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Dear Margaret,

28th September 2010

Please find enclosed Iskraemeco (UK) Ltd response to the prospectus required for the 28th September 2010.

Kind Regards,

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Prospectus

CHAPTER 2

Question 3: Do you have any comments on the proposed approach to ensuring customers have a positive experience of the smart meter rollout (including the required code of practice on installation and preventing unwelcome sales activity and upfront charging)?

CHAPTER 3

Question 6: Do you have any comments on the functional requirements for the smart metering system we have set out in the Functional Requirements Catalogue?

We broadly welcome the scope of the functional requirements but have concern that much of the detail is technology prescriptive to a greater or lesser degree. Certain outlined functionality implies specific technical solutions and all but excludes alternative technologies. In particular, requirements concerning HAN and WAN communications and associated service levels favour technologies such as ZigBee and GPRS while precluding others such as DLC.

While we realise unambiguous service levels in relation to the DCC must be aspired to, such targets must also include provision for technologies and methods which meet particular groups of consumer's needs and circumstances. An example of a situation requiring a best-fit technology is tower blocks with the consumer's meters located on an inaccessible riser; a standard ISM radio solution will not support the core functional requirements for IHDs, contactor/valve interlocks, etc. Additionally, the current definition of the Smart Metering System as equipment and systems located within the consumer's premise does not allow for the classification of data concentrators.

Another key concern is the lack of support for an existing SME market. While the current functional requirements do not prohibit the connection to the HAN of accredited third party devices, the implication of HAN topology makes the likely-hood of a gateway or bridge necessary. Potential security policies and binding mechanisms of existing public or proprietary standards pose a significant challenge to maintain a fair and open network for consumer directed use while reassuring suppliers and consumers that their data is secure. A common sense approach to security and data ownership is required to avoid locked-down inaccessible networks which threaten energy management businesses at all levels. If the consumer is to act as the principal authorised party and have complete authority as to how and who uses their data, an open HAN structure must be maintained. The issue must be resolved for secure maintenance of the core smart metering system components by supplier authorised on-site parties, therefore consideration should be given for consumer authorised parties. In this respect, general consideration for security policies, transient/roaming HAN device binding, public encryption key management, etc. is paramount.

In the commercial gas market, intrinsically-safe data loggers are common and a necessary device in the case when gas correctors are in place. Due to the variety of meter types and sizes in existence, the economics of manufacturers developing a cost-effective common smart solution is unlikely to favour consumers. To this end, we believe an exception for such devices is acceptable after April 2014 in such cases where smart metering is either cost prohibitive or technologically inappropriate. The lack of a mandate for DCC use would support existing advanced metering service support already in place.

We also welcome the initiative to exempt SME consumer's from requiring an IHD. Coupled to the fact that many SME consumers are non dual-fuel, multiple unnecessary HANs would be undesirable. Therefore we seek an exemption for SME consumers to require HAN communication modules (or HAN-ready meters). The technological solution should aim to complement the individual's circumstances while not interfering with global interoperability. Obviously, there is nothing to stop suppliers providing equipment over and above the minimum required functionality with the consumer's consent. The momentum for adoption of advanced and smart metering will be maintained especially with initiatives such as CRCees.

The Statement of Design Requirements provides some challenges for manufacturers of smart metering equipment. Specific requirements imply supporting functionality potentially arising in costs beyond those delineated by the impact assessment. Functionality requiring additional mechanical or electronic components and firmware development adds to the already demanding targets and potentially jeopardising final production costs and time to market;

- Resources; excessive demands in terms of on-board data storage and processing, e.g. multiple quadrant data logging, event logging, tamper logging, vending history, ghost firmware image, etc.
- Tamperers; incorporation of numerous sensors (momentary mechanical switches, flow detection, etc)
- Batteries; multiple backup, RTC backup, last gasp, etc.
- LCD displays; messaging, dot-matrix versus custom glass, etc
- Gas meter specific; frequency of wakeup and general battery lifetime based on required functionality including backlight, prepay, monitoring, required resolution of demand flow monitoring, etc.

As an example, last gasp is a potentially expensive feature to provide on the meter(s) and/or communication hub which appears to have a limited cost benefit -- the ENA estimate an overall net benefit of £2.2M per annum for an estimated investment of £60M to £150M.

Power quality information is an important subset of data critical for effective energy management in SME. Furthermore, as the nature of domestic loads continue to evolve – for example, EV charging (induction mats, capacitive coupling, etc. – the availability of

complementary metrics of efficiency will help to provide a fuller picture of the UK's energy use.

Question 7: Do you see any issues with the proposed approach to developing technical specifications for the smart metering system?

In order to meet the current Programme milestones it is imperative the technical specifications are made available to manufacturers on schedule providing the necessary level of detail and guidance. Lack of clarity or contextual ambiguity will result in loss of interoperability and service levels. Other stakeholders critical to performance such as data and radio network providers will also require a clear indication of the expectations of their own offerings.

It is clear the Programme must look outside the industry for the necessary experience and expertise particularly in areas such as security. The results of such consultations will have an impact on the final specifications and potentially Statement of Design Requirements.

Question 16: Do you have any comments on the proposals for requiring suppliers to deliver the rollout of smart meters (including the use of targets and potential future obligations on local coordination)?

Significant planning will be required between the energy suppliers and meter manufacturers. In order to minimise risk in the supply chain, contractual assurance will be required between energy suppliers and meter manufacturers. This is to ensure minimal Supply chain and logistical issues. Commitment from energy suppliers for both volumes of materials as well as time for delivery will ensure value for money is maintained as well as finished goods being available for 'just in time' deployment.

In any significant rollout all parties (energy suppliers, meter manufacturers, component suppliers and installers) must clearly understand the time frame/s. Other factors also need to be accounted for which could have a risk in completing a roll out. For example, seasonal variations, a significant number of consumers will go on holiday during the summer months. Avoidance of larger volume of finished goods will require mitigating as well installers potentially waiting around unable to complete installations adding cost as well as time for non-installation. Bad weather conditions must also be seen as a high risk for both supply chain logistics as well as installation. Identification for the optimum periods as well as the worst periods must known prior to any roll out.

CHAPTER 4

Question 17: Do you have any comments on our implementation strategy? In particular, do you have any comments on the staged approach, with rollout starting before DCC services are available?

It is critical that the base-line technical specifications are signed off as early as possible to allow manufacturers to meet the demanding targets for rollout. While the development and rollout of the DCC in parallel may impact the efficiency of the equipment rollout, there are

certain risks involved. In particular, unforeseen technical and scheduling issues will have to be resolved in the DCC; large scale remote functional firmware updates are not desirable in the midst of a full scale rollout (it is assumed the DCC would be instrumental in the rollout of firmware updates).

Smart meter installations will effectively be commissioned blind without end-to-end WAN testing, unknown quality of site survey information, data scheduling issues and so on. Meters will be forced to debt mode without the necessary supporting PPMIP for prepayment.

Assuming the DCC is a true thin-client and the backbone of the head-end is achieved by a procurement exercise on the smart metering equipment manufacturers and service suppliers, integration issues will present the biggest challenge.

Question 18: Do you have any other suggestions on how the rollout could be brought forward? If so, do you have any evidence on how such measures would impact on the time, cost and risk associated with the programme?

It is unlikely the roll out could be brought forward due to the number stakeholders involved and agreements to be finalised. From a manufacturer's perspective, the manufacturers will be further down the stakeholder decision making process. When preparing for a significant production, sign off for components from the manufactures suppliers and for raw materials will require securing on sound data provided by energy suppliers. Details of volumes and time for delivery of finished goods will require the manufacture to ensure human resource is available. Initially, additional training may be required both for energy suppliers as well manufacturers, Clear objectives for numbers of devices as well as location must identified as soon as practically possible.

Question 19: The proposed timeline set out for agreement of the technical specifications is very dependent on industry expertise. Do you think that the technical specifications can be agreed more quickly than the plan currently assumes and, if so, how?

It is our view that the necessary level of technical interoperability can only be achieved within the desired timeframe if existing public standards are used as a base to build UK specific standards upon. We believe this also requires an early freeze on the adoption of new and emerging standards – this does not mean we cannot draw on European initiatives, directives and standards progressing through the roll-out, indeed, we may be forced to. This said, we believe the timeline is moderately aggressive providing little opportunity for early completion.

Question 20: Do you have any comments on our proposed governance and management principles or on how they can best be delivered in the context of this programme?

We broadly agree with the Programme's principles providing continued all stakeholder participation is maintained.

Statement of Design Requirements

CHAPTER 3

Question 1: Should the HAN hardware be exchangeable without the need to exchange the meter?

We agree that the HAN components should be exchangeable without interference or replacement of the meter. However, we believe the functional requirements are inconsistent with respect to the HAN for SME. While the IHD is not mandated the provision of a HAN is required. This would potentially require a accredited communication hub even though the DCC would not be utilised. We believe provision should be made to allow SME consumers opt out of the provision of HAN hardware where unnecessary.

With any HAN technology de-commissioning of any incumbent and binding/commissioning of the new device needs careful consideration in the technical specifications. Issues to consider include unintended binding to neighbouring MPAN/MPRN devices and phantom tamperers detected by WAN hub.

Question 2: Are suitable HAN technologies available that meet the functional requirements?

With respect to the IHD, while there are devices in the market that meet the general minimum data display requirements in the main we do not believe they meet the HAN communication needs, supplier/network messaging, any level of interoperability in terms of communication or data modelling and target costs.

We also do not believe any existing HAN communication technology is sufficient to drive the HAN rollout in its entirety although some come closer than others. There is a trade-off between application layer functionality/flexibility and performance which should be embraced to ensure HAN networks are rolled out to meet the needs of individual consumers' needs and site considerations. In particular an effective solution is required to support the physical separation of the IHD from the meter/communications hub, e.g. a block of flats or office block. An additional consideration in this case is the issue of how best to handle multiple meters located inaccessibly; are individual communication hubs required for each MPAN? In this example, a DLC system is would solve both the issue of meter WAN access via a communal data concentrator and remote IHDs.

Short-range radio solutions may suit the majority of domestic HAN needs, but the overall performance of the HAN will not be known until rollout including issues of penetration, bandwidth, interference with existing similar technologies, etc. Furthermore, accepted proprietary standards such as ZigBee (including the Smart Energy Profile) will require customisation to meet the minimum technical specifications. Supported for scheduled releases of ever evolving standards need consideration..

Question 3: How can the costs of switching between different mobile networks be minimised particularly in relation to the use of SIM cards and avoiding the need change out SIMs?

Effective management of GSM network costs and interchange can be attained by embedded SIM, however this requires legislation to force network providers to regulate the novation of contracts between providers. It is our view this is the only credible way forward.

Network aggregators provide a mechanism for an intermediary common interface and potential flat pricing; however the physical SIM asset remains specific to the source provider. Roaming SIMs currently offered by their nature offer independence to a certain degree but suffer from highest common denominator pricing.

Question 4: Do you believe that the Catalogue is complete and at the required level of detail to develop the technical specification?

See response to Prospectus question 6.

Question 5: Do you agree that the additional functionalities beyond the high-level list of functional requirements are justified on a cost benefit basis?

We believe any additional functionality beyond DCC requirements for billing and settlement and network balancing should be at the discretion of the consumer. We also believe caution should be exercised when rolling out smart grid functions included in the smart metering system. Duplicate functionality may follow as part of a DNO led losses management rollout and any cost benefit analysis should justify the incremental net benefit should the functionality be rolled out under smart grid, e.g. last gasp.

For SME gas, a pulse output coupled with a data logger (and possible corrector upstream) is common and the only way to effectively handle larger meters. Similarly, auxiliary switching should not be precluded from automation uses in the SME market and selective domestic electric vehicle charging via an external contactor to name an existing and future example use.

Question 6: Is there additional or new evidence that should cause those functional requirements that have been included or omitted to be further considered?

No.

CHAPTER 5

Question 7: Do you agree that the proposed approach to developing technical specifications will deliver the necessary technical certainty and interoperability?

Yes, we believe that detailed technical specifications based on solid existing public standards are the only way interoperability can be achieved. The European smart metering industry relies on self-regulation to a certain degree with organisations like the DLMS User Association amongst others regulating the specifications and compliance. The UK industry has a direct link to European standards working group output in the shape of the SMCG.

Europe has adopted a number of standard data modelling and mapping standards which have reached a level of maturity with coverage over all utilities, many communication profiles and now smart grid functionality. Furthermore, communication profiles for the main WAN and HAN technologies are in existence in some form or other. The main metering manufacturers have embraced these standards over the last 5-7 years and inter-manufacturer initiatives are now coming to fruition in the interests of developing co-operative interoperable specifications based on the standards.

Most of the main meter manufacturers have adopted DLMS/COSEM (standardised under the IEC 62056 and EN 13757-1 suite of protocols) as the preferred transport protocol and homogenised data model. The COSEM stack is well integrated into an IP stack with a choice of transport layers (UDP or TCP) and a simple wrapper to the application layer. The standard provides an abstracted model for representation of multiple logical devices independently addressable within a physically device which promotes secure data segmentation for sub-elements.

The standard now encompasses most utilities and is increasing integration with other proprietary and non-proprietary communication standards in a rapid phase of development. There now exists a moderate level of interoperability between major manufacturers in particular in DLC, partly driven by large regulated market rollouts in France, Belgium, the Netherlands and Scandinavia. In 2008/9, the DLMS UA started working with both the ZigBee Alliance and ESMIG.

We believe the DLMS/COSEM protocol suite provides a stable, flexible and proven platform to build upon in the UK.

Question 8: Do you agree it is necessary for the programme to facilitate and provide leadership through the specification development process? Is there a need for an obligation on suppliers to co-operate with this process?

Yes, we believe it critical for the Programme to manage individual stakeholders' requirements and obligations.

Question 9: Are there any particular technical issues (e.g. associated with the HAN) that could add delay to the timescales?

See response to Question 1 and 2.

Question 10: Are there steps that could be taken which would enable the functional requirements and technical specifications to be agreed more quickly than the plan currently assumes?

We believe the timeline is an aggressive but realistic target outside of the influence of any specific EU directives or governance issues.

Roll-out Strategy

CHAPTER 2

Question 1: 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?

No.

Question 2: Would the same approach be appropriate for the non-domestic sector as for the domestic sector?

No.

Question 3: Is there a case for special arrangements for smaller suppliers?

Yes.

CHAPTER 3

Question 4: 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?

We believe there should an initial national Government campaign explaining the for short and long term benefits to the consumer as well as securing energy suppliers for GB. Further campaigns should be done regionally by the energy suppliers promoting tariff benefits as well as energy management benefits of having a smart meter/s.

Question 5: How should a code of practice on providing customer information and support be developed and what mechanisms should be in place for updating it over time?

No response.

CHAPTER 4

Question 6: 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?

No response.

Question 7: Do you think that there is a need for interim targets and, if so, at what frequency should they be set?

No response.

Question 8: Do you have any views on the form these targets should take and whether they should apply to all suppliers?

No response.

Question 9: What rate of installation of smart meters is achievable and what implications would this have?

No response.

CHAPTER 5

Question 10: Do you have any evidence to show that there are benefits or challenges in prioritising particular consumer groups or meter types?

No response.

CHAPTER 6

Question 11: Do you agree with our proposed approach to requiring suppliers to report on progress with the smart meter rollout? What information should suppliers be obliged to report and how frequently?

Yes. No of installations per quarter. Failed installs and HAN, WAN communication success rates.

CHAPTER 7

Question 12: 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?

No response.

Question 13: 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?

Yes.