



TELSTRA CORPORATION LIMITED

PUBLIC INQUIRY TO MAKE FINAL ACCESS DETERMINATIONS FOR THE DECLARED FIXED LINE SERVICES

PART A OF TELSTRA'S RESPONSE TO THE COMMISSION'S DISCUSSION PAPER

SCHEDULE A.4: TECHNICAL ANALYSIS OF INFLATION EFFECTS

June 2011

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1. RECOGNITION OF INFLATION COSTS UNDER DIFFERENT ACCOUNTING SYSTEMS

Asset cost	\$100
Life of asset	10
Remaining life of asset	5
Depreciation Rate	10.00%
Asset price trend	2.50%
WACC (Nominal Pre-Tax)	10.00%
WACC (Real Pre-Tax)	7.32%

Table 1.1: HCA

Year	Book value of assets (real)		Depreciation			Cost of capital		Applying WACC to nominal asset	Total	Depreciation and capital cost	PV of depreciation and capital costs over the asset's life	Compensation for inflation	PV of recognised inflation costs
			Real	Inflation	Total	Real	Use of nominal WACC						
1	\$100		\$10.00		\$10.00	\$7.32	\$2.68	\$10.00	\$20.00	\$100.00	\$2.68	\$10.34	
2	\$90		\$10.00		\$10.00	\$6.59	\$2.41	\$9.00	\$19.00		\$2.41		
3	\$80		\$10.00		\$10.00	\$5.85	\$2.15	\$8.00	\$18.00		\$2.15		
4	\$70		\$10.00		\$10.00	\$5.12	\$1.88	\$7.00	\$17.00		\$1.88		
5	\$60		\$10.00		\$10.00	\$4.39	\$1.61	\$6.00	\$16.00		\$1.61		
6	\$50		\$10.00		\$10.00	\$3.66	\$1.34	\$5.00	\$15.00		\$1.34		
7	\$40		\$10.00		\$10.00	\$2.93	\$1.07	\$4.00	\$14.00		\$1.07		
8	\$30		\$10.00		\$10.00	\$2.20	\$0.80	\$3.00	\$13.00		\$0.80		
9	\$20		\$10.00		\$10.00	\$1.46	\$0.54	\$2.00	\$12.00		\$0.54		
10	\$10		\$10.00		\$10.00	\$0.73	\$0.27	\$1.00	\$11.00		\$0.27		

Table 1.2: Replacement Cost with Tilted Annuity

Year	Book value of assets (real)	Book value of assets (nominal)	Depreciation			Cost of capital			Applying WACC to nominal asset	Total	Depreciation and capital cost	PV of depreciation and capital costs over the asset's life	Compensation for inflation	PV of recognised inflation costs
			Real	Inflation	Total	Real	Use of nominal WACC							
1	\$100.00	\$100.00	\$10	-\$5.19	\$4.81	\$7	\$2.68	\$0.00	\$10.00	\$14.81	\$100	-\$2.51	\$10.34	
2	\$90.00	\$95.19	\$10	-\$4.34	\$5.66	\$6.59	\$2.41	\$0.52	\$9.52	\$15.18		-\$1.41		
3	\$80.00	\$89.53	\$10	-\$3.40	\$6.60	\$5.85	\$2.15	\$0.95	\$8.95	\$15.56		-\$0.30		
4	\$70.00	\$82.93	\$10	-\$2.35	\$7.65	\$5.12	\$1.88	\$1.29	\$8.29	\$15.95		\$0.82		
5	\$60.00	\$75.27	\$10	-\$1.18	\$8.82	\$4.39	\$1.61	\$1.53	\$7.53	\$16.35		\$1.96		
6	\$50.00	\$66.46	\$10	\$0.11	\$10.11	\$3.66	\$1.34	\$1.65	\$6.65	\$16.75		\$3.10		
7	\$40.00	\$56.35	\$10	\$1.54	\$11.54	\$2.93	\$1.07	\$1.63	\$5.63	\$17.17		\$4.25		
8	\$30.00	\$44.81	\$10	\$3.12	\$13.12	\$2.20	\$0.80	\$1.48	\$4.48	\$17.60		\$5.41		
9	\$20.00	\$31.69	\$10	\$4.87	\$14.87	\$1.46	\$0.54	\$1.17	\$3.17	\$18.04		\$6.58		
10	\$10.00	\$16.81	\$10	\$6.81	\$16.81	\$0.73	\$0.27	\$0.68	\$1.68	\$18.49		\$7.76		

Table 1.3: ACCC's FLSM/PTRM

Year	Book value of assets (real)		Depreciation			Cost of capital		Use of nominal WACC	Applying WACC to nominal asset	Total	Depreciation and capital cost	PV of depreciation and capital costs over the asset's life	Compensation for inflation	PV of recognised inflation costs
			Real	Inflation	Total	Real								
1	\$100.00		\$10.00	\$0.25	\$10.25	\$7.32		\$0.18	\$7.50	\$17.75	\$100.00	\$0.43	\$10.34	
2	\$90.00		\$10.00	\$0.51	\$10.51	\$6.59		\$0.33	\$6.92	\$17.43		\$0.84		
3	\$80.00		\$10.00	\$0.77	\$10.77	\$5.85		\$0.45	\$6.30	\$17.07		\$1.22		
4	\$70.00		\$10.00	\$1.04	\$11.04	\$5.12		\$0.53	\$5.65	\$16.69		\$1.57		
5	\$60.00		\$10.00	\$1.31	\$11.31	\$4.39		\$0.58	\$4.97	\$16.28		\$1.89		
6	\$50.00		\$10.00	\$1.60	\$11.60	\$3.66		\$0.58	\$4.24	\$15.84		\$2.18		
7	\$40.00		\$10.00	\$1.89	\$11.89	\$2.93		\$0.55	\$3.48	\$15.37		\$2.44		
8	\$30.00		\$10.00	\$2.18	\$12.18	\$2.20		\$0.48	\$2.67	\$14.86		\$2.66		
9	\$20.00		\$10.00	\$2.49	\$12.49	\$1.46		\$0.36	\$1.83	\$14.32		\$2.85		
10	\$10.00		\$10.00	\$2.80	\$12.80	\$0.73		\$0.20	\$0.94	\$13.74		\$3.01		

2. TRANSITION TO THE FLSM ACCOUNTING SYSTEM WITH CONSISTENT ASSET VALUES

Asset cost	\$100
Life of asset	10
Remaining life of asset	5
Depreciation Rate	10.00%
Asset price trend	2.50%
WACC (Nominal Pre-Tax)	10.00%
WACC (Real Pre-Tax)	7.32%

Table 2.1: Transition from Indexed Historic Cost to the ACCC's FLSM with consistent asset values at the beginning of year 5

Year	Book value of assets (real)		Depreciation			Cost of capital			Depreciation and capital cost	PV of depreciation and capital costs over the asset's life	Compensation for inflation	PV of recognised inflation costs	
			Real	Inflation	Total	Real	Use of nominal WACC	Applying WACC to nominal asset					Total
1	\$100.00	\$100.00	\$10	-\$2.50	\$7.50	\$7.32	\$2.68	\$0.00	\$10.00	\$17.50	\$100	\$0.18	\$10.34
2	\$90.00	\$92.50	\$10	-\$2.31	\$7.69	\$6.59	\$2.41	\$0.25	\$9.25	\$16.94		\$0.35	
3	\$80.00	\$84.81	\$10	-\$2.12	\$7.88	\$5.85	\$2.15	\$0.48	\$8.48	\$16.36		\$0.51	
4	\$70.00	\$76.93	\$10	-\$1.92	\$8.08	\$5.12	\$1.88	\$0.69	\$7.69	\$15.77		\$0.65	
5	\$68.86		\$11.48	\$0.29	\$11.76	\$5.04		\$0.13	\$5.16	\$16.93		\$2.54	
6	\$57.38		\$11.48	\$0.58	\$12.06	\$4.20		\$0.21	\$4.41	\$16.47		\$2.81	
7	\$45.90		\$11.48	\$0.88	\$12.36	\$3.36		\$0.26	\$3.62	\$15.98		\$3.05	
8	\$34.43		\$11.48	\$1.19	\$12.67	\$2.52		\$0.26	\$2.78	\$15.45		\$3.25	
9	\$22.95		\$11.48	\$1.51	\$12.98	\$1.68		\$0.22	\$1.90	\$14.88		\$3.42	
10	\$11.48		\$11.48	\$1.83	\$13.31	\$0.84		\$0.13	\$0.97	\$14.28		\$3.55	

Table 2.2: Transition from Replacement Cost/Tilted Annuity to the ACCC's FLSM with consistent asset values at the beginning of year 5

Year	Book value of assets (real)	Book value of assets (nominal)	Depreciation			Cost of capital			Depreciation and capital cost	PV of depreciation and capital costs over the asset's life	Compensation for inflation	PV of recognised inflation costs	
			Real	Inflation	Total	Real	Use of nominal WACC	Applying WACC to nominal asset					Total
1	\$100.00	\$100.00	\$10	-\$5.19	\$4.81	\$7	\$2.68	\$0.00	\$10.00	\$14.81	\$100	-\$2.51	\$10.34
2	\$90.00	\$95.19	\$10	-\$4.34	\$5.66	\$6.59	\$2.41	\$0.52	\$9.52	\$15.18		-\$1.41	
3	\$80.00	\$89.53	\$10	-\$3.40	\$6.60	\$5.85	\$2.15	\$0.95	\$8.95	\$15.56		-\$0.30	
4	\$70.00	\$82.93	\$10	-\$2.35	\$7.65	\$5.12	\$1.88	\$1.29	\$8.29	\$15.95		\$0.82	
5	\$75.27		\$12.55	\$0.31	\$12.86	\$5.51		\$0.14	\$5.65	\$18.50		\$4.11	
6	\$62.73		\$12.55	\$0.64	\$13.18	\$4.59		\$0.23	\$4.82	\$18.00		\$4.34	
7	\$50.18		\$12.55	\$0.96	\$13.51	\$3.67		\$0.28	\$3.95	\$17.46		\$4.54	
8	\$37.64		\$12.55	\$1.30	\$13.85	\$2.75		\$0.29	\$3.04	\$16.89		\$4.69	
9	\$25.09		\$12.55	\$1.65	\$14.19	\$1.84		\$0.24	\$2.08	\$16.27		\$4.81	
10	\$12.55		\$12.55	\$2.00	\$14.55	\$0.92		\$0.15	\$1.06	\$15.61		\$4.88	

3. TRANSITION FROM REPLACEMENT COST/TILTED ANNUITY TO FSLM WITH INDEXED AND UNINDEXED ASSET VALUES

Asset cost	\$100
Life of asset	10
Remaining life of asset	5
Depreciation Rate	10.00%
Asset price trend	2.50%
WACC (Nominal Pre-Tax)	10.00%
WACC (Real Pre-Tax)	7.32%

Table 3.1: Transition from Replacement Cost/Tilted Annuity to the ACCC's FLSM with indexed historic cost asset values at the beginning of year 5

Year	Book value of assets (real)		Depreciation			Cost of capital			Depreciation and capital cost	PV of depreciation and capital costs over the asset's life	Compensation for inflation	PV of recognised inflation costs	
			Real	Inflation	Total	Real	Use of nominal WACC	Applying WACC to nominal asset					Total
1	\$100.00	\$100.00	\$10	-\$5.19	\$4.81	\$7	\$2.68	\$0.00	\$10.00	\$14.81	\$96	-\$2.51	\$5.96
2	\$90.00	\$95.19	\$10	-\$4.34	\$5.66	\$6.59	\$2.41	\$0.52	\$9.52	\$15.18		-\$1.41	
3	\$80.00	\$89.53	\$10	-\$3.40	\$6.60	\$5.85	\$2.15	\$0.95	\$8.95	\$15.56		-\$0.30	
4	\$70.00	\$82.93	\$10	-\$2.35	\$7.65	\$5.12	\$1.88	\$1.29	\$8.29	\$15.95		\$0.82	
5	\$68.86		\$11.48	\$0.29	\$11.76	\$5.04		\$0.13	\$5.16	\$16.93		\$2.54	
6	\$57.38		\$11.48	\$0.58	\$12.06	\$4.20		\$0.21	\$4.41	\$16.47		\$2.81	
7	\$45.90		\$11.48	\$0.88	\$12.36	\$3.36		\$0.26	\$3.62	\$15.98		\$3.05	
8	\$34.43		\$11.48	\$1.19	\$12.67	\$2.52		\$0.26	\$2.78	\$15.45		\$3.25	
9	\$22.95		\$11.48	\$1.51	\$12.98	\$1.68		\$0.22	\$1.90	\$14.88		\$3.42	
10	\$11.48		\$11.48	\$1.83	\$13.31	\$0.84		\$0.13	\$0.97	\$14.28		\$3.55	

Table 3.2: Transition from Replacement Cost/Tilted Annuity to the ACCC's FLSM with historic cost asset values at the beginning of year 5

Year	Book value of assets (real)	Book value of assets (nominal)	Depreciation			Cost of capital			Depreciation and capital cost	PV of depreciation and capital costs over the asset's life	Compensation for inflation	PV of recognised inflation costs	
			Real	Inflation	Total	Real	Use of nominal WACC	Applying WACC to nominal asset					Total
1	\$100.00	\$100.00	\$10	-\$5.19	\$4.81	\$7	\$2.68	\$0.00	\$10.00	\$14.81	\$90	-\$2.51	-\$1.30
2	\$90.00	\$95.19	\$10	-\$4.34	\$5.66	\$6.59	\$2.41	\$0.52	\$9.52	\$15.18		-\$1.41	
3	\$80.00	\$89.53	\$10	-\$3.40	\$6.60	\$5.85	\$2.15	\$0.95	\$8.95	\$15.56		-\$0.30	
4	\$70.00	\$82.93	\$10	-\$2.35	\$7.65	\$5.12	\$1.88	\$1.29	\$8.29	\$15.95		\$0.82	
5	\$60.00		\$10.00	\$0.25	\$10.25	\$4.39		\$0.11	\$4.50	\$14.75		-\$0.29	
6	\$50.00		\$10.00	\$0.51	\$10.51	\$3.66		\$0.19	\$3.84	\$14.35		\$0.15	
7	\$40.00		\$10.00	\$0.77	\$10.77	\$2.93		\$0.23	\$3.15	\$13.92		\$0.56	
8	\$30.00		\$10.00	\$1.04	\$11.04	\$2.20		\$0.23	\$2.42	\$13.46		\$0.94	
9	\$20.00		\$10.00	\$1.31	\$11.31	\$1.46		\$0.19	\$1.66	\$12.97		\$1.29	
10	\$10.00		\$10.00	\$1.60	\$11.60	\$0.73		\$0.12	\$0.85	\$12.45		\$1.61	