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Smart Metering Implementation Programme

Response to Consultation on Draft Licence Conditions and Technical Specifications.

URN 110/836

13th October 2011

Executive Summary

Overall GEO supports the proposed licence conditions and technical specifications; however, we wish to make one key fundamental observation.

We can see no reason why the obligation to provide an IHD should be first introduced in a "switched off" form: displays are a significant element of the roll-out and therefore need to be part of the Foundation Phase. There is every bit as much preparation to be carried out and lessons learned about how best to engage the consumer and deliver a satisfactory consumer experience as there is about other elements of the smart metering programme. There is no issue with the provision of displays meeting the minimum specification from Q12012, and the fact is that displays are ready ahead most of the metering systems.

In addition, the manufacturing scale up required to meet the roll-out in 2014 is not inconsiderable. To expect IHD manufacturers to be able to deliver the volumes required from what would effectively be a standing start is highly risky. Allied to this is the importance of setting and keeping to a timescale. Manufacturing quality products in volume is not a process that can be easily delayed or switched on and off. Ours is an embryo industry that is supporting a highly significant element of the smart metering programme and the benefits it delivers: we need to be part of an effective Foundation Phase if we are to deliver what is expected of us.

Detailed Comments

We have not commented on every question and the absence of comment should be read as broad support for the actions proposed.

Question 17

What period of notice do you think would be appropriate before the obligation to provide IHDs comes into effect?

We can see no reason why the IHD obligation should be introduced in a "switched off" form in the Foundation Phase and submit three reasons why it should come into effect immediately:

1. Suitable units will be available when the licences are introduced.
2. The Foundation Phase is about preparation to ensure a smooth roll-out. If this is to be achieved the provision and installation of the IHD including engaging users and learning how best to deliver the Installation Code of Practice all need to be major elements of this phase.
3. The manufacturing scale up required to meet the roll-out in 2014 is not inconsiderable. To expect IHD manufacturers to be able to deliver the volumes required from what would effectively be a standing start is highly risky. Our industry needs the Foundation Phase to prepare every bit as much as other participants in the smart meter programme.

Question 19

Do you think the licence conditions as drafted effectively underpin the policy intentions set out for the provision of IHDs to domestic consumers?

Yes.

-Question 29

What unit manufacturing cost reduction do you think can be achieved for Smart Metering Equipment over the next 20 years?

The estimate given appears reasonable; however, exchange rate fluctuations are a much bigger and more unpredictable variable. The relationship of the UK pound to the US dollar is the key exchange relationship.

Questions 30, 34 & 35

Do you agree that the government should include a requirement for a communications hub in the SMETS and associated questions?

We agree for all the reasons outlined. In addition, we believe the communications hub will give greater flexibility in the placement of the items in order to ensure the best wireless communications between the meter, the hub and the IHD. In our recent TSB Smart Metering Smart Home trial in home communications using ZigBee was the biggest technical issue and required the use of range extenders in many homes in order to ensure successful communications between the gas meter, electricity meter and the IHD.

It is likely that there will be many situations where the location of the meters in relation to the dwelling may preclude all four units being in communication with each other. Tall buildings with meters in the basement is an obvious example, another is where one or both meters are in an outbuilding. There seems to be no recognition of this type of installation and therefore both the technical solution and the party responsible for delivering it.

The infrastructure for delivering information to multiple apartments in a tall building will be significant and require maintenance beyond the 12 month obligation to support an IHD. It is likely that multiple suppliers will be supplying energy to the block and therefore it seems expensive and impractical to expect each supplier to put in their own infrastructure. Requiring DNOs to provide the infrastructure would bring an additional responsibility and interface into the equation which is not recommended. It therefore would seem sensible to include this responsibility as part of the DCC's licence. In this case the "communications hub" would be part of this infrastructure with the Supplier providing either a communications bridge for PLC solutions or an IHD capable of interfacing direct with the HAN.

We therefore believe that the SMIP objectives will be best met by giving suppliers flexibility over options for configuration of the communications hub with either 3a or 3b options being acceptable.

Questions 36, 37 & 38

Specifying HAN Standards

We agree there should be no restrictions on the HAN Standards adopted providing they are available as a European or International standard and that they are recognised or be in the process of being recognised by 31 December, 2014.

Our business is focused on consumer engagement and we are particularly concerned about the wireless propagation within homes. Our experience with displays shows that this can have a significant effect on consumers' engagement and is a key driver of calls to customer support lines. We fully understand the benefits of higher bandwidth and therefore functionality that higher frequencies deliver, but it comes at the cost of range and is of little or no benefit if the display continuously loses communications. Range extenders and mesh networking can be used to circumvent this but are an expensive solution. We therefore fully support the intention to carry out testing of HAN standards in the Foundation Phase. Whilst we fully support the desire to simplify interoperability by choosing one standard we expect that the downsides will preclude this. In addition, most manufacturers are supplying to multiple markets and therefore have to have the ability to support multiple HANs. This decision needs to be considered in a wider context.

Question 41

Communications networks standards.

We fully agree with the intention not to specify a network layer addressing standard for the WAN. We believe this could delay the programme for little benefit: the most important thing is to get the programme running.

Question 46

Do you agree with the proposed approach for consumers to access data and transfer it from the HAN via a separate bridging device?

Yes. The ability to provide consumer services and hence generate consumer engagement through the meter is limited. In the home of the future occupiers will become increasingly used to managing their environment locally and remotely on a range of wireless and IP devices which will offer greater functionality and convenience. Not providing a suitable bridge will reduce the potential benefits that can accrue from smart meters.

Question 50

Do you agree that the IHD should only be required to display ambient feedback based on energy usage?

We fully endorse the statement for ambient feedback based on *energy* usage and agree with the reasoning of the SMOG IHD Group. However, we do not agree with the IHD Group's recommendation that it should be based on *Instantaneous Electricity Demand* for three reasons: first it is limited to electricity, second its relevance is transitory and tells you little about actual consumption and third it is highly prescriptive and does not facilitate innovation. We therefore would like to see Function 2 of the IHD Minimum Specification altered to "Function 2- Ambient (non-numeric) Visualisation of Energy Usage" and the text amended to reflect this.

Questions 54, 55, 56 & 57

Do you think that an assurance framework, underpinned by regulatory obligations, is needed to support the delivery of the required functionality, interconnectivity, interoperability, and security of Smart Metering Equipment?

Do you agree that as part of any assurance framework adopted, there should be a testing regime in place to support the delivery of the required functionality, interoperability and security?

What are your views on the options outlined for a testing regime? Are there other options that should be considered?

Do you think that a different approach to assurance is necessary for the Foundation and enduring phases?

We agree that an assurance framework is needed. We believe that for the full programme the best option is a mandatory industry code. Certification and accreditation schemes can be a licence to print money for the bodies concerned whilst a market led approach is both open to abuse and a number of market failures which could damage the standing of the programme.

However, during the Foundation Phase, a market led approach is both practical and informative as it will provide the time and the experiences needed to set up an industry body.