



G4S Utility Services (UK) Ltd  
14 Silver Fox Way  
Cobalt Business Park  
Newcastle Upon Tyne  
NE27 0QJ, UK

Tel: +44 (0)191 2013500  
Fax: +44 (0)191 2013641  
[www.g4s.com/uk](http://www.g4s.com/uk)

Margaret Coaster  
Smart Metering Team  
Ofgem E-Serve  
9 Millbank  
London  
SW1P 3GE

[smartmetering@ofgem.gov.uk](mailto:smartmetering@ofgem.gov.uk)

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Dear Margaret

G4S Utility Services (UK) Ltd are pleased to have the opportunity to respond to the Smart Metering Prospectus which provides a platform for the industry to commence more detailed preparation for the mass deployment of Smart Meters in the UK Domestic market. As the leading independent metering services company in the UK we are committed to the Smart Metering Implementation Programme and are already engaged in the delivery of Smart Metering Services. As a provider of a comprehensive service from meter asset provision, through installation, maintenance, data retrieval and industry data processing we believe we have a good insight into the challenges faced in delivering a programme of this scale.

We have only responded to the questions relevant to us and our experience. Furthermore we do not consider these responses to be commercially sensitive.

Our commitment to Smart meter deployment is clear with services provided to energy suppliers and end consumers in the SME and residential sectors. Through 2010 we have significantly expanded our portfolio to include meter installation, maintenance, MOP/MAM, MAP, and data management services which provide energy suppliers and end consumers with an interim Smart solution.

This transition has provided us with major learning points around mobilisation including access to meters, network coverage, equipment availability, resourcing and training amongst others. We believe that we are therefore well placed to provide insight into how to deliver the Smart transition in a way which minimises wasted effort and delivers the most positive consumer experience. We believe that this is where the focus of the Smart Metering Implementation Programme should be in the first instance with a second phase to assess improvements and modifications to deliver the secondary benefits that Smart Metering can help to deliver such as centralised data processing services and changes to the customer switching process.

As the UK Metering Market goes through this transformational change we would look to OFGEM to ensure that the benefits of a competitive metering market are not eroded such that there is a lack of independent service providers to serve smaller suppliers, new entrants and the reducing legacy metering estate. This is important to avoid the creation of a multi-tiered



customer segmentation approach defined by the metering system in place, economy of scale (of both operation and procurement) or the spending power of the customer.

Please do not hesitate to contact me should you wish to discuss any of the issues we have outlined or if there are any other matters you consider relevant.

Yours Sincerely

[Redacted Signature]

G4S Utility Services



## **G4S Utility Services Responses to Questions in the Smart metering Prospectus**

### **Summary**

#### **Q4. Have we identified the full range of consumer protection issues related to remote disconnection and switching to prepayment?**

G4S currently carry out a number of services to prepayment customers and are experienced in dealing with this group of customers. This experience could be used to assist in the transfer process to prepayment through site visits prior to switching a customer to prepayment. This would fill the void currently filled as part of the visit by a meter worker to physically change the meter. The visit could include an assessment that it is safe and the meter is accessible and the delivery of education around the implications of prepayment metering. While this would incur a cost it would provide a better customer experience and remains lower cost than sending a meter worker as the time on site would be lower and there would be no asset write-off costs. This same process could be followed to attend site linked to a disconnection, thereby maximising attempts to make contact with the customer.

G4S believe that the meter reading workforce can assist with the roll-out programme and one area of assistance could be through the use of the meter reading staff to carry out a meter survey. We have added a discussion document on this subject to our submission. Part of the survey could be to identify meter sites where the use of Prepayment functionality is not possible due to the need for practicability of meter access.

#### **Q5. Do you have any comments on the proposed approach to smaller non-domestic consumers (in particular on exceptions and access to data)?**

G4S carry out services for a number of energy suppliers but also for direct consumers in the business sector. The market for services to business customers has grown through a mixture of obligations upon them and individual approaches to energy and carbon management. There are benefits to the use of Smart meters for these customers and we are keen to ensure that the ultimate flexibility seen today is retained for them. To that end it is important to make clear that these customers are serviced essentially through the use of the same systems as the domestic portfolio and costs are commensurate with this approach.

Should the NHHDC and NHHDA services be moved to DCC this will have an impact on the cost to serve this portfolio.

We agree that the provision of a display unit does not need to be mandated as these customers will already employ more sophisticated and appropriate means of displaying data.



**Q9. Do you have any comments on the proposal that the scope of activities of the central data and communications function should be limited initially to those functions that are essential for the effective transfer of smart metering data, such as data access and scheduled data retrieval?**

G4S have provided greater detail in our response to the Information request on DCC scope and services. In short we believe that the scope of the DCC should be limited in the first instance to provision of core services only.

**Q12. Does the proposal that suppliers of smaller non-domestic customers should not be obliged to use DCC services but may elect to use them cause any substantive problems?**

G4S support the approach to allow smaller non-domestic customers to continue to benefit from a competitive market but stress the need to manage the scope of the DCC for domestic customers such that these customers are not forced to use the DCC due to inflated costs in the competitive market or to move to a half hourly settlement model with disproportionately high costs.

**Q13. Do you agree with the proposal for a Smart Energy Code to govern the operation of smart metering?**

G4S recognise the need for a governance framework such as the Smart Energy Code and also support a harmonised operational approval process and framework for installation staff to remove a timely and costly process in place today that reflects a regional market rather than a national one.

**Q14. Have we identified all the wider impacts of smart metering on the energy sector?**

The Prospectus considers the delivery of the Smart Metering Implementation Programme but with little reference to the management of the declining legacy services and the impacts of this. The duration of the roll-out of Smart meters is critical in that a longer programme provides more time for legacy operations such as ours to restructure through retraining and redeployment of the existing workforce thereby reducing, or even removing, the need for large scale redundancy.

#### **Data Comms Company**

**Q1. Do you agree that access control to secure centrally-coordinated communications, translation services and scheduled data retrieval are essential as part of the initial scope of DCC?**

G4S believe that there is a need to ensure access control is monitored by an independent party in order to ensure consumers are protected against unscrupulous behaviour. This is delivered today using authorised parties through the supplier hub principle. There could be a large volume of smart meters installed by the time DCC is operational and this will lead to a migration of services that will carry a cost and a risk to continuity of service to those



customers with Smart meters. In reference to questions 2 and 3 this migration is particularly important.

The delivery of a coordinated service could be delivered through the existing competitive market. There would be a need to ensure delivery is possible at a competitive rate for small suppliers or new entrants but this could be delivered through independent agents with sufficient market share or alternative licence arrangements or centrally subsidy to ensure a true competitive market. The move away from a competitive market will cause difficulty, risk and cost for the set-up of the DCC.

**Q2 and Q3 - Do you agree that meter registration should be included within DCC"s scope and, if so, when? Should data processing, aggregation and storage be included in DCC"s scope and, if so, when?**

There are a number of benefits that will be spoken about relating to the centralisation of services centrally but it is important that the Smart Metering Implementation Programme is not charged with resolving existing industry processes or making changes not directly linked to Smart Metering that will carry a consumer benefit. These include:

- Standardisation of customer switching processes
- Half hourly settlement
- Data quality issues and differences
- Unbundling of Gas MAM/MAP services

All of these could be delivered in the current non-Smart environment and trying to resolve them could lead to a failure to deliver the main target of installing Smart Meters across the UK as quickly as possible.

If changes were to be made that would only benefit those customers who have switched to Smart this would create a two-tier approach to consumers. The divisive nature of this could lead to a negative reaction to Smart or to an unsatisfied pull for Smart metering. We firmly believe that changes to current processes should be considered at a time closer to the conclusion of the Smart implementation programme.

If data processing and aggregation is to be conducted within the DCC it is important to manage the transition in a way that considers the impact on costs of a transition (with reducing economy of scale for the legacy portfolio) and where these impacts may be felt. We have commented further in our response to the Information Request relating to the scope and services of the DCC.

**Q4. Do any measures need to be put in place to facilitate rollout in the period before DCC service availability and the transition to provision of services by DCC, for example requiring DCC to take on communications contracts meeting certain pre-defined criteria?**

If interim measures are needed they needed to already be in place by 2010. The suggestion to make DCC take contracts with certain features seems practical but, if not already defined,



by the time the interim arrangements are agreed the DCC will need to be on the way to being operational.

**Q7. Do you have any comments on the steps DCC would need to take to be in a position to provide its services and the likely timescales involved?**

Should the scope of the DCC be expanded to include data processing and aggregation, particularly in options b and d (with the whole portfolio being serviced from day 1) there would be significant unnecessary cost and risk linked to the migration process from legacy systems and agents to DCC. This would probably need to be delivered through a technical solution that would require focus from across the industry at a time when resources are limited due to the core delivery of Smart meter installations and service development.

**Consumer Protection**

The visit to install the Smart Metering System will need to be carefully planned and delivered. There needs to be a balance of consumer education that reflects the need not just for Smart Meters but for education and services delivered on the back of the Smart Metering System that help consumers reduce their consumption.

**Q2 and Q3 - Do you agree with our proposed approach for addressing unwelcome sales activities during visits for meter installation? What do you consider as acceptable and unacceptable uses of the installation visit and why?**

The focus of the installation visit should be to ensure a safe, right-first-time installation of the Smart metering system. This should include sufficient education such that the consumer understands how to use the equipment that has been installed. To ensure this we support a national standardised process to approve meter workers to operate as proposed by the EU Skills NSAP programme. Our meter workers all follow a doorstep protocol which includes having a clearly visible ID card and use appropriate customer greetings etc.

**Q12 and Q15 - What notification should suppliers be required to provide before disconnecting a customer?**

G4S believe that the residual meter reading workforce could be used to conduct site visits prior to switching a customer to prepayment. This would fill the void currently filled as part of the visit by a meter worker to physically change the meter. The visit could include an assessment that it is safe and the meter is accessible and the delivery of education around the implications of prepayment metering. While this would incur a cost it would provide a better customer experience and remains lower cost than sending a meter worker as the time on site would be lower and there would be no asset write-off costs.

**Q14. Do you agree with our approach for addressing issues related to remote disconnection and switching to prepayment?**

G4S believe that the meter reading workforce can assist with the roll-out programme and one area of assistance could be through the use of the meter reading staff to carry out a meter survey. We have added a discussion document on this subject to our submission. Part of the



survey could be to identify meter sites where the use of Prepayment functionality is not possible due to the need for practicability of meter access.

**Q16. What information, advice and support might be provided for vulnerable consumers (e.g. a dedicated help scheme)? Who should it be provided to?**

We believe that there is a large workforce of people skilled and experienced in dealing with vulnerable customers that could be utilised to provide advice and support for these groups of consumers. Meter reading staff will be retained to fulfil Must Inspect Obligations and could deliver other first line maintenance visits. These staff are experienced in dealing with prepayment customers and managing meter reading services for vulnerable customers and so are well placed to deliver support of these groups of consumers before, during and after Smart meter installation.

**Non-Domestic Sector**

G4S are a leading provider of AMR and Smart services to the non-domestic sector and this area of the market is relatively advanced as a result of earlier adoption. There are benefits to leaving this sector in a competitive environment:

- Continued use and further development of flexible and tailored solutions
- Removes need to manage novation or transfer of high volume of contracts into DCC
- Allows segment / industry specialism to develop
- Aggregated consumption data passed to DNOs through existing industry processes
- Allows focus to be on delivery of domestic portfolio

There are things that need to be considered however which are impacted by the scope of services of the DCC for the domestic portfolio,

**Q1. Are there any technical circumstances where only advanced rather than smart metering would be technically feasible? How many smaller non-domestic customers have U16 or CT meters and what scope is there for full smart meter functionality to be added in these cases? Are there technical circumstances that we have not considered that would justify further flexibility around installation of either smart or advanced meters?**

Data quality has been an issue in the non-domestic sector and a number of lessons have been learnt by those operating in it. A number of these are transferable to the domestic sector. For example, we regularly now conduct pre-installation surveys to ensure first time fits. The surveys include signal strength tests, checks of equipment, supply type validation and collection of customer contact information. For gas AMR surveys the survey is focussed on the availability of a pulse output.

**Q2. Do you agree with our proposed approach to exceptions in the smaller non-domestic sector?**

The proposed approach to exceptions seems reasonable; that in time there be technical solutions to a number of the issues faced today. There are a number of scenarios that limit Smart installations today, a number of which should be resolvable. They include:

- Customer will not allow power-down due their business operational requirements





- There are technical reasons driving the need for DNO involvement
- Meters can not be located or accessed due to physical impairments

These issues are not specific to Smart metering and should be excluded from consideration with the assumption that the recert programme and methods to ensure full compliance will be adopted.

There are, however, physical and financial factors that are specific to Smart meter installations that should be considered and acknowledged. They relate to where there is not sufficient signal using existing communications methods and / or where it is simply not cost effective to install a Smart solution. If there is a drive for 100% rollout these issues will need to be resolved. Alternatively there could be exceptions made until such point as cost-effective solutions are developed.

**Q3. Are there technical circumstances that we have not considered that would justify further flexibility around installation of either smart or advanced meters?**

G4S experience in the non-domestic market has highlighted the data quality issues and information gaps that a meter survey would reduce or remove. The practical implications are linked to the different training required for CT and WC installations. Further experience in gas installations has led us to take a different view to some others with regards to training to cater for most scenarios (e.g. fitting Smart gas meters in semi-concealed boxes and having medium pressure trained meter workers). Neither of these ultimately limit the deployment of Smart but can impact first time installation rates and, therefore the customer experience, cost and duration of rollout.

**Q6. To what extent does our proposed approach to the use of DCC for non-domestic customers present any significant potential limitations for smart grids?**

G4S believe that this question is best answered by those who require Smart Grids. Essentially, the aggregated consumption data is provided to DNOs and so, while active management would not be possible forecasting for Grid management would still be possible. The question is whether this information is sufficient or until when is this kevel of information sufficient? The current levels of data provision are understood and costed but any increase in requirements should be chargeable at appropriate levels to those who realise the benefit.

**Q9. What steps are needed to ensure that customers can access their data, and should the level of data provision and the means through which it is provided to individual customers or premises be a matter for contract between the customer and the supplier or should minimum requirements be put in place?**

Those companies which have already invested in AMR/Smart solutions should not be commercially disadvantaged and should be permitted to exploit the current competitive market to deliver solutions tailored to their needs. The existence of the SME Smart market is aiding and informing the domestic rollout with companies learning how to resolve issues as they have materialised. The smaller non-domestic customers are likely to be more akin to the domestic sector and so could have the choice to use the DCC (particularly if their Smart meter installation is supplier-driven) or agree their own commercial contract.





**Q10 and Q11 - Do you agree with our approach to data privacy and security for non-domestic customers? Is the proposed approach to rollout (for example in terms of targets and a requirement for an installation code of practice) appropriate for the non-domestic sector?**

The non-domestic market that has not instigated Smart meter deployment themselves through elective use of Smart could be dealt with and protected in the same way as the domestic market.

### **Regulatory and Commercial Framework**

**Q5. Do you agree with the proposals concerning the roles and obligations of suppliers in relation to the WAN communications module?**

G4S see benefit in the separation of the WAN module to allow staff who are not meter worker trained to conduct first line maintenance visits in cases where the cause of the fault is not known. There is further benefit in this case of an independent party conducting this first line maintenance to provide impartial views as to the nature of the fault. If this service is carried out by staff other than meter workers it has the benefit of reducing the cost. Furthermore the secondary benefit is that the scarcer resource trained to install meters are not distracted from the delivery of the initial rollout programme.

**Q13. Are there changes to settlement arrangements in the electricity or gas sectors that are needed to realise the benefits of smart metering?**

Smart metering can help to deliver a number of other benefits in the long term, particularly upon completion of roll-out but, if the benefits of Smart metering in the domestic market are to improve visibility to consumers of their energy consumption in a bid to reduce to carbon emissions, there is no relation to settlement as far as the consumer is concerned.

**Q14. What arrangements would need to be put in place to ensure that customers located on independent networks have access to the same benefits of smart metering as all other customers?**

It is important that the process to obtain authorisation to operate on networks is standardised and G4S are supporting EU Skills in the development of an operational standard that should include independent networks to remove barriers to delivering standardised, safe, service levels.

### **Statement of Design Requirements**

**Q1. Should the HAN hardware be exchangeable without the need to exchange the meter?**

The significant benefit of the separation of HAN technology from metrology is that the maintenance can be conducted by staff that are not meter installation trained which would reduce the cost of the visit, reduce the redundancy of meter reading staff and avoid meter workers being diverted onto maintenance work.



The second major benefit is that the separation of the HAN would make it more clearly open to connect with home automation systems or tertiary devices for those who wish to incorporate this within their home energy management solution.

### **Data Privacy and Security**

G4S operate in a number of secure government environments through our varied operations in the UK. Data security and privacy covers people, infrastructure and data. Given the sensitivity of data and the need to ensure consumer confidence, we see security is very much central to our business and this is carried into our Utility Services Business evidenced by:

- Our approach to vetting of all staff (enhanced CRB checking for all meter installers)
- Annual DVLA licence checks for all staff
- Full reference checks for meter installers
- Provision of secure IT systems to protect our customers data

We believe that security is important to all, including the end consumer, and the Smart Metering Implementation Programme will need to evidence what actions are being taken to protect the information gathered from consumers' homes.

### **Q2. We seek views from stakeholders on what level of data aggregation and frequency of access to smart metering data is necessary in order for industry to fulfil regulated duties.**

The frequency of access to data, were regulation not to change, in the Smart model would not need to differ from the existing model. That said there would be an expectation from consumers that they would not need to provide reads as part of some tariff arrangements. The obligation to physically inspect a meter would not be relevant as this would need to be managed through a visit process and logging of physical inspections. To meet settlement requirements, with no change to settlement targets or calendars, the processing of a monthly or quarterly read would suffice.

### **In-Home Display**

G4S have a neutral position on meter technologies and so have little to add to the specific questions asked.

### **Q5. We welcome evidence on whether portability of IHDs has a significant impact on consumer behavioural change.**

To an end consumer who doesn't have an alternative method of viewing their data (e.g. through the internet or another application), the IHD is what brings the benefits of Smart metering to life. It is therefore important that the IHD is visible to the consumer and a version remains with them in most circumstances (e.g. through change of supply).



## **Roll-out**

**Q1. Do you believe that the proposed approach provides the right balance between supplier certainty and flexibility to ensure the successful rollout of smart meters? If not, how should this balance be addressed?**

To ensure maximum efficiency roll-out would be delivered on a co-ordinated basis. This would have the added benefit of allowing the meter reading wind-down to also be managed in a way that removes volume rather than density thereby leaving efficient cyclic read activity for the residual legacy meters. This can be achieved through a competitive market based on costs. A level of local co-ordination would ensure there is an efficient rollout that reaches all customers.

There are synergies to realise between meter reading workforces and Smart meter deployment. The work force has local knowledge and can be used to conduct meter surveys in a planned way that delivers the best customer experience. The survey can be extended to cover other areas using the same premise that the benefits to be realised outweigh the costs to complete as the costs would be incremental to existing meter reading services.

**Q2. Would the same approach be appropriate for the non-domestic sector as for the domestic sector?**

Small non-domestic customers could be managed in the same way as domestic customers as they are in existing meter reading and meter change programmes.

**Q3. Is there a case for special arrangements for smaller suppliers?**

With the removal of meter installation obligations from network operators in 2003 and 2004 for electricity and gas respectively there is an increased risk that small suppliers may not be able to access competitively priced metering services. It is essential that there remain independent metering providers in the market and that they have sufficient volume to be able to offer comprehensive services at competitive rates. Any changes to the industry need to be delivered such that there is no decrease in protection of independent metering companies to ensure that they can provide competitive legacy and Smart metering services.

**Q4. What is the best way to promote consumer engagement in smart metering? As part of broader efforts, do you believe that a national awareness campaign should be established for smart metering? If so, what do you believe should be its scope and what would be the best way to deliver it?**

G4S have valuable experience in managing relationships with consumers through the delivery of meter reading and first line maintenance services. We have experience of utilising meter readers to deliver other services for both energy suppliers and other companies requiring data collection services. This experience can be used to assist with the consumer education process either through targeted letter drops as part of meter reading activities or even through the use of meter reading staff to collect customer contact details and even arrange meter change appointments. The level of involvement will vary based on the needs or wants of suppliers who are managing the programme. Where the same operation is



managing the meter reading and meter change programme the synergies are easier to realise.

Meter readers are trusted by consumers as a population who understand energy and metering and, in the case of independent operators, can demonstrate detachment from energy suppliers.

In addition to the possibilities of using the meter reading workforce, a website including features such as FAQs, media advertising and billboard style posters describing the benefits of Smart metering should be co-ordinated by the industry. As with digital switchover the message can be tailored geographically to reflect any local initiatives.

**Q6. Do you agree with the proposed obligation on suppliers to take all reasonable steps to install smart meters for their customers? How should a completed installation be defined?**

For the purposes of measurement a completed installation needs to be defined clearly and should be related to the provision of the equipment and education about its use. However that will not mean that the installation is delivering what was intended – a reduction in energy. G4S believe that further customer engagement will be required to deliver the desired energy reduction. This does not need to be delivered as part of the installation but could be delivered some time after the installation to ensure that consumers now have data on their consumption but are able to turn it into information and that they receive advice on how to reduce their energy consumption.

There are different drivers for the installation of Smart meters at different sites and various arguments as to whether the different groups require specific targets. For example, rural meters may take longer to access but they are also the most expensive to read and traditionally have lower read rates so may have more to gain from Smart meters. Poor customers may have lower revenue and therefore not be in a position to purchase additional services but the same portfolio could be more likely to require a change from credit to prepayment metering. On one hand therefore a supplier may not be minded to install Smart meters early but could have the most to gain in terms of avoiding future costs.

G4S are not in a position to second guess the different views of the suppliers but recognise their different views. The most efficient deployment would be to fit on a street by street basis but efficient installations can be achieved in other ways through the maximisation of first time fits and reduced aborted visits.

**Q9. What rate of installation of smart meters is achievable and what implications would this have?**

Installation rates are a function of travel time, access rates and on-site process. In a supplier led rollout these are decided in the main by the suppliers and will be subject to commercial agreements.



**Q12. Do you agree that there is already adequate protection in place dealing with onsite security or are there specific aspects that are not adequately addressed?**

G4S take our responsibility relating to protection of customers extremely seriously and, to this end, have a number of activities related to our on-boarding process for new meter workers. The assessment process is focussed on health and safety regarding technical competence but also on the selection of fit and proper people. The checks include:

- 5 year history of work references
- 2 personal references
- Enhanced CRB check
- Eligibility to work in the UK
- Annual DVLA checks
- Credit checks
- Technical competency
- Mentoring
- Independent assessor sign-off

This is further augmented through an ongoing routine audit process.

All staff carry photo ID cards and a telephone line is provided to verify identity.

These are all existing processes for us and, as detailed in the Prospectus, are in place within legacy operations.

G4S see a benefit in having a single industry technical assessment process that complements the non-technical assessment of individuals. The existing standards should not be compromised in any way if there is pressure to increase meter worker numbers to deliver the programme.

**Q13. Do you agree with our proposal to require suppliers to develop a code of practice around the installation process? Are there any other aspects that should be included in this code of practice?**

G4S believe that a national standard for technical competence (as being proposed by EU Skills through the National Skills Academy for Power initiative) would be beneficial as a single accreditation allowing meter workers to operate. Further mandating softer elements of the process could prove counter-productive or unnecessary:

- Information on how to use the Smart metering system and information does not have to be delivered at install. This has the disadvantage of increasing the time on site and further increasing the pressure on a limited resource. It could be delivered after the event either remotely or through appropriately trained staff
- Suppliers may wish to differentiate their on-site process. It is, essentially, in their interest to ensure a positive customer experience
- Moving furniture is unlikely to be required and should only be carried out by the meter worker if absolutely necessary and agreed to by the consumer
- Facilities already exist for dealing with customers with special needs