

Transmission & Distribution Interface Charging Task Force

Action 17: Options for increasing commonality of approach in Transmission and Distribution Charging

Options	Impact	Commentary
<p>Option 1 Make the connection boundary more similar by making the transmission connection boundary deeper.</p>	<p>The transmission boundary was changed to a shallow boundary over 10 years ago through the introduction of the 'plugs' methodology. As part of the implementation customers were refunded significant funds for past contributions. If moving to a deeper connection charging methodology, there would be a requirement to recover additional contributions from customers which could be problematic. An option could be to reflect any additional charges in site specific charges but it is still likely to have significant implementation issues.</p>	<p>There are probably very few customers who have a realistic choice between a distribution and transmission connection and hence making the boundary more common in this manner is unlikely to have a major impact on removing distortions from a whole system perspective.</p>
<p>Option 2 Make the connection boundary more similar by making the distribution connection boundary shallower.</p>	<p>A relatively simple way of doing this would be to only recover the costs of extension assets through connection charges and remove contribution to network reinforcement. The contribution to transmission costs could also be removed.</p>	<p>As stated above, few customers have a realistic choice on whether to have a transmission or distribution connection so is also unlikely to have a major impact on removing distortions from a whole system perspective.</p> <p>The change would involve a significant transfer of risk and costs from new customer to existing customers.</p> <p>There are not many practical implementation issues though there would need to be consequential changes to the customer contribution assumptions in the use of system models.</p> <p>There are significant price control effects as this would have a major impact on DNO reinforcement expenditure and the net/ gross calculation. Any change would probably need to be implemented at the start of ED2, though would need to be agreed and developed well in advance of DNOs submitting their ED2 business plans.</p>
<p>Option 3 Agree common cost drivers/ scenarios for use of system cost modelling</p>	<p>The current transport model in transmission assumes all costs are driven by winter peak demand. Whilst there has been the effect of exporting GSPs or costs driven by summer minimum, these have not been reflected in the modelling which is essential if cost reflective charges are</p>	<p>If we are to develop a whole system approach it is essential to agree a common set of cost drivers which can feed into the development of transmission and distribution charging methodologies. These could be developed in different timescales but eventually there would be a more harmonised approach.</p>

	to be applied. Similarly in distribution, EDCM charges are primarily derived from peak demand. CDCM charges are also derived from peak demand modelling though there is a recognition that some networks peak at different times. These assumptions are used to derive time of day charges.	<p>Possible cost drivers:</p> <ul style="list-style-type: none"> • Net peak demand (by time of day?) • Net peak generation (by time of day?), and • Being connecting; recognising that parties who connect to the transmission and distribution network but don't use them often still need to make a fair contribution to the services they provide. <p>[There probably needs to be a debate about gross/ net. It is not clear whether gross (ie including behind the meter generation) can actually be measured].</p>
Option 4 Harmonise the ICRP/ LRIC/ FCP modelling approaches	The transmission and distribution EHV models are trying to do similar things in determining the cost per MW of expanding the system	<p>It's difficult to see any specific benefits in harmonising between transmission and distribution models and the operation of these systems are different so a common approach may not be appropriate.</p> <p>Note the CDCM produces average tariffs for the majority of distribution customers and is significantly different from the ICRP/ LRIC/FCP approaches which produce site specific charges so there is no scope for increasing commonality.</p>
Option 5 Harmonisation of residual charges/ scaling approaches	There is a need across all approaches to fully understand whether these costs are truly residual or not properly allocated to customers. Harmonisation could consist of an agreed principle that charging methodologies should look to allocate as many relevant costs as possible to users in a cost reflective manner.	This element is a focus of Ofgem's Targeted Charging Review.

NOTES:

1. This paper should be read in conjunction with the 'Entitlements and rights' paper also created by the TSO-DSO Charging Working Group.
2. For the five options described in the table above there is unlikely to be a change to the entitlements and rights of the existing and/ or new customers connected to the Transmission or Distribution networks but further investigation may be necessary to definitely confirm this.