

## DCP 212 — draft legal text

*This is a draft for consideration by the working group. The author makes no representation about the suitability of this draft for any purpose.*

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### Schedule 17, paragraphs 25.1 to 25.15, ~~version 6.2~~proposed

25.1 The extended price control disaggregation model (the extended method M model) calculates discount percentages in a two-part process.

25.2 For the purposes of the first part of the process, the DNO Party's network is split into ~~four~~five levels: LV ~~services~~, LV ~~main~~s, HV/LV, HV and EHV ~~and 132kV~~.

25.3 The first part of the price control disaggregation involves the calculation of ~~the percentages used to allocate separate percentages by network level of each element of~~ the DNO Party's Allowed Revenue ~~to each network level. This is done for each element of~~ Allowed Revenue: the operating cost, depreciation and return on RAV elements. These are aggregated over the period 2005/2006 to 2009/2010 (the DPCR4 period).

25.4 In order to determine the allocation to network levels of each element of price control revenue, the following cost allocation drivers are used:

- Data submitted by the DNO Party to the Authority using the format prescribed in the regulatory reporting pack (RRP) on units distributed and operating expenditure broken down by network level (typically relating to the year 2007/2008).
- Data that each DNO Party considers appropriately represents the forecast of net capital expenditure and ~~Connectee~~customer contributions for the period 2005/~~2006~~ to ~~–2014/2015~~, broken down by network level.
- Forecast data that each DNO Party considers appropriately represents the gross modern equivalent asset values (replacement costs) for various asset types.

### Allocation of operating expenditure by network level

~~25.5 The DNO Party allocates operating expenditure in the 2007/2008 RRP by network level. The RRP already allocates some operating expenditure by network level. For categories of expenditure for which the table below reports "MEAV" in the column headed "Allocation key", the DNO Party allocates, on the basis of modern equivalent asset values, the difference between total operating expenditure and the operating expenditure that is allocated to network levels.~~

~~25.5—Data from the RRP are used to distinguish between direct and indirect costs, with direct costs coded by network level. For the purpose of this calculation, capital expenditure is included, net of Connectee contributions, but negative figures are replaced with zero. This analysis provides direct costs percentage for each network level.—~~

### Table: Allocation rules

<u>Allocation key</u>	<u>Percentage</u>	<u>Direct cost</u>
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		<u>capitalised</u>	<u>indicator</u>
<u>Load related new connections &amp; reinforcement (net of contributions)</u>	<u>MEAV</u>	<u>100.0%</u>	<u>1</u>
<u>Non-load new &amp; replacement assets (net of contributions)</u>	<u>MEAV</u>	<u>100.0%</u>	<u>1</u>
<u>Non-operational capex</u>	<u>MEAV</u>	<u>23.5%</u>	<u>1</u>
<u>Faults</u>	<u>MEAV</u>	<u>23.5%</u>	<u>1</u>
<u>Inspections, &amp; Maintenance</u>	<u>MEAV</u>	<u>23.5%</u>	<u>1</u>
<u>Tree Cutting</u>	<u>MEAV</u>	<u>23.5%</u>	<u>1</u>
<u>Network Policy</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Network Design &amp; Engineering</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Project Management</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Engineering Mgt &amp; Clerical Support</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Control Centre</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>System Mapping - Cartographical</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Customer Call Centre</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Stores</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Vehicles &amp; Transport</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>IT &amp; Telecoms</u>	<u>Do not allocate</u>	<u>52.57%</u>	
<u>Property Mgt</u>	<u>Do not allocate</u>	<u>52.57%</u>	
<u>HR &amp; Non-operational Training</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Health &amp; Safety &amp; Operational Training</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Finance &amp; Regulation</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>CEO etc</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Atypical cash costs</u>	<u>Do not allocate</u>		<u>1</u>
<u>Pension deficit payments</u>	<u>Do not allocate</u>	<u>57.7%</u>	<u>1</u>
<u>Metering</u>	<u>Do not allocate</u>		<u>1</u>
<u>Excluded services &amp; de minimis</u>	<u>Do not allocate</u>		<u>1</u>
<u>Relevant distributed generation (less contributions)</u>	<u>Do not allocate</u>		<u>1</u>
<u>IFI</u>	<u>Do not allocate</u>		<u>1</u>
<u>Disallowed Related Party Margins</u>	<u>Do not allocate</u>		<u>1</u>
<u>Statutory Depreciation</u>	<u>Do not allocate</u>		<u>1</u>
<u>Network Rates</u>	<u>Do not allocate</u>		<u>1</u>
<u>Transmission Exit Charges</u>	<u>Deduct from revenue</u>		<u>1</u>
<u>Pension deficit repair payments by related parties</u>	<u>Do not allocate</u>		<u>1</u>
<u>Non activity costs and reconciling amounts</u>	<u>Do not allocate</u>		<u>1</u>

25.6 For the categories of expenditure for which the table reports “MEAV” under “the column “Allocation key”, the DNO Party allocates the difference between total and allocated operating expenditure on the basis of an estimate of modern equivalent asset value by network level. Estimated gross modern equivalent asset values used for this purpose are derived from asset counts and gross modern equivalent asset values (replacement costs) for various asset types. The DNO Party maps assets to network levels using the mapping shown in the table headed “Mapping of assets to network levels”, and calculates the share of MEAV

allocated to each of the network levels. ~~Indirect operating costs are allocated to network levels on the basis of an estimate of MEAV by network level.~~

25.6A. The DNO Party adjusts the operating costs allocated to each network level — — equal to the sum of the operating costs already allocated to network levels in the 2007/2008 RRP and the operating costs allocated in line with the previous paragraph — by multiplying, for each operating cost category, the allocated cost by one minus the relevant capitalisation percentage reported in the table headed “Allcoation rules”. On the basis of summing this adjusted allocation of operating costs across cost categories for each network level, the DNO Party calculates the share of operating costs of each network level. These are denoted as [Expensed proportions].

25.7 ~~The operating cost percentage for each level is a weighted average of the direct and indirect percentages. Estimated gross modern equivalent asset values used for this purpose are derived from asset counts and the DNO Party’s unit cost forecasts wherever available.~~

Transmission exit charges are excluded from the allocation because it does not seem reasonable to allocate these charges to different network levels.

**Table: Mapping of assets to network levels**

<u>Asset</u>	<u>Network level</u>
<u>LV mains overhead lines</u>	<u>LV mains</u>
<u>LV services overhead lines</u>	<u>LV services</u>
<u>LV overhead support</u>	<u>LV mains</u>
<u>LV mains underground cable, consac</u>	<u>LV mains</u>
<u>LV mains underground cable, plastic</u>	<u>LV mains</u>
<u>LV mains underground cable, paper</u>	<u>LV mains</u>
<u>LV services underground cable</u>	<u>LV services</u>
<u>LV pillar, indoors</u>	<u>LV mains</u>
<u>LV pillar, outdoors</u>	<u>LV mains</u>
<u>LV board, wall-mounted</u>	<u>LV mains</u>
<u>LV board, underground</u>	<u>LV mains</u>
<u>LV fuses, pole-mounted</u>	<u>LV mains</u>
<u>LV fuses, tower-mounted</u>	<u>LV mains</u>
<u>6.6/11 kV overhead line, open</u>	<u>HV</u>
<u>6.6/11 kV overhead line, covered</u>	<u>HV</u>
<u>20 kV overhead line, open</u>	<u>HV</u>
<u>20 kV overhead line, covered</u>	<u>HV</u>
<u>6.6/11 kV overhead support</u>	<u>HV</u>
<u>20 kV overhead support</u>	<u>HV</u>
<u>6.6/11kV underground cable</u>	<u>HV</u>
<u>20kV underground cable</u>	<u>HV</u>
<u>HV submarine cable</u>	<u>HV</u>
<u>6.6/11 kV circuit breaker pole-mounted</u>	<u>HV</u>
<u>6.6/11 kV circuit breaker ground-mounted</u>	<u>HV</u>
<u>6.6/11 kV switch pole-mounted</u>	<u>HV</u>
<u>6.6/11 kV switch ground-mounted</u>	<u>HV/LV</u>
<u>6.6/11 kV ring main unit</u>	<u>HV/LV</u>

<a href="#"><u>6.6/11 kV other switchgear, pole-mounted</u></a>	<a href="#"><u>HV</u></a>
<a href="#"><u>6.6/11 kV other switchgear, ground-mounted</u></a>	<a href="#"><u>HV</u></a>
<a href="#"><u>20 kV circuit breaker, pole-mounted</u></a>	<a href="#"><u>HV</u></a>
<a href="#"><u>20 kV circuit breaker, ground-mounted</u></a>	<a href="#"><u>HV</u></a>
<a href="#"><u>20 kV switch, pole-mounted</u></a>	<a href="#"><u>HV</u></a>
<a href="#"><u>20 kV switch, ground-mounted</u></a>	<a href="#"><u>HV/LV</u></a>
<a href="#"><u>20 kV ring main unit</u></a>	<a href="#"><u>HV/LV</u></a>
<a href="#"><u>20 kV other switchgear, pole-mounted</u></a>	<a href="#"><u>HV</u></a>
<a href="#"><u>20 kV other switchgear, ground-mounted</u></a>	<a href="#"><u>HV</u></a>
<a href="#"><u>6.6/11 kV transformer, pole-mounted</u></a>	<a href="#"><u>HV/LV</u></a>
<a href="#"><u>6.6/11 kV transformer, ground-mounted</u></a>	<a href="#"><u>HV/LV</u></a>
<a href="#"><u>20 kV transformer, pole-mounted</u></a>	<a href="#"><u>HV/LV</u></a>
<a href="#"><u>20 kV transformer, ground-mounted</u></a>	<a href="#"><u>HV/LV</u></a>
<a href="#"><u>33kV overhead pole line</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33kV overhead tower line</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66kV overhead pole line</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66kV overhead tower line</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33kV pole</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33kV tower</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66kV pole</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66kV tower</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33kV underground cable, non-pressurised</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33kV underground cable, oil</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33kV underground cable, gas</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66kV underground cable,non-pressurised</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66kV underground cable, oil</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66kV underground cable, gas</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>EHV submarine cable</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33 kV circuit breaker, indoors</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33 kV circuit breaker, outdoors</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33 kV switch, ground-mounted</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33 kV switch, pole-mounted</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33 kV ring main unit</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33 kV other switchgear</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66 kV circuit breaker, indoors and outdoors</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66 kV other switchgear</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33 kV transformer, pole-mounted</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33 kV transformer, ground mounted</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33 kV auxiliary transformer</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66 kV transformer</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66 kV auxiliary transformer</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>132kV overhead line pole conductor</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>132kV overhead line tower conductor</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>132kV pole</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>132kV tower</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>132kV tower fittings</u></a>	<a href="#"><u>EHV and 132kV</u></a>

<u>132kV underground cable, non-pressurised</u>	<u>EHV and 132kV</u>
<u>132kV underground cable, oil</u>	<u>EHV and 132kV</u>
<u>132kV underground cable, gas</u>	<u>EHV and 132kV</u>
<u>132 kV submarine cable</u>	<u>EHV and 132kV</u>
<u>132 kV circuit breaker, indoors and outdoors</u>	<u>EHV and 132kV</u>
<u>132 kV other switchgear</u>	<u>EHV and 132kV</u>
<u>132 kV transformer</u>	<u>EHV and 132kV</u>
<u>132 kV auxiliary transformer</u>	<u>EHV and 132kV</u>
<u>132 kV/EHV remote terminal unit, pole-mounted</u>	<u>EHV and 132kV</u>
<u>132 kV/EHV remote terminal unit, ground-mounted</u>	<u>EHV and 132kV</u>
<u>HV remote terminal unit, pole-mounted</u>	<u>HV</u>
<u>HV remote terminal unit, ground-mounted</u>	<u>HV</u>

### **Allocation of depreciation and return to network levels**

25.8 Both the depreciation and return on capital elements of Allowed Revenue are allocated to network levels on the basis of net capital expenditure data derived from the DNO Party's estimates and forecasts. All figures on net capital expenditure are aggregated over the 10-year period from 2005/2006 to 2014/2015, taking in actual data or forecasts for each year as available.

25.9 The DNO Party calculates the net capital expenditure split by LV, LV/HV, HV, and EHV and 132kV. For each of these four segments, ~~network level~~, the relevant net capital expenditure is calculated by adding up expenditure on total condition based replacement (proactive and reactive) replacement), ~~combined in the case of LV, HV and EHV with~~ connections spend minus ~~Connectee customer~~ contributions (directs) for connections at that voltage level, general reinforcement capital expenditure at that voltage level, and fault reinforcement capital expenditure at that voltage level.

25.10 Some of these net capital expenditure categories allow HV substation and transformer costs to be identified. These costs (and no other costs) are allocated to the HV/LV network level. The ratio of the expenditure in these categories on HV substations and transformers to the expenditure in these categories on other HV assets is denoted as [HV/LV capital expenditure ratio]. Some of the net capital expenditure categories do not separately identify HV substation/transformer costs. For these categories, the -costs reported under HV are split between ~~allocated to~~ the HV/LV network and the HV network level so that the ratio of the amount allocated to the HV/LV network level to the costs reported under HV is equal to [HV/LV capital expenditure]. ~~in the same proportion as for the other categories (where these costs are separately identified).~~

25.11 Generation-related capital expenditure is not included in the net capex attributable to each network level.

25.11A The DNO Party splits the net capital expenditure allocated to LV by dividing it between the LV mains and the LV services network levels. It does this on the basis of the ratio of net capital expenditure on total condition based replacement costs for each of those two network levels.

### **Determination of a percentage allocation of total revenue per unit to network levels**

25.12 ~~The allocation to each network level of each element of the DNO Party's Allowed Revenue is then aggregated by network level to create network level totals. These totals are then converted into network level percentages. The DNO Party allocates a measure of the price control revenue to each network level.~~

25.12A The DNO Party determines a breakdown of price control allowed revenue over the period from 2005/2006 to 2009/2010 between (1) operating expenditure, (2) depreciation and (3) return on regulatory asset value. Each of these three components of price control allowed revenue is then allocated across each network level using the percentage cost drivers as calculated for each such network level. The allocations of each of the three components of price control allowed revenue are aggregated by network level to obtain a percentage per network level of total price control allowed revenue.

25.13 ~~The DNO Party uses the network level percentages are used to allocate the DNO Party's Allowed Revenue less an amount denoted as [Revenue not to share]. The [Revenue not to share] is calculated as the sum of the the net amount earned or lost by the licensee under price control financial incentive schemes (this may be a negative number) and the less the DNO Party's total transmission exit charges. All three numbers relate to a single year (typically 2007/2008). The result of deducting [Revenue not to share] from the Allowed revenue is denoted as [Revenue to share].~~

25.14 The ~~Allowed~~ [Revenue to share] allocations are then rescaled by the estimated number of units flowing through each network level, ~~loss adjusted to LV. The result is denoted by [Revenue to share per unit]. and normalised so that they sum to 100 per cent.~~ The ~~net amount earned or lost by the licensee under price control financial incentive schemes plus the DNO Party's total transmission exit charges (the unallocated part of the Allowed Revenue)~~ [Revenue not to share] is rescaled by the number of units flowing through the EHV network level, ~~loss adjusted to LV; the result is denoted as [Revenue not to share per unit]. The result of this calculation is a set of percentages for each of the LV, HV/LV, HV and EHV network levels, and one percentage for the DNO Party's unallocated revenue.~~

25.14A The DNO Party calculates the number of units flowing through each network level, loss-adjusted to LV in two steps.

25.14B The first step is to calculate adjustment factors for units distributed at LV, at HV and at EHV and 132kV in respect of each of the LV, HV and EHV and 132kV levels.

(a) For units distributed at LV, the adjustment factor is 1 (one).

(b) For units distributed at HV, the adjustment factor is 0 (zero) in respect of the LV level, and  $(U + 0.5 * \text{Losses}) / (U + \text{Losses})$  in respect of the other levels, where U is the number of units distributed at LV plus half of the number of units distributed at HV plus a quarter of the number of units distributed at EHV and 132kV.

(c) For units distributed at EHV, the adjustment factor is 0 (zero) in respect of the LV and HV levels, and  $(U + 0.25 * \text{Losses}) / (U + \text{Losses})$  in respect of the EHV and 132kV level, where U is defined as above.

25.14C The second step is to calculate, for each of the LV, HV and EHV and 132kV networks, the sum of the product of the three adjustment factors and the units distributed at

each of LV, HV, and EHV and 132kV. This gives the number of units loss adjusted relative to LV flowing through each of the LV, HV, and EHV and 132kV networks. The number of units loss adjusted relative to LV flowing through the LV services, the LV mains and the HV/LV network levels are the same as the number flowing through the LV network.

25.14D For each network level, the DNO Party calculates the percentage that the [Revenue to share per unit] represents of the sum of the [Revenue to share per unit] across all network levels and the [Revenue not to share per unit]. The results are denoted as [LV mains allocations], [LV services allocation], [HV/LV allocation], [HV allocation], [EHV and 132kV allocation].

### **Calculation of direct cost proportion**

25.14E The DNO Party calculates the [EHV and 132kV direct cost proportion] on the basis of the allocation of RRP operating expenditure across network levels set out in paragraphs 25.5 and 25.6 (before the adjustment for capitalization rates is made). The [EHV and 132kV direct cost proportion] is calculated as the ratio of the sum of the operating expenditure allocated to the EHV and 132 kV network level across the expenditure categories identified as “Direct costs” in the table headed “Allocation rules” to the sum of the operating expenditure allocated to the EHV and 132kV network level across all operating expenditure categories.

### **EHV network level disaggregation**

25.15 The second part of the price control disaggregation process is to split the percentage allocated to the ~~for~~ the EHV and 132kV network level, ~~in the above calculation~~ [EHV and 132kV allocation], into separate percentages for the following asset levels:

- ☐ 132 kV circuits (England and Wales only);
- ☐ 132kV/~~33kV~~-EHV substations (England and Wales only);
- ☐ ~~33 kV~~-EHV circuits; and
- ☐ ~~33kV~~-EHV/HV substations

25.15A The DNO Party splits [EHV and 132kV allocation] into separate percentages for the above assets levels on the basis of the share of the MEAV of the EHV and 132kV network level accounted for by the MEAV of the assets associated with each of the four asset levels. The DNO Party does this on the basis of the MEAV of the assets and of the mapping in the table below. The results of the allocation of [EHV and 132kV allocation] into percentage allocations for the different EHV and 132kV asset levels are denoted as [132kV allocation], [132kV/EHV allocation], [EHV allocation] and [EHV/HV allocation].

**Table: MEAV EDCM mapping**

<u>Asset</u>	<u>Asset level</u>
<u>6.6/11 kV circuit breaker pole-mounted</u>	<u>EHV/HV</u>
<u>6.6/11 kV circuit breaker ground-mounted</u>	<u>EHV/HV</u>
<u>20 kV circuit breaker, pole-mounted</u>	<u>EHV/HV</u>
<u>20 kV circuit breaker, ground-mounted</u>	<u>EHV/HV</u>



<u>33kV overhead pole line</u>	<u>EHV</u>
<u>33kV overhead tower line</u>	<u>EHV</u>
<u>66kV overhead pole line</u>	<u>EHV</u>
<u>66kV overhead tower line</u>	<u>EHV</u>
<u>33kV pole</u>	<u>EHV</u>
<u>33kV tower</u>	<u>EHV</u>
<u>66kV pole</u>	<u>EHV</u>
<u>66kV tower</u>	<u>EHV</u>
<u>33kV underground cable, non-pressurised</u>	<u>EHV</u>
<u>33kV underground cable, oil</u>	<u>EHV</u>
<u>33kV underground cable, gas</u>	<u>EHV</u>
<u>66kV underground cable,non Pressurised</u>	<u>EHV</u>
<u>66kV underground cable, oil</u>	<u>EHV</u>
<u>66kV underground cable, gas</u>	<u>EHV</u>
<u>EHV submarine cable</u>	<u>EHV</u>
<u>33 kV circuit breaker, indoors</u>	<u>132kV/EHV</u>
<u>33 kV circuit breaker, outdoors</u>	<u>132kV/EHV</u>
<u>33 kV switch, ground-mounted</u>	<u>132kV/EHV</u>
<u>33 kV switch, pole-mounted</u>	<u>132kV/EHV</u>
<u>33 kV ring-main-unit</u>	<u>132kV/EHV</u>
<u>33 kV other switchgear</u>	<u>EHV/HV</u>
<u>66 kV circuit breaker, indoors and outdoors</u>	<u>132kV/EHV</u>
<u>66 kV other switchgear</u>	<u>EHV/HV</u>
<u>33 kV transformer, pole-mounted</u>	<u>EHV/HV</u>
<u>33 kV transformer, ground mounted</u>	<u>EHV/HV</u>
<u>33 kV auxiliary transformer</u>	<u>EHV/HV</u>
<u>66 kV transformer</u>	<u>EHV/HV</u>
<u>66 kV auxiliary transformer</u>	<u>EHV/HV</u>
<u>132kV overhead line pole conductor</u>	<u>132kV</u>
<u>132kV overhead line tower conductor</u>	<u>132kV</u>
<u>132kV pole</u>	<u>132kV</u>
<u>132kV tower</u>	<u>132kV</u>
<u>132kV tower fittings</u>	<u>132kV</u>
<u>132kV underground cable, non-pressurised</u>	<u>132kV</u>
<u>132kV underground cable, oil</u>	<u>132kV</u>
<u>132kV underground cable, gas</u>	<u>132kV</u>
<u>132 kV submarine cable</u>	<u>132kV</u>
<u>132 kV circuit breaker, indoors and outdoors</u>	<u>132kV</u>
<u>132 kV other switchgear</u>	<u>132kV</u>
<u>132 kV transformer</u>	<u>132kV/EHV</u>
<u>132 kV auxiliary transformer</u>	<u>132kV/EHV</u>
<u>132 kV/EHV remote terminal unit, pole mounted</u>	<u>EHV/HV</u>
<u>132 kV/EHV remote terminal unit, ground mounted</u>	<u>EHV/HV</u>



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**Schedule 17, paragraph 25.17, ~~version 6.2~~proposed**

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25.17 ~~For each combination of an end user network level and a discount category, the relevant d~~Discount ~~percentages for demand end users is~~ are determined ~~calculated~~ as follows:

**For discount categories 0000, 132kV/EHV and HVplus**

Discount percentage ~~=~~ is the lowest of 100 per cent and  $P / (S + U)$

**For discount category 132kV**

Discount percentage ~~=~~ is the lowest of 100 per cent and  $(P + ([\text{percentage for 132kV allocation}] * (1 - ([\text{network Network length split for 132kV}] * [\text{EHV and 132kV direct cost proportion}])))) / (S + U)$

**For discount category EHV**

Discount percentage ~~=~~ is the lowest of 100 per cent and  $(P + ([\text{percentage for EHV allocation}] * (1 - ([\text{network Network length split for EHV}] * [\text{EHV and 132kV direct cost proportion}])))) / (S + U)$

Where:

Discount percentage is the discount applicable for each combination of discount category and end user type.

P is the sum of the allocation percentages for all network levels below the network level of the DNO Party – ~~IL~~DNO-~~Party~~ boundary up to and including the network level of the end user in the case of demand, and up to and excluding the network level of the end user in the case of generation.

S the sum of the percentages for all network levels in the distribution network above and including the network level of the end user in the case of demand, and up to and excluding the network level of the end user in the case of generation.

U is the ratio of the sum of the DNO Party's total incentive revenue and the transmission exit charge, and the DNO Party's total Allowed Revenue including any incentive revenue and transmission exit charge.

~~[Network length split for 132kV] and [Network length split for EHV] is equal to 1 minus the ratio of the average length of circuits on relevant network level (EHV or 132kV) that is deemed to be provided by the IDNO Party to that provided by the host DNO Party. The values for the "network length split" for 132kV and EHV are currently set to 100 per cent.~~

~~[EHV and 132kV D]direct cost proportion] is as calculated in paragraph 25.14E. the percentage share of direct costs in the sum of direct costs and indirect costs (excluding IT and telecoms and property management costs) at EHV. Negative costs will be excluded from the calculation.~~

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**Schedule 18, paragraphs 25.1 to 25.15, ~~version 6.2~~proposed**

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25.1 The extended price control disaggregation model (the extended method M model) calculates discount percentages in a two-part process.

25.2 For the purposes of the first part of the process, the DNO Party's network is split into ~~four~~five levels: LV services, LV mains, HV/LV, HV and EHV and 132kV.

25.3 The first part of the price control disaggregation involves the calculation of the percentages used to allocate separate percentages by network level of each element of the DNO Party's Allowed Revenue to each network level. This is done for each element of Allowed Revenue: the operating cost, depreciation and return on RAV elements. These are aggregated over the period 2005/2006 to 2009/2010 (the DPCR4 period).

25.4 In order to determine the allocation to network levels of each element of price control revenue, the following cost allocation drivers are used:

- Data submitted by the DNO Party to the Authority using the format prescribed in the regulatory reporting pack (RRP) on units distributed and operating expenditure broken down by network level (typically relating to the year 2007/2008).
- Data that each DNO Party considers appropriately represents the forecast of net capital expenditure and ~~Connectee~~customer contributions for the period 2005/~~2006~~ to ~~–2014/2015~~, broken down by network level.
- Forecast data that each DNO Party considers appropriately represents the gross modern equivalent asset values (replacement costs) for various asset types.

#### **Allocation of operating expenditure by network level**

25.5 The DNO Party allocates operating expenditure in the 2007/2008 RRP by network level. The RRP already allocates some operating expenditure by network level. For categories of expenditure for which the table below reports "MEAV" in the column headed "Allocation key", the DNO Party allocates, on the basis of modern equivalent asset values, the difference between total operating expenditure and the operating expenditure that is allocated to network levels.

~~25.5—Data from the RRP are used to distinguish between direct and indirect costs, with direct costs coded by network level. For the purpose of this calculation, capital expenditure is included, net of Connectee contributions, but negative figures are replaced with zero. This analysis provides direct costs percentage for each network level.—~~

**Table: Allocation rules**

	<u>Allocation key</u>	<u>Percentage capitalised</u>	<u>Direct cost indicator</u>
<u>Load related new connections &amp; reinforcement (net of contributions)</u>	<u>MEAV</u>	<u>100.0%</u>	<u>1</u>
<u>Non-load new &amp; replacement assets (net of contributions)</u>	<u>MEAV</u>	<u>100.0%</u>	<u>1</u>
<u>Non-operational capex</u>	<u>MEAV</u>	<u>23.5%</u>	<u>1</u>

<u>Faults</u>	<u>MEAV</u>	<u>23.5%</u>	<u>1</u>
<u>Inspections, &amp; Maintenance</u>	<u>MEAV</u>	<u>23.5%</u>	<u>1</u>
<u>Tree Cutting</u>	<u>MEAV</u>	<u>23.5%</u>	<u>1</u>
<u>Network Policy</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Network Design &amp; Engineering</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Project Management</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Engineering Mgt &amp; Clerical Support</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Control Centre</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>System Mapping - Cartographical</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Customer Call Centre</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Stores</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Vehicles &amp; Transport</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>IT &amp; Telecoms</u>	<u>Do not allocate</u>	<u>52.57%</u>	
<u>Property Mgt</u>	<u>Do not allocate</u>	<u>52.57%</u>	
<u>HR &amp; Non-operational Training</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Health &amp; Safety &amp; Operational Training</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Finance &amp; Regulation</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>CEO etc</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Atypical cash costs</u>	<u>Do not allocate</u>		<u>1</u>
<u>Pension deficit payments</u>	<u>Do not allocate</u>	<u>57.7%</u>	<u>1</u>
<u>Metering</u>	<u>Do not allocate</u>		<u>1</u>
<u>Excluded services &amp; de minimis</u>	<u>Do not allocate</u>		<u>1</u>
<u>Relevant distributed generation (less contributions)</u>	<u>Do not allocate</u>		<u>1</u>
<u>IFI</u>	<u>Do not allocate</u>		<u>1</u>
<u>Disallowed Related Party Margins</u>	<u>Do not allocate</u>		<u>1</u>
<u>Statutory Depreciation</u>	<u>Do not allocate</u>		<u>1</u>
<u>Network Rates</u>	<u>Do not allocate</u>		<u>1</u>
<u>Transmission Exit Charges</u>	<u>Deduct from revenue</u>		<u>1</u>
<u>Pension deficit repair payments by related parties</u>	<u>Do not allocate</u>		<u>1</u>
<u>Non activity costs and reconciling amounts</u>	<u>Do not allocate</u>		<u>1</u>

25.6 For the categories of expenditure for which the table reports “MEAV” under “the column “Allocation key”, the DNO Party allocates the difference between total and allocated operating expenditure on the basis of an estimate of modern equivalent asset value by network level. Estimated gross modern equivalent asset values used for this purpose are derived from asset counts and gross modern equivalent asset values (replacement costs) for various asset types. The DNO Party maps assets to network levels using the mapping shown in the table headed “Mapping of assets to network levels”, and calculates the share of MEAV allocated to each of the network levels. ~~Indirect operating costs are allocated to network levels on the basis of an estimate of MEAV by network level.~~

25.6A. The DNO Party adjusts the operating costs allocated to each network level — — equal to the sum of the operating costs already allocated to network levels in the 2007/2008 RRP and the operating costs allocated in line with the previous paragraph — by multiplying, for each operating cost category, the allocated cost by one minus the relevant capitalisation

percentage reported in the table headed “Allcoation rules”. On the basis of summing this adjusted allocation of operating costs across cost categories for each network level, the DNO Party calculates the share of operating costs of each network level. These are denoted as [Expensed proportions].

25.7 ~~The operating cost percentage for each level is a weighted average of the direct and indirect percentages. Estimated gross modern equivalent asset values used for this purpose are derived from asset counts and the DNO Party’s unit cost forecasts wherever available.~~

Transmission exit charges are excluded from the allocation because it does not seem reasonable to allocate these charges to different network levels.

**Table: Mapping of assets to network levels**

<b><u>Asset</u></b>	<b><u>Network level</u></b>
<u>LV mains overhead lines</u>	<u>LV mains</u>
<u>LV services overhead lines</u>	<u>LV services</u>
<u>LV overhead support</u>	<u>LV mains</u>
<u>LV mains underground cable, consac</u>	<u>LV mains</u>
<u>LV mains underground cable, plastic</u>	<u>LV mains</u>
<u>LV mains underground cable, paper</u>	<u>LV mains</u>
<u>LV services underground cable</u>	<u>LV services</u>
<u>LV pillar, indoors</u>	<u>LV mains</u>
<u>LV pillar, outdoors</u>	<u>LV mains</u>
<u>LV board, wall-mounted</u>	<u>LV mains</u>
<u>LV board, underground</u>	<u>LV mains</u>
<u>LV fuses, pole-mounted</u>	<u>LV mains</u>
<u>LV fuses, tower-mounted</u>	<u>LV mains</u>
<u>6.6/11 kV overhead line, open</u>	<u>HV</u>
<u>6.6/11 kV overhead line, covered</u>	<u>HV</u>
<u>20 kV overhead line, open</u>	<u>HV</u>
<u>20 kV overhead line, covered</u>	<u>HV</u>
<u>6.6/11 kV overhead support</u>	<u>HV</u>
<u>20 kV overhead support</u>	<u>HV</u>
<u>6.6/11kV underground cable</u>	<u>HV</u>
<u>20kV underground cable</u>	<u>HV</u>
<u>HV submarine cable</u>	<u>HV</u>
<u>6.6/11 kV circuit breaker pole-mounted</u>	<u>HV</u>
<u>6.6/11 kV circuit breaker ground-mounted</u>	<u>HV</u>
<u>6.6/11 kV switch pole-mounted</u>	<u>HV</u>
<u>6.6/11 kV switch ground-mounted</u>	<u>HV/LV</u>
<u>6.6/11 kV ring main unit</u>	<u>HV/LV</u>
<u>6.6/11 kV other switchgear, pole-mounted</u>	<u>HV</u>
<u>6.6/11 kV other switchgear, ground-mounted</u>	<u>HV</u>
<u>20 kV circuit breaker, pole-mounted</u>	<u>HV</u>
<u>20 kV circuit breaker, ground-mounted</u>	<u>HV</u>
<u>20 kV switch, pole-mounted</u>	<u>HV</u>
<u>20 kV switch, ground-mounted</u>	<u>HV/LV</u>

<a href="#"><u>20 kV ring main unit</u></a>	<a href="#"><u>HV/LV</u></a>
<a href="#"><u>20 kV other switchgear, pole-mounted</u></a>	<a href="#"><u>HV</u></a>
<a href="#"><u>20 kV other switchgear, ground-mounted</u></a>	<a href="#"><u>HV</u></a>
<a href="#"><u>6.6/11 kV transformer, pole-mounted</u></a>	<a href="#"><u>HV/LV</u></a>
<a href="#"><u>6.6/11 kV transformer, ground-mounted</u></a>	<a href="#"><u>HV/LV</u></a>
<a href="#"><u>20 kV transformer, pole-mounted</u></a>	<a href="#"><u>HV/LV</u></a>
<a href="#"><u>20 kV transformer, ground-mounted</u></a>	<a href="#"><u>HV/LV</u></a>
<a href="#"><u>33kV overhead pole line</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33kV overhead tower line</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66kV overhead pole line</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66kV overhead tower line</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33kV pole</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33kV tower</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66kV pole</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66kV tower</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33kV underground cable, non-pressurised</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33kV underground cable, oil</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33kV underground cable, gas</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66kV underground cable,non-pressurised</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66kV underground cable, oil</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66kV underground cable, gas</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>EHV submarine cable</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33 kV circuit breaker, indoors</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33 kV circuit breaker, outdoors</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33 kV switch, ground-mounted</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33 kV switch, pole-mounted</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33 kV ring main unit</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33 kV other switchgear</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66 kV circuit breaker, indoors and outdoors</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66 kV other switchgear</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33 kV transformer, pole-mounted</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33 kV transformer, ground mounted</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>33 kV auxiliary transformer</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66 kV transformer</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>66 kV auxiliary transformer</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>132kV overhead line pole conductor</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>132kV overhead line tower conductor</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>132kV pole</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>132kV tower</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>132kV tower fittings</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>132kV underground cable, non-pressurised</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>132kV underground cable, oil</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>132kV underground cable, gas</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>132 kV submarine cable</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>132 kV circuit breaker, indoors and outdoors</u></a>	<a href="#"><u>EHV and 132kV</u></a>
<a href="#"><u>132 kV other switchgear</u></a>	<a href="#"><u>EHV and 132kV</u></a>

<u>132 kV transformer</u>	<u>EHV and 132kV</u>
<u>132 kV auxiliary transformer</u>	<u>EHV and 132kV</u>
<u>132 kV/EHV remote terminal unit, pole-mounted</u>	<u>EHV and 132kV</u>
<u>132 kV/EHV remote terminal unit, ground-mounted</u>	<u>EHV and 132kV</u>
<u>HV remote terminal unit, pole-mounted</u>	<u>HV</u>
<u>HV remote terminal unit, ground-mounted</u>	<u>HV</u>

### **Allocation of depreciation and return to network levels**

25.8 Both the depreciation and return on capital elements of Allowed Revenue are allocated to network levels on the basis of net capital expenditure data derived from the DNO Party's estimates and forecasts. All figures on net capital expenditure are aggregated over the 10-year period from 2005/2006 to 2014/2015, taking in actual data or forecasts for each year as available.

25.9 The DNO Party calculates the net capital expenditure split by LV, LV/HV, HV, and EHV and 132kV. For each of these four segments, ~~network level~~, the relevant net capital expenditure is calculated by adding up expenditure on total condition based replacement (proactive and reactive) replacement), ~~combined in the case of LV, HV and EHV with~~ connections spend minus ~~Connectee customer~~ contributions (directs) for connections at that voltage level, general reinforcement capital expenditure at that voltage level, and fault reinforcement capital expenditure at that voltage level.

25.10 Some of these net capital expenditure categories allow HV substation and transformer costs to be identified. These costs (and no other costs) are allocated to the HV/LV network level. The ratio of the expenditure in these categories on HV substations and transformers to the expenditure in these categories on other HV assets is denoted as [HV/LV capital expenditure ratio]. Some of the net capital expenditure categories do not separately identify HV substation/transformer costs. For these categories, the -costs reported under HV are split between ~~allocated to~~ the HV/LV network and the HV network level so that the ratio of the amount allocated to the HV/LV network level to the costs reported under HV is equal to [HV/LV capital expenditure].~~in the same proportion as for the other categories (where these costs are separately identified).~~

25.11 Generation-related capital expenditure is not included in the net capex attributable to each network level.

25.11A The DNO Party splits the net capital expenditure allocated to LV by dividing it between the LV mains and the LV services network levels. It does this on the basis of the ratio of net capital expenditure on total condition based replacement costs for each of those two network levels.

### **Determination of a percentage allocation of total revenue per unit to network levels**

25.12 ~~The allocation to each network level of each element of the DNO Party's Allowed Revenue is then aggregated by network level to create network level totals. These totals are then converted into network level percentages.~~ The DNO Party allocates a measure of the price control revenue to each network level.

25.12A The DNO Party determines a breakdown of price control allowed revenue over the period from 2005/2006 to 2009/2010 between (1) operating expenditure, (2) depreciation and (3) return on regulatory asset value. Each of these three components of price control allowed revenue is then allocated across each network level using the percentage cost drivers as calculated for each such network level. The allocations of each of the three components of price control allowed revenue are aggregated by network level to obtain a percentage per network level of total price control allowed revenue.

25.13 The DNO Party uses ~~the~~ the network level percentages ~~are used~~ to allocate the DNO Party's Allowed Revenue less ~~an amount denoted as [Revenue not to share]~~. The ~~[Revenue not to share]~~ is calculated as the sum of the ~~the~~ net amount earned ~~or lost~~ by the licensee under price control financial incentive schemes ~~(this may be a negative number)~~ and the ~~less~~ the DNO Party's total transmission exit charges. All three numbers relate to ~~a single year (typically 2007/2008)~~. The result of deducting ~~[Revenue not to share]~~ from the Allowed revenue is denoted as ~~[Revenue to share]~~.

25.14 The ~~Allowed~~ ~~[Revenue to share]~~ allocations are then rescaled by the estimated number of units flowing through each network level, ~~loss adjusted to LV. The result is denoted by [Revenue to share per unit], and normalised so that they sum to 100 per cent.~~ The ~~net amount earned or lost by the licensee under price control financial incentive schemes plus the DNO Party's total transmission exit charges (the unallocated part of the Allowed Revenue)~~ ~~[Revenue not to share]~~ is rescaled by the number of units flowing through the EHV network level, ~~loss adjusted to LV; the result is denoted as [Revenue not to share per unit].~~ ~~The result of this calculation is a set of percentages for each of the LV, HV/LV, HV and EHV network levels, and one percentage for the DNO Party's unallocated revenue.~~

25.14A The DNO Party calculates the number of units flowing through each network level, loss-adjusted to LV in two steps.

25.14B The first step is to calculate adjustment factors for units distributed at LV, at HV and at EHV and 132kV in respect of each of the LV, HV and EHV and 132kV levels.

(a) For units distributed at LV, the adjustment factor is 1 (one).

(b) For units distributed at HV, the adjustment factor is 0 (zero) in respect of the LV level, and  $(U + 0.5 * \text{Losses}) / (U + \text{Losses})$  in respect of the other levels, where U is the number of units distributed at LV plus half of the number of units distributed at HV plus a quarter of the number of units distributed at EHV and 132kV.

(c) For units distributed at EHV, the adjustment factor is 0 (zero) in respect of the LV and HV levels, and  $(U + 0.25 * \text{Losses}) / (U + \text{Losses})$  in respect of the EHV and 132kV level, where U is defined as above.

25.14C The second step is to calculate, for each of the LV, HV and EHV and 132kV networks, the sum of the product of the three adjustment factors and the units distributed at each of LV, HV, and EHV and 132kV. This gives the number of units loss adjusted relative to LV flowing through each of the LV, HV, and EHV and 132kV networks. The number of units loss adjusted relative to LV flowing through the LV services, the LV mains and the HV/LV network levels are the same as the number flowing through the LV network.



25.14D For each network level, the DNO Party calculates the percentage that the [Revenue to share per unit] represents of the sum of the [Revenue to share per unit] across all network levels and the [Revenue not to share per unit]. The results are denoted as [LV mains allocations], [LV services allocation], [HV/LV allocation], [HV allocation], [EHV and 132kV allocation].

### **Calculation of direct cost proportion**

25.14E The DNO Party calculates the [EHV and 132kV direct cost proportion] on the basis of the allocation of RRP operating expenditure across network levels set out in paragraphs 25.5 and 25.6 (before the adjustment for capitalization rates is made). The [EHV and 132kV direct cost proportion] is calculated as the ratio of the sum of the operating expenditure allocated to the EHV and 132 kV network level across the expenditure categories identified as “Direct costs” in the table headed “Allocation rules” to the sum of the operating expenditure allocated to the EHV and 132kV network level across all operating expenditure categories.

### **EHV network level disaggregation**

25.15 The second part of the price control disaggregation process is to split the percentage allocated to the ~~for the EHV and 132kV~~ network level, ~~in the above calculation~~ [EHV and 132kV allocation], into separate percentages for the following asset levels:

- ☐ 132 kV circuits (England and Wales only);
- ☐ 132kV/~~33kV~~-EHV substations (England and Wales only);
- ☐ ~~33 kV~~-EHV circuits; and
- ☐ ~~33kV~~-EHV/HV substations

25.15A The DNO Party splits [EHV and 132kV allocation] into separate percentages for the above assets levels on the basis of the share of the MEAV of the EHV and 132kV network level accounted for by the MEAV of the assets associated with each of the four asset levels. The DNO Party does this on the basis of the MEAV of the assets and of the mapping in the table below. The results of the allocation of [EHV and 132kV allocation] into percentage allocations for the different EHV and 132kV asset levels are denoted as [132kV allocation], [132kV/EHV allocation], [EHV allocation] and [EHV/HV allocation].

**Table: MEAV EDCM mapping**

<u>Asset</u>	<u>Asset level</u>
6.6/11 kV circuit breaker pole-mounted	EHV/HV
6.6/11 kV circuit breaker ground-mounted	EHV/HV
20 kV circuit breaker, pole-mounted	EHV/HV
20 kV circuit breaker, ground-mounted	EHV/HV
33kV overhead pole line	EHV
33kV overhead tower line	EHV
66kV overhead pole line	EHV
66kV overhead tower line	EHV

<u>33kV pole</u>	<u>EHV</u>
<u>33kV tower</u>	<u>EHV</u>
<u>66kV pole</u>	<u>EHV</u>
<u>66kV tower</u>	<u>EHV</u>
<u>33kV underground cable, non-pressurised</u>	<u>EHV</u>
<u>33kV underground cable, oil</u>	<u>EHV</u>
<u>33kV underground cable, gas</u>	<u>EHV</u>
<u>66kV underground cable,non Pressurised</u>	<u>EHV</u>
<u>66kV underground cable, oil</u>	<u>EHV</u>
<u>66kV underground cable, gas</u>	<u>EHV</u>
<u>EHV submarine cable</u>	<u>EHV</u>
<u>33 kV circuit breaker, indoors</u>	<u>132kV/EHV</u>
<u>33 kV circuit breaker, outdoors</u>	<u>132kV/EHV</u>
<u>33 kV switch, ground-mounted</u>	<u>132kV/EHV</u>
<u>33 kV switch, pole-mounted</u>	<u>132kV/EHV</u>
<u>33 kV ring-main-unit</u>	<u>132kV/EHV</u>
<u>33 kV other switchgear</u>	<u>EHV/HV</u>
<u>66 kV circuit breaker, indoors and outdoors</u>	<u>132kV/EHV</u>
<u>66 kV other switchgear</u>	<u>EHV/HV</u>
<u>33 kV transformer, pole-mounted</u>	<u>EHV/HV</u>
<u>33 kV transformer, ground mounted</u>	<u>EHV/HV</u>
<u>33 kV auxiliary transfomer</u>	<u>EHV/HV</u>
<u>66 kV transformer</u>	<u>EHV/HV</u>
<u>66 kV auxiliary transfomer</u>	<u>EHV/HV</u>
<u>132kV overhead line pole conductor</u>	<u>132kV</u>
<u>132kV overhead line tower conductor</u>	<u>132kV</u>
<u>132kV pole</u>	<u>132kV</u>
<u>132kV tower</u>	<u>132kV</u>
<u>132kV tower fittings</u>	<u>132kV</u>
<u>132kV underground cable, non-pressurised</u>	<u>132kV</u>
<u>132kV underground cable, oil</u>	<u>132kV</u>
<u>132kV underground cable, gas</u>	<u>132kV</u>
<u>132 kV submarine cable</u>	<u>132kV</u>
<u>132 kV circuit breaker, indoors and outdoors</u>	<u>132kV</u>
<u>132 kV other switchgear</u>	<u>132kV</u>
<u>132 kV transformer</u>	<u>132kV/EHV</u>
<u>132 kV auxiliary transfomer</u>	<u>132kV/EHV</u>
<u>132 kV/EHV remote terminal unit, pole mounted</u>	<u>EHV/HV</u>
<u>132 kV/EHV remote terminal unit, ground mounted</u>	<u>EHV/HV</u>

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**Schedule 18, paragraph 25.17, ~~version 6.2~~proposed**

25.17 ~~For each combination of an end user network level and a discount category, the relevant d~~Discount ~~percentages for demand end users is~~ are determined ~~calculated~~ as follows:

### For discount categories 0000, 132kV/EHV and HVplus

Discount percentage = is the lowest of 100 per cent and  $P / (S + U)$

### For discount category 132kV

Discount percentage = is the lowest of 100 per cent and  $(P + ([\text{percentage for 132kV allocation}] * (1 - ([\text{network-Network length split for 132kV}] * [\text{EHV and 132kV direct cost proportion}])))) / (S + U)$

### For discount category EHV

Discount percentage = is the lowest of 100 per cent and  $(P + ([\text{percentage for EHV allocation}] * (1 - ([\text{network-Network length split for EHV}] * [\text{EHV and 132kV direct cost proportion}])))) / (S + U)$

Where:

Discount percentage is the discount applicable for each combination of discount category and end user type.

P is the sum of the allocation percentages for all network levels below the network level of the DNO Party – IL DNO-Party boundary up to and including the network level of the end user in the case of demand, and up to and excluding the network level of the end user in the case of generation.

S the sum of the percentages for all network levels in the distribution network above and including the network level of the end user in the case of demand, and up to and excluding the network level of the end user in the case of generation.

U is the ratio of the sum of the DNO Party's total incentive revenue and the transmission exit charge, and the DNO Party's total Allowed Revenue including any incentive revenue and transmission exit charge.

[Network length split for 132kV] and [Network length split for EHV] is equal to 1 minus the ratio of the average length of circuits on relevant network level (EHV or 132kV) that is deemed to be provided by the IDNO Party to that provided by the host DNO Party. The values for the "network length split" for 132kV and EHV are currently set to 100 per cent.

[EHV and 132kV D direct cost proportion] is as calculated in paragraph 25.14E. the percentage share of direct costs in the sum of direct costs and indirect costs (excluding IT and telecoms and property management costs) at EHV. Negative costs will be excluded from the calculation.