



Corrections and Updates to the AER's Opex Forecast

AER Opex Model Update

TransGrid prepared an alternative forecast by updating the AER's forecast in the draft decision to correct for observed errors, remove inconsistencies and take account of the most recent information as discussed in Chapter 6 of the revised revenue proposal. This spreadsheet sets out the steps TransGrid took when updating the AER's model.

1. Steps to Update AER Opex Model

Starting point - base year expenditure

Step 1: Remove 15-month lag from inflation

The AER used TransGrid's 2012/13 operating expenditure as the base year expenditure.

The AER then used CPI factors with a 15-month lag to translate the base year expenditure into June 2014 dollars.

TransGrid has used the CPI factors without a 15-month lag in its update of the AER's opex model.

Rate of change

The AER has used results from operating expenditure partial factor productivity benchmarking to calculate the rate of change.

While TransGrid has concerns with the suitability of the partial factor productivity benchmarking, it has updated the productivity change and output change for estimates that incorporate data from the 2013/14 RIN responses.

Step 2: Update price change variable with updated labour escalation forecasts from BIS Shrapnel

The AER used the average of Deloitte Access Economics and BIS Shrapnel's wage price index forecasts for labour escalation forecasting.

The AER used April 2014 forecasts from BIS Shrapnel and the most recent Deloitte Access Economics forecast.

TransGrid has updated labour escalation to the average of a December 2014 forecast from BIS Shrapnel and the AER's forecast from Deloitte Access Economics.

	2014-15	2015-16	2016-17	2017-18	
Deloitte (Nominal)	3.29%	2.90%	3.37%	3.50%	Source: Deloitte report for AER.
BIS Shrapnel (Nominal)	3.50%	3.40%	3.60%	4.10%	Source: BIS Shrapnel, December 2014.
CPI	2.50%	2.50%	2.50%	2.50%	Source: Revised proposal PTRM.
Deloitte (Real using Fisher)	0.77%	0.39%	0.85%	0.98%	
BIS Shrapnel (Real using Fisher)	0.98%	0.88%	1.07%	1.56%	
Average Deloitte and BIS (Real)	0.87%	0.63%	0.96%	1.27%	

Step 3a/3b: Update the output and productivity change for estimates that incorporate 2013/14 data

	Draft Decision	3a. Opex (inc Step Changes)	3b. Opex (no Step Changes)
Revised Output Weight			
Energy	21.40%	18.62%	21.01%
Ratcheted MD	22.11%	25.20%	21.62%
Connections	27.80%	31.19%	27.69%
Circuit Length	28.69%	24.98%	29.68%

	Draft Decision	3a. Opex (inc Step Changes)	3b. Opex (no Step Changes)
Revised Productivity Change			
Industry Productivity Factor	0.86%	-0.07%	-0.13%

Comparing the total opex difference between the two scenarios:

(All figures in \$m Jun-14)	2014/15	2015/16	2016/17	2017/18
3a. -0.07% Productivity Forecast (inc Step Changes)	166.06	165.47	166.65	168.92
3b. -0.13% Productivity Forecast (no Step Changes)	166.19	165.62	166.95	169.21
Difference	-0.13	-0.15	-0.30	-0.29

(All figures in \$m Jun-14)	2014 - 18
Difference of productivity with/without step changes	-0.87
Total Step Changes (inc Capex/Opex Trade-offs)	32.83

Since the difference between productivity forecasts is lower than TransGrid's revised proposal step changes, TransGrid has used the productivity forecast excluding step changes and added specific step changes. This is consistent with advice from HoustonKemp in Appendix C of TransGrid's revised revenue proposal.

Step changes and other costs

The AER has included two step changes in its model, for defined benefit superannuation forecast and Sydney accommodation change. TransGrid has removed the step change for defined benefit superannuation and added the specific step changes set out in its revised revenue proposal.

(Note: Only the case in step 3b will be progressed from this point onwards, as it corresponds with the selected method for including step changes.)

Step 4b: Remove the step change for defined benefits superannuation contributions**Step 5b: Add step changes and capex/opex trade-offs consistent with TransGrid's Revised Proposal**

TransGrid updated the list of step changes to reflect those set out in its revised revenue proposal.

(All figures in \$m Jun-14)	2014/15	2015/16	2016/17	2017/18
Change to Sydney office accommodation	-0.18	-2.10	-2.10	-2.10
Payroll efficiencies	-0.65	-0.65	-0.65	-0.65
Closure of Yass control room	-0.07	-0.07	-0.07	-0.07
Revenue reset	-0.07	0.51	0.92	0.11
Rental fees for communication towers on crown lands	0.09	0.11	0.16	0.15
AER's new regulatory guidelines	0.61	0.61	0.61	0.61
Easement maintenance	2.47	1.70	0.19	0.26
Transfer of AEMO system operator functions	0.92	0.92	0.92	0.92
Consumer engagement program	1.70	1.64	1.64	1.70
Increase in demand management innovation allowance	-0.09	3.48	3.49	3.49

TransGrid added projects that are specific capex/opex trade-offs, as described in its revised revenue proposal.

(All figures in \$m Jun-14)	2014/15	2015/16	2016/17	2017/18
MOPS - Capex/Opex Trade-off	1.55	2.55	7.53	0.77

2. Outputs of AER Opex Model

TransGrid populated the following table starting from the AER's Draft Decision opex model, and changing the inputs to reflect each step described above. TransGrid has provided versions of the opex model incrementally showing each change in input data at each step, with the cells modified in each run highlighted, as supporting information to the revenue proposal.

Forecast Opex (excl. DRC & NS) in \$m Jun-14	2014-15	2015-16	2016-17	2017-18	Total
0. AER Draft Decision	162.84	161.15	161.22	161.84	647.05
1. Corrected for CPI Lag	164.29	162.60	162.67	163.30	652.87
2. Updated Price Change	164.43	162.10	161.66	162.11	650.30
3a. Updated Productivity/Output Change (with Step Changes)	166.06	165.47	166.65	168.92	667.10
3b. Updated Prod/Output Change (no Step Changes)	166.19	165.62	166.95	169.21	667.96
4b. Removed Defined Benefit Step Change	175.91	175.75	177.40	179.97	709.03
5b. Added Step Changes and Capex/Opex Trade-offs	182.38	186.53	192.11	187.23	748.25