28/10/2010

To **: Margaret Coaster**
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Dear Margaret,

Re: Response to Questions Raised - Smart Metering Implementation Programme

Salient Systems Limited (SSL) are happy to respond further to questions raised within the prospectus and accompanying documents. Our comments here are by no means confidential, please feel free to disseminate them as you see fit.

This communication will address questions raised to which responses are required by the end of October, 2010. It will complement our earlier communication to you which addressed questions raised which required response by the end of September, 2010.

At the outset it is important to qualify our particular stakeholder positioning, experience and interest in the outcomes of the programme so that reviewers are fully aware of the drivers in play that influence our views.

SSL are a software product solutions and consultancy company operating in the UK and totally focused upon the delivery of business system solutions to the Utilities market space. Our fully automated Electricity NHHDC, NHHMO industry qualified solutions and our RMS metering work management and field service system solution are in place at significant agent providers of metering services to their Supplier and SME/I&C clients.

It follows that the proposed scope of the DCC and the specification of its necessary bi-directional interfaces to authorised parties/agents is of significant interest to SSL. We have restricted our brief responses here to those questions that are relevant to our particular stakeholder interest and which provide opportunity for us to raise our concerns upon or relevant inputs to their outcomes.

I have provided our response in the form of sets of short summaries of our observations and concerns prompted by particular sets of questions that are logically related. I have pre-pended each of our summary responses by the set of related questions from the prospectus that have prompted each summary response. I hope our approach here does not compromise your review objectives too greatly.

Salient Systems Limited
Registered in England Number: 4215222

SSL Responses

Consumer Protection - CHAPTER 2

Question 1: *Do you have any views on our proposed approach for addressing potential tariff confusion? What specific steps can be taken to safeguard the consumer from tariff confusion while maintaining the benefit of tariff choices?*
Question 5: *Do you agree that consumers should be able to obtain consumption information free of charge at a useful level of detail and format? How could this be achieved in practice?*

SSL response here is particularly prompted by the two questions identified above, but is also influenced by the range of issues discussed within the Data Privacy and Security section of the Prospectus. Our particular stakeholder interest relates to the potential role of Smart complements to agent systems, particularly NHHDC systems, to address requirements here.

SSL are mindful that the Consumer will pay the bill – the whole bill over time – to achieve Government and Supplier objectives around Smart. Despite recent moves by Government to effectively remove a number of effective Consumer voices from the UK regulatory and support landscape the Smart solution delivered to Consumers will ignore at its peril the legitimate consumer concerns, information requirements and value for money objectives that must be delivered by the programme. Ofgem must pick up the gauntlet here.

The raw interval consumption data available from Smart will provide the basis for both Supplier focused and Consumer focused further data analysis, leading to relevant action plans for change at each stakeholder. The joining of raw data with settlement configuration data, including tariff and critical peak interval related data, is a relevant enabler of targeted analysis at each stakeholder. Further joining of generation commitment and cost data at the Supplier focused data analysis suite is certain.

Suppliers will construct the data analysis mechanisms that will serve to illuminate commercially attractive offer configurations and continually test such configurations against potential alternative offers, consumer demand shifts and demand reductions over time. It is inconceivable, at the effective Supplier, that the data analysis facilities constructed will not include the delivery of consumer-centric views across alternate offers available both within and across Supply companies – providing critical inputs to testing and securing Supplier competitive advantage in the market.

Although the implicated data analysis mechanisms at both Supplier and Consumer of themselves are clear and not particularly complex it would be unreasonable in the extreme to expect individual consumers to construct their own effective facilities here. Neither would it appear appropriate, or palatable, to expect Suppliers to distribute their internal data analysis facilities either completely or discretely to the consumer or to other interested parties.

We are of the view that a pragmatic solution here should include the development of a full census of consumer-centric Smart delivered data requirements, complemented by a census of implicated industry configuration data, which will form the basis for delivery directly to the consumer or to a consumer nominated agent who will provide differentiated data analysis services directly to the Consumer.

The data specifications developed here will be inclusive, rather than consumer/supplier nominated, and will be included in any case within the set of data required by the Supplier, delivered at the particular components of Supplier Hub arrangements.

The onus would be on the Supplier to ensure that implicated data is available. Consumers will be contributing significantly in any case to the costs of securing data and its distribution mechanisms. Additional cost mechanisms applied to consumers who choose to take advantage of such mechanisms would be cumbersome and inappropriate.

The onus would remain with the Consumer to take advantage of the data delivery service offered, most likely partnered by a nominated data analysis service provider. There are and will continue to be significant commercial incentives for the positioning of such third party service providers, particularly on the back of the significant channel opened up to the consumer through such service deliveries.

Within such a framework there should not exist barriers to Suppliers or their Supplier Hub agents to present such service offerings to their own customers. Indeed, within the non-domestic market, independent providers of DC and MO services already provide example variations upon the model proposed, providing value-adding data analysis services to both Supplier and end customer clients.

Nomination by consumers to Supplier of data analysis partner agents and communication of those requirements between Suppliers across Change of Supplier events will serve to maintain consistency of service to consumers, avoiding possible problematic restating of requirements to new Supplier. Consumer Data Privacy related requirements would form an integral component of the contract between consumer and data analysis service provider, complementing and reinforcing similar arrangements entered into with the Supplier.

Consumers who do not choose to nominate service provider partners in this respect provide a particularly useful flag to Government, Suppliers and industry regulators. The potential for central analysis of such implicated demand and demand reduction performance data here, coupled with similar performance data reporting requirements which might usefully be delivered by the consumer centric service providers, would be expected to significantly assist further focused investment and regulation decisions.

Communications Business Model - CHAPTER 2

Question 1: *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?*
Question 2: *Do you agree that meter registration should be included within DCC"s scope and, if so, when?*
Question 3: *Should data processing, aggregation and storage be included in DCC"s scope and, if so, when?*

Salient have reported in our September, 2010 response that we fully support a ‘staged’ approach to DCC role and scope implementations and that we agree that the proposed initial scope of DCC is entirely achievable within schedule constraints - with the proviso that design and delivery of adequate and appropriate ‘Translation’ services at DCC require significant attention to achieve ‘fit for purpose’ status. Responses to the Prospectus required at this point provide further opportunity to evaluate the decisions taken regarding the particular census of role responsibilities that will form DCC initial scope and to postulate upon the required process that will form the basis for confirmation of additional role scope in future iterations of DCC.

DCC delivery of centrally coordinated and secure communications facilities to Smart infrastructure, from our perspective, is a no-brainer. Delivery of a coherent set of functional requirements here, complemented by similar attention to device interoperability specifications, will support the delivery of an effective Smart technical architecture backbone upon which business process requirements may be achieved. However, decisions upon the positioning of role

responsibilities that relate to the management and administration of the business processes and data supported by the physical architecture are less straightforward. Positive validation of decisions reached will demand the application of a rigorous systems engineering approach to illuminate and test sensible and desirable decision options.

From our experience, as data management professionals, we are aware of the significant danger of concluding too early that moves towards central custodianship and administration of data will cure all ills. Conclusions will always demand rigorous evaluation of the impacts of separation of the custodianship/administrator data management roles from other important roles of data owner, data creator, data validator, data maintainer etc. Alignment within a single responsible party of all data management role responsibilities against data is an ideal, compromise here will necessarily introduce risk to data integrity and availability, mitigated by controlled data distributions (data copy management) and additional data integrity assurance procedures and controls.

Electricity and Gas market models in the UK, particularly Electricity, currently involve significant distribution of business processes, data and associated data management role responsibilities across agent participants. A non-trivial arrangement indeed, but geared towards assuring a competitive metering services market particularly, while assuring data has integrity and is available on a timely basis to support the responsibilities of particular role holders. The arrangements have, and frequently incur, potential disadvantages, particularly over CoS events when significant data maintenance and redistribution of changed data between agent parties is implicated. It is of no surprise that potential opportunities to consolidate activities here will come under serious scrutiny during evaluations of DCC role going forward.

Salient firmly support such scrutiny of DCC future role, but caution that established data management process and principles must be applied rigorously along the way in order to assure decision outcomes. Deliberations upon the potentials for DCC to assume registration, data processing and aggregation responsibilities cannot be adequately addressed without illuminating and testing both the positive and negative impacts that will result between persisting data management role holders.

For example, we believe that currently where the agent roles, and thus the data management roles, of DC and MOP are assumed and exercised together for a meter set at an effective metering services provider then the integrity of managed data is significantly improved over alternate arrangements where DC and MOP responsibilities are distributed between different service providers. The separation of data processing (DC) responsibilities to DCC at some point in the future may in fact serve to reduce data integrity rather than improve it – certainly an issue that is worth disciplined and impartial review.

Additionally, DCC future role assumptions must take account of persisting or additional data requirements and appropriate data management role responsibility positioning that will arise from developing Smart Grid initiatives. Proposals here, when available, will no doubt give rise to serious further debate, but impact upon the role of LDSO may be safely predicted. This may suggest that future deliberations upon the role of LDSO's going forward, including around registration, should be considered in the round.

Adopting a rigorous data management process driven evaluation of potential future role constituents at DCC will no doubt give rise to interesting observations. Salient expectations are that where such appropriate process is adopted then the resulting conclusions will not compromise Ofgem's remit in the area of encouraging market improvement through competition across a range of effective data management focused metering service providers.

However, we must also report our observation at this point that within the process of validating decisions upon the initial scope of DCC the application of data management process imperatives appear to have been discarded – a bit of a worry if this situation is a sign of things to come.

Although we believe that the scheduling of reads at DCC is entirely achievable we are puzzled by inclusion of this role within first draft of DCC. Scheduling of Electricity reads is a role responsibility of DC agents currently, a role that will persist for some time presumably, if only to accommodate pedestrian read scheduling. Neither will the impacted role relationship between existing DC agents and the DCC read scheduling role reflect the industry established DC to DR role relationship. Data management roles exercised against read schedule data will be duplicated across DC and DCC, in direct violation of any sensible data management process.

We would encourage removal of this anomaly at first implementation of the DCC role - which should focus upon delivery of secure communications framework and translation services that will accommodate the interfaces required between DCC and all other parties, including DC/DR role holders. The possible future scheduling of reads from DCC is an issue that should be subjected to the proposed discipline of data management process evaluation during future consideration of the potential for positioning of DC services at DCC.

Question 4: *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?*

Aggressive early rollout of Smart is happening now, there will be millions of installed meters and infrastructure in place before DCC is mobilised. The impressive business service plans of early mover Suppliers will be supported by sophisticated and effective technical and applications architecture frameworks. Change of Supplier churn will continue in the interim and services will develop in the market to accommodate the need of Suppliers to support infrastructure that they have not installed.

If DCC is to be a success at mobilisation it must be mindful of the developments that will be achieved in the interim. Prediction of the actual de-facto state of play prior to DCC delivery is problematic, suggesting that periodic formal review and impact analysis will be required along the DCC design and rollout schedule. Impact analysis required must be pragmatic and impartial rather than focused upon confirming particular DCC status quo expectations.

Pragmatically, we would expect that DCC will be unable to avoid providing mechanisms that will assume or subsume some existing facilities in play across the market. Assuming existing communications contracts entered into by Suppliers may indeed be a positive step. The realisation of a range of service providers to DCC, in our view, would be an expected objective during DCC construction in any case. We persist in our view, however, that early illumination of proposed ‘Translation’ facilities that will be provided at DCC (discussed in our September response) is critical and will reduce the risk of poor fit between Supplier interim developed Smart interfaces/brokerage services and those that will be available from DCC.

Yours sincerely,

[redacted]

Salient Systems Limited

[redacted]