page 321):

<http://www.hpa.org.uk/Publications/Radiation/DocumentsOfTheHPA/RCE20HealthEffectsfromRFElectromagneticFields/>

The main aim of the project is to assess the contribution to personal radiofrequency electromagnetic field exposure arising from smart meter signals and compare this with the appropriate ICNIRP guideline values for limiting exposure as well as with contributions to exposure from other familiar telecommunication sources such as mobile phones, Wi-Fi devices, and mobile phone base stations.

The fine details of the project are still being finalised but the broad plan is follow the model of the HPA Wi-Fi in Schools project. The project is planned over 2.5 years as it is scoped to include measurements of field strength around selected devices in controlled laboratory environment as well as on-site measurements in selected houses/ premises (assuming this is possible). My colleagues NAME REDACTED and NAME REDACTED will be happy to meet with DECC to explain further details of the project and seek your input on how best to access the technical information and samples of meters that are available from the manufacturers. They will be in touch, but also feel free to contact them.

As with smart meters, from the outset of the Wi-Fi project it was possible to estimate, based on calculation, that exposure levels would be small. However, quantifying exposure through measurement made it much easier to communicate HPA's

advice. A position statement was placed on the HPA website at the beginning of the work and project results were added to the webpage as they were finalised, ultimately, validating the original position statement.

The Wi-Fi project was announced by way of a press release in 2007, which contained important initial communications lines:
http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1254510322363 (see pages 146 and 147)

There was a further press release in 2009 when the first results from the project were published:
<http://www.hpa.org.uk/NewsCentre/NationalPressReleases/2009PressReleases/090915WiFiemissions/>

I am not sure the level of public concern about smart meters would merit such an approach with smart meters in the UK at this point in time. Nevertheless, the option of press releases could be kept open.

The position statement and the Wi-Fi project data are here:
<http://www.hpa.org.uk/Topics/Radiation/UnderstandingRadiation/UnderstandingRadiationTopics/ElectromagneticFields/WiFi/>
Even in the absence of a press release, there will need to be a position statement on the HPA website that sets out key communications lines and the expected situation with respect to exposures and health effects. Appropriate timing and content of such a position statement is something we should discuss.

I look forward to meeting with you on 24 July.

Best Regards

Email from HPA to DECC, 26/7/12

Note: a number of identical emails were received as part of the campaign referred to below. The standard text from these emails is included as Attachment 15

As mentioned when we met the other day, HPA's NAME REDACTED NAME REDACTED is receiving multiple identical e-mails about smart meters as part of a campaign, which seems to be orchestrated through this website.
<http://stopsmartmeters.org.uk/dont-smart-meter-me-notice-of-non-consent-for-smart-meter-installation/>

The most practical way for HPA to respond to the e-mails is to place an information sheet about smart meters on its website that sets out its position. I have attached this information sheet, which will be placed at the location below among other information sheets about electromagnetic fields.
<http://www.hpa.org.uk/Topics/Radiation/UnderstandingRadiation/UnderstandingRadiationTopics/ElectromagneticFields/>

In previous responses to DECC consultations, HPA has advised “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.” On the basis of the answers BEAMA has recently provided to questions from DECC it seems that this has happened.

The information sheet includes a recommendation that “exposures from smart meters should be assessed and be made available as part of routine product information”, which is broadly how HPA would respond to questions about exposures from any product on the market. Reference to a harmonised standard drawing on the ICNIRP restriction values, as in the EU Council Recommendation, and any measures necessary during installation to ensure compliance would satisfy this HPA advice.

The information sheet has been approved internally and the words it uses are those of HPA. Nevertheless, it would be helpful to know if there are any “show stoppers” before this is published. This e-mail is copied to radiation team at the Department of Health.

I will be on leave for two weeks from this weekend and it would be best to communicate with NAME REDACTED from the HPA Comms Team during my absence. NAME REDACTED will know when it is going to be published and this will not be before next Tuesday.

Best Regards

Email from Department of Health to DECC, 16/8/12, titled: Contribution Request for TO2012/09547

Your draft is fine and covers HPA advice. The HPA's website advice on smart meters and EMF mentions the following under the heading "Are some people sensitive to radio waves?" in relation to electrosensitivity and this is what we would base a reply on.

"Some people report real and unpleasant symptoms that they attribute to exposure to radio waves. Considerable effort has been put into investigating this topic rigorously in recent years with research programmes funded by the government and academic bodies. The results of these studies have been published in the scientific literature.

The HPA's independent Advisory Group on Non-ionising Radiation (AGNIR) prepared a review of health effects from radio waves that was published in 2012. This included a chapter on the evidence for sensitivity to radio waves. AGNIR concluded

there is accumulating evidence that radio wave exposures below guideline levels do not cause symptoms and cannot be detected by people, even those who consider themselves sensitive to radio waves.

This conclusion does not belittle the importance of the symptoms that people experience, but it does suggest causes other than those directly related to radio waves should be considered. HPA published [a review of the public health aspects of electrical sensitivity](#) in 2005 which included comments on the management of affected individuals and evaluation of treatment options."

I hope this helps
kind regards

Smart Meters - Publicly Available Information

The department holds relevant information which is already in the public domain (e.g. consultations, published responses to consultations etc.). The table below provides details of these and where they are located.

Consultations / Other Published Documents	Date of Publication
Smart Metering Implementation Programme Consumer Advisory Group – meeting papers http://www.decc.gov.uk/en/content/cms/tackling/smart_meters/industry/cons_advisory/cons_advisory.aspx	Various 2011 – 2012
Smart Metering Implementation Programme Consumer Engagement & Rollout Group – Meeting Papers http://www.decc.gov.uk/en/content/cms/tackling/smart_meters/industry/cons_engage/cons_engage.aspx	Various 2011 – 2012
Open letter from Secretary of State to the “Stop Smart Meters!” Campaign http://www.decc.gov.uk/en/content/cms/about/contact_us/sos_campaigns/ed_resp_stopsm/ed_resp_stopsm.aspx	August 2012
Report on Quantitative Research into Public Attitudes to Smart Meters http://www.decc.gov.uk/assets/decc/11/tackling-climate-change/smart-meters/6194-quantitative-research-into-public-awareness-attit.pdf	21/8/12
Smart Meters: Research into Public Attitudes? http://www.decc.gov.uk/assets/decc/11/tackling-climate-change/smart-meters/5424-smart-meters-research-public-attitudes.pdf	30/5/12
Second version of smart metering equipment specifications http://www.decc.gov.uk/en/content/cms/consultations/smets2cons/smets2cons.aspx	13/8/12
Consumer engagement strategy http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx#	5/4/12
Data access and privacy http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx#	5/4/12
Impact Assessment – domestic sector http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx#	5/4/12
Impact Assessment – non-domestic sector http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx#	5/4/12

Detailed design policy of the regulatory and commercial framework for DCC http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx#	29/11/11
Draft licence conditions and technical specifications for rollout – Govt Response http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx#	5/4/12
Draft licence conditions and technical specifications for rollout http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx# Responses from: <ul style="list-style-type: none"> - Private individual - Health Protection Agency 	18/8/11
Draft Licence Conditions for Installation Code of Practice http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx#	18/8/11
Prospectus – Govt Response http://www.decc.gov.uk/en/content/cms/consultations/smart_mtr_imp/smart_mtr_imp.aspx	30/3/11
Prospectus – Govt Response <ul style="list-style-type: none"> - Impact assessment – Domestic (url as above)	30/3/11
Prospectus – Govt Response <ul style="list-style-type: none"> - Impact assessment Non-Domestic (url as above)	30/3/11
Prospectus – Govt Response <ul style="list-style-type: none"> - Design Requirements (url as above)	30/3/11
Prospectus – Govt Response <ul style="list-style-type: none"> - Implementation Plan (url as above)	30/3/11
Application for Justification of a smart gas meter (the decision that this is not a Justified practice is also available on the website). http://www.decc.gov.uk/en/content/cms/meeting_energy/nuclear/radioactivity/decc/Justifidegislation/justification/justification.aspx	8/11/10
Prospectus (url as above) Responses from:	27/7/10

<ul style="list-style-type: none"> • 5 responses from private individuals referring to EMF. • Bio Electromagnetic Research Initiative • Energy Action Scotland • Electrosensitivity UK • Health Protection Agency • Powerwatch 	
Prospectus - Impact assessment – Domestic (url as above)	27/7/10
Prospectus - Impact assessment – Non-Domestic (url as above)	27/7/10
Prospectus - Consumer Protection (url as above)	27/7/10
Consumers' Views of Smart Metering – Report by FDS International http://www.decc.gov.uk/assets/decc/Consultations/smart-meter-imp-prospectus/227-consumer-views-smart-metering.pdf	27/7/10

