



# Interim Options Review

Sub Group 2

September 2010





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- The Interim service is expected to have a short life but will require significant ~~costs-resources~~ to establish and therefore must be delivered at a commercially viable cost;
- ~~Interim solution may have to continue to run in parallel with DCC solution to support non-compliant smart meters and non-domestic customers.~~

## Option 1 - Central Translation

### Description

Suppliers retain ownership of Head Ends.

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~~Pre initial Change of Supply the~~ Prior to implementation of the interim solution the installing Supplier would manage the meter through its own ~~requests through its own~~ Head End. i.e. Direct access. Once the interim solution has been established there would be potentially two ways that this model could operate:

- The installing/lead supplier could continue to manage technically compliant meters through its own Head End until CoS, at which point support for the meter is transferred to the Interim Solution.
- Support for all technically compliant meters is transferred into the Interim solution from the point of implementation. ~~Is this necessary or is there a migration option for all, except non-compliant meters? I think both options would work, just migration at start of interim may be complex. There is a requirement which requires both suppliers to use same read at CoS, this would indicate that meters may already be pre-registered in Interim!~~
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Meter point and Meter Id ~~is~~are passed to the interim service on install and other information is transferred on CoS, or all of the information is migrated to the Interim service at start up.

~~[Or migrated at start of Interim service?]~~ Once a meter is managed through the interim service it remains so until the DCC is operational.

Interim Services – pre initial CoS

- Data Management
  - Interim Service holds installed Smart Meter details and provides this information to current and prospective suppliers via a lookup service.

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Provides smart meter lookup ~~[Look up to where?]~~

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Interim Service - post initial CoS/migration.

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- Single Point of Access to meter through interim service



- Translation services for a defined set of meter interactions
  - Web service requests to Head End specific formats
  - Head End specific formats to web service response
  - DTN/Uklink to HE specific formats
  - HE Specific format to DTN/UKLink
  
- Access Control
  - Determines who the registered Supplier is and restricts access
  
- Data Management
  - Interim Service holds installed Smart Meter details and provides this information to current and prospective suppliers via a lookup service. Also Provides smart meter lookup ~~[Look up to where?]~~
  - Enables identification of Head end and comms requirements
  - Identifies the Head End owner to facilitate communications ~~Enables charging and fault resolution~~

~~by identification of lead Supplier. **[Should this be Owner of Head-end rather than Supplier?]**~~

Other Interactions

- Supplier to Interim Service
  - DTN/Uk link/X and/or web services
- Interim Service to Head End
  - HE Specific messages/protocols defined by HE provider ~~HE specific messages (Message protocols defined by HE provider)~~

Charging Options

- Suppliers transfer comms contracts for meter points ~~over~~ to the interim service on CoS or on establishment of Interim service. The Interim service charges Suppliers for subsequent usage.
- Interim service charges end users, lead Supplier charges interim service provider.
- Bi-lateral arrangements between Suppliers.
- Where the interim service is used for meter communications from the point of meter installation, the interim service charges Suppliers for communications usage.

~~Suppliers perform their own rollouts of Smart Meters and WAN Communications Devices.~~

~~Suppliers procure their own Head-End systems, either collectively or individually.~~

~~A separate, central system (Interim Service) provides access to:~~

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- ~~Smart Metered Supply Points~~
- ~~Supplier registration details~~
- ~~Head-End providers (per Supply Point)~~
- ~~Meter Ids~~
- ~~Meter Capabilities~~

~~The interim service includes a lookup facility for this information, controls access to authorised parties, and directs information to the correct Head-End and Supplier.~~

~~The interim service translates standard Supplier requests into head-end specific messages.~~

~~Options exist for all of the head-ends which will be used by the interim service to be owned by multiple parties (e.g. Suppliers) or by the interim service.~~







## SWOT

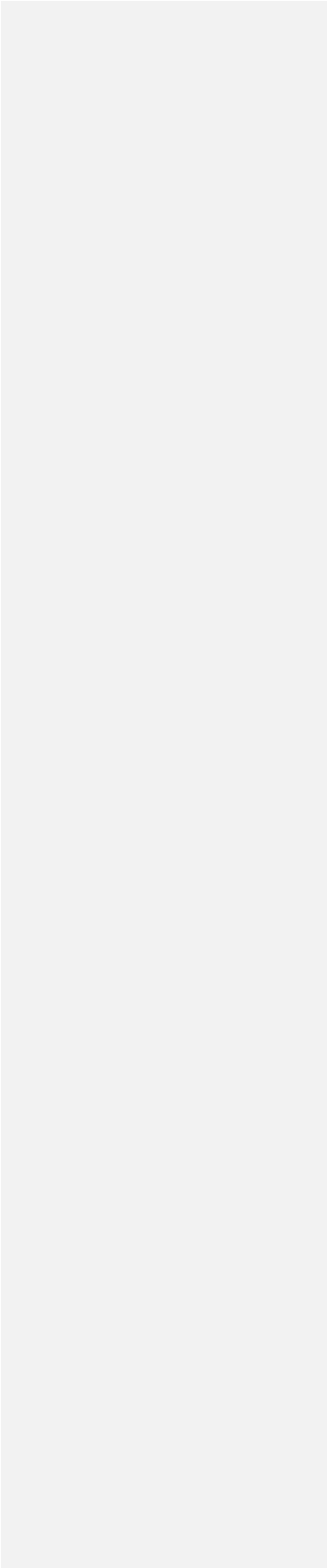
### Strengths

- Single interface for suppliers will enable communication with all smart meters – reduces Supplier development effort
- Single point of access to all smart meters, ensures only authorised parties can communicate with meters- ~~n~~No exchange of access details at CoS
- Allows suppliers to use existing communications infrastructure
- Allows suppliers to use existing dataflow infrastructure
- Provides option to use web-services to enable full functionality
- Uses proven head end technology and capabilities
- Converts messages into required format for meters/suppliers – no requirement for suppliers to build/procure their own translation services
- Single repository for all smart meter data provides opportunity for suppliers to be able to identify presence of smart meter prior to taking over supply point
- Will support key processes required by Suppliers
- Facilitates interoperability at CoS without changes to the meter hardware (meter, SIM card, etc);
- No dependency on other Suppliers

### Weaknesses

- Use of multiple head ends and establishment of central service requires significant development effort for central service interfaces - adds to implementation complexity and cost
- Changes required to use and/or structure of existing flows and or web services need to be created to support even basic smart functionality for Suppliers – meter configuration, provision of pricing information etc. ~~Over and above that provided by initial deployments~~
- Migration activity required prior to establishment of central service – in order to populate meter ~~and comms~~ data
- Multiple head end ownership will require complex commercial and support agreements- definition of these will potentially add to time required to implement central service
- Compliance/accreditation testing required to allow central service to use DTN/~~UKLink-IX~~ etc. potentially adds to implementation time
- Potential for extended implementation time- tender process for provision of central services, creation of central systems, look-ups to registration systems, full end-to-end testing required for all participants
- ~~Meters populated within the Interim Service do not change Head End system at Change of Supplier. Suppliers that own a Head End system within the Interim Service may not centralise all of their meters (installed meters where they are the lead supplier and gained meters at CoS) within a single Head End. Does not allow suppliers to use existing head end systems for gained sites – Suppliers must migrate to use interim service. [Why not?]~~
- Comms contracts ~~would may~~ need to be transferred from suppliers/service providers to central service ~~– dependent on ownership~~

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### Opportunities

- Allows industry to test/hone operations using central service provider for smart meters
- ~~Creates a Single-single~~ source of data held in standard format at that may be transitioned available for transition to the DCC;
- Could provide early definition of standard messaging and translation services pre-DCC;
- Potentially allows for some premise alignment and improvement in data quality prior to creation of DCC;
- Opportunity for the Interim Service to include a translation layer, to translate Head-End messages into standard DTC / ~~UK Link~~X data flows;
- Opportunity for the Interim Service to forward information/messages to Distribution operators or third parties in a standard format (e.g. Supply Outages, Alarms, Tamper alerts)
- Provides opportunity to establish end-to-end security standards for smart meters;
- Provides opportunity to implement data privacy standards, all smart meter data and access to it obtained/held in single source;
- Creates a standardised registration lookup facility that could Standardisation of registration look-up could be used by initial DCC - Existing systems (e.g. MPAS/ECOES, xoserve/SCGOGES) could be used with changes to identify smart meters;
- Suppliers can choose the services they wish to support

### Threats

- Could be regarded as de-facto DCC ~~- and~~ no further industry development takes place;
- May provide the owner of the interim, central service with competitive advantage in DCC tendering process;
- Distributed ownership of head ends makes establishment of data privacy and end-to-end security standards difficult to establish;
- New services/processes would need to be defined to allow suppliers to fulfil mandated interim obligations;
- ~~May need to be run in parallel with DCC if central service supports non technically compliant smart meters and also any non domestic meters supported by service and suppliers elect not to use DCC~~
- ~~Support for prepayment unclear~~The design Ddoes not lend itself to standardised Industry Prepayment solution— Prepayment solution requires specific supplier, payment network, head end and meter functionality. The use of different head-end systems may complicate (or even prevent) the implementation of a standard industry solution.

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## Option 2 - Standardise Head End Services

### Description

Suppliers retain ownership of Head Ends.

Prior to implementation of the interim solution the installing Supplier would manage the meter through its own Head End. i.e. Direct access. Once the interim solution has been established there would be potentially two ways that this model could operate:

- The installing/lead supplier could continue to manage technically compliant meters through its own Head End until CoS, at which point support for the meter is transferred to the Interim Solution
- Support for all technically compliant meters is transferred into the interim solution from the point of implementation

Meter point and Meter Id are passed to the interim service on install and other information is transferred on CoS, or all of the information is migrated to the Interim service at start up.

Once a meter is managed through the interim service it remains so until the DCC is operational.

Suppliers/Agent retain ownership of Head Ends or:

Pre initial Change of Supply the installing Supplier manages requests through its own Head End i.e. Direct access:

Meter point and Meter Id is passed to the interim service on install other information is transferred on CoS ~~[Again this is an option and has not been decided]~~. Once a meter is managed through the interim service it remains so until the DCC is operational.

Interim Services – Pre initial CoS

- Data Management

Interim Service holds installed Smart Meter details and provides this information to current and prospective suppliers via a lookup service.

— Provides smart meter lookup —

Interim Service – Post initial CoS/Migration

- Single Point of Access to meter provided through via the interim service
- Translation services for a defined set of meter interactions
  - Web service requests to standardised Head End services (adopted and supported by all Head End providers using a common message format) standardised Head End formats [Need to define standardised head end formats – same standard to be used by all head end manufacturers]
  - o Standard Head End formats services to web service response
  - o DTN/Uklink to standard HE formats services

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- o [Standard HE format services to DTN/UKLink](#)
- [Access Control](#)
  - o [Determines who the registered Supplier is and restricts access](#)
- [Data Management](#)
  - [Interim Service holds installed Smart Meter details and provides this information to current and prospective suppliers via a lookup service. Provides smart meter lookup](#)
  - o [Enables identification of Head end and comms requirements](#)
  - o [Enables charging and fault resolution by identification of lead Supplier](#)

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Key Interactions

- [Supplier to Interim Service](#)
  - o [DTN/UKLink and/or web services](#)
- [Interim Service to Head End](#)
  - o [Standard HE specific messages/protocols defined by HE providers](#)

Charging Options

- [Suppliers transfer comms contract for meter point over to interim service on CoS or on commencement of Interim service. Interim service charges Suppliers for subsequent usage.](#)
- [Interim service charges end users, lead Supplier/Head End owner charges interim service provider.](#)
- [Bi-lateral arrangements between Suppliers.](#)
- [Where the interim service is used for meter communications from the point of meter installation, the interim service charges Suppliers for communications usage.](#)

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~~Meter manufactures develop and provide an standard interface to head-end.~~

~~Suppliers perform their own rollouts of Smart Meters and WAN Communications Devices.~~

~~Suppliers procure their own Head-End systems, either collectively or individually.~~

~~A separate, central system (Interim Service) provides access to:~~

- ~~Smart Metered Supply Points~~
- ~~Supplier registration details~~
- ~~Head-End providers (per Supply Point)~~
- ~~Meter Ids~~
- ~~Meter Capabilities~~

~~The interim service includes a lookup facility for this information, controls access to authorised parties, and directs information to the correct Head-End and Supplier.~~

Communications between the interim service and the Head Ends (or the Supplier and Head End) uses standardised messages / interfaces.

Communications between each Head End and Meter may use meter manufacturer specific messages.

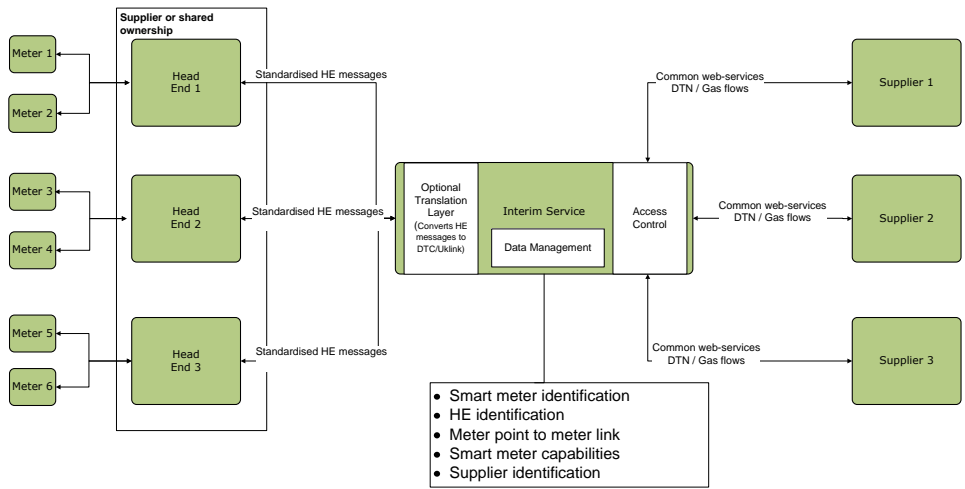


Figure 2: Standardise Head End Services





~~[Discuss when meters are migrated to the Interim Service and any duplication of cost associated with managing meters using Supplier Owned Head Ends (Direct Access) and the Interim Service in unison]~~

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- Comms contracts would need to be transferred from suppliers/service providers to central service - dependent on ownership





**Opportunities**

- Allows industry to test/hone operations using central service provider for smart meters;
- Single source of data held in standard form available for transition to DCC;
- Potentially allows for some premise alignment and improvement in data quality prior to creation of DCC;
- Opportunity for the Interim Service to include a translation layer, to translate Head-End messages into standard DTEN-/UK LinkIX data flows;
- Could provide definition of standard messaging and translation services pre-DCC
- Opportunity for the Interim Service to forward information/messages to Distribution operators or third parties in a standard format (e.g. Supply Outages, Alarms, Tamper alerts)
- Provides opportunity to establish end-to-end security standards for smart meters
- Provides opportunity to implement data privacy standards, all smart meter data and access to it obtained/held in single source;
- Standardisation of registration look-up could be used by initial DCC -existing systems (e.g. MPAS/ECOES, xoserve/SCGOGES) could be used with changes to identify smart meters;
- Suppliers can choose the services they wish to support

**Threats**

- Could be regarded as de facto DCC and no further industry development takes place;
- May provide owner of the interim central service with competitive advantage in DCC tendering process;
- Distributed ownership of head ends makes establishment of data privacy and end-to-end security standards difficult to establish;
- New services/processes would need to be defined to allow suppliers to fulfil mandated interim obligations;
- May need to be run in parallel with DCC if central service supports non-technically compliant smart meters and also if any non-domestic meters are supported by the Interim service and suppliers elect not to use DCC for those meters;
- Does not lend itself to standardised Industry Prepayment solution— Prepayment solution requires specific supplier, payment network, head end and meter functionality. The use of different head-end systems may complicate (or even prevent) the implementation of a standard industry solution.
  - ~~Support for prepayment unclear— Prepayment solution requires specific supplier, payment network, head end and meter functionality. The use of different head-end systems may complicate (or even prevent) the implementation of a standard industry solution;~~

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## Option 3 - Single Consolidated Head End with Common Services

### Description

Interim service owns single or multiple consolidated Head Ends.

The option exists for the interim service to supersede Suppliers own arrangements on implementation. This would mean that ~~the~~ the interim service ~~would need to accommodate meter installations. Interim will have~~ need to accommodate meter installs as part of requirements to support Ofgem rollout targets.

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### Interim Service

- Single Point of Access to meter through interim service
- Translation services for a defined set of meter interactions
  - Web service requests to Head End specific formats
  - Head End specific formats to web service response
  - DTN/Uklink to HE specific formats
  - HE Specific format to DTN/UKLink
  
- Access Control
  - Determines who the registered Supplier is and restricts access
  
- Data Management
  - Provides smart meter lookup ~~where to?~~ for Suppliers to identify Smart meters prior to taking over supply
  - Enables identification of Head end and comms requirements
  - Enables charging and fault resolution by identification of lead Supplier

### Other Interactions

- Supplier to Interim Service
  - DTN/~~Uk link~~X or web services
- Interim Service to Head End
  - HE specific messages/~~protocols as defined by HE manufacturers~~

### Charging Options

- Interim Service provider is responsible for charging users and holds comms contracts.

~~A universal head end is used by the interim service to communicate with all smart meters.~~

~~Suppliers perform their own rollouts of Smart Meters and WAN Communications Devices.~~

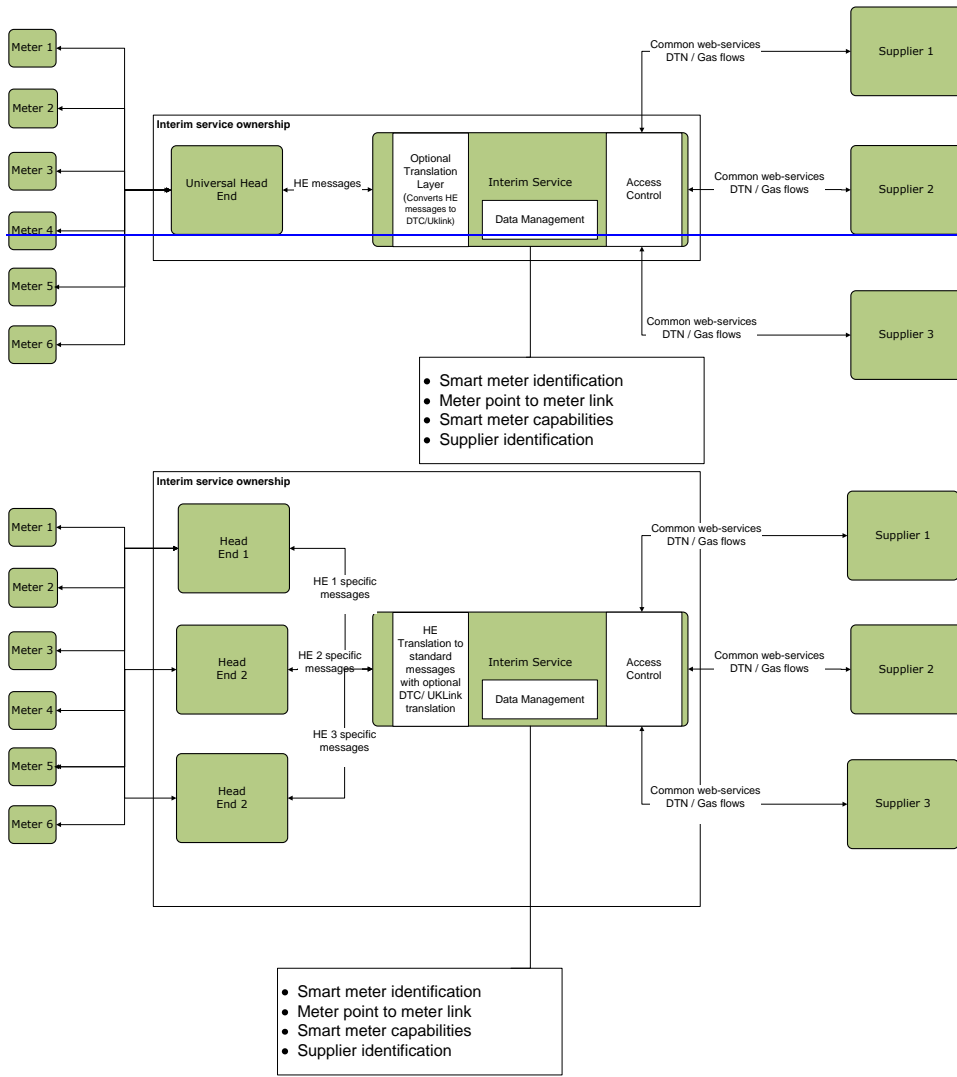
~~A separate, central system (Interim Service) provides access to:~~

- ~~Smart Metered Supply Points~~
- ~~Supplier registration details~~

- Comms providers (per Supply Point)
- Meter Ids
- Meter Capabilities

The interim service includes a lookup facility for this information, controls access to authorised parties, and directs information to the correct Head-End and Supplier.

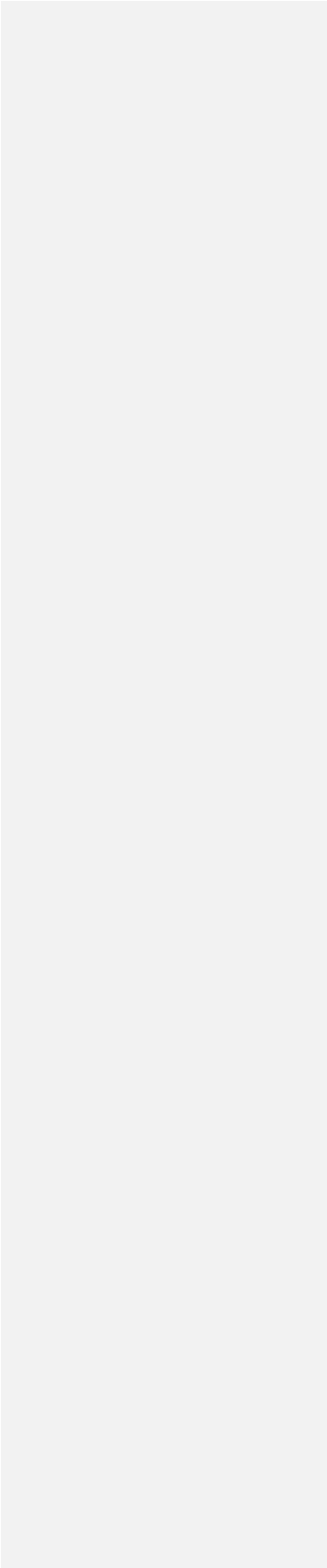
The interim service translates standard Supplier requests into a universal head-end protocol.



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Figure 3: Single-Consolidated Head Ends with Common Services

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- ~~Comms contracts would need to be transferred from suppliers/service providers to central service—dependent on ownership~~

#### Opportunities

- Allows industry to test/hone operations using central service provider for smart meters;
- Single source of data held in standard form available for transition to DCC;
- Potentially allows for some premise alignment and improvement in data quality prior to creation of DCC;
- Reduced development effort and costs for interim service providers if universal head end can be used to provide interface to meters;
- Could provide definition of standard messaging and translation services pre-DCC;
- Opportunity for the Interim ~~s~~Service to include a translation layer, to translate Head-End messages into standard DTN~~C~~/~~UK Link~~X data flows;
- Opportunity for the Interim Service to forward information/messages to Distribution operators or third parties in a standard format (e.g. Supply Outages, Alarms, Tamper alerts);
- Simplifies establishment of ~~-~~end-to-end security standards for smart meters;
- Provides opportunity to implement data privacy standards, all smart meter data and access to it obtained/held in single source;
- Standardisation of registration look-up could be used by initial DCC - ~~e~~Existing systems (e.g. MPAS/ECOES, ~~x~~oserve/~~S~~CGOGES) could be used with changes to identify smart meters;
- Suppliers can choose the services they wish to support

#### Threats

- ~~Dependency on single head end provider~~
- ~~Single head end could limit network capacity/capability~~
- ~~Time to add new meter protocols to single head end could delay rollout of new meter types~~
- New services/processes would need to be defined to allow suppliers to fulfil mandated interim obligations;
- Could be regarded as de facto DCC and no further industry development takes place;
- May provide owner of ~~central~~Interim service with competitive advantage in DCC tendering process;
- May need to be run in parallel with DCC if central service supports non-technically compliant smart meters and also any non-domestic meters are supported by the Interim service and suppliers elect not to use DCC for those meters;
- Time to provide support for new meter protocols to interim service could delay rollout of new meter types;
- Does not lend itself to standardised Industry Prepayment solution— Prepayment solution requires specific supplier, payment network, head end and meter functionality. The use of different head-end systems may complicate (or even prevent) the implementation of a standard industry solution;



- Support for prepayment unclear – Prepayment solution requires specific supplier, payment network, head end and meter functionality. The use of different head end systems may complicate (or even prevent) the implementation of a standard industry solution;



## Option 4 - Customise Interfaces for each Head End

### Description

Suppliers perform their own rollouts of Smart Meters and WAN Communications Devices.

Suppliers develop their own Head-End translation services.

A separate, central system (Interim Service) provides access to:

- Smart Metered Supply Points
- Supplier registration details
- Head-End provider
- Meter Id
- Meter Capabilities

This system provides a lookup facility for this information and limits access to the Smart Metering System to authorised parties.

The interim service provides access control services but does not provide translation services

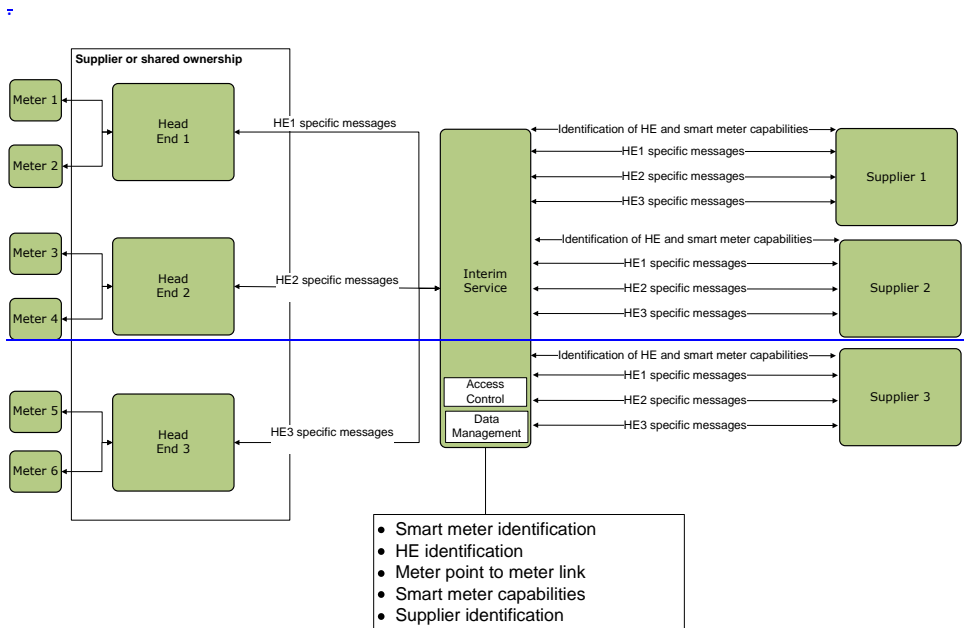


Figure 4: Customise Interfaces for each Head End



## SWOT

### Strengths

- Single point of access to all smart meters, ensures only authorised parties can communicate with meters—No exchange of access details at CoS
- May allow suppliers to use existing head-end protocols developed pre-interim service
- Allows suppliers to use existing communications infrastructure
- Provides option to use web-services to enable full functionality
- Uses proven head-end technology and capabilities
- Converts messages into required format for meters/suppliers—no requirement for suppliers to build/procure their own translation services
- Single repository for all smart meter data provides opportunity for suppliers to be able to identify presence of smart meter prior to taking over supply point
- Will support key processes with minimum change
- Facilitates interoperability at CoS without changes to the meter hardware (meter, SIM card, etc);
- No dependency on other Suppliers

### Weaknesses

- Suppliers do not have a single defined interface for communicating with all Smart meters—this requires significant additional development effort
- New web-services need to be created to support even basic smart functionality—meter configuration, provision of pricing information etc—Over and above that provided by initial deployments
- Multiple head-end ownership will require complex commercial and support agreements—definition of these will potentially add to time required to implement central service
- Migration activity required prior to establishment of central service
- Potential for extended implementation time—tender process for provision of central services, creation of central systems, look-ups to registration systems, full end-to-end testing required for all participants
- Supplier development effort made redundant by DCC establishment
- Does not allow suppliers to use existing head-end systems—Suppliers must migrate to interim service
- Comms contracts would need to be transferred from suppliers/service providers to central service—dependent on ownership

### Opportunities

- Single source of data held in standard form available for transition to DCC
- Potentially allows for some premise alignment and improvement in data quality prior to creation of DCC
- Standardisation of registration look-up could be used by initial DCC—Existing systems (e.g. ECOES, SGOES) could be used with changes to identify smart meters



- ~~Suppliers can choose the services they wish to support~~

**Threats**

- ~~Distributed ownership and multiple head-end protocols makes establishment of data privacy and end-to-end security standards difficult to establish~~
- ~~New services/processes would need to be defined to allow suppliers to fulfil mandated interim obligations~~
- ~~May provide owner of central service with competitive advantage in DCC tendering process~~
- ~~May need to be run in parallel with DCC if central service supports non-technically compliant smart meters and also any non-domestic meters supported by service and suppliers elect not to use DCC~~
- ~~Support for prepayment unclear – Prepayment solution requires specific supplier, payment network, head-end and meter functionality. The use of different head-end systems may complicate (or even prevent) the implementation of a standard industry solution;~~



## Option 5 - Suppliers Provide Data Services

### Description

Suppliers perform their own rollouts of Smart Meters and WAN Communications Devices.

The installing Supplier provides ~~reads-services~~ on request to the current Supplier. The responsibility for access control lies with the installing Supplier.

A separate, central system (Interim Service) provides ~~access-to-details of~~:

- Smart Metered Supply Points
- Head End manager
- Meter Id

This system provides a lookup facility for this information and limits access to the Smart Metering data to authorised parties. ~~The~~ interim service may ~~providerrequire~~ access to registration data.

~~This model is restricted to the provision of scheduled and on-demand reads.~~

#### Interim Service

- Data Management
  - Provides smart meter lookup
  - Enables identification of lead Supplier

#### Installing Supplier

- Single Point of Access to meter through installing Supplier
- Potential translation services
  - Web service requests to Head End specific formats
  - Head End specific formats to web service response
  - DTN/~~UkLinkIX~~ to HE specific formats
  - HE Specific format to DTN/~~UkLinkIX~~
- Access Control
  - Determines who the registered Supplier is and restricts access

#### Other Interactions

- Supplier to Interim Service
  - DTN/~~UkLinkIX~~ or web services – identify whether a meter is smart and who the lead Supplier is
- Installing Supplier to Head End
  - HE specific messages/~~protocols defined by HE manufacturer~~

#### Charging Options







- Minimal change option is restricted to basic data provision (e.g. reads) with no mandated ~~No~~ support for meter configuration requests etc.:-
- Suppliers have to build multiple interfaces for different head ends;
- Individual Suppliers provide access control – dependency on HE manager having access to registration data;
- Data held in the smart data repository does not provide basis for DCC transition;
- New interfaces required to smart data repository;
- Supplier ~~development effort~~ to implement this model made redundant by DCC establishment;

#### Opportunities

- Standardisation of registration look-up could be used by initial DCC - ~~e~~Existing systems (e.g. MPAS/ECOES, xoserve/SOES/SCOGES) could be used with changes to identify smart meters;

#### Threats

- Restricted use of smart services/capabilities ~~may~~ result in negative consumer perception of smart metering
- Distributed ownership and operation of head ends makes establishment of data privacy and end-to-end security standards difficult to establish
- May need to be run in parallel with DCC if central service supports non-technically compliant smart meters and also any non-domestic meters are supported by the Interim service and suppliers elect not to use DCC for those meters;
- No support for prepayment
- Access to a customer's meter provided only through competitor systems
- Suppliers may adopt inconsistent approach to access control
- ~~Current Registered~~ Supplier dependent on competitor to ensure customer data privacy and security



## Option 6 - Supplier Configures Meter/HE on CoS

### Description

Suppliers perform their own rollouts of Smart Meters and WAN Communications Devices.

Suppliers make requests direct to the meter without going through ~~the a interim service~~ third party. Comms and security details are made available to a gaining Supplier on Change of Supply. This data could be made available through either a direct Supplier to Supplier exchange of access, comms, meter details and CoS read or by the losing supplier transferring those details directly to the Interim service on CoS date. Mandated provision of this data would require changes to the rules governing CoS to place the obligation on the losing supplier to provide this data.

Suppliers use their own infrastructure and comms arrangements.

~~SIM cards may need to be exchanged following Change of Supply to enable the gaining Supplier to communicate with the meter.~~

Suppliers develop their own Head End translation services.

The Interim Service provides access to:

- Smart Metered Supply Points
- Head End manager
- Meter Id

This system provides a lookup facility for this information and limits access to the Smart Metering data to authorised parties. The interim service may provide access to registration data. ~~Does it even need to do this or could we just make changes to existing registrations systems?~~

~~!Would prefer that on CoS losing suppliers sends access, comms and meter details to gaining supplier, potentially with file containing CoS read. This would require a change to CoS rules to place responsibility with losing supplier for the provision of reads etc. Pretty sure BG would support this, however what is impact on our systems?!~~

### Interim Service

- Data Management
  - Provides smart meter lookup
  - Enables identification of Supplier
  - Receives smart meter comms and security data from losing Supplier
  - Makes available smart meter comms and security data to the gaining Supplier
- Access Control
  - Restricts access to smart meter data to the registered Supplier

### Gaining Supplier

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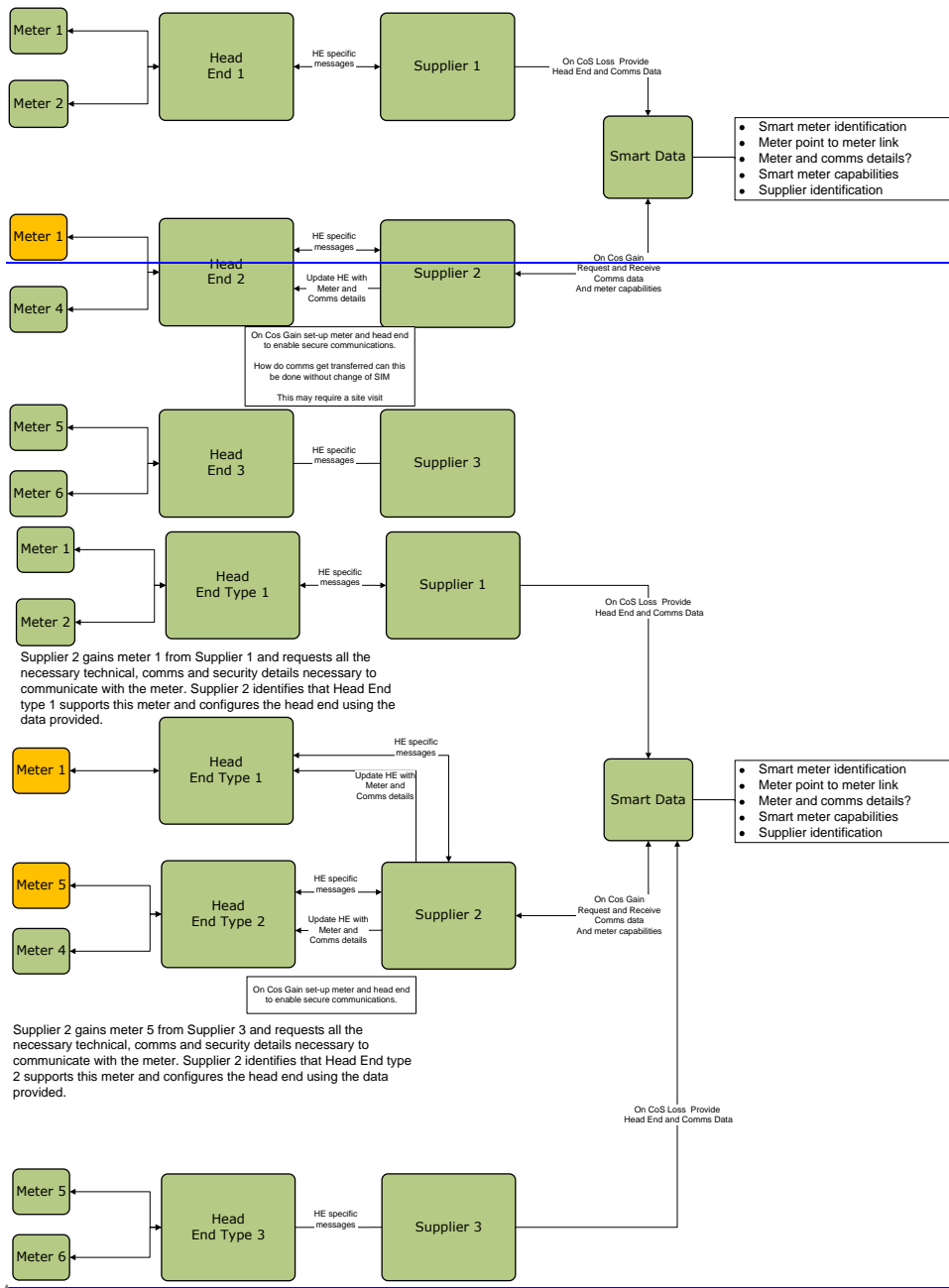


Figure 56: Supplier Configures Meter/HE on CoS

SWOT

### Strengths

- Allows Suppliers to use their existing smart metering infrastructures;
- Uses proven head end technology and capabilities;
- Single repository for all smart meter data provides opportunity for suppliers to be able to identify presence of smart meter prior to taking over supply point;
- No translation services provided by interim service - limits central development effort;
- Install process within control of Supplier – no dependency on interim service provider;
- Interim service provides smart data repository only - limits central development effort;
- No dependency on other Supplier or interim service post CoS;

### Weaknesses

- Potentially need Site Visit Required to change SIM / configure meter – additional costs and poor customer experience;
- Suppliers do not have a single defined interface for communicating with all Smart meters - this requires additional development effort;
- New interfaces required to smart data repository;
- Dependency on Suppliers to update data repository;
- Supplier development effort made redundant by DCC establishment;
- Suppliers may have increased cost HE purchase/support;
- Security keys/certificates needs to be passed between participants;

### Opportunities

- Standardisation of registration look-up could be used by initial DCC - Existing systems (e.g. ECOES, SGOES) could be used with changes to identify smart meters;
- Suppliers can choose the services they wish to support;
- Smart data captured in consistent form to provides basis for DCC transition;

### Threats

- Poor customer experience on CoS may impact mass rollout;
- May need to be run in parallel with DCC if central service supports non-technically compliant smart meters and also any non-domestic meters supported by service and suppliers elect not to use DCC;
- PPM solution developed independently by each Supplier;
- No co-ordinated approach to security or data privacy;
- New services/processes would need to be defined to allow suppliers to fulfil mandated interim obligations;

ScottishPower Energy Retail Limited





( *End of Document* )