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Re: SMETS Consultation

To whom it may concern,

Please find below my responses to the consultation.

Yours sincerely,

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No.	Answer.	Comment.
1.	Yes.	<p>Although there has been extensive research into the radio bands have the initial issues from the Ofcom Consultation document May 2002 been resolved? For example, Point 4.5 states 169 MHz, in May 2002, is unavailable on a European-wide basis. I ask whether this will impact upon energy supplies to homes. Also will it require energy suppliers to have offices within UK mainland to ensure accurate remote reading of SMART Meters occurs? 433 MHz is shortwave, and 868 MHz is used for outdoor monitoring of things such as habitats and battlefields, is short-range and can pick-up sound according to Molina-Garcia-Pardo et al. However why would either be used as antennas are necessary? The use of antennas could be subject to power-outages during lightening storms or the antenna could be blown off during gales if they are fitted on roof tops. Having antenna fitted upon rooftops would result in an increase of working at height and confined spaces during fitting and maintenance of SMART Meters unless they could be placed elsewhere yet in places unlikely to be vandalized.</p> <p>To pick-up short-range transmissions are lampposts be used as receivers or trees or mobile phone poles? These can be accessed used cherry-pickers and such like therefore reduce the likelihood of working-at-height and in confined spaces in people's gardens. They can further reduce accidents because of their safety features such as cages. In addition although 868 MHz proffers additional security once accessed legally using court orders and so forth when requiring evidence for incidents, this aspect could disfavour SMART Meters with the general public if not publicised with care. I would suggest publicizing it because of the Consumer Rights Directive (2011/83/EU) and for wildlife crime prevention and using the Anti-Social Behaviour Reduction Unit as these have enforceable powers and are able to be used as witnesses where necessary.</p>

		<p>You give in Option Approaches 1, 2, and 3 868 MHz is to be used. However there is no framework in place if 868 MHz is not used. What is the systematic approach to choosing which frequency is the preferred option should this be questioned in a court of law?</p> <p>References: European Commission (2012) <i>The Directive on Consumer Rights</i>. Available from: http://ec.europa.eu/justice/consumer-marketing/rights-contracts/directive/index_en.htm House of Commons (July 2012) <i>Corrected transcript of oral evidence: HC 140-iii. Wildlife Crime: Examination of Witnesses</i>. Molina-Garcia-Pardo, J. M., A. Martinez-Sala, M.V. Bueno-Delgado, E.Egea-Lopez, L. Juan-Llacer & J. Garcia-Haro. (No date). <i>Channel Model at 868 MHz for Wireless Sensor Networks in Outdoor Scenarios</i>, pages 1-3. Ofcom (May 2002) <i>The future use of 169MHz Band</i>, page 5.</p>
2.	Yes.	
3.	Yes.	
4.	Yes.	
5.		<p>Because of the recent eavesdropping court case in the UK I remain unsure whether this is the best route to take unless of course the data cannot be read by a third party. According to Dong et al (2010), physical layers can be intercepted by multiple eavesdroppers. Therefore is it possible to integrate the system with ISO 27001: Information Security Standard? This issue is important because of the competitiveness within the energy sector and the data protection of the consumer and their energy usage should they opt to not disclose it to a third party. It also shows that the system is operating to an international standard and one that can provide quality to the system.</p> <p>References: British Standards Institute (2012) <i>ISO/IEC 27001 Information Security</i>. Available from: http://www.bsigroup.co.uk/en/Assessment-and-Certification-services/Management-systems/Standards-and-Schemes/ISOIEC-27001/?gclid=CLCBq7bC9rECFcUNfAodKUoAIA [Accessed 20 August].</p> <p>Dong, L., Z. Han, A.P.Petropulu. , & H.V.Poor. (2010) <i>Improving wireless physical layer security via cooperating relays</i>. IEEE Transactions on signal processing, Vol. 58, NO.3, March 2010, page 1875. Available from: http://www2.egr.uh.edu/~zhan2/papers/Lun_J_pub.pdf</p>
6.	Views.	<p>My views will be satisfied if the following questions are answered and justified: Are the bands used by anyone else? This information could be available from CEPT Electronic Communications Committee. By sharing radio-waves would this hinder or assist operations and Standards? Would there be economic and societal gains or costs associated with shared</p>

		<p>radio-waves? What is the evidence of this, is it an impact assessment?</p> <p>References: CEPT (2012) <i>Compatibility studies: Annex to SRDMG(12)26-FM(11)202 Annex 38: Updated UHF Roadmap</i>. CEPT Electronic Communications Committee (No date) <i>All about our organisation</i>. Available from: http://www.cept.org/files/1047/CEPT_about_us.pdf</p>
7.	No.	<p>Reference: CEPT (2011) Minutes from 19/12/2012 CEPT 11(11), Assembly Meeting, Copenhagen.</p>
8.	Yes.	
9.	Views.	<p>Option 1: All domestic premises require fitting with SMART Meters to be compliant with government objectives (Ofgem). Option 2: Who would pay for the additional cost? Also is the additional cost a life time cost or does it have a short-term guarantee of say five or ten years? Will replaced items be automatically included in WEEE take-back schemes if so where would customers take the items without having to pay further costs? Option 3: To reduce complexity will the SMART Meter contain information for consumers such as HAN frequency or dual capability? This could assist in properties that have high transient populations.</p> <p>References: Ofgem (2010) <i>GB-wide Smart Meter roll out for the domestic sector: Impact Assessment</i>. Available from: http://www.ofgem.gov.uk/e-serve/sm/Documentation/Documents1/DECC%20-%20Impact%20assessment%20-%20Domestic.pdf</p>
10.	Yes however ...	<p>...in Houston people must pay for the wired service offered by CentrePoint Energy if they have Electricity Card Meters. If the UK were adopt this practice this could add further burdens to residents in that type of property with the Welfare Reform current expectations and to the landlords of those properties as it may deter people from taking up a lease contract.</p> <p>Also do we have the legislation for the additional costs to be recovered as they do in Texas? If not, could they be placed within the National Adaptation Programme regulated by DEFRA as they also guide businesses on how to measure Green House Gas Emissions? Therefore when SMART Meters are rolled out to business the infrastructure will already be in place.</p> <p>Therefore I agree the consultation for this must occur after the Welfare Reform has happened. This could also give the organizers of the consultation time to prepare video links to You Tube and other networking sites for people to access during the consultation period. For a preview of video links please access the CentrePoint Energy link.</p>

		<p>References: CentrePoint Energy (2012) <i>Frequently Asked Questions</i>. Accessed from: http://www.centerpointenergy.com/services/electricity/residential/smartmeters/faq/ DEFRA (2012) <i>National Adaptation Programme: Climate Ready</i>. Available from: http://www.defra.gov.uk/environment/climate/government/nap/ DEFRA (2012) <i>2012 Guidelines to DEFRA/DECC's GHG Conversion Factors for Company Reporting: Methodology Paper for Emission Factors</i>. Available from: http://www.defra.gov.uk/publications/2012/07/06/ghg-2012-conversion-factors-reporting/</p>
11.	No views.	
12.	Yes.	I agree with the proposed Scope and the functional requirements.
13.	No views.	
14.	No.	Maintenance costs take additional resources of which add costs to the supplier and the customer, therefore they must be considered to give Value for Money. Also if there are lots of owners to the Hubs, this could result in inconsistency of service and price. Having said that, having different owners supports competitiveness and the Localism Act 2011 and these are priority points. Consequently due to the economy, to legislation and to encourage R&D my choice is supplier-led where feasible and CSP-led where not.
15.	Yes.	
16.	Yes.	However it needs to be within a set timeframe to ensure the equipment is fitted. Also consider what would happen to the opted-out non-domestic site if the set timeframe elapsed.
17.	Yes.	
18.	No.	<p>I do not agree as it brings in a two-tier system. Smart Meters proffer all to cut emissions and energy usage using behaviour change, if there is no requirement for outage reporting the premises it could make it difficult for users of those premises to monitor their behaviour and usage. More significantly premises or land undergoing a Change of Usage which can happen because of the Town and Country Planning (Development Management Procedure) (England) Order 2010 to listed buildings, may be burdened because of the two-tier system.</p> <p>Reference: Legislation (2010) <i>Explanatory Memorandum to Town and Country Planning (Development Management Procedure) (England) Order 2010 No. 2184 and The Planning (Listed Buildings and Conservation Areas) (Amendment No.2) (England) Regulations 2010 No. 2185</i>. Available from: http://www.legislation.gov.uk/uksi/2010/2184/pdfs/uksiem_20102184_en.pdf , Sections 2.2, 4.1, and 4.3.</p>

19.	Yes.	<p>The Consumer Rights Directive (2011/83/EU) obligates traders to be transparent when distance selling for traders to grow as they supply new deals to customers prior to contract. The Directive includes: digital products, information, goods and services, fees, delivery times, post-contract customer helplines and additional payments. The Directive is currently being transposed and implemented into UK law. These affect the maximum demand registers by because they record and so supply regular quantitative information. The methods in Options 1 & 2 are cheaper than the current system and can be accessed during any 24 hour period for timely information that can be used to baseline activities yet without incurring additional cost. This system has been used by the USA for Federation purposes for sixteen years and is used as evidence for competitiveness and quality management of public money.</p> <p>References: Chief Financial Officer (2004) <i>National Energy Information System: executive summary</i>. Available from: http://www.cfo.doe.gov/budget/04budget/content/eia/eia.pdf pages 75-78. Department for Business Innovation and Skills (August 2012) <i>Enhancing Consumer Confidence by Modernising Consumer Law: consultation on the implementation of the Consumer Rights Directive 2011/83/EC</i>. Available from: http://www.bis.gov.uk/assets/biscore/consumer-issues/docs/c/12-999-consultation-implementation-of-consumer-rights-directive pages 6-7.</p>
20.	I agree.	
21.	Meters, Yes.	<p>To mitigate risk to businesses in domestic and non-domestic premises of loss of revenue from energy usage and from Climate Change extreme weather events and emergency energy-security and supply resulting in 24 hour access.</p> <p>Costs of delivery, in some circumstances such as communal areas in both domestic and non-domestic areas can be added to Service Charges for recovery if provided for in the lease.</p> <p>Reference: Leasehold Advisory Service (2012) <i>Service Charges and other issues: what are service charges & The power to recover service charges</i>. Available from: http://www.lease-advice.org/publications/documents/document.asp?item=14</p>
22.	Yes.	<p>Yes to both. By including variant smart electricity meters in SMETS 2 it can work in conjunction with current heating systems and suppliers. Such as storage heaters (single switch) and radiators (double switch). These systems help energy suppliers to flatten the load curve resulting in a more manageable system.</p> <p>However will customers be shown how to work the polyphase? A booklet by Essential Energy in Australia is so explanatory that it could help a user to know whether they are on a single or multigrid. Also what will happen if someone moves and takes the booklet with them? Are new customers able to retrieve a copy of the booklet for information purposes? Will contact details be placed onto SMART Meters for this purpose? The cost uplifts will be recouped more effectively if the consumer knows how to use and</p>

		<p>understands their SMART Meter by making key behavioural responses to information.</p> <p>References: DECC (2012) <i>Smart Meter roll-out for the domestic sector: Impact Assessment</i>. April 2012. Available from: http://www.decc.gov.uk/assets/decc/11/consultation/smart-metering-imp-prog/4906-smart-meter-rollout-domestic-ia-response.pdf page 2 Essential Energy (2011) <i>EM5100 Polyphase electronic meter: installation and use. Issue 3, 29/03/2011</i>. Available from: http://www.essentialenergy.com.au/asset/cms/pdf/contestableWorks/CEOM8014_50.pdf Sillito, N. (No Date) <i>Radio Teleswitch</i>. Available from: http://www.nationalgrid.com/NR/rdonlyres/A3B1EE3E-BD61-46ED-8D44-4F6D0F1E5A07/1410/Teleswitch_Demand.pdf</p>
23.	Yes.	<p>However I do have views upon the randomized offset delay range yet agree that it is a good idea to deliver controls to reduce supply stress. According to Hansard there is a time of daybreak difference of fifty minutes between John O'Groats in Scotland and Lands End in England. Because of this difference I question whether seven minutes is a large enough range and also because of the clocks going back and forward in Spring and Autumn proffer whether the range needs to systematic with the rotation of the sun with night and day upon the UK.</p> <p>Reference: Billingham, Baroness. (2008) <i>Advise the authority for reducing the effects of climate change through the adaptation of a daylight saving scheme</i>. Lords Hansard 14/01/2008 Column 1154, paragraph 2. Available from: http://www.publications.parliament.uk/pa/ld200708/ldhansrd/text/80114-0015.htm Royal Museums Greenwich (2012) <i>Spring forward: 100 years of British Summer Time</i>. Available from: http://www.rmg.co.uk/explore/astronomy-and-time/time-facts/spring-forward-100-years-of-british-summer-time</p>
24.	Option 1.	<p>I am used to retaining numbers and passwords. So long as these can be connected to my email or phone it is unlikely they will be permanently lost should I misplace the original numbers or password.</p> <p>Also I do not know who I can trust when it comes to getting a third party in, therefore I would be less likely to use Option 2 due to the potential of financial charges for the service.</p>
25.	Yes.	<p>Because I would not know who to trust and also whether I could afford their service charge.</p>
26.	Not at present.	<p>By pursuing other CAD installation options at this stage could delay the SMART Meter Programme. To avoid delay it may be more prudent to Review installation options in three years' time.</p>
27.	Yes.	

28.	No Comment.	
29.	Yes.	I do not know the number that are feasible, therefore no comment.
30.	Yes.	<p>Handheld terminals must be given internet access so that during maintenance and installation real-time information can be fed to head office or a dataset elsewhere. This will enable accuracy checks to be made, additional equipment to be ordered and using a paperless system so that others works can continue without being delayed by 'post' or processes that do not comply with Lean Principles.</p> <p>It may be necessary for hand scribbled signatures or work-persons' codes to be input therefore the handheld terminal needs to facilitate either or both of these. Please note signatures are not always identifiable on handheld terminals therefore ISO9001 may be required to facilitate access-code deliverance and tracking. Mobile printers and scanners would enable signatures to be physically written by hand but this would prevent a paperless system to be put in-situ whereas biometrics offers individuals' unique signatures that are unable to be duplicated and is a paperless system. The work-persons would need to have clean fingers that contain no oil; is this too difficult to guarantee? Alcohol wipes/hand gel would be required to ensure fingerprints are read.</p> <p>Augmented reality hand held terminals proffer a solution as these allow data to be input either by photo, direct measurement using infrared and other. The information is sent direct to a dataset (in any country) and compared in real-time with key performance indicators and without the necessity for the work-persons to be good with mathematics. It can also be used to teach people. This will be the most expensive solution yet the most accurate therefore the solution that I would choose. This system could assist the Energy Efficiency Directive with consumption data and using one methodology regardless of energy supplier and tariffs' equations however work-persons using the hand held terminals would require mandatory training so that they completely understand the terminals' capabilities. To assist work-persons could the training be given as 'games' such as those on mobile telephones? This would encourage the work-persons to practice regularly and have 'league tables' for success. This would require cooperation from games creators such as Dice, Treyarch and Activision. Their business relies upon discretion and confidentiality therefore they may be able to assist with security too (question 31).</p>
31.	Yes.	
32.	Yes.	It is good practice to have independent review panels because it supports democracy. However there are cost implications due to the wages and expenses of panel members. These costs would need to be retrieved somehow yet offer Value for Money to energy consumers. Therefore I propose the gaming aspect of the mandatory training be licensed and for those licenses to pay for the independent panels costs.

33.	Yes.	<p>Without the requirement for set interval testing the UK is likely to acquire an obsolete system in relatively short time. Set-Testing timescales enable competition of new technologies to be introduced for procurement and complies with EU tender requirements (Official Journal of the European Union threshold values and tendering for government contracts should they become involved in energy production for pension capital assets.</p> <p>References: Business Link (2012) <i>Overview on selling to government</i>. Available from: http://www.businesslink.gov.uk/bdotg/action/detail?itemId=1073792571&type=RESOURCES Business Link (2012) <i>Procurement</i>. Available from: http://www.bis.gov.uk/about/procurement Cabinet Office (2011) <i>Procurement Policy Note- New threshold levels for 2012 and changes in the use of the Accelerated Restricted Procedure</i>. Available from: http://www.cabinetoffice.gov.uk/sites/default/files/resources/10%2011%20Threshold%20Rates%20for%202012%20and%20AR%20Procedure%20Update.pdf</p>
34.	Yes.	No views.
35.	Yes.	The sanctions need to be clear, transparent and uncomplicated so that non-compliance cannot be blamed upon a complicated system.
36.	Yes.	I believe that this could help home-grown small suppliers as it could deter foreign small suppliers from applying. However it may also encourage large foreign suppliers to become involved, therefore, a minimum percentage of small suppliers could be given priority and incentives to become involved. Involvement could be by subcontract to larger suppliers.
37.	Yes.	Governance arrangements could be via the independent panel who could invite customers for their observations of the equipment.
38.	Yes to both.	
39.	Yes.	This could help customers to get insurance on the products of which they could pay for either as a lump sum or using a payment plan. This could help pay for replacement equipment and for old inoperable equipment to be recaptured for WEEE and results used as a requirement necessity guide for inoperability license in the future.
40.	Yes.	Because energy suppliers are the first point of call for customers having any queries requiring immediate answers.
41.		I find it odd that non-domestic customers are being given two tier treatment and do not see the benefit to anyone from it. Non-domestic customers use energy too so they should be given the same opportunity to access information from their suppliers. I can understand to an extent given the

		issues with Carbon Reduction Commitment and education however everyone should have the right to access the information if they choose to.
42.	Yes.	
43.		I do not have any views other than the normative data security assurances.
44.	Yes.	Green House Gases and their obligations throughout the globe have deadlines therefore all relative mitigation and adaptation ought to be given deadlines too for accountability, transparency and measurement.
45.	Yes.	I do not know of any other changes that could be necessary.
46.	Yes however deliverance into homes will require strict project management, who will lead on this given that energy suppliers and the others involved are different companies.	
47.	Yes.	It is usual practice for transitional periods to be given and to be given commencement and end dates. These dates are usually in-line with Directives transitional transpose periods.
48.	I agree with the proposal that milestones need to be reached and a sound structure put in place.	
49.	A non-standing committee required as and when necessary. This reduces administration, costs and bylaws needing to be the primary cause of the need for the committee.	
50.	You must have a mixed membership: research and development, finance, regulatory and other experts. They need to act quick in their responses and respond to deadlines.	