

Appendix 7

Cost Benefit Parameters

Appendix 7 – CBA Parameters

Discounting	
Discount Rate	5.00%
Appraisal Period	30
Price Base	2002
Evaluation Base	2002
Opening Year	2010
Inflation (2002 to 2036)	
Background inflation pa	2.35%
Construction inflation pa	5.00%
Land Inflation	10.00%
Machinery inflation pa	2.50%
O&M Inflation pa	4.00%
Growth	
From-to	Real GNP Growth % pa
2000 tp 2002	6.23%
2002 to 2010	2.70%
2011 to 2015	2.37%
2016+	2.29%
Consumer Price Index	
CPI in price base year (2002)	99.8
CPI in evaluation base year (2002)	99.8
Weighted Average Value of Time €	
Car (Non User Benefits)	
Am Peak (2002)	€ 10.92
Off Peak (2002)	€ 12.24
PT (User Benefits)	
Am Peak (2002)	€ 8.89
Off Peak (2002)	€ 8.62
Car Occupancy	
2000	
Am Peak	1.2
Inter Peak	1.4
2016	
Am Peak	1.2
Inter Peak	1.4
Accident Costs	
Accident Rate (per m veh km)	0.054
Average cost per accident (2002)	€ 179,343

Vehicle Operating Costs	
Fuel Consumption Parameters	
Resource cost of fuel	€ 0.33
Duty	€ 0.39
VAT	€ 0.15
 $L = a + bv + cv^2$	
a	0.1587516
b	-0.0026590
c	0.0000181
 Non Fuel Costs	
$C = a1 + (b1/V)$	
a1 work	6.18
b1work	31.58
 a1 non work	 6.18
b1non work	31.58
Operational Build Up	
Years from opening	
2010	100%
2011	100%
2012	100%
2013	100%
2014	100%
2015	100%
Demand Build Up	
Years from opening	
2010	80%
2011	85%
2012	90%
2013	100%
2014	100%
2015	100%
Annualisation	
<i>Public Transport</i>	
Peak	1040
Off Peak	3807
 <i>Highway</i>	
Peak	1040
Off Peak	3965