

version number	use / purpose	date	changes made
Template CBA RIIO ED1 v1.xls	initial draft RIIO-GD1 model issued for demo purposes		-
Template CBA RIIO ED1 v2.xls	draft RIIO-ED1 model demonstrated during the CBA meeting held on the 19 March	19/03/2013	updated the model to reflect ED1 rather than GD1
Template CBA RIIO ED1 v3.xls	issued to DNOs to complete the 2 worked examples (leaking cable and QoS)	28/03/2013 03/04/2013	updated to reflect discussions at the CBA meeting including straight line depreciation assumption for ED1, addition of fixed parameter assumptions for non-monetary items re-issued on 3 April to correct CI/CML fixed data transpose error
Template CBA RIIO ED1 v4.xls	final version of CBA spreadsheet to take into account worked examples	16/04/2013    29/04/2013 10/01/2014 10/01/2014 10/01/2014	updated to reflect DNO feedback following completion of worked examples  main changes include: - included baseline scenario worksheet - removed VOLL as CI/CML method of monetising loss of supply was viewed as robust method - amended the CO2 conversion factor associated with losses to take into account assumptions regarding future decarbonisation of electricity - updated fixed data parameters to 2012/13 prices removed 'do minimum' text in cell B9 of <i>Option summary</i> worksheet Inserted clarification comment in cell C9 of the <i>Option 1</i> worksheet. Clarified text in cell B1 of <i>Option summary</i> worksheet. Clarified text in cell F26 of <i>Option summary</i> worksheet.

## Guidance for CBA spreadsheet model

Tab	Instructions
<b>Option summary</b>	Provide a description of the stated aim / investment decision contained within this CBA analysis workbook, along with a list of options considered to meet the aim. Also include here the short list of options contained within this workbook which have been fully costed and specify which option has been adopted following CBA and included in your business plan submission.
<b>Fixed data</b>	Enter pre-tax WACC and prices consistent with your business plan
<b>Baseline scenario</b>	Enter costs and benefits associated with the baseline scenario. The baseline scenario represents status quo; that is the cost of business as usual in the absence of any investment intervention. Where business as usual is not an option i.e. an investment intervention of some kind is required DNOs should chose the option with the lowest investment to represent the baseline scenario.
<b>Working baseline</b>	Show any calculation used to derive the values in your baseline scenario
<b>Option 1</b>	Enter costs and benefits <i>over and above the baseline scenario</i> i.e. the marginal or incremental costs / benefits of the option being considered. Enter capitalisation rates consistent with your business plan.
<b>Working 1</b>	Show any calculation used to derive the values in your CBA

### Colour code:

User populated cells
Fixed data
Summation formula
Other formula

The user should populate the light blue cells. All other cells are either fixed or auto-populated.

Enter costs / benefits in 2012/13 prices (£m).

Costs should be entered as negative values.

Benefits (i.e. avoided costs) should be entered a positive values.

Costs entered should correspond to values set out in company business plans i.e. should exclude RPEs and include ongoing efficiencies consistent with assumptions contained in your business plan submission.

Copy *Option 1 worksheet & workings 1* for each CBA option and label these *option 2 & workings 2* etc.

Where a 'do minimum option' exists, Option 1 should represent your 'do minimum' or 'reference scenario' e.g. do nothing, ongoing maintenance of existing asset or the option which requires the minimum investment .

Use the relevant *Workings worksheet* to demonstrate any calculation/information that can support the costs and benefits you have entered for each option. This is free fill and provides you with an opportunity to show additional underlying data you believe will assist Ofgem in evaluating/understanding your CBA.

Please highlight your chosen option by colouring the worksheet tab yellow.

Purpose of CBA: describe the **primary driver** of the investment decision

To quantify losses savings of targeted replacement of pre-1958 distribution transformers.

If investment is to replace an existing asset / asset class, please state the condition of the asset / asset class (HI / CI etc.)

Targeted replacement of pre-1958 distribution transformers with a Health Index of 3.

List below all options considered to meet the stated aim

Options considered / project name	Comment
"do minimum" option	Transformers replacement due to their condition (where the Health Index $\geq$ H4) and/or as a consequence of other works at site, e.g. due to the condition of the LV board and/or HV switchgear and/or building and/or if it's closely coupled, i.e. where there are secondary drivers.
Targeted replacement of pre-1958 distribution transformers	Targeted/accelerated replacement of pre-1958 distribution transformers with a Health Index of 3 as part of the work programme selection criteria for the replacement of indoor and outdoor substations.

List below the short list of those options which have been costed within this CBA workbook

Option no.	Options considered	Decision	Comment	For the chosen option only, provide detail of where CBA expenditure included in this CBA is reported in the BPDOT pack. e.g. LV switchgear BPDOT CV3 rows 15 to 22.	NPVs based on payback periods (£m)				
					5 years	10 years	20 years	45 years	DNO view
1	Targeted replacement of pre-1958 distribution transformers with a Health Index of 3.	Adopted	Adopted as a design policy due to payback period being within 10 years of investment.	Not reported directly in BODT pack. These CBAs could be used to quantify options for the Losses Strategy. Not licence specific	£0.06	£0.00	£0.28	£0.40	
2									
3									
4									
5									

If more options are costed, please copy Option 1 and workings / worksheets and add detail to the short list table above.



[illegible]