IN THE MATTER OF UNDERTAKINGS
DATED 23 DECEMBER 2005 LODGED BY
TELSTRA CORPORATION LIMITED
WITH THE AUSTRALIAN COMPETITION
AND CONSUMER COMMISSION IN
RESPECT OF UNCONDITIONED LOCAL
LOOP SERVICE
("the Access Undertaking")

# STATEMENT OF [c-i-c]

On 28 July 2006, I, [c-i-c] of 27 Jardine Street, Kingston in the Australian Capital Territory, state as follows:

# 1 [removed]

### Introduction

- 2 Since 1 May 2006, I have been working with Charles River Associates International ("CRAI") on a contract basis. CRAI is an economics, finance and business consulting firm. I am contracted as a Senior Consultant at CRAI.
- Prior to taking up my current role with CRAI, I was Manager, Pricing and Economic Modeling with the Strategic Marketing Business Unit of Telstra. I was in this role from November 2005 to May 2006. From November 2004 to November 2005, I was the Group Manager, Economic Analysis in the Regulatory Business Unit of Telstra. Prior to this, and from April 2004, I was Group Manager, Broadband Strategy in Business Strategy and Operations of Telstra.
- I have extensive experience in economic modeling and specifically in cost modeling for the purposes of determining access prices. I have a Bachelor of Economics from the Australian National University in which I majored in econometrics. Since completing my degree in 1992, my professional career has focused largely on economic and cost modeling. I first worked for the National Centre for Social and Economic Modeling at the University of Canberra, where I undertook microsimulation modeling of key demographic characteristics of the Australian population and then for the Bureau of Industry Economics and the Productivity Commission, where I focused mainly on general equilibrium modeling of trade liberalisation. Since 1998 I have worked predominantly in the field of

telecommunications and specifically on access pricing issues. I have been closely involved in the development of Telstra's cost models for the purposes of determining prices for Telstra's key regulated services including PSTN originating and terminating access, the Local Carriage Service and the Unconditioned Local Loop Service ("ULLS"). I have also developed cost models for the purposes of setting prices for commercial products and undertaken extensive imputation test modeling for assessing Telstra's pricing compliance with the *Trade Practices Act* 1974.

In the Access Undertakings context, Telstra relies on its own historic and current costs. In this Statement, I present estimates of ULLS costs derived using Telstra's own historic and current costs. I explain how I calculated these estimates, as well as discussing the underlying data I have used in my calculations. In addition, I explain my calculation of the USO adjustment that is also relied upon by Telstra in the Access Undertakings context.

### Historic and current cost accounts

- Telstra's historic and current cost accounts are prepared in accordance with record keeping rules determined by the ACCC and are audited on an annual basis:
  - Historical cost accounts reflect the costs actually incurred in service provision.
  - Current cost accounts reflect the costs that would be incurred today if existing assets used to provide services were replaced with equivalent modern assets.
- Under section 151BU of the *Trade Practices Act*, the ACCC has the power to make a record keeping rule ("**RKR**") by written instrument and require that carriers and carriage service providers comply with it.
- On 14 May 2001, the ACCC notified Telstra and three other carriers as being required to report under the Telecommunications Industry Regulatory Accounting Framework ("RAF"). As a notified carrier, Telstra is required under the RAF to generate and report to the ACCC on the retail and wholesale components of its business via a set of core reports and several usage reports.

- 9 These reports are prepared on the basis of historic cost accounts. The core reports are the:
  - (a) Capital Adjusted Profit and Loss Statements;
  - (b) Capital Employed Statements;
  - (c) Fixed Asset Statements; and
  - (d) Weighted Average Cost of Capital Report.
- 10 The usage reports are the:
  - (a) Service Usage Reports; and
  - (b) Key Network Asset Usage Report.
- On 19 June 2003, the Government released the Australian Competition and Consumer Commission (Accounting Separation Telstra Corporation Limited)

  Direction (No.1) 2003. Under this Direction, Telstra is required to prepare current cost accounts, as well as publish current cost and historical cost key financial statements in respect of "core" interconnect services.
- The historic and current accounts Telstra prepares in accordance with those recording and reporting requirements set out above are submitted to the ACCC every six months and are audited annually. They are commonly referred to within Telstra as the "RAF", or the "regulatory accounts".
- I have extensive knowledge of and experience with Telstra's regulatory accounts. I was closely involved in the development of the RAF when the transition was made from Chart of Accounts/Cost Allocation Manual ("COA/CAM") to the regulatory accounts that are in place today. Therefore, I have a good understanding of the cost allocation rules that are used to convert the costs in Telstra's General Ledger to the product costing and retail, internal and external costs that are reported in the RAF. I use the RAF regularly in both my cost modeling and imputation testing work. I often use the RAF to assess the reasonableness of cost estimates built-up from bottom-up models, as the costs in the RAF reflect the costs that Telstra has actually incurred and hence provide a useful basis for checking the range of assumptions and methodology choices that are used in bottom-up models. I draw largely from the RAF for determining transformation costs in my imputation test models. This

requires me to have a good understanding of the cost categories in the RAF and how these inter-relate with the access products provided by Telstra.

# Calculating Telstra's historic and current ULLS costs

- In order to calculate Telstra's historic and current ULLS costs, I used the most recent audited RAF regulatory accounts available, namely those for the 12 month period to 30 June 2005. Those accounts are very voluminous in size. Accordingly, where I have made reference to certain information contained in those accounts, I have annexed the relevant extracts from the accounts to this Statement.
- Both the historic and current cost versions of the RAF regulatory accounts include the costs associated with the provision of ULLS product supplied to external parties. These costs include both network costs and ULLS specific costs. Aside from the Cost of Capital, all the cost items for ULLS that I have used in my calculations are taken directly from the *Capital Adjusted Profit Statement External Wholesale Business* (CAP-External). The Cost of Capital is sourced directly from the *Capital Employed Statement External Wholesale Business* (CES-External).
- In carrying out the calculation of Telstra's historic and current ULLS costs, and in order to make them comparable to the ULLS costs estimated by the PIE II model, I made the following adjustments to the material I sourced from the above RAF Statements:
  - I excluded Line item 4-2-01 both from the historic and current costs accounts. This line item comprises installation costs associated with ULLS and is not included in the costs in the PIE II model for the purpose of calculating monthly charges.
  - For the current cost accounts, I excluded line item 4-4-01-1, which is the holding gains/losses on the asset adjustment. This line item reflects the difference between the opening and closing current cost value, adjusted for additions and retirements, for the reporting period. Therefore, it represents the "notional profit or loss" that Telstra would make if it were to realise the value of these assets at the closing current cost value. These gains/losses are notional and are inconsistent with the TSLRIC concept. I have therefore excluded them from my analysis.

- For the current cost accounts, I excluded line item 4-4-01-4, which is the inflation adjustment. The inflation adjustment represents the "notional" cost of maintaining the purchasing power of the financial capital of the business and does not impact on the value of the underlying assets.
- Once I had made these adjustments, the calculations required to derive per unit ULLS costs are as follows:
  - The first step is to sum ULLS cost line items to derive estimates of the total cost pool of ULLS.
  - The second step is to divide those total costs by the number of ULLS lines, and then to divide that resulting amount through by 12, to derive monthly costs per ULLS line. I sourced total ULLS lines from *Schedule 8(b)*:

    Service Usage Report External Wholesale of the RAF, relevant extracts of which are annexed and marked "A".
- Table 1 below presents a summary of key cost components that comprise total historic and current costs, as well as the results of my calculations.

Table 1: Summary of historical and current cost estimates

|   | Historic costs | Current costs |
|---|----------------|---------------|
| Organisational costs                              | [c-i-c]        | [c-i-c]       |
| Product & customer costs (excluding installation) | [c-i-c]        | [c-i-c]       |
| Network costs (depreciation & maintenance)        | [c-i-c]        | [c-i-c]       |
| Cost of capital                                   | [c-i-c]        | [c-i-c]       |
| (1) Total Annual Costs                            | [c-i-c]        | [c-i-c]       |
| (2) Volumes                                       | [c-i-c]        | [c-i-c]       |
| (3) = (1) / (2) / 12 Unit costs per month         | [c-i-c]        | [c-i-c]       |

19 I expand on these calculations in the remaining paragraphs of my Statement.

#### Historic costs calculation

- I sourced the historic cost data for Organisation Costs, Product and Customer Costs and Network Costs shown in Table 1 above from the statement in the RAF accounts entitled *Capital Adjusted Profit Statement External Wholesale Business*, relevant extracts of which are annexed and marked "B".
- I have summarised the individual line items included in the Organisation, Product and Customer, and Network Cost components that comprise total historic costs shown in Table 1 inTable 2, Table 3 and Table 4 below respectively. In the historic cost accounts in the RAF, Total Product and Customer Costs include line item 4-2-01, which represents Installation costs. As noted at paragraph 14 above, I excluded this line item from the calculation for the purpose of this exercise.

**Table 2: Summary of Organisational Historic Costs** 

| Line Item                                   | Cost    |
|---|---------|
| 4-1-01 General Administration               | [c-i-c] |
| 4-1-10 Information Technology               | [c-i-c] |
| 4-1-20 Accommodation & Property             | [c-i-c] |
| 4-1-30 Other Non Communications Asset Costs | [c-i-c] |
| 4-1-40 Other Organisational Costs           | [c-i-c] |
| <b>Total Organisation Costs</b>             | [c-i-c] |

**Table 3: Summary of Product and Customer Historic Costs** 

| Line Item                               | Cost    |
|---|---------|
| 4-2-10 Marketing                        | [c-i-c] |
| 4-2-15 Sales                            | [c-i-c] |
| 4-2-20 Operator Services                | [c-i-c] |
| 4-2-25 Customer Support                 | [c-i-c] |
| 4-2-30 Billing                          | [c-i-c] |
| 4-2-31 Bad Debt Expenses                | [c-i-c] |
| 4-2-40 Interconnection Costs            | [c-i-c] |
| 4-2-50 International Settlement Costs   | [c-i-c] |
| 4-2-60 USO Payments                     | [c-i-c] |
| 4-2-70 Other Product Expenses           | [c-i-c] |
| <b>Total Product and Customer Costs</b> | [c-i-c] |

**Table 4: Summary of Network Historic Costs** 

| Line Item                | Cost    |
|--------------------------|---------|
| 4-3-01 CAN Ducts & Pipes | [c-i-c] |
| 4-3-05 CAN Copper Cables | [c-i-c] |
| 4-3-10 CAN Other Cables  | [c-i-c] |

| 4-3-15 CAN Pair Gain Systems                  | [c-i-c] |
|---|---------|
| 4-3-20 CAN Radio Bearer Equipment             | [c-i-c] |
| 4-3-25 Other CAN                              | [c-i-c] |
| 4-3-30 Switching Equipment - Local            | [c-i-c] |
| 4-3-35 Switching Equipment - Trunk            | [c-i-c] |
| 4-3-40 Switching Equipment - Other            | [c-i-c] |
| 4-3-45 Inter-exchange Cables                  | [c-i-c] |
| 4-3-50 Transmission Equipment                 | [c-i-c] |
| 4-3-55 Radio Bearer Equipment                 | [c-i-c] |
| 4-3-60 Data Equipment                         | [c-i-c] |
| 4-3-65 Mobile Network and Terminal Equipment  | [c-i-c] |
| 4-3-70 Customer Equipment                     | [c-i-c] |
| 4-3-75 Satellite Equipment                    | [c-i-c] |
| 4-3-80 International Network Cables           | [c-i-c] |
| 4-3-85 International Network - Other Systems  | [c-i-c] |
| 4-3-90 Other Communications Plant & Equipment | [c-i-c] |
| Total Network Costs                           | [c-i-c] |

I sourced the Cost of Capital line item shown in Table 1 above from the RAF statement entitled *Capital Employed Statement - External Wholesale Business*, relevant extracts of which are annexed and marked "C".

### Current costs calculation

- I sourced the current cost data for Organisation Costs, Product and Customer Costs and Network Costs shown in Table 1 from the statement in Telstra's current cost accounts ("CCA") entitled *Capital Adjusted Profit Statement External Wholesale Business*, relevant extracts of which are annexed and marked "D".
- I have summarised the line items included in the Organisation, Product and Customer, and Network Cost components that comprise total current costs shown in Table 1 in Table 5, Table 6 and Table 7 below respectively.
- As with the historic cost accounts, Total Product and Customer Costs for the current cost accounts include line item 4-2-01, which represents Installation costs. As noted above, I excluded this line item from the calculation for the purpose of this exercise. As noted above at paragraph 14, for the purpose of deriving the current Network Costs, I also excluded line items 4-4-01-1 and 4-4-01-4.

**Table 5: Summary of Organisational Current Costs** 

| Line Item                     | Cost    |
|-------------------------------|---------|
| 4-1-01 General Administration | [c-i-c] |
| 4-1-10 Information Technology | [c-i-c] |

| 4-1-20 Accommodation & Property             | [c-i-c] |
|---|---------|
| 4-1-30 Other Non Communications Asset Costs | [c-i-c] |
| 4-1-40 Other Organisational Costs           | [c-i-c] |
| <b>Total Organisation Costs</b>             | [c-i-c] |

**Table 6: Summary of Product and Customer Current Costs** 

| Line Item                               | Cost    |
|---|---------|
| 4-2-10 Marketing                        | [c-i-c] |
| 4-2-15 Sales                            | [c-i-c] |
| 4-2-20 Operator Services                | [c-i-c] |
| 4-2-25 Customer Support                 | [c-i-c] |
| 4-2-30 Billing                          | [c-i-c] |
| 4-2-31 Bad Debt Expenses                | [c-i-c] |
| 4-2-40 Interconnection Costs            | [c-i-c] |
| 4-2-50 International Settlement Costs   | [c-i-c] |
| 4-2-60 Uso Payments                     | [c-i-c] |
| 4-2-70 Other Product Expenses           | [c-i-c] |
| <b>Total Product and Customer Costs</b> | [c-i-c] |

**Table 7: Summary of Network Current Costs** 

| Line Item                                      | Cost    |
|--|---------|
| 4-3-01 Can Ducts & Pipes                       | [c-i-c] |
| 4-3-05 Can Copper Cables                       | [c-i-c] |
| 4-3-10 Can Other Cables                        | [c-i-c] |
| 4-3-15 Can Pair Gain Systems                   | [c-i-c] |
| 4-3-20 Can Radio Bearer Equipment              | [c-i-c] |
| 4-3-25 Other Can                               | [c-i-c] |
| 4-3-30 Switching Equipment - Local             | [c-i-c] |
| 4-3-35 Switching Equipment - Trunk             | [c-i-c] |
| 4-3-40 Switching Equipment - Other             | [c-i-c] |
| 4-3-45 Inter-Exchange Cables                   | [c-i-c] |
| 4-3-50 Transmission Equipment                  | [c-i-c] |
| 4-3-55 Radio Bearer Equipment                  | [c-i-c] |
| 4-3-60 Data Equipment                          | [c-i-c] |
| 4-3-65 Mobile Network And Terminal Equipment   | [c-i-c] |
| 4-3-70 Customer Equipment                      | [c-i-c] |
| 4-3-75 Satellite Equipment                     | [c-i-c] |
| 4-3-80 International Network Cables            | [c-i-c] |
| 4-3-85 International Network - Other Systems   | [c-i-c] |
| 4-3-90 Other Communications Plant & Equipment  | [c-i-c] |
| 4-4-01-2 Supplementary Depreciation Adjustment | [c-i-c] |
| 4-4-01-3 Backlog Depreciation Adjustment       | [c-i-c] |
| Total Network Costs                            | [c-i-c] |

I sourced the Cost of Capital line item shown in the current costs column of Table 1 above from the statement in the CCA entitled *Capital Employed Statement* -

External Wholesale Business, relevant extracts of which are annexed and marked "E".

# **USO Adjustment**

- I have also been asked to set out my calculation of the contributions that Telstra receives toward copper Customer Access Network ("CAN") costs under its Universal Service Obligation ("USO"), which are deducted from the ULLS costs for the purposes of determining ULLS prices contained in the Access Undertaking.
- The primary difficulty with identifying the appropriate contributions that should be deducted in the context of the USO is that the contributions are not based on the net cost of providing universal service ("NUSC"). Rather, the contributions are set directly by the Minister for Communications, Information Technology and the Arts ("the Minister"). Therefore, in calculating the USO Adjustment, I considered it appropriate to pro rata the contributions to the USO between different cost elements of the NUSC, so as to establish that proportion of the total USO that relates to copper CAN cost. It is then this proportion of the total USO contribution that has been deducted from the ULLS costs in the Access Undertaking.
- The last detailed analysis of the NUSC that was made publicly available was the Australian Communication Authority ("ACA") Net Universal Service Cost Assessment for 1997/98 ("ACA Report"), the relevant extract of which is annexed and marked "F". Table 27 of the ACA Report sets out the ACA's assessment of total avoidable costs, on a component by component basis, of the costs that make up the NUSC.
- The different cost components of the NUSC identified by the ACA in table 27 of the ACA Report are set out in the second column of table 8 below. I then calculated the proportion that each cost component contributes to the total NUSC cost as shown in table 8 below. These percentages are presented in the third column of table 8 below. As shown in this table, 23% of the total NUSC cost is related to the copper CAN. As ULLS is related only to the copper CAN, contributions to this proportion of costs are all that are relevant to ULLS.

**Table 8: Pro rata of USO contributions** 

| Cost component    | Cost            | Share of total USO cost |
|-------------------|-----------------|-------------------------|
| Copper CAN        | \$252,385,001   | 23.1%                   |
| Other CAN         | \$544,377,356   | 49.8%                   |
| Bearer            | \$57,526,361    | 5.3%                    |
| Opex              | \$177,232,348   | 16.2%                   |
| Switch            | \$43,399,929    | 4.0%                    |
| Payphones         | \$17,574,503    | 1.6%                    |
| Claim preparation | \$1,282,000     | 0.1%                    |
| Total             | \$1,093,777,498 | 100%                    |

Source: Table 27 ACA Report

- The total USO contributions as determine by the Minister are:
  - (a) \$171,403,872 for 2005/06;
  - (b) \$157,691,562 for 2006/07; and
  - (c) \$145,076,237 for 2007/08.
- I sourced the above contributions from the Minister's determination of USO subsidies dated 21 June 2005.
- I estimated the share of the above USO contributions that go toward copper CAN costs (and hence are relevant for deducting from the ULLS costs) by multiplying the total USO contribution in each year by the share of total USO costs that are related to copper CAN costs, that is, 23%. The results are:
  - (a) \$39,550,792 for 2005/06;
  - (b) \$36,386,792 for 2006/07; and
  - (c) \$33,475,790 for 2007/08.
- I then divided these amounts by the forecast number of total copper lines (service in operation, or "SIO") in each year that were used in Telstra's PIE II model to calculate ULLS network costs, which were:
  - (a) [c-i-c] for 2005/06;
  - (b) [c-i-c] for 2006/07; and
  - (c) [c-i-c] for 2007/08.
- This produces ULLS network costs as follows:
  - (a) [c-i-c] per SIO for 2006/06;

- (b) [c-i-c] per SIO for 2006/07; and
- (c) [c-i-c] per SIO for 2007/08.
- I then divided the above costs by 12 to arrive at a ULLS network cost per SIO per month. The results are:
  - (a) [c-i-c] per SIO per month for 2005/06;
  - (b) [c-i-c] per SIO per month for 2006/07; and
  - (c) [c-i-c] per SIO per month for 2007/08.

| DATED: | 28 July 2006 |         |
|--------|--------------|---------|
|        |              |         |
|        |              | [c-i-c] |