

Appendix B

First Economics detailed calculations for the estimate of Network Rail's CP3 corporation tax allowance.

Tax calculation - 2006-07 prices

Central estimate

	headline rate of return	equivalent accounting rate of return	cost of debt	gearing	tax uplift	implied cost of equity	tax component of rate of return	average RAB (2002/03 prices)	implied revenue (2002/03 prices)	implied revenue (2006/07 prices)	
Year 1	7.00%	6.76%	3.25%	0.75	1.43	12.27%	1.29%	18,939	245	277	
Year 2	7.00%	6.76%	3.25%	0.74	1.43	11.66%	1.31%	21,024	275	311	
Year 3	6.50%	6.30%	3.25%	0.71	1.43	9.72%	1.19%	22,393	267	301	
Year 4	6.50%	6.30%	3.25%	0.69	1.43	9.09%	1.22%	23,427	285	322	
Year 5	6.50%	6.30%	3.25%	0.66	1.43	8.52%	1.25%	24,321	303	342	
									cash totals	1,376	1,553

Low estimate

	headline rate of return	equivalent accounting rate of return	cost of debt	gearing	tax uplift	implied cost of equity	tax component of rate of return	average RAB (2002/03 prices)	implied revenue (2002/03 prices)	implied revenue (2006/07 prices)	
Year 1	7.00%	6.76%	4.50%	0.75	1.43	9.59%	1.01%	18,939	192	216	
Year 2	7.00%	6.76%	4.50%	0.74	1.43	9.19%	1.03%	21,024	217	245	
Year 3	6.50%	6.30%	4.50%	0.71	1.43	7.54%	0.92%	22,393	207	234	
Year 4	6.50%	6.30%	4.50%	0.69	1.43	7.17%	0.96%	23,427	225	254	
Year 5	6.50%	6.30%	4.50%	0.66	1.43	6.83%	1.00%	24,321	243	274	
									cash totals	1,084	1,223

High estimate

	headline rate of return	equivalent accounting rate of return	cost of debt	gearing	tax uplift	implied cost of equity	tax component of rate of return	average RAB (2002/03 prices)	implied revenue (2002/03 prices)	implied revenue (2006/07 prices)	
Year 1	7.00%	6.76%	3.25%	0.55	1.43	7.74%	1.49%	18,939	283	319	
Year 2	7.00%	6.76%	3.25%	0.55	1.43	7.74%	1.49%	21,024	314	354	
Year 3	6.50%	6.30%	3.25%	0.55	1.43	7.01%	1.35%	22,393	303	342	
Year 4	6.50%	6.30%	3.25%	0.55	1.43	7.01%	1.35%	23,427	317	358	
Year 5	6.50%	6.30%	3.25%	0.55	1.43	7.01%	1.35%	24,321	329	371	
									cash totals	1,545	1,744

Conversion from 2002/03 prices to 2006/07 prices provided by ORR 1.129

Tax calculation - nominal

Central estimate

	headline rate of return	equivalent accounting rate of return	cost of debt	gearing	tax uplift	implied cost of equity	tax component of rate of return	average RAB (2002/03 prices)	implied revenue (2002/03 prices)	implied revenue (out-turn prices)
Year 1	7.00%	6.76%	3.25%	0.75	1.43	12.27%	1.29%	18,939	245	260
Year 2	7.00%	6.76%	3.25%	0.74	1.43	11.66%	1.31%	21,024	275	299
Year 3	6.50%	6.30%	3.25%	0.71	1.43	9.72%	1.19%	22,393	267	301
Year 4	6.50%	6.30%	3.25%	0.69	1.43	9.09%	1.22%	23,427	285	336
Year 5	6.50%	6.30%	3.25%	0.66	1.43	8.52%	1.25%	24,321	303	371
cash totals									1,376	1,568

Low estimate

	headline rate of return	equivalent accounting rate of return	cost of debt	gearing	tax uplift	implied cost of equity	tax component of rate of return	average RAB (2002/03 prices)	implied revenue (2002/03 prices)	implied revenue (2006/07 prices)
Year 1	7.00%	6.76%	4.50%	0.75	1.43	9.59%	1.01%	18,939	192	203
Year 2	7.00%	6.76%	4.50%	0.74	1.43	9.19%	1.03%	21,024	217	236
Year 3	6.50%	6.30%	4.50%	0.71	1.43	7.54%	0.92%	22,393	207	234
Year 4	6.50%	6.30%	4.50%	0.69	1.43	7.17%	0.96%	23,427	225	265
Year 5	6.50%	6.30%	4.50%	0.66	1.43	6.83%	1.00%	24,321	243	298
cash totals									1,084	1,235

High estimate

	headline rate of return	equivalent accounting rate of return	cost of debt	gearing	tax uplift	implied cost of equity	tax component of rate of return	average RAB (2002/03 prices)	implied revenue (2002/03 prices)	implied revenue (2006/07 prices)
Year 1	7.00%	6.76%	3.25%	0.55	1.43	7.74%	1.49%	18,939	283	300
Year 2	7.00%	6.76%	3.25%	0.55	1.43	7.74%	1.49%	21,024	314	341
Year 3	6.50%	6.30%	3.25%	0.55	1.43	7.01%	1.35%	22,393	303	342
Year 4	6.50%	6.30%	3.25%	0.55	1.43	7.01%	1.35%	23,427	317	373
Year 5	6.50%	6.30%	3.25%	0.55	1.43	7.01%	1.35%	24,321	329	403
cash totals									1,545	1,758

Conversion from 2002/03 prices to out-turn prices provided by ORR

2002/03 to 2004/05	1.061
2002/03 to 2005/06	1.086
2002/03 to 2006/07	1.129
2002/03 to 2007/08	1.177
2002/03 to 2008/09	1.225