

Smart Metering Implementation Programme
Roll-Out Team
Department of Energy & Climate Change
3 Whitehall Place
London
SW1A 2AW

13 October 2011

Dear Sir or Madam,

Smart Metering Implementation Programme: consultation on draft licence conditions and technical specifications for the roll-out of gas and electricity smart metering equipment (August 2011)

EDF Energy is one of the UK's largest energy companies with activities throughout the energy chain. We provide 50% of the UK's low carbon generation. Our interests include nuclear, coal and gas-fired electricity generation, renewables, combined heat and power plants, and energy supply to end users. We have over five million electricity and gas customer accounts in the UK, including both residential and business users.

EDF Energy supports the Coalition Government's renewed commitment to delivering Britain's low carbon future. We are fully committed to supporting DECC/Ofgem in planning and delivering a successful GB Smart Metering Programme. In response to previous consultations, we set out four fundamental principles which we believe are critical in underpinning success:

1. Placing a strong emphasis on health and safety
2. Minimising the cost to the consumer
3. Reducing risk through robust governance, effective planning and thorough testing
4. Delivering an optimal and enduring solution for the consumer and industry participants

We believe that these principles are also central to answering the questions raised in this consultation and guiding the future development of the smart metering programme.

Our detailed response is set out in the attachment to this letter. This letter and the attachment may be published. The key points we are making relating to draft licence conditions and technical specifications for the roll-out are summarised below for ease of reference.

Technology Decisions:

EDF Energy believes it is vitally important that a plan and timetable for making technological decisions is in place and has robust governance. A roadmap of decisions required, such as chosen HAN & Application Data Layer technologies, needs to be developed to encourage business confidence to procure smart metering equipment. Equipment deployed during the foundation phase should be for testing and trialling

purposes; should be at the installing supplier's risk; and should not be deployed in high volumes – to avoid the risk of a poor consumer experience and acceptance.

Testing and accreditation of Smart Metering Equipment:

EDF Energy believes that significant further work needs to be planned and executed to ensure that testing and accreditation delivers a successful roll-out of smart metering equipment. This must reflect the risks associated with deploying a new and complex system and network infrastructure and include:

- Agreeing next steps for developing the SMETS and specifications fit for procuring compliant and interoperable smart metering equipment. It is essential that all suppliers are able to procure smart metering equipment from manufacturers, confident that the equipment is compliant with the SMETS and will interoperate.
- Agreeing security requirements and how these are implemented. The security requirements currently do not specify how each requirement must be implemented. This is required to ensure integrity and security.
- Agreeing a regime that guarantees interoperability of smart metering equipment. This regime must be built upon clear, unambiguous requirements; must ensure that any supplier can inherit smart metering equipment following a Change of Supplier event confident that any component can be replaced and will work with all other existing equipment; must be able to determine whether any equipment is not compliant or interoperable; and must be enforceable.
- Ensuring that participants are ready to enter the market. All participants must be able to demonstrate that they are ready to participate in the market without compromising the end-to-end solution.
- Ensuring that consumers are ready. The industry needs to determine readiness checks for consumers, so that suppliers can deploy smart metering equipment efficiently and effectively from the DCC go-live / mandated roll-out of compliant smart metering equipment.

DCC Go-live:

EDF Energy is concerned that there is a risk that the go-live of DCC may be delayed. We believe that insufficient time may have been allowed in the plan for development of the DCC services and particularly of the time that will be required for testing to ensure that the end-to-end solution including the DCC works first time. Additional confidence is required to enable suppliers to optimise supply chains for procuring and installing smart metering equipment.

DCC Opt-out:

EDF Energy believes that excessive costs will be incurred by industry participants to support the ability for smart metering equipment installations to opt-out of using the DCC. If such allowances are required it is imperative that, amongst other things, security requirements are not compromised and that interfaces to communications providers are standardised to

minimise additional development time and costs and to ensure that customers are able to enjoy the full benefits of a competitive market.

Should you wish to discuss any of the issues raised in our response or have any queries please contact my colleague



Attachment

Smart Metering Implementation Programme: consultation on draft licence conditions and technical specifications for the roll-out of gas and electricity smart metering equipment (August 2011)

EDF Energy’s response to your questions

EDF Energy is pleased to provide our responses below to the questions within the DECC consultation on draft licence conditions and technical specifications for the roll-out of gas and electricity smart metering equipment published on 18 August 2011.

Question 1	The Government is seeking new evidence and views on the impacts of specifying a completion date that is in the earlier part of 2019.
<p>An acceleration of the completion date to early 2019 would have a materially negative impact on the ability for EDF Energy to undertake the rollout of smart meters within the framework envisaged through the Impact Assessment (IA), and hence would put the IA at increased risk of not being realised. EDF Energy has concluded that a minimum period of 5.5 years is required, from the time the go-live criteria are met until the mass rollout is complete, to maximise the benefits whilst minimising the risks and supply chain constraints.</p> <p>In the August 2011 release of the smart meter IA, the following point made by DECC stands out as of particular importance, given the question asked:</p> <p>"Sensitivity analysis indicates that moving from the central [rollout scenario] to the higher bound [i.e., more rapid rollout scenario] could have a negative impact on the Net Present Value (NPV) of the rollout of £150m."</p> <p>EDF Energy is seeing pressure being placed on the existing DECC time lines for smart metering go live in a number of areas, such as finalisation of technical specification, DCC road map and testing without any contingency in the current plan. With this situation we are concerned about setting and bringing forward a firm end date that suppliers will have to reach. EDF Energy believes a number of key go live criteria need to be satisfied in order to work out an appropriate end date.</p> <p>The criteria impacting the start date include, but are not limited to:</p> <ul style="list-style-type: none"> • Availability of compliant SME devices to all Suppliers in volumes matching their roll-out profile. • Evidence of a full end-to-end testing of all accredited devices. • Availability of a controlled market start-up to ensure that end-to-end processes and customer engagement are correct, creating an environment where safety is core to both employees of energy companies and customers. 	

- Successful national customer engagement plan / low customer opt-out rates of having smart meters installed.
- DNO ability to swiftly correct issues that prevent a meter exchange happening such as a faulty cut-out.
- The completion of end-to-end testing including interoperability, security and the DCC.
- Successful go-live of the DCC.

EDF Energy has run scenarios based on the number of years the roll-out will take once the go-live criteria are met, and feel that this is the optimal approach to setting an end date. The minimum roll-out period for EDF Energy to install smart meters would be 5.5 years for 97% complete. A shortening to 5 years creates a material negative impact on the business case and operational business compared to 5.5 years. Reducing the period from 5 years to 4.5 years or 4 years accelerates the negative impact and would be even more unacceptable.

The main reasons for the negative impacts include installation and asset cost increases due to supply chain constraints. The shortened rollout has particular impacts on recruitment and training of installers, size and added complexity of back office and logistics.

The negative impacts of shortening the roll-out are countered in EDF Energy's investment case to a limited extent by decreased dumb meter rental, customer services and meter reading benefits.

One clear risk once end to end testing is complete that could impact supplier delivery on a national basis is a false start or break down in the end to end processes impacting customer experience particularly in the first 18 months.

Finally, the National Audit Office (NAO) report commended the smart meter programme for providing certainty regarding the timetable for the programme, and this proposal removes this certainty. For companies planning large scale infrastructure projects certainty is very important.

<p>Question 2</p>	<p>Do you think the licence conditions (AA1-2) as drafted effectively underpin the policy intention to complete roll-out of Smart Metering Equipment by a specified date? Are there any areas where you consider further clarification is necessary? Please explain your reasoning.</p>
<p>EDF Energy recommends a minimum 5.5 year roll-out period to be set after the go live criteria (set out in reply to consultation question 1) for mass roll-out is complete. This will maximise the benefits whilst minimising the risks and supply chain issues.</p> <p>EDF Energy believes 'reasonable steps' is the correct approach but with no guidance provided as to the scope of the wording it introduces regulatory risk on suppliers and also is a risk to the IA if achievement of 'reasonable steps' proves to be expensive and/or time</p>	

consuming.

The supplier is not in control of many of the key requirements needed to ensure that a minimum 5.5 years roll-out period is met. Examples of items outside of suppliers' control include the need for the DCC to be robust and the National Customer Engagement Plan. Exceptions such as these should be factored into the licence condition.

A shortening of the roll-out period with a fixed end date due to a later start date may mean corners are cut, potentially reducing customer experience and adversely impacting safety.

An additional issue that needs resolving is the change of supplier process just before the end of the roll-out. Some Suppliers may price non-smart customers with a high risk premium to force change of supplier, leaving other suppliers with an accumulation of installations to be completed at short notice to meet the licence condition.

Question 3	Do you agree that the licence conditions as drafted effectively underpin the policy intention to deliver Smart Metering Equipment with the functionality and Interoperability required to meet the business case? Please explain your reasoning.
-------------------	---

EDF Energy does not agree that the licence conditions effectively underpin the policy intention.

Although the consultation paper refers to 'Testing' the licence condition modifications on pages 83 to 96 only refer to the need to 'design' Smart Metering Equipment. There is no mention of 'subject to availability for such equipment' that has undergone a 'test and certification criteria' which should be the responsibility of 'manufacturing industry'. This would provide confidence that asset providers could purchase interoperable Smart Metering Equipment. In addition although the consultation paper refers to the need for similar requirements relating to 'Security' the actual licence conditions do not. 'Security' is fundamental for both 'Functionality' and 'Interoperability' of equipment from differing manufacturers and significantly contributes to design and technology choices that should be specified in the SMETS.

It is widely recognised that there may be instances where a particular set standard, for example 'wireless' HAN, will not work in certain locations. In such circumstances if another technology is used such as 'wired' HAN, the 'wired' HAN technology should also be chosen from an agreed standard technology.

We believe that the IDTS is a 'functional' specification that is widely open to interpretation in its current form. There needs to be true prescriptive 'Interoperable' standards for technologies set and enforced by centralised regulation, with agreement of suppliers and manufacturers. Unless this position is reached, suppliers would have mandated accountability for potential costs for 'putting it right in the future' due to circumstances beyond their control. This raises supply chain concerns as purchasers will be wary of a caveat emptor process, which may add delays and additional costs when choosing which equipment to buy.

Question 4	Do you agree that Smart Metering Equipment should be compliant with the SMETS extant at the time of installation and that it should continue to be compliant with that version of the SMETS through the operational life of the equipment? Please explain your reasoning.
<p>EDF Energy agrees that an installed SME should continue to comply with the version of the SMETS extant at that time of installation throughout its operational life. Suppliers should not as a matter of course be expected to upgrade installed SME alongside the SMETS development. The only exception to this would be on the grounds of health and safety following an appropriate risk assessment or a confirmed issue leading to the potential or actual instance of a security threat. Clearly, if a supplier has a business case to upgrade the SME to new SMETS requirement version then it should be free to make that decision but such an upgrade should not be obligated.</p> <p>For a change of SMETS the SEC panel needs to implement appropriate change procedures.</p> <p>When a change of SMETS is implemented a derogation, e.g. delayed start date or other procedure, needs to be in place for all existing stock already produced and paid for so as to avoid such assets becoming stranded.</p> <p>EDF Energy believes that any asset that is compliant at the time of installation should not subsequently become stranded. If SME is installed in a property where it is no longer required the equipment should be capable of being removed and installed elsewhere irrespective of whether the SMETS has altered. This would avoid such assets becoming stranded before the end of their operational life.</p> <p>Issues around one change of component (gas meter for example) where one or more items are on a different version of SMETS are not clear. If the resulting combination is not able to support a newer version of SMETS there should be no requirement for the supplier to further upgrade the remainder of the installation. There is also a need to consider the backwards compatibility of the SMETS. The SEC needs to take responsibility for this.</p> <p>A single component change requires that backwards compatibility also needs to be a SMETS requirement.</p>	

Question 5	Do you agree that in some exceptional circumstances suppliers should be required to retrofit Smart Metering Equipment that has already been installed? Please explain your reasoning.
<p>A SME set compliant when installed should be able to remain in situ in line with MID requirements to ensure that the IA is met. The only exception would be on health and safety grounds following risk assessments or appropriate materiality for security threats.</p> <p>If a supplier has a business case to upgrade the SME, then it should be free to make that</p>	

decision, for example if the customer has purchased a heat pump or electric vehicle.

An issue has been identified by EDF Energy regarding the process of installing meters and its interaction with the LAN. This may lead to an upgrade of some parts of an SME already installed.

In the foundation stage there is a risk to the WAN module if the compliant SMETS were installed before the appropriate DCC decisions have been made. This situation should be avoided through timely decision making.

Question 6	Do you think that the licence conditions (AA3-6) as drafted effectively underpin the policy intention for the new and replacement installation of Smart Metering Equipment? Please explain your reasoning.
<p>EDF Energy agrees that the paragraphs as drafted are sufficient to underpin the policy intention with the exception of the following points:</p> <ol style="list-style-type: none"> 1. "Relevant Electricity Supplier" is a term we understand to refer to the import supplier we therefore believe that a similar requirement needs to be placed on the export supplier or the FITS licensee where these are different from the import supplier. 2. The SMETS needs to define all aspects of smart metering unambiguously. It is clear that further work is required to complete the specification to these standards. Providing this takes place it will provide sufficient guidance as to what must and must not be installed. 3. We also note that the licence requirements may change as a result of the response to question 13. 	

Question 7	What period of notice do you think would be appropriate before the new and replacement obligation comes into effect? Please explain your reasoning.
<p>EDF Energy believes that a plan consisting of all key events and decision points is pre-requisite of delivering the programme.</p> <p>With this in mind, EDF Energy would not like to see a licence implementation date until all of the following criteria have been met including but not limited to:</p> <ul style="list-style-type: none"> • availability of compliant SME devices to all Suppliers in sufficient volumes to meet their roll-out profile • evidence of a full E2E testing of all accredited devices • availability of a controlled market start up to ensure that end-to-end processes and customer engagement are correct, creating an environment where safety is core to both employees of energy companies and customers 	

- Successful national customer engagement plan / low customer opt-out rates of having smart meters installed
 - DNO ability to swiftly correct issues that prevent a meter exchange happening such as a faulty cut-out.
 - The completion of full end-to-end testing including interoperability, security and the DCC.
 - Successful go-live of the DCC.
- Licence obligations should only become effective once the above criteria are met as this is the only way to ensure compliance.

Question 8	What contribution do you think the Interoperability Licence condition as drafted could play in ensuring that suppliers work together to ensure Smart Metering Equipment is Interoperable? Please explain your reasoning.
<p>This licence condition is critical to ensure Interoperability. However, in its current form it is not effective. The licence conditions themselves i.e. AA7-8 and BB6-7 could include more detail relating to 'reasonable steps'. For example, inclusion of wording 'Ensuring that any equipment installed has undergone the testing and compliance certification process as defined and governed by the Smart Energy Code (SEC). In addition, the wording within the licence should be extended to cover 'compliance' together with a full definition of compliance. Interoperability is only one facet of compliance.</p> <p>The licence conditions also need to confirm that 'Interoperability' relates to 'minimum specification' as defined in the SMETS which still needs to be changed from a 'functional' to a true 'technical' specification.</p> <p>There needs to be a clear statement in the licence that confirms that suppliers are not expected to ensure 'enhanced functionality' continues to work in cases where that functionality has been supplied by another party. An example is a customer that has a central heating controller function built into their in home display. This function may have been supplied by an Energy Services Company (ESCO) or another energy supplier. If the central heating programmer function fails to work for any reason the current supplier who did not supply the function should not be liable for any repair or replacement needed to ensure the function continues to work.</p>	

Question 9	Do you think the licence conditions as drafted effectively underpin the policy intention to ensure Smart Metering Equipment is interoperable? Please explain your reasoning?
<p>EDF Energy does not believe that the licence conditions effectively underpin the policy intention in their present form. Options discussed within the relevant sections of the consultation document i.e. Section 2.5 page 19. Section 3.4 page 67 need to arrive at</p>	

clear and concise conclusions that are reflected in the licence conditions.

Unless the industry has a clearer definition of what is 'compliant' and how licensees demonstrate compliance, there is a danger that a 'self certification approach' is adopted which will cause stranded assets in the future.

The licence condition should also define 'technical interoperability'

Question 10	What role could a dispute resolution mechanism have a role in ensuring interoperability? What key features should such a mechanism have?
<p>Ideally we need to have design processes, definition processes, and test processes that are precise and robust enough to minimise the risk of disputes over interoperability occurring i.e. if an issue over interoperability failure occurs the specificity of the design definition and test processes should be such that it is self evident and unambiguous as to where the responsibility for the failure lies.</p> <p>Notwithstanding this, it is recognised that no matter how precise the design definition and test processes may be, there will always be circumstances where disputes over interoperability failures, and who is responsible for them, may arise. Therefore, there remains a need for an underlying independently administered dispute resolution mechanism, which should only be used as a last resort, to help ensure such disputes are promptly, pragmatically, cost effectively and fairly resolved in the overall interests of all participants, stakeholders and consumers.</p> <p>We consider that a dispute mechanism that is independently appointed and administered by the Smart Energy Code 'SEC' is the most suitable mechanism for achieving this crucial objective.</p> <p>Such a mechanism should require all industry parties that use the test regime to agree to adhere to any decisions or recommendations that result from use of the resolution process. This adherence agreement includes manufacturers using the appointed test and certification process as well as energy suppliers, test houses and any other related parties.</p> <p>The following points support this view:</p> <ul style="list-style-type: none"> • Knowing that there is such a mechanism should promote financial investor confidence. Meter Asset Providers 'MAP' need confidence that where a 'stranded asset' issue occurs they are not left with financial liability. • Promotes confidence that there is an independent mechanism to identify the root cause of an issue where there are multiple industry parties including, Suppliers, Manufacturers and Test Houses. • Would provide a point of independent arbitration amongst said parties. • If arbitration could not provide an agreed resolution ultimately judicial review would likely take an industry recognised process in evidence. • Would complement a test regime. For example by providing a mechanism for 	

independently identifying which participant or test house was at fault for the resulting issue and should be accountable for the consequences.

<p>Question 11</p>	<p>For the smaller non-domestic sector do you agree that where there is a Current Transformer meter then suppliers should be required to install an advanced rather than Smart Metering Equipment? Please explain your reasoning.</p>
<p>EDF Energy agrees with the decision not to mandate a requirement for non domestic sites served by CT Metering to have smart metering fitted. This is on the basis that market demand for a smart CT meter might prove too small to be viable and lead to a situation wherein suitable compliant metering system cannot be obtained. As advanced CT metering is generally available for the non-domestic market then mandating the use of such metering to cater for this situation is seen as a sensible compromise.</p> <p>It might prove to be the case that a meter manufacturer(s) might choose to mirror one of their whole current smart meter designs with a CT equivalent. In such a case the supplier should have the choice of fitting a smart CT meter although clearly for practical purposes prepayment switch functionality will not be possible. With regard to the expected few domestic situations where a CT meter is in use, EDF Energy sees no reason why an advanced meter could not also be deployed.</p>	

<p>Question 12</p>	<p>Do you think that the licence conditions as drafted effectively underpin the policy intention for Current Transformer meters? Please explain your reasoning.</p>
<p>EDF Energy agrees that that the licence condition as drafted effectively underpins the policy intention not to expect non-domestic meter positions currently served by CT operated meters to require anything more than an advanced meter replacement. The relaxation in this requirement is clearly sensible given that for CT operated metering:</p> <ul style="list-style-type: none"> • Prepayment switching/load limiting and other smart functionality is impractical. • Smart versions of CT operated meters are unlikely to be developed. • Fairly comprehensive advanced forms of metering capable of meeting half-hourly metering requirements are already available within the market. <p>Following the work of the Gas Meter Variants Group it is understood that high capacity gas meter will not contain a valve and so cannot be considered to be truly smart. It is therefore suggested that similar licence exclusions should apply to high capacity gas meters, such as U16.</p>	

Question 13	Do you think under the new and replacement obligation gas suppliers should be given the option to wait for the installation of electricity Smart Metering Equipment before installing the gas Smart Metering Equipment? Please explain your reasoning.
<p>We believe that the same rules should apply to gas-only suppliers that apply to electricity-only suppliers.</p> <p>In the interests of an equitable marketplace it is unreasonable to give gas suppliers freedom (via this option) to defer costs on their roll-out while not allowing electricity suppliers the same leeway.</p> <p>Therefore, we do not believe that this option should be allowed.</p> <p>The best mechanism for achieving gas-first installation would be for the gas meter worker to be MOCOPA approved in order to install a communications hub connected direct to the main service head. The communications hub would need to be of a suitable design and licence conditions would need to be changed to enable this work to be carried out.</p> <p>However, this answer does depend upon the nature of the communications hub that is mandated (as per question 35).</p> <p>We also note that if the proposed option was upheld a mechanism would have to be devised to inform the gas supplier of where electricity smart metering has and has not been installed.</p>	

Question 14	Do you think there are any other barriers to gas Smart Metering Equipment being installed before electricity Smart Metering Equipment? Please explain your reasoning.
<p>We do not believe that there are any other significant barriers to installing smart metering in gas-only sites.</p> <p>The fact that the communications hub is powered by electricity can be circumvented by our answer to question Q13.</p> <p>Other difficulties that must be overcome in the gas market may include space considerations for installing a standalone communications hub.</p>	

Question 15	What do you think the implications would be of extending the new and replacement obligations to the licences of other relevant parties in relation to installing Smart Metering Equipment in new developments without the involvement of a supplier? Do you think mechanisms other than licence conditions should be considered to achieve the policy objective? Please explain your reasoning.
<p>The principle of Supplier led roll-out must be maintained not weakened. Suppliers need to manage roll-out plans, MAP/MAMs, local marketing, customer engagement, SMICoP</p>	

etc and this cannot be disrupted by other parties rolling out to new developments in an uncoordinated way. Although 60% of new gas connections are on IGT sites and existing (IGT/IDNO) processes would need to change (as the SEC develops), we believe that the existing Supplier relationship with their customers and MAPs should continue, particularly in the smart metering roll-out. A single supplier is normally allocated to one of these new developments. We are concerned about the poor data quality resulting from the existing IGT/IDNO processes e.g. plot number changes.

Question 16	Do you think the roll-out of Smart Metering Equipment has any specific implications for the provision of emergency metering services? Please explain your reasoning.
<p>In summary, EDF Energy believes that the roll-out of Smart Metering Equipment will have specific implications for the provision of emergency metering services. The functionality provided by smart meters should enable, in the majority of cases, appropriate identification of the most appropriate action to be taken in order to ensure that the customer is safe and back on supply as quickly as possible.</p> <p>Consumers' safety must remain everyone's first priority with network faults such as smell of gas rectified in a timely manner with customers being able to contact the relevant industry party as quickly as possible.</p> <p>Under Emergency Services situations obligations on both Suppliers and electricity and gas Distribution Network Operators (DNO) need to be clear, with Suppliers having the opportunity to put their own commercial arrangements in place to allow if necessary their regional/national MOP/MAP to attend site to rectify metering faults.</p> <p>With smart metering having the ability to send error messages or alarms to the DCC indicating if there is a network or meter fault, it should be relatively easy to diagnose via the DCC whether a DNO or Supplier is required to attend site. This will improve customer experience by getting customers back on supply as quickly as possible and avoiding a need for a second visit.</p> <p>EDF Energy believes that in all instances the Supplier should always be made aware of the nature of the fault by being able to contact or respond to the consumer to deal with any queries and to manage the customers' expectations as to level of services. In addition the MAP may also need to be made aware so that it is able to monitor the performance of its assets.</p>	

Question 17	What period of notice do you think would be appropriate before the obligation to provide an IHD comes into effect? Please explain your reasoning.
<p>Rather than suggesting a specific notice period EDF Energy believes a number of criteria must be met to ensure successful roll-out and interoperability, including:</p> <ul style="list-style-type: none"> • sufficient manufacturing availability of compliant SME devices (including the IHD) 	

for all Suppliers to volumes matching their roll-out profile

- evidence of successful E2E testing of all accredited devices including interoperability, security and the DCC completed
- a controlled market start up with success criteria to ensure that end-to-end processes and customer engagement are correct, creating an environment where safety is core to both employees of energy companies and customers
- Successful launch of a national customer engagement plan
- go-live of the DCC and operating robustly.

Only when we have confidence that these criteria have been met, or will be met, do we think that any notice period for the obligation can be initiated.

Question 18	Would the consumer changing their supplier raise any particular issues with regard to the approach set out for the provision of IHDs? Please explain your reasoning.
	<p>EDF Energy believe that a customer with a minimum specification IHD should be able to switch suppliers and expect no difference in the display of data on that same device</p> <p>However, there may be instances where customers do notice a change in functionality dependent on the specification of the original device that they received and the supported functions of the new Supplier.</p> <p>For example; customers who have been provided with (or procured) an enhanced IHD which supports additional functionality (e.g. display of register reads), could find that function is not supported by the new supplier.</p> <p>Indeed, the new supplier may not be able to tell what functions the customer has previously been provided.</p> <p>It is assumed that the new Supplier could procure elective services from the DCC to support the missing functions but this may incur a delay and additional cost to the customer.</p> <p>There will be a requirement at CoS for additional customer engagement to explain possible impacts to avoid consumer dissatisfaction when they suddenly find that they are lacking some features with a new supplier. Conversely, they might also find that they have additional, useful functions, not previously provided.</p> <p>A second impact at CoS is that Suppliers will need to support all IHDs on the market place, so that when a customer queries the function, of their IHD, a supplier will be able to help the customer remotely, talk them through the operation of the inherited IHD or even provide them with one of their own devices.</p> <p>Finally, as Suppliers are obliged to maintain IHDs and honour the customer's right to demand one if they previously refused for one year, there is a requirement to ensure that this data is passed over to the new supplier on CoS. These are new data items and will</p>