# Assessment of Governance options for Interim Smart Metering solution

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## Introduction

At the IISG on 7th September 2010 Governance of the interim arrangements for Smart Metering was identified as a key issue.
Attendees were requested to provide options for governance of the interim solution, together with an assessment of the pros and cons of each option.
It is clear Governance arrangements required will be dependent on the solution agreed by the Industry to facilitate the mandated interim rollout, and due consideration would need to be given to ensuring compatibility with the enduring arrangements, avoidance of unnecessary costs and ease of transition.

Solution options fall into three general categories –

1. Individual Supplier solution and 2nd Tier service

2. Provision of a central "pre-DCC" type service through new DCC licence

3. Provision of a central "pre-DCC" type service through Code of Practice

Under option 1 each Supplier develops their own internal bespoke Smart Metering solution and individually contracts with the various SP's for provision of communications services. On Change of Supplier, the incumbent offers a 2nd Tier service to the new Supplier to ensure continued provision of the agreed minimum Smart Metering services at an agreed price. This would require changes to Supplier Licence conditions to support.

Under option 2, a new central service is developed for all Suppliers which provides the minimum smart metering services and contracts with the various SP's for provision of communications services. This would require establishing a new DCC licence potentially through an interim Smart Energy Code (SEC), with changes to Supplier Licence conditions to support.

Under option 3, a new central service is developed for all Suppliers which provide the minimum smart metering services and contracts with the various SP's for provision of communications services. This would require establishing a Smart Metering Code of Practice (similar to the AMRCoP), possibly through an existing central body, with Suppliers mandated to use it through changes to Supplier Licence conditions to support.

It is unclear how dependent each of these options is upon the development of the Smart Energy Code, which needs to be understood before a recommendation is made. Also, it is not clear whether an EU 3 month approval is required for any of the three options, the group should provide an assessment. We would recommend an assessment of the options by the HSE, Consumer CAG approval, Privacy and Security (PSAG) approval and any other relevant bodies. For all options the group needs to demonstrate through governance how transition to the enduring solution would work including what sign-offs are required.

An Impact Assessment (cost benefit analysis) should be undertaken for all options which are considered viable, including a review against the amended DECC IA.

The remainder of this paper considers the governance required to support the three solution options and provides an assessment of the pros and cons of each option.

The assessment assumes Technical specifications (definition to be agreed) have been agreed and approved prior to mandated interim rollout.

## Governance options

### Option 1 – Individual Supplier solution and 2nd Tier service

This option would require the following Governance arrangements –

- Agreement of applicable licence conditions
    - Drafting of licence conditions could be started now by making conditions broad (possibly with Governance notes), and where issues are identified amended as appropriate in the future
    - The drafting and legal review would need to undertaken as soon as possible
- Licence conditions issued for a 6 week consultation period followed by immediate implementation
- Agreement of service requirements
- Any Business as Usual type changes can be "frozen" in the short term to minimise any impact on both the interim and enduring solutions
- All Suppliers would need to agree communications arrangements with the various Service Providers (SP's)
- Suppliers would also need to agree arrangements for provision of a 2nd Tier service with other Suppliers and appropriate Supply Licence changes made.
- All Suppliers would need to develop their own internal bespoke solutions catering for the range of meters they install based on the minimum services to be provided

### Option 2 – Provision of a central "pre-DCC" type service through new DCC licence

This option would require the following Governance arrangements –

- Creation of a new licence to govern operation of the minimum interim service with approval by Parliament
- Agreement of service requirements
- Tender for interim DCC service
- Appointment of interim DCC service provider
- DCC SP would develop one solution to deal with the range of meters installed
- DCC SP would need to agree communications arrangements with the various Service Providers (SP's)
- Agreement of applicable licence conditions
    - Drafting of licence conditions could be started now by making conditions broad (possibly with Governance notes), and where issues are identified amended as appropriate in the future
    - The drafting and legal review would need to undertaken as soon as possible
- Licence conditions issued for a 6 week consultation period followed by immediate implementation
- Any Business as Usual type changes can be "frozen" in the short term to minimise any impact on both the interim and enduring solutions
- Suppliers would need to comply with arrangements for provision of an interim DCC service and appropriate Supply Licence changes made.

### Option 3 – Provision of a central "pre-DCC" type service through Code of Practice

This option would require the following Governance arrangements –

- Creation of a new Smart Metering Code of Practice (SMCoP) to govern operation of the minimum interim service (like the AMRCoP), would need to deal with any DPA type issues
- Agreement of service requirements

- Tender for interim DCC service
- Appointment of interim DCC service provider
- DCC SP would develop one solution to deal with the range of meters installed
- DCC SP would need to agree communications arrangements with the various Service Providers (SP's)
- Agreement of applicable licence conditions to **mandate** the SMCoP
    - Drafting of licence conditions could be started now by making conditions broad (possibly with Governance notes), and where issues are identified amended as appropriate in the future
    - The drafting and legal review would need to undertaken as soon as possible
- Licence conditions issued for a 6 week consultation period followed by immediate implementation
- Any Business as Usual type changes can be "frozen" in the short term to minimise any impact on both the interim and enduring solutions
- Suppliers would also need to agree arrangements for provision of a SMCoP appropriate Supply Licence changes made.

## Pros and Cons of Governance – solution options

| Criteria | Option 1 – Individual Supplier solution and 2nd Tier service | | Option 2 – Provision of a central "pre-DCC" type service through new DCC licence | | Option 3 – Provision of a central "pre-DCC" type service through Code of Practice | |
|---|---|---|---|---|---|---|
| | **Pros** | **Cons** | **Pros** | **Cons** | **Pros** | **Cons** |
| **1. Timeliness** | Achievable for SLC's | Challenge for multitude of comms contracts and Supplier to Supplier contracts<br>All DR agents must be accredited so likely delay<br>More testing required as multiple agents so likely delay | Achievable for comms contracts<br><br>One agent accreditation<br><br>One agent so optimal testing | Challenge for new licence | Achievable for SLC's, SMCoP and comms contracts<br><br>One agent accreditation<br><br>One agent so optimal testing | Is Mandation of SMCoP legal |
| **2. Cost** | | Most expensive –<br>All Suppliers develop their own solutions and procure all head ends;<br>All Suppliers setup multiple contracts which are short term and therefore likely to be at a premium;<br>Solution and arrangements become redundant when DCC available<br><br>Solutions in place prior to agreed Tech Specs so likely risk of replacement of SM system<br>Any delay to DCC go-live will increase the number of replacements | Cheapest solution –<br>One solution developed for all with one set of head ends<br><br>One party sets up comms contracts which can novate<br><br>"Prototype" and arrangements easy to transition to enduring arrangements<br>Rollout starts after approved tech specs so no need for replacement<br><br>No impact with DCC delay | | Cheaper than option 1<br>One solution developed for all with one set of head ends<br><br>One party sets up comms contracts which can novate<br><br>"Prototype" may transition but arrangements unlikely to<br><br>Rollout starts after approved tech specs so no need for replacement<br><br>No impact with DCC delay | Dearer than option 2<br><br>Costs associated with establishing SMCoP lost |
| **3. Efficiency** | | Highly inefficient with all Suppliers providing own solution; complex flows between Suppliers for 2nd Tier service; agreement of comms contracts duplicated across all parties | Most efficient solution with one party managing all access to/from SM and all contractual arrangements | | Most efficient solution with one party managing all access to/from SM and all contractual arrangements | |
| **4. Implementability** | | Most difficult to implement<br>Multiple solutions tested by multiple parties plus additional testing for 2nd Tier service<br>Agreement of multiple contracts with multiple parties more difficult to implement | Easiest option to implement One party providing one solution and agreeing one set of comms contracts, minimises amount of testing required | | Easiest option to implement One party providing one solution and agreeing one set of comms contracts, minimises amount of testing required | |
| **5. Transition - Technical** | | Suppliers will develop different solutions with different data requirements so migration likely to be most complex<br>Head ends maybe utilised which are not consistent | Pre-cursor solution future proofed for DCC so migration simple<br><br>Head ends consistent with DCC | | Pre-cursor solution future proofed for DCC so migration simple<br><br>Head ends consistent with DCC | |

| Criteria | Option 1 – Individual Supplier solution and 2nd Tier service | | Option 2 – Provision of a central "pre-DCC" type service through new DCC licence | | Option 3 – Provision of a central "pre-DCC" type service through Code of Practice | |
|---|---|---|---|---|---|---|
| | **Pros** | **Cons** | **Pros** | **Cons** | **Pros** | **Cons** |
| | | with the DCC<br>Solutions in place prior to technical standards so likely requirement for replacement and 2nd home visit | SM systems rolled out when tech specs agreed so no need for 2nd visit | | SM systems rolled out when tech specs agreed so no need for 2nd visit | |
| **6. Transition - Commercial** | | Most complex<br>Multiple comms contracts with multiple SP's so difficult to novate | Easiest<br>Comms contracts required for enduring easy to novate | | Easiest<br>Comms contracts required for enduring easy to novate | |
| **7. Security** | | Most unsecure<br>Will have at least 6 x the number of connections from Supplier to MDMS<br>Solutions in place prior to security specifications so likely to be inconsistent<br>Solutions in place prior to privacy requirements so likely to be inconsistent<br>Lack of adequate security could lead to tampering issues and ultimately open to terrorist threats | Most secure<br>Minimal number of end points<br>Solution provided based on approved security specifications<br>Solution provided based on approved privacy specification<br>As above | | Most secure<br>Minimal number of end points<br>Solution provided based on approved security specifications<br>Solution provided based on approved privacy specification<br>As above | |
| **8. Health and safety** | | Pilots prior to established tech specs have identified a number of issues with comms hub, power supply failures etc | Tech specs established therefore N/A | | Tech specs established therefore N/A | |
| **9. Risk to SMDP** | | Negative perception based on the above risks by the public of the interim rollout may derail the enduring rollout and ultimately risk the success of the SMDP<br>Maybe unable to novate interim comms contracts to enduring | No risk to SMDP<br>Risks managed as described | | No risk to SMDP<br>Risks managed as described | |
| **8. Media / Consumer perception** | | Rollout prior to agreed tech specs will likely require 2nd visit attracting negative publicity and put consumer confidence at risk | N/A | | N/A | |