

Interim Interoperability Principles

This memo is intended to inform the DCG of the subgroup's views on interim interoperability and to provide input to policy definition within the programme.

From	DCG Subgroup 2
To	DCG
cc	
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Introduction

This paper has been drafted for discussion at DCG Subgroup 2 within Phase 1a of the Ofgem/DECC Smart Metering Implementation Programme. It is intended to inform the DCG of the subgroup's views on interim interoperability and to provide input to policy definition within the programme.

Approach

The subgroup intends to follow the process set out below in progressing interim interoperability. This paper is the first product in this process:



There are draft papers for each of the blue blocks, looking to establish increasing agreement on the key building blocks.

There will then have to be an assessment of the potential solutions to interim interoperability to see which might be feasible for implementation and which may be the most optimum. At the stage of assessment in the orange block, we expect to undertake process design to understand how the interim solution may map into current industry flows, processes and systems. The different solution options will have to be evaluated.

Objectives

Any interim arrangements should add to the delivery of the Impact Assessment set out in the Prospectus. It is expected that by installing smart meters in customer premises before the DCC is operational:

- Customers will have the opportunity to change behaviour and therefore customer benefits in the IA will begin to be realised
- Industry will have the opportunity to use smart metering functionality and therefore some of the industry benefits will be realised and passed through to customers
- Suppliers will be able to install smart meters that will not be replaced at future change of supplier events, providing certainty to their assets and reducing the cost of stranding

Guiding Principle

The guiding principle for interim interoperability is that the customer experience should not be adversely impacted by having a smart meter installed in advance of the enduring solution for smart metering being live (i.e. DCC operational and all smart meters fully functioning in the DCC architecture). Key within this is the customer experience on Change of Supplier.

If the experience of customers is compromised within any interim arrangements, then we run the risk of negative perceptions being set publicly (e.g. in the media) and this may undermine the mass roll-out of smart meters under the enduring DCC arrangements. It is vital to maintain positive media perception and communication with customers through the lifetime of roll-out.

There may be a need to comply with any pending licence/regulation/code of practice relating to remote disablement.

Principles

The table below lists high level principles for any interim activity.

Ref	Principle
1	Quick and economic to deliver
2	Deliver economic value
3	Easy to integrate and operationalise
4	Does not undermine enduring arrangements
5	Commercial terms which are fair to all and transparent
6	Minimal change to/impact on existing industry infrastructure, dataflows, processes and participant systems (linked to 3)
7	One participant cannot prejudice (or be prejudiced by) the interim arrangements
8	Interim Arrangements must be robust to the aggregated volumes of metering systems set in suppliers' roll-out plans.

Notes:

1. Quick and economic to deliver - Interoperability arrangements will need to be implemented as soon as is practicable in order to ensure customers are able to continue to benefit from smart metering services, in advance of the formal industry arrangements coming into force. These arrangements are not intended to replicate the current industry design and therefore should be capable of being implemented as soon as possible i.e. 2011.
2. Deliver economic value - The arrangements should have a net benefit for all participants doing their own Cost/Benefit assessment
3. Easy to integrate and operationalise - Interoperability arrangements must be designed to support ease of integration into supplier systems and processes. Otherwise implementation effort, cost and time would be contrary to the "interim" nature of these arrangements. Includes not affecting existing "automatic" processes of registration and settlement
4. The delivery and operation of interim arrangements should not be seen as a substitute for enduring arrangements, which need development as the target infrastructure. There is a balance between minimum change and the good practice of using as much as practicable from the enduring framework/definition of interfaces to avoid duplication of development.
5. Commercial terms which are fair to all and transparent - Competition which is protected by central governance (which could be self governance). A multilateral rather than bilateral approach is expected.

Issues

Presented as a simple list, and accepting that clarification of one or other of these (and the principles) could change the nature of individual issues significantly:

1. How long do the Interim arrangements need to endure? The expectation is that any interim arrangements should be novated to the DCC, as described in the Prospectus 3.30: *From the date on which DCC starts provision of services, suppliers will be required to use these services for all WAN communications with smart meters in the domestic sector. This includes all meters installed prior to that time which comply with the relevant technical specifications. We will consider the need for arrangements to facilitate this transition.* However, if the interim arrangements address more proprietary solutions, there may be a requirement for them to remain in place for longer if the DCC will not be covering these.
2. Impact assessment needs to consider the full industry impact on processes and systems, including CoS, change of meter and related processes.
3. How do we practically implement interim arrangements? It is important to consider the implications of legislation – we cannot assume that because something is legislated for that it will happen. Considerations include:
 - a. Governance – how do we legislate for interim arrangements?:
 - i. Mandated statutory instruments for gas and elec smart meters, domestic & non-dom (as set out in Prospectus)
 1. Via changes to existing codes (e.g. via a Significant Code Review)
 2. Via a new interim/early drop Smart Energy Code
 3. Licence conditions
 - ii. Voluntary/Self governing arrangements
 1. MoU between Suppliers
 2. multi-lateral contract with service provider
 3. common set of bilateral (JPW-like)
 - iii. A combination of both mandated instruments with underpinning self-governing

arrangements

- b. Participation – should these arrangements be mandatory or voluntary? If they are to be mandatory, how will that work? Can a Supplier opt out?
 - c. Do nothing – let the commercial incentives on suppliers drive a solution with no further legislation/code updates
4. How is commercial interoperability delivered for solution options – for meter rental costs, for communications and agent services costs? For a number of options these could include Suppliers charging each other.
 5. Transition to enduring arrangements – how will this be done? e.g. cut over, migration etc? How can we minimise customer impact in transition?
 6. Complexity of transfer of commercial arrangements for communications. This is a process that does not currently “exist” in the industry design, but will need to be a part of interim arrangements. There is a key requirement for continuity of communications services.
 7. Can the interim arrangements be extended with a positive cost/benefit to cover meters with additional functionality that are not smart meter compliant? This is not a firm requirement of any interim solution.
 8. Do the interim arrangements have potential to act as a market trial for solutions and interoperability – i.e. it will not be 100% disposable?
 9. Is it a design principle that each IIA meter will support a single point of access (i.e. the registered Supplier)? How this is technically delivered via agents, head ends etc. is essentially transparent.
 10. Appropriate mechanisms must be implemented for funding and cost recovery.

Assumptions/Preconditions

1. The technical specifications are clear, complete, published by Ofgem/DECC and approved by Europe for all necessary equipment and interfaces for interim arrangements (e.g. meter specification, IHD specification, HAN specification, WAN interface specification). We expect this to include consideration of open standards and protocols.
2. Accreditation/certification regimes will be required for interim arrangements and these will need to be developed and implemented by Ofgem. The risk of installing assets without an accreditation regime is considered too great with the potential operational cost of replacing defective meters and associated equipment once they are installed. Assurance is expected to fall within the scope of DCC services, but DCC cannot retrofit accreditation later to interim meters – the opportunity will have passed.
3. Compliant smart meters and associated equipment have been developed, manufactured, accredited/certified and purchased by suppliers.
4. Interim Arrangements only apply for compliant smart meters and associated equipment.
5. Interim Arrangements will begin at the latest from the mandated start date of smart meter roll-out (currently set out by Ofgem to be 2012).
6. Interim Arrangements could begin from the date of approval/accreditation of smart meters and associated equipment to the European approved the technical specifications. In this case, existing installed smart meters later approved as compliant could become part of the interim arrangements early.
7. Volumes of smart meters in interim arrangements will be linked to the roll-out volumes and profiles set between suppliers and Ofgem (and expected in licence conditions). Interim Arrangements must be robust to the aggregated volumes of metering systems set in suppliers’ roll-out plans.
8. Interim arrangements will be available for use for both domestic and SME customers and will be available for AMR arrangements on a voluntary basis.
9. Interim arrangements will not embody PAYG/prepayment functionality as a nationally provided service. To implement PPM/PAYG services, we need the DCC defined PPM/PAYG services and interfaces – without this we will not be able to develop against an enduring baseline. The DCC services will not be live and the definitions of these services are unlikely to be ready in time to build any interim national arrangements. Prepayment/PAYG services will be implemented by individual suppliers on a commercial basis at their risk and on change of supplier, the losing supplier will set the prepayment meter to credit mode for the gaining supplier.
10. There is a natural commercial incentive on suppliers to participate in interim arrangements for the reasons in the objectives above.
11. Compliant smart meters and associated equipment are expected to remain on the wall after CoS by default, but there is always a commercial decision to be made by suppliers as to whether assets are replaced.
12. If smart meters and associated equipment are installed in advance of the technical specifications and are subsequently certified as compliant, then they should be allowed to be included in

interim arrangements.

13. At Change of Supplier, there may be value added services that will not be expected to be transferred to the gaining Supplier and these should not be considered to be transferred de-facto (e.g. non-IHD presentation of customer information, energy service advice).
14. Responsibilities for smart meters and associated devices (e.g. IHDs) will be the same in the interim arrangements as they will in the enduring arrangements.

Dependencies

1. Technical Assurance falls within the scope of SMDG sub-group 2 and short term arrangements are required to be delivered from this group that can be implemented in time to apply to interim arrangements. It is expected that assurance will cover: smart meters, HAN, IHD, WAN interfaces/protocols (if not the physical comms mechanisms in advance of DCC).
2. The technical specifications fall within the remit of SMDG and are clear, complete and published by Ofgem/DECC for all necessary equipment and interfaces for interim arrangements (e.g. meter specification, IHD specification, HAN specification, WAN interface specification).
3. The technical specifications are subsequently approved by Europe.
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