

## DCP 328 Options

### Option 1 – Invoice only the boundary supplier

Under this approach, the Distributor (Distribution Network Operator (DNO) and Independent Distribution Network Operator (IDNO)) would continue to invoice use of system charges only to the supplier registered to the boundary Metering Point Administration Number (MPAN) in Settlement. In order to invoice all units, this solution requires the Distributor to either receive or be in a position to calculate gross units at the boundary, whereas in settlements it will only show net units (i.e. with units used by embedded customers having been differenced from the boundary MPAN).

This solution has the advantage of the Distributor only invoicing in respect of the boundary, being where its responsibility ends. However, it results in the boundary supplier being invoiced use of system charges in respect of units which it has not supplied (i.e. the units used by embedded customers for whom another supplier is responsible). The solution is only compatible with the difference metering option (which requires the metering to measure on a HH basis) as it relies on a 'principle' supplier being in place, where the full Settlement and shared metering options treat all suppliers of customers connected to the private network equally.

Pro's	Con's	Consumer Impacts
Can deal with Half-Hourly (HH) settlements – does not rely on all customers being HH, it relies on a meter at the boundary.	Can't deal with Non Half-Hourly (NHH) settlements	If Distributor is billing at boundary the supplier is receiving all use of system charges (these could be passed on to boundary customer) and other consumers may not receive any.
Multiple feeders have different capacities? Not an issue with this option.	Distributor is invoicing boundary supplier for units that were used by embedded customer. a process is needed to work out the gross metering data (needs to have a mapping exercise to the boundary MPAN and the embedded MPANs to ensure the Distributor does not invoice the suppliers embedded customers).	Embedded customers may get a benefit or the Private Network Operator (PNO) may be recovering this element through their agreement with embedded customer.
If Distributor receives actual gross data from the meter, charges can be accurate	If Distributors receive data from individual meters the sum of all may not add to the actual meter reading.	

There is a meter at the boundary with settlement data passing through which can be used for billing.	The accuracy of the sum of the meter may only be relevant where a PNO has a methodology statement in place.	
	Can suppliers at the boundary get the actual data going through the meter?	
	Caters for the voltage of connection rather than actual connection within the PNO network. Distributor only invoices for its own assets	
	Needs to be paired with another option	

## Questions for Working Group

**Is there any other pro's or cons you would like to add to the above table?**

**Please consider any examples that could be included in the consultation regarding option 1?**

**We need to sense check each against NHH metered, HH metered, Unmetered, different voltage levels at the boundary and within the network, fully settled, and partial settled instances.**

**Option 2 – Invoice all suppliers based on the tariff which the Distributor would apply if the end user were connected at the Distribution network to private network boundary, with a correction to fixed charges and some form of capacity allocation**

Under this approach, the Distributor would invoice use of system charges to both the boundary supplier and the supplier of embedded customers (under the difference metering approach) or the suppliers of all embedded customers (under the full Settlement or shared metering approach), based on units received through Settlement, using the tariff which the Distributor would apply if the customers were connected at the Distributor to private network boundary. In this way, units would be charged once and only once.

A solution would be needed to the issues raised at the end of the 'Why Change' section. This could be achieved for fixed charges by applying a proportion of the fixed charge to each supplier which would ensure that the total of fixed charges applied for all customers connected to the private network is equivalent to the fixed charge which would have been applied had there only been a single boundary MPAN. For capacity charging, some means of capacity allocation would be required to split the agreed capacity at the Distributor to private network boundary between the connected customers.

Pro's	Con's	Consumer Impacts
End customer is being billed on actual metering data	Without new tariff's there may be a need to allocate to non-reflective tariffs	Each pass-through customers will be getting charged by the supplier rather than the PNO the

		same as they do if they were connected to the Distributor network
Each supplier is paying use of system charges for the units it is supplying	Does not address allocation of capacity and reactive units	
Approx. the same will be collected from all suppliers as if there was one bill for a boundary meter	Does not account for unmetered	
Caters for the voltage of connection rather than actual connection within the PNO network. Distributor only invoices for its own assets	Need a mechanism to catch new MPANs to ensure reallocation of charges	
	It doesn't work well with a mixture of generation technologies on same site – i.e. diversity issues	
	Does not cater for fully settled sites	

## Questions for Working Group

Is there any other pro's or cons you would like to add to the above table?

Please consider any examples that could be included in the consultation regarding option 2?

We need to sense check each against NHH metered, HH metered, Unmetered, different voltage levels at the boundary and within the network, fully settled, and partial settled instances

**Option 3 – Invoice all suppliers as if the customer were connected to the Distributor network, with the private network operator able to 'claim' some use of system revenue back from the Distributor in respect of private network assets**

Under this approach, the Distributor would invoice the supplier of both the embedded customers and the boundary supplier use of system charges as if those end customers were connected direct to its network. As a result, the DNO would have recovered some use of system charges in respect of assets on the private network, to which the private network operator should be entitled, and so the private network operator would be eligible to claim back a portion of use of system revenue from the Distributor.

Pro's	Con's	Consumer Impacts
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If PNO or IDNO wanted to actively manage their network they could claim off the DNO	No access to super customer use of system by the PNO (this is possible but would require an additional process)	Risk of picking up more costs if costs are not fully recovered
Issues with capacity and reactive eliminated	Need for contractual agreement with Distributor and PNO to agree what value can be claimed	
No billing which involves the boundary meter it is all based on individual MPAN	If Distributor treats credit to PNO as a cost it will not fully recover.	
	Each PNO would need a number of LLFC (Line loss factor class) specific to themselves	

## Questions for Working Group

Is there any other pro's or cons you would like to add to the above table?

Please consider any examples that could be included in the consultation regarding option 3?

We need to sense check each against NHH metered, HH metered, Unmetered, different voltage levels at the boundary and within the network, fully settled, and partial settled instances

### Option 4 – Invoice the private network operator direct

Under this approach, the Distributor would invoice use of system charges direct to the private network operator only based on total units at the boundary, with no charges applied to the units recorded in Settlement against MPANs which relate to customers connected to the private network or against the boundary MPAN if applicable. The private network operator may then directly pass through the Distributor's charges to customers connected to the private network or recover those costs through another means (e.g. included in the lease for each customer).

In order to invoice all units, this solution requires the Distributor to either receive or be in a position to calculate gross units at the boundary, where Settlement will only show net units (i.e. with units used by embedded customers having been differenced from the boundary MPAN).

This solution has the advantage of the Distributor only invoicing in respect of the boundary, being where its responsibility ends, and avoids the issues presented in option one where the boundary supplier is being invoiced use of system charges in respect of units which it has not supplied (under the difference metering approach). Unlike option one this option is also compatible with all metering approaches.

Pro's	Con's	Consumer Impacts
	Requires PNOs to update relationships with customers which is outside of remit	Impact relationship with PNO in regard to use of system charges

	Need for zero tariffs to be produced because suppliers would need to know that there is no use of system charging and that these will be invoiced directly to private network operators.	
	This could increase risk for the Distributor if, for example, the PNO changed ownership.	
	Issues could arise with this option as PNOs do not accede to DCUSA.	
	There may be a need to install a boundary meter.	
	There would need to be a contract with the PNO	

## Questions for Working Group

Is there any other pro's or cons you would like to add to the above table?

Please consider any examples that could be included in the consultation regarding option 4?

We need to sense check each against NHH metered, HH metered, Unmetered, different voltage levels at the boundary and within the network, fully settled, and partial settled instances

### Option 5 – Invoice all suppliers based on new use of system charges which only include elements of charging which relate to voltage levels provided by the Distributor

Under this approach, the Distributor would invoice use of system charges to both the boundary supplier and the supplier of embedded customers (under the difference metering approach) or the suppliers of all embedded customers (under the full Settlement or shared metering approach), based on units received through Settlement, using new tariffs calculated for each Distribution network to private network boundary voltage based on the voltage levels which the Distributor provides. This could be carried out using the calculations in the Common Distribution Charging Methodology which are calculated on a voltage level basis prior to being aggregated to tariff level.

Provided the breakdown of which tariff elements should and should not apply for a given end user (based on the Distribution network to private network boundary) treats Low Voltage services and Low Voltage mains distinctly, this solution would resolve the issue of multiple fixed charges as the fixed charge is recovered in respect of service assets which would always be owned by the private network operator and so the Distributor would not be charging a fixed charge. For capacity charging, some means of capacity allocation may be required to split the agreed capacity at the Distribution network to private network boundary between the connected customers.

Pro's	Con's	Consumer Impacts
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Straight forwards for large numbers of NHH customers	Need new tariffs	
	Agreed capacity and reactive charges – how is this allocated	

## Questions for Working Group

Is there any other pro's or cons you would like to add to the above table?

Please consider any examples that could be included in the consultation regarding option 5?

We need to sense check each against NHH metered, HH metered, Unmetered, different voltage levels at the boundary and within the network, fully settled, and partial settled instances