



TelstraClear Limited

**Cross-Submission on the Draft Determination on the Application for
Pricing Review for Designated Interconnection Services**

PUBLIC VERSION

10 June 2005

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2. Executive Summary

1. TelstraClear welcomes the opportunity to make a cross submission in relation to the Commerce Commission's "Draft Determination on the Application for Pricing Review for Designated Interconnection Services", ("TSLRIC Draft Determination"), dated 11 April 2005.

General

2. TelstraClear recommends that the Commission should not agree to Telecom's proposals for additional cost items and increased costs for the following reasons:
 - a. Telecom's proposed changes are unlikely to reflect the TSLRIC requirements of an efficient operator and costs that are forward looking.
 - b. the experience of the TSO suggests that Telecom is likely to inflate the costs it submits to the Commission in relation to this determination.
 - c. Telecom's submission makes a number of unsupported and exaggerated claims that are not supported by empirical evidence.

Scale economies

3. TelstraClear's investigations of Telecom's claim that "the PSTN network modelled here is particularly susceptible to scale economies"¹ are not supported by empirical evidence. For example interconnection costs in Denmark are lower than much larger countries such as Germany. TelstraClear demonstrates that scale economies are but one factor that contributes to interconnection costs and that such economies can be dominated by other factors such as coverage and the strategies of vendors.

Exclusion of TSO costs

4. Telecom has stated that it considers that CostQuest (and consequently, the Commission in the Draft Determination) have gone too far in excluding TSO costs from the forward-looking common costs component of the TSLRIC PSTN interconnection price.² As should be clear from TelstraClear's submission on the Draft Determination, TelstraClear considers that CostQuest/the Commission have not gone far enough, and have not fully satisfied the exclusion of "any TSO costs" under part (b) of the definition of forward-looking common costs.³
5. TelstraClear's views and recommendation to the Commission remain unchanged from the submission on the Draft Determination. TelstraClear therefore reiterates its recommendation that the Commission interpret subparagraph (b) of the definition of forward-looking common costs as excluding:
 - a. Net losses from CNVCs (if any); and

¹ Telecom New Zealand Limited, *Submission in respect of the Commerce Commission's Draft Determination on the Application for Pricing Review for Designated Interconnection Services*, 26 May 2005, paragraph 13, page 5

² As specified in clause 1 of Subpart 1 of Schedule 1 of the Telecommunications Act.

³ As specified in clause 1 of Subpart 1 of Schedule 1 of the Telecommunications Act.

- b. Any other costs of providing TSO services, whether incremental or common, and whether to CNVCs or commercially-viable customers.
6. In the alternative, the common costs should be offset by the standalone common costs of a standalone business.

TELRIC or TSLRIC

7. Telecom considers that the Commission's model is a TELRIC model rather than TSLRIC, as required by the Act and this results in "unreasonable" allocations of forward-looking common costs. TelstraClear considers that the approach that the Commission has taken is consistent with TSLRIC and therefore meets requirements of the Act for the following reasons:
 - a. interconnection specific costs are included within a more general mark-up for overheads;
 - b. the TELRIC approach does not exclude cost items that cannot be allocated to elements as it seeks to apportion the costs of providing telecommunications services into network elements; and
 - c. the differences between TSLRIC and TELRIC in allocation of common costs is not relevant when the increment is large, such as the entire core network.

Land and building costs

8. Telecom claims that the land and building mark-up applied to switching investments does not adequately recover land and building costs as it excludes those costs associated with transmission. TelstraClear does not agree with this. Information previously provided by Marsden Jacobs Associates (MJA) on building and land cost mark-ups for Danish and Swedish models, which they have updated to include standby generators and now include a specific transmission mark-up,⁴ indicates that the Commission's mark-ups may be overstated rather than understated.
9. TelstraClear recommends that land and building costs be considered as part of a workshop on the many technical matters covered by this determination.

Structure sharing

10. Telecom do not agree with the Commission's approach to structure sharing:
 - a. The ability for a scorched and optimised voice network to share with an unscorched and unoptimised data network is likely to be very limited; and
 - b. The high level of wireless and aerial access in the TSO model means that the level of sharing between the core and access networks should be much lower than that assumed by the Commission.

⁴ MJA, *Cross Submission on the TSLRIC Model for Designated Interconnection Services: Commerce Commission Draft Determination 11 April 2005*, 9 June 2005, table 1, page 9.

11. Network Strategies have examined the approach taken by the Commission and do not consider that the level of sharing in the CostPro model is overstated because:
 - a. Sharing between the data and voice networks is in fact possible;
 - b. Most wireless clusters are in remote areas and not on key routes between nodes, which means that sharing is possible to a more widespread level than Telecom claim; and
 - c. If an operator is deploying a green fields network for core and access simultaneously, it would design the network so that sharing was possible.
12. TelstraClear therefore recommends that the Commission:
 - a. reject Telecom's assertions regarding structure sharing; and
 - b. adopt Network Strategies suggestion of expanding the level of cost sharing to include sharing of cable sheaths.

Operating cost mark-ups

13. Telecom considers that the CostQuest model should use the same direct network operating cost mark-ups as used by the ACCC/NERA because these figures are based on those from a new entrant in Australia (Optus).
14. Network Strategies has examined Telecom's proposed mark-ups and consider that they are inappropriate in New Zealand due to the prevalence of higher labour rates and unquantified inefficiencies.
15. TelstraClear therefore recommends that the Commission use the mark-ups in Telstra's forward-looking PIE II model as they are based on efficient operation.
16. With regard to Telecom's claim that little or no allowance has been made in the model for network common operating costs, TelstraClear considers that the CostPro model recovers sufficient common costs through the 5% common cost and 1.5% retail/wholesale mark-ups on direct network capital investment. The Commission should therefore make no change to the approach used in the CostPro model for recovery of common costs – other than those necessary to properly accommodate for excluding any TSO common costs (as discussed earlier in this submission).

Labour costs

17. Telecom disagrees with the Commission's and CostQuest's argument that New Zealand's operating costs should be lower in New Zealand than in other countries because of New Zealand's lower labour rates because:
 - a. of the similarity of Telecom labour rates to other incumbents;
 - b. recent research by n/e/r/a and WIK argues that differences in labour costs do not drive significant differences in overall costs; and

- c. there is no evidence to support the Commission's proposition that low labour cost countries have low operating cost mark-ups or lower costs overall.
18. TelstraClear does not agree with Telecom for the following reasons:
- a. Labour costs, like all other inputs to the model should be those that are appropriate for an efficient operator, which is unlikely to be the costs of an incumbent facing limited competition;
 - b. Telecom's labour costs are based on Telecom's consolidated results, which means that this includes personnel costs for Telecom's Australian operations as well as New Zealand;
 - c. The significant level of outsourcing undertaken by Telecom is likely to mean that Telecom's labour costs are relatively high;
 - d. The research cited by Telecom in support of its claim that differences in labour costs do not drive operating costs does not corroborate Telecom's hypothesis;and
 - e. the efficient operator requirement of TSLRIC should mean that labour costs should be set at an efficient level for the country in which the operator under consideration is present. As a result, other things being equal, the lower general labour costs in New Zealand should translate to lower overall interconnection costs.
19. The Commission should therefore:
- a. ensure that its operating costs reflect labour rates that are consistent with those of an efficient operator in the New Zealand market, which is likely to mean entrant labour rates rather than those of an incumbent; and
 - b. reject the use of Telecom's labour rates as they appear to be inflated and therefore do not meet the requirements of an efficient operator.

Working Capital

20. Telecom proposes a working capital estimate of 0.75% of investment costs. TelstraClear consider that this figure is likely to be excessive. MJA found that the working capital figure in Denmark, Sweden and the United Kingdom ranged between -0.4% and 0.4% of gross investment, while no working capital surcharge is applied in the ACCC TSLRIC model.⁵
21. There are several other concerns with the Telecom approach:⁶
- a. The estimate for working capital should reflect the requirements of an efficient fixed network telecommunications provider but it is not clear that this is reflected in Telecom's figure;

⁵ *ibid*, paragraph 57, pages 13-14.

⁶ *ibid*, paragraphs 41-42, page 11.

- b. Only working capital that is related to Telecom's network (wholesale) should be included since interconnection is a wholesale cost; and
 - c. Working capital that has been calculated using accounting data from a certain point of time which may not be representative.
22. MJA provide a methodology for estimating working capital using a bottom-up modelling technique.⁷ TelstraClear recommends that the Commission apply this methodology to estimate working capital.
23. The Commission should:
- a. reject Telecom's working capital estimate as it is likely to be excessive; and
 - b. estimate the working capital using the bottom-up modelling technique proposed by MJA in paragraphs 46-56 of their report that accompanies this submission.

WACC issues

24. The Commission proposed a post-tax weighted average cost of capital (WACC) for the regulated interconnection business of 8.8% in the Draft Determination. Telecom consider that the WACC should be 11.1% as their view is that a WACC of 8.8% "is not reasonable compensation for the risk of investing in the regulated interconnection line of business"⁸. TelstraClear does not agree and considers that a WACC of 8.8% is too high and that a more appropriate value for the WACC would be 7.57%.⁹
25. The Commission should:
- a. reject Telecom's comments regarding the appropriate inputs for the TSLRIC WACC; and
 - b. adopt the WACC and WACC input values recommended in paragraph 144 of TelstraClear's submission.

Minimum call duration

26. Telecom recommends that the minimum call duration be retained. TelstraClear indicated in its previous submission¹⁰ that it had no position on this issue and that it was continuing to investigate it and may report back subsequently.
27. After completing its investigations, TelstraClear does not consider that the Commission has demonstrated that the 1 minute minimum is efficient. This is as a result of considering Swedish and Danish information on call-set up costs.

⁷ Refer section 4.2, *ibid*, paragraphs 46-56, pages 12-13.

⁸ Telecom New Zealand Limited, *Submission in respect of the Commerce Commission's Draft Determination on the Application for Pricing Review for Designated Interconnection Services*, 26 May 2005, paragraph 169, page 54.

⁹ See section 8.4, TelstraClear Limited, *Submission on the Draft Determination on the Application for Pricing Review for Designated Interconnection Services*, pages 34-35.

¹⁰ TelstraClear, *Submission on the Draft Determination on the Application for Pricing Review for Designated Interconnection Services*, paragraph 167, page 44.

28. While the Danish model suggests that the Commission's estimate is reasonable, this estimate is based on technology that does not meet the forward-looking requirement of TSLRIC. However, the Swedish estimate, which suggests a call set-up cost much lower than the Commission's, is based on technology that is more consistent with the forward-looking requirement.
29. TelstraClear's view is that second-second billing is consistent with efficient recovery of call set-up costs. The Commission should therefore set a minimum call duration of one second in its final determination.

3. Introduction

30. TelstraClear welcomes the opportunity to make a cross submission in relation to the Commerce Commission’s “Draft Determination on the Application for Pricing Review for Designated Interconnection Services”, (“TSLRIC Draft Determination”), dated 11 April 2005.
31. Please find attached the following reports which are part of TelstraClear’s cross submission:

Figure 1: Consultancy Reports that accompany TelstraClear’s written submission

Author		Report Name	Date	Public Version	Restricted Version
Network Strategies	1	Draft Determination on the Application for Pricing Review for Designated Interconnection Services: Comments on the Telecom Submission	10 June 2005	✓	✓
Marsden Jacob Associates	2	Cross Submission on the TSLRIC Model for Designated Interconnection Services: Commerce Commission Draft Determination 11 April 2005	9 June 2005	✓	✓

32. This public version of TelstraClear’s cross submission and the public versions of the attached reports have had removed from them:
 - a. TelstraClear-designated Restricted Information (**TCLRI**);
 - b. Telecom-designated Restricted Information (**TCNZRI**); and
 - c. Commerce Commission-designated Restricted Information (**CCRI**).
33. The material comprising **TCLRI**, **TCNZRI** and **CCRI** is provided to the Commission in accordance with clause 10 of the Commission’s Confidentiality Order dated 11 May 2004. The material comprising **TCLRI** is categorised as financial and cost/price.
34. The balance of this submission is structured as follows:
35. **Section 4** provides TelstraClear’s general observations regarding Telecom’s submission.
36. **Section 5** discusses Telecom’s assertions regarding scale economies and outlines empirical evidence that indicates that other factors are likely to be more important in determining interconnection costs.
37. **Section 6** discusses Telecom’s suggested treatment of TSO costs and indicates that it is inconsistent with the Act.
38. **Section 7** discusses various modelling issues raised by Telecom including: whether the Commission’s model is TELRIC or TSLRIC and therefore whether it is

consistent with the requirements of the Act; land and building costs, structure sharing; operating cost mark-ups; labour costs; working capital; and WACC issues.

39. **Section 8** discusses Telecom's comments on minimum call duration and provides TelstraClear's response to this and the Commission's request for information on whether the 1 minute minimum call duration is appropriate.
40. **Section 9** summarises the recommendations made in this submission.

4. General Observations

41. TelstraClear has a number of general observations to make about Telecom's submission.
42. First, and not unexpectedly, Telecom is advocating the addition of a significant number of additional cost items, as well as increased costs for several items that exceed the Commission's original estimates. While some of these items may be legitimate, in considering Telecom's proposed changes, the Commission needs to keep in mind that the cost inputs that go into the TSLRIC model should reflect those of an efficient – and therefore cost-minimising – operator.
43. An efficient operator is unlikely to mean Telecom given its position of dominance in fixed telecommunications services. Because of Telecom's market power it has much less incentive to minimise costs.
44. Moreover, Telecom data that is based on historical information is unlikely to meet the other key requirement of TSLRIC, which is that costs should be forward looking.
45. Second, the experience of the TSO suggests that Telecom is likely to inflate the costs it submits to the Commission in relation to this determination. TelstraClear's submission, the accompanying reports from Network Strategies and Marsden Jacobs, and the information provided in this cross-submission confirms this.
46. Third, it is notable that Telecom makes a number of unsupported and exaggerated claims in its submission that are not supported by empirical evidence, as will be demonstrated below. An example of this is its assertions regarding the importance of scale economies in the PSTN.¹¹ As we discuss below, to the extent that scale economies are an issue, the empirical evidence suggests that their effect is minor relative to other factors.
47. Fourth, TelstraClear does not agree with Telecom's comment that "contrary to the expectations of CostQuest, many regulators in other countries expect interconnect costs to rise in the future, or at least to fall much less rapidly than in the past".¹² TelstraClear considers that the likely direction of future interconnection costs in New Zealand is a continued reduction despite what Telecom suggests. This is for two main reasons:
 - a. As TelstraClear pointed out in its submission,¹³ the move to next generation network and switching technologies enables achievement of substantial efficiencies. Telecom's rollout of its next generation network will occur over an extended period of time so these efficiencies will increase with time.

¹¹ Telecom New Zealand Limited, *Submission in respect of the Commerce Commission's Draft Determination on the Application for Pricing Review for Designated Interconnection Services*, 26 May 2005, paragraph 13, page 4.

¹² *ibid*, paragraph 13, page 4.

¹³ Refer paragraph 113-120, TelstraClear, *Submission on the Draft Determination on the Application for Pricing Review for Designated Interconnection Services*, page 28.

- b. The TSO requirement for unmetered local calling is likely to mean that any shift in call traffic from the PSTN to mobile and broadband networks is likely to be much slower in New Zealand than in countries where unmetered local calling is not available.
48. Fifth, Telecom expresses the following concerns regarding the lack of transparency of the Commission's model:¹⁴
- “The lack of transparency on key inputs and assumptions means Telecom has not yet had a fair opportunity to respond to the Commission's model. There has not been the opportunity to debate and test the Commission's key assumptions, and to provide material from Telecom's experience which might have assisted the Commission. Telecom submits that remedying these process issues should be the focus of the Commission and the parties prior to the conference.”*
49. TelstraClear agrees that the parties have had sufficient time to respond to the Commission's model. However, TelstraClear notes that Telecom has had a significantly longer period in which to become familiar with the model and this is borne out in, for example, the extremely detailed coding suggestions set out in Annex 8 of Telecom's submission. TelstraClear would therefore welcome the opportunity to discuss the more detailed aspects of the model in a workshop.

¹⁴ Telecom New Zealand Limited, *Submission in respect of the Commerce Commission's Draft Determination on the Application for Pricing Review for Designated Interconnection Services*, 26 May 2005, paragraph 11, page 5.

5. Scale Economies

50. Telecom claim that the “PSTN network modelled here is particularly susceptible to scale economies. Given this, one would expect the interconnection cost in a small country like New Zealand to be higher than the per minute costs of networks in Europe and the US – leaving aside the possible effects of higher equipment costs, lower labour costs and any differences in efficiency.”¹⁵
51. Scale economies are one factor that influences costs but Telecom appears to be exaggerating its impact on overall costs. As data presented by Network Strategies on European interconnection rates demonstrates,¹⁶ scale economies do not appear to dominate other factors in determining interconnection prices. In particular, the data shows that countries such as Denmark with small markets, and therefore small traffic volumes, have interconnection rates that are lower than significantly larger countries such as Germany and France.
52. As Network Strategies points out, coverage requirements may be more important than traffic volumes in some cases:¹⁷

“In sparsely populated countries (such as New Zealand and Australia), the coverage-dependant costs would be more significant than in a country with higher population density (such as the United Kingdom). Thus we would expect to find that total network costs in low population density countries may be less sensitive to traffic volumes than in high density countries.”

53. As Network Strategies comments, and TelstraClear’s experience has shown, the strategy of the vendor and the importance of the contract can also have a substantial impact on equipment prices.

Recommendation

54. TelstraClear recommends that the Commission note that scale economies are but one factor that contributes to interconnection costs and that such economies can be dominated by other factors such as coverage and the strategies of vendors.

¹⁵ *ibid*, paragraph 13, page 5.

¹⁶ Network Strategies, *Draft Determination on the Application for Pricing Review for Designated Interconnection Services: Comments on the Telecom Submission*, 10 June 2005, pages 2-5.

¹⁷ *ibid*, page 5.

6. Exclusion of TSO costs

Relationship to TSO – exclusion of any costs in relation to a TSO instrument

55. Telecom has stated that it considers that CostQuest (and consequently, the Commission in the Draft Determination) have gone too far in excluding TSO costs from the forward-looking common costs component of the TSLRIC PSTN interconnection price.¹⁸ As should be clear from TelstraClear’s submission on the Draft Determination, TelstraClear considers that CostQuest/the Commission have not gone far enough, and have not fully satisfied the exclusion of “any TSO costs” under part (b) of the definition of forward-looking common costs.¹⁹
56. Telecom has argued²⁰ (as reflected in its Option E) that “any costs” should be interpreted as any costs excluding common costs between the TSO and PSTN (and any other business) and excluding the incremental costs of supplying commercially viable customers, and net of revenues received from CNVCs and from liable persons by way of TSO payments under Part 3 of the Telecommunications Act. Telecom’s Option E only excludes the net cost of the TSO from TSLRIC/common costs, rather than the incremental costs (as required by the Commission’s interpretation) of supplying CNVCs.
57. Option E results in Telecom fully recovering the net cost of the TSO from liable persons/access seekers through a combination of the TSO funding mechanisms (27.16%) and mark-up on interconnection charges (72.84%). Telecom bears no part of the net cost of the TSO.
58. Telecom’s approach is inconsistent with the Government’s clear policy intentions. The Government has explicitly stated that the reason that the TSO funding mechanism was included in Part 3 of the Telecommunications Act was to ensure that interconnection charges excluded contributions to the TSO. In a media release, for example, the Minister of Communications stated:²¹
- ‘Industry currently contribute to the [KSO/TSO]costs through a premium on interconnection. The proposed mechanism will replace this. It will be more transparent and competitively neutral, and will give the Telecommunications Commissioner the final decision over the calculation of costs and cost contributions.*
59. Telecom’s approach is also inconsistent with the literal wording of the Act. The amount Telecom seeks to deduct is, in effect, a subset of a subset of the costs of commercially non-viable customers, which in turn is a further subset of the total costs of the TSO. The other sections of the Act use different language to describe each of these different TSO amounts. The payments by each non-Telecom party are described as “an amount payable by each liable person in relation to the TSO instrument” (section 92(f)). This contribution is calculated as a share of the “net loss” on commercially non-viable customers (section 93) and the net loss is calculated as the direct and indirect revenue of providing services to commercially non-viable customers less “the costs” of providing

¹⁸ As specified in clause 1 of Subpart 1 of Schedule 1 of the Telecommunications Act.

¹⁹ As specified in clause 1 of Subpart 1 of Schedule 1 of the Telecommunications Act.

²⁰ Refer Annex 4, Telecom New Zealand, *Report to the Commission on Modelling of the TSLRIC toll-bypass interconnect cost*, 31 August 2004.

²¹ Minister of Communications “Telecommunications: Questions and Answers”, 22 December 2000.

those services (section 84). Clearly, the reference to any costs of the TSO in the definition of forward-looking common costs is much broader than the contribution made by some liable parties to the net loss of CNVCs. If Parliament had intended to reflect Telecom's view, it could have worded the second limb of the definition of "forward looking common costs" to cross refer to the amount which the access provider pays as a liable party under section 92(f).

60. TSO and PSTN costs are recovered from a number of means, not just Part 3 of the Telecommunications Act and PSTN interconnection charges. In particular, and as detailed in TelstraClear's submission on the Draft Determination, TSO costs are recovered through revenues from CNVCs plus Part 3 of the Telecommunications Act **PLUS** revenues from commercially-viable customers. Accordingly, in TelstraClear's view, the Act provides that interconnection charges are not to contribute to any of the TSO costs (be they related to CNVCs, commercially-viable customers, incremental costs or common costs).
61. If the Commission does not accept TelstraClear's view that any shared costs between the TSO and interconnection are to be excluded from the TSLRIC calculation, the question then arises, given that Telecom's view is clearly incorrect, as to what the exclusion of any TSO costs from the forward looking common costs means. It must mean more than excluding a proportion of the common costs which are allocated to TSO services. In the absence of paragraph (b), common costs would be shared across all services, including PSTN and TSO services. Accordingly, paragraph (b) must do more work.
62. The only alternative is that paragraph (b) must exclude all those common costs which Telecom would have incurred if it operated the TSO business on a standalone basis. That is, as Telecom would have had to incur those common costs in any event for a standalone TSO business, interconnection charges should not be required to contribute to those costs. On this approach, the standalone common costs would be deducted from the pool of common costs and interconnection services would be allocated a share of those reduced common costs.

Conclusion

63. In conclusion, TelstraClear's views and recommendation to the Commission remain unchanged from the submission on the Draft Determination. TelstraClear therefore reiterates its recommendation that the Commission interpret sub-paragraph (b) of the definition of forward-looking common costs as excluding:
 - a. Net losses from CNVCs (if any); and
 - b. Any other costs of providing TSO services, whether incremental or common, and whether to CNVCs or commercially-viable customers.
64. In the alternative, the common costs should be offset by the standalone common costs of a standalone business.

7. Modelling issues

7.1 TELRIC or TSLRIC

65. As Telecom points out in paragraph 48 of its submission, the Act requires the price of interconnection to be modelled using one of the methods prescribed in Subpart 1, Part 2, Schedule 1 of the Act. The prescribed method chosen by the Commission is TSLRIC. Telecom consider that the Commission's model is a TELRIC model rather than TSLRIC and claim that this has resulted in the Commission making "unreasonable" allocations of forward-looking common costs.

66. However, as both MJA and Network Strategies comment, the approach that the Commission has taken is consistent with TSLRIC and therefore meets requirements of the Act. To quote MJA:²²

"The use of TELRIC has been widely debated in the United States and the term has taken on a fairly specific interpretation implicitly including important costing decisions such as optimisation and choice of technology. These issues are separately considered and defined by the Commission. In this respect it is inaccurate for Telecom to assert that the Commission uses a TELRIC model, rather it is our view that the Commission's model accurately may be termed a TSLRIC model using an element based approach. We consider that such an approach will provide a cost estimate of interconnection that is consistent with the definition of TSLRIC in Schedule 1 of the Telecommunications Act."

67. Moreover, even if the Commission's model shares characteristics with a TELRIC model, for large increments such as that being considered in this proceeding, there is little material difference between cost estimates provided by TELRIC and TSLRIC. As MJA comment:²³

"The FCC considered an important difference between TSLRIC and TELRIC to be TELRIC's avoidance, in large part, of the difficult process of allocating joint and common costs."

"When the increment is defined for a specific service there are significant costs which are joint and common. In comparison the degree of common costs between network elements is much smaller. The TELRIC approach therefore avoids any 'arbitrary' allocation of joint and common costs. However, as we have discussed above when a broad (or large) increment approach is used the amount of joint and common costs are reduced in a TSLRIC approach. In practice the element based approach and TSLRIC therefore yield the same or very similar cost estimates for large increments (and when both methodologies are implemented appropriately and consistently)."

68. Telecom identify three specific concerns with the Commission's allocation of costs which Telecom believe result from the Commission's model being a TELRIC model rather than TSLRIC:

²² MJA, *Cross Submission on the TSLRIC Model for Designated Interconnection Services: Commerce Commission Draft Determination 11 April 2005*, 9 June 2005, paragraph 19, page 4.

²³ *ibid*, paragraphs 17-18, page 4.

- a. some costs, such as those related to administering the interconnection service, are treated as common rather than incremental;
- b. some common costs are excluded under a TELRIC approach, such as network opex common costs, and are therefore not picked up adequately in the Commission's model;
- c. allocations of common costs in TELRIC and TSLRIC will be different for elements that are partly incremental and partly common.

69. In relation to (a), MJA comment as follows:²⁴

"... we agree that costs that can be identified as being directly and unambiguously related to the service in question, be allocated solely to that service. One way of doing this is by adding an interconnection specific mark-up to the final cost of the interconnection service. In the current version of the model it our understanding that interconnection specific costs are included within a more general mark-up for overheads."

70. In relation to (b), as MJA point out,²⁵ the TELRIC approach does not exclude cost items that cannot be allocated to elements as it seeks to apportion the costs of providing telecommunications services into network elements. As a consequence, the total cost of an element will include some common cost even though they may not be allocated directly to the element but are allocated using a mark-up approach.

71. With regard to (c) MJA comment that Telecom's citation of Gans and King (2003) on the differences between TSLRIC and TELRIC in allocation of common costs is not relevant when the increment is large, such as the entire core network. This is because for large increments the differences between the approaches are minimal.

72. MJA also note the following caveat by Gans and King on the impact of the practical implementation of a TELRIC approach on the cost estimates:²⁶

"Gans and King also note that practical implementation of TELRIC is likely to have significant influence on the cost estimates. In particular, when products are omitted from the analysis there is a danger that the evaluated incremental cost will not be the true incremental cost but will include common costs associated with excluded products. We agree that it important that the Commission carefully consider how costs are shared and how dimensioning of some network elements may be influenced when other increments are not directly modelled. Failure to do so may result in the final cost estimate being overestimated."

Recommendation

73. TelstraClear recommends that the Commission reject Telecom's assertions regarding whether the Commission's model is consistent with the requirements of the Act for a TSLRIC model.

²⁴ *ibid*, paragraph 21, page 5.

²⁵ *ibid*, paragraph 22, page 5.

²⁶ *ibid*, paragraph 25, page 6.

7.2 Land and building costs

74. Telecom claims that the land and building mark-up applied to switching investments does not adequately recover land and building costs as it excludes those costs associated with transmission. Information previously provided by MJA on building and land cost mark-ups for Danish and Swedish models, which they have updated to include standby generators and a transmission mark-up,²⁷ indicates that the Commission's mark-ups may be overstated rather than understated.
75. Moreover, Network Strategies points out²⁸ that Telecom claim that the Commission's mark-ups exclude the costs associated with transmission is incorrect. This is because the CostPro model recovers land and building costs associated with the transmission equipment through mark-ups on what Network Strategies assume is transmission equipment capital investment (but are unable to confirm this because it is not documented).
76. Telecom recommends that the mark-ups used in the model be revised to reflect the building costs in Annex 6 of their submission. MJA has considered these costs and their comments can be summarised as follows:²⁹
- a. It is unclear from the information provided by Telecom what adjustments have been made to account for the smaller space requirements of modern PSTN equipment;
 - b. It is unclear from the information provided by Telecom what account has been taken of sharing of common site costs. Telecom allocates property costs to switching, transmission and access. If Telecom has adjusted sites to only include PSTN-related costs, common site costs may be exaggerated.
 - c. Metro, Rural and Suburban use 100% of the model base cost but urban sites are assumed to be valued at 80% of the base cost. The reason for the different treatment of urban sites is unclear although there may be good reasons for this.
 - d. A single cost per m² is applied for buildings (and building fittings) when property areas measure less than 30 m². MJA comment that a more detailed approach may be desirable to ensure that economies of scale are adequately taken into account.
 - e. Land costs account for a relatively large share of total costs in Telecom's numbers. MJA's review of Danish and Swedish models indicates that the Telecom land costs may be excessive.
77. Network Strategies has examined the claim by Telecom that buildings in New Zealand have greater fit-out costs due to the risk of earthquakes. They have been advised by the engineering consultancy Beca that "a typical assumption

²⁷ *ibid*, table 1, page 9.

²⁸ Network Strategies, *Draft Determination on the Application for Pricing Review for Designated Interconnection Services: Comments on the Telecom Submission*, 10 June 2005 page 16.

²⁹ refer MJA, *Cross Submission on the TSLRIC Model for Designated Interconnection Services: Commerce Commission Draft Determination 11 April 2005*, 9 June 2005, paragraphs 27-32, pages 7-8.

on the differential in total costs between a building with or without seismic detailing would be 5%”.³⁰ The Commission’s should therefore ensure that any adjustment to the model’s building cost inputs for greater fit-out costs due to earthquakes are no greater than 5%.

Recommendation

78. TelstraClear recommends that land and building costs be considered as part of a workshop on the many technical matters covered by this determination.

7.3 Structure sharing

79. Telecom identify the following concerns in relation to the Commission’s approach to structure sharing:

- a. The ability for a scorched and optimised voice network to share with an unscorched and unoptimised data network is likely to be very limited; and
- b. The high level of wireless and aerial access in the TSO model means that the level of sharing between the core and access networks should be much lower than that assumed by the Commission.

80. Network Strategies have examined the approach taken by the Commission and do not consider that the level of sharing in the CostPro model is overstated for the following reasons:³¹

- a. Because the number of data E1s is derived from the actual traffic it is optimised to the same level as the voice network, meaning that sharing between the two networks is in fact possible.
- b. Most wireless clusters are in remote areas and not on key routes between nodes, which means that sharing is possible to a more widespread level than Telecom claim; and
- c. If an operator is deploying a green fields network for core and access simultaneously, it would design the network so that sharing is possible, ie the operator would put both the core and access either above ground or both underground.

With regard to Telecom’s comment³² that it is ‘best practice’ to bury access and core network cables in different trenches because the risk of damaging one cable when accessing the other is reduced, this is neither efficient, nor, in many instances, practical or possible. This is because it is unlikely an efficient operator would incur the extra expense for the small benefit gained. Additionally in many instances there would not be enough room on the road berm for more than one trench, making it necessary for both cables to share the same trench.

Recommendation

³⁰ Network Strategies, *Draft Determination on the Application for Pricing Review for Designated Interconnection Services: Comments on the Telecom Submission*, 10 June 2005 page 18.

³¹ *ibid*, section 4, pages 8-11.

³² Telecom, *Submission in respect of the Commerce Commission’s Draft Determination on the Application for Pricing Review for Designated Interconnection Services*, 26 May 2005, paragraph 86, page 29.

81. TelstraClear recommends that the Commission:
- a. reject Telecom’s assertions regarding structure sharing; and
 - b. adopt Network Strategies’ suggestion of expanding the level of cost sharing to include sharing of cable sheaths.³³

7.4 Operating cost mark-ups

82. Telecom claims that CostQuest’s operating cost mark-ups are inadequate because:
- a. the CostPro mark-ups are based on inappropriate source data; and
 - b. little or no allowance has been made for network common operating costs.
83. With regard to the source data, Telecom considers that the CostQuest model should use the same direct network operating cost mark-ups as used by the ACCC/NERA. Telecom’s justification for this is that these figures are based on those from a new entrant in Australia (Optus), which Telecom claim (paragraph 99) “has similar labour costs to New Zealand, and which have been thoroughly tested in the Australian regulatory context”.
84. Network Strategies has examined Telecom’s proposed mark-ups and comment as follows:³⁴

“While the ACCC/NERA mark-ups have been tested in the Australian regulatory context, Network Strategies believes that the mark-ups are inappropriate in New Zealand due to the prevalence of higher labour rates ... and unquantified inefficiencies:

“Cable & Wireless Optus submitted to the Commission that many of the O&M cost percentages, notably those for site and SDHs, are higher than would be the case for an efficient operator.”³⁵

85. Network Strategies consider that the most appropriate mark-ups “are those in Telstra’s forward looking PIE II model as they are based on efficient operation”³⁶. In addition, Network Strategies point out that the PIE II and Cost Pro mark-ups recover the same costs.
86. With regard to Telecom’s claim that little or no allowance has been made in the model for network common operating costs, Network Strategies notes that Telecom provides no examples of this nor do they suggest how the model should do this. Network Strategies continue to hold the view that the CostPro

³³ Network Strategies, *Pricing review for designated interconnection services: A review of the 2005 Draft Determination*, page 21.

³⁴ Network Strategies, *Draft determination on the application for pricing review for designated interconnection services: Comments on the Telecom submission*, pages 12-13.

³⁵ ACCC, *A report on the assessment of Telstra’s undertaking for the Domestic PSTN Originating and Terminating Access Services*, July 2000.

³⁶ Network Strategies, *Draft determination on the application for pricing review for designated interconnection services: Comments on the Telecom submission* page 13.

model recovers sufficient common costs through the 5% common cost and 1.5% retail/wholesale mark-ups on direct network capital investment.³⁷

Recommendation

87. TelstraClear recommends that the Commission should:
- a. use the operating cost mark-ups in Telstra's forward looking PIE II model; and
 - b. make no change to the approach used in the CostPro model for recovery of common costs – other than those necessary to properly accommodate for excluding any TSO common costs (as discussed earlier in this submission).

7.5 Labour costs

88. Telecom disagrees with the Commission's and CostQuest's argument that New Zealand's operating costs should be lower in New Zealand than in other countries because of New Zealand's lower labour rates. Telecom give three reasons for this:³⁸
- a. "Telecom's labour rates are shown to be almost the same as Bell Canada, very close to Telstra, and not a long way from those for France Telecom and KPN Telecom";³⁹
 - b. Recent research by n/e/r/a and WIK argues that differences in labour costs do not drive significant differences in overall costs; and
 - c. There is no evidence to support the Commission's proposition that low labour cost countries have low operating cost mark-ups or lower costs overall.

There is no justification for labour costs to be the same as incumbents in countries with higher labour costs

89. With regard to (a), TelstraClear would be very concerned if access seekers were forced to subsidise Telecom's labour costs to ensure that they are of the same level as incumbents in countries with substantially higher labour costs than New Zealand. Labour costs, like all other inputs to the model should be those that are appropriate for an efficient operator. Incumbent labour rates are unlikely to be equivalent to those of an efficient operator if the incumbent faces limited competition, as Telecom does in New Zealand. An incumbent facing limited competition will have only limited incentives to minimise labour costs and therefore labour costs are unlikely to be at an efficient level.
90. A more appropriate benchmark would be an entrant's labour costs. This is because entrants have significantly greater incentives to keep these to a minimum in order to successfully compete with an incumbent that has the luxury of using its control of bottlenecks to increase the costs of its competitors.

³⁷ *ibid*, page 14.

³⁸ Telecom, *Submission in respect of the Commerce Commission's Draft Determination on the Application for Pricing Review for Designated Interconnection Services*, 26 May 2005, paragraph 33, page 12

³⁹ *ibid*.

91. In addition, Network Strategies point out⁴⁰ that the Telecom labour costs are based on Telecom’s consolidated results, which means that this includes personnel costs for Telecom’s Australian operations as well as New Zealand. Network Strategies have shown⁴¹ that New Zealand personnel costs are significantly lower than those of the Telecom Group. For example, in 2003 Network Strategies found that while New Zealand employees make up 81% of Telecom Group employees they account for only 70% of Group labour costs.
92. Furthermore, the significant level of outsourcing undertaken by Telecom is likely to mean that Telecom’s labour costs are relatively higher than operators that undertake less outsourcing. Network Strategies has investigated this issue and conclude:⁴²

“Given that New Zealand is a relatively sparsely populated country, with difficult terrain, we would deduce that [Network Strategies finding of Telecom’s] high access paths per employee is likely to be due to substantial outsourcing of functions, and thus would influence Telecom’s labour costs.”

Recent research does not support Telecom’s claim that differences in labour costs do not drive differences in overall costs

93. With regard to (b), Network Strategies has examined the research cited by Telecom and conclude as follows:⁴³

“The research cited by Telecom in support of its claim that differences in labour costs do not drive operating costs does not corroborate Telecom’s hypothesis. The NERA model in which it was claimed that staff costs were insignificant actually incorporated a factor, proved to be highly significant, that allowed for differences in staff costs. The second cited study, from Cullen International and WIK, study found that incumbents in countries with lower labour rates will have relatively high overall costs if levels of efficiency and competition are also low – which is not the case in New Zealand.”

The efficient operator requirement should mean lower labour costs in New Zealand should translate to lower overall interconnection costs

94. With regard to (c), Network Strategies indicate that they have “found no evidence of a relationship between GNI per capita and opex per employee but we note that other factors, such as the level of outsourcing and efficiency, may influence opex levels”⁴⁴. TelstraClear considers that the efficient operator requirement of TSLRIC should mean that labour costs should be set at an efficient level for the country in which the operator under consideration is present. As a result, other things being equal, the lower general labour costs in New Zealand should translate to lower overall interconnection costs.

Recommendation

95. TelstraClear recommends that the Commission:

⁴⁰ Network Strategies, *Draft determination on the application for pricing review for designated interconnection services: Comments on the Telecom submission*, page 24-25.

⁴¹ Exhibit 8.3, *ibid*, page 25.

⁴² *ibid*, page 25.

⁴³ *ibid*, page 31.

⁴⁴ *ibid*, page 30.

- a. ensure that its operating costs reflect labour rates that are consistent with those of an efficient operator in the New Zealand market, which is likely to mean entrant labour rates rather than those of an incumbent; and
- b. reject the use of Telecom's labour rates as they appear to be inflated and therefore do not meet the requirements of an efficient operator.

7.6 Working Capital

96. Telecom comments that the Commission makes no allowance for working capital. TelstraClear agrees with Telecom that working capital is a real cost for any operator and therefore the Commission should allow for this in its model.
97. Telecom proposes a working capital estimate of 0.75% of investment costs. TelstraClear consider that this figure is likely to be excessive. MJA compared this figure with working capital figures used in models in Australia, Denmark, Sweden and the United Kingdom. MJA found that the working capital figure in Denmark, Sweden and the United Kingdom ranged between -0.4% and 0.4% of gross investment, while no working capital surcharge is applied in the ACCC TSLRIC model.⁴⁵
98. MJA also highlight several other concerns with the Telecom approach:⁴⁶
- a. The estimate for working capital should reflect the requirements of an efficient fixed network telecommunications provider but it is not clear that this is reflected in Telecom's figure. If Telecom asserts that the figure does this, this would need to be documented to confirm that this is the case.
 - b. Only working capital that is related to Telecom's network (wholesale) should be included since interconnection is a wholesale cost. Working capital related to retail debtors and creditors should not be included. Again it is not clear that this is included in Telecom's figure.
 - c. Working capital that has been calculated using accounting data from a certain point of time may not be representative. MJA indicate that the Telecom figure appears to be based on a combination of actual and budget numbers but more specific information is required to confirm that this issue is adequately dealt with.
99. MJA provide a methodology for estimating working capital using a bottom-up modelling technique.⁴⁷ TelstraClear recommends that the Commission apply this methodology to estimate working capital.
100. In applying this methodology, the Commission should note MJA's comment (paragraph 56) that working capital may have a lower return than the return used for capital investment. This is because of the opportunity of using some working capital for obtaining a return from, for example, short-term bank

⁴⁵ MJA, *Cross Submission on the TSLRIC Model for Designated Interconnection Services: Commerce Commission Draft Determination 11 April 2005*, 9 June 2005, paragraph 57, page 13.

⁴⁶ *ibid*, paragraphs 43-45, page 11.

⁴⁷ Refer section 4.2, *ibid*, paragraphs 46-56, pages 12-13.

deposits. Consequently, it is inappropriate to apply the same return value for working and investment capital as this will potentially result in working capital being over-estimated.

Recommendation

101. TelstraClear recommends that the Commission:

- a. reject Telecom's working capital estimate as it is likely to be excessive; and
- b. estimate the working capital using the bottom-up modelling technique proposed by MJA in paragraphs 46-56 of their report that accompanies this submission.

7.7 WACC issues

102. The Commission proposed a post-tax weighted average cost of capital (WACC) for the regulated interconnection business of 8.8% in the draft determination. Telecom consider that the WACC should be 11.1% as their view is that a WACC of 8.8% "is not reasonable compensation for the risk of investing in the regulated interconnection line of business"⁴⁸. TelstraClear does not agree and considers that a WACC of 8.8% is too high and that a more appropriate value for the WACC would be 7.57%.⁴⁹

103. Telecom's submission on the appropriate WACC focuses on three areas:

- a. limitations of the Capital Asset Pricing Model (CAPM);
- b. estimating the asset beta for the CAPM; and
- c. the term of the risk free rate.

104. TelstraClear requested that Marsden Jacobs Associates (MJA) examine the matters raised by Telecom in relation to the WACC.

The Capital Asset Pricing Model Is Appropriate for Estimating the WACC

105. Telecom claim that the CAPM will produce an estimate of the cost of capital that is biased downwards. MJA's comments on this can be summarised as follows:

- a. The CAPM does not underestimate the WACC. In fact, because the Commission's current framework is based on the domestic closed economy version of the CAPM, the WACC is likely to be overestimated relative to the estimate provided by an open economy version of the CAPM.

⁴⁸ Telecom New Zealand Limited, *Submission in respect of the Commerce Commission's Draft Determination on the Application for Pricing Review for Designated Interconnection Services*, 26 May 2005, paragraph 169, page 54.

⁴⁹ See section 8.4, TelstraClear Limited, *Submission on the Draft Determination on the Application for Pricing Review for Designated Interconnection Services*, pages 34-35.

- b. The validity of alternatives to the CAPM have been widely debated in the finance literature and there is no consensus on whether alternative models provide equal or better estimates of the cost of capital;
 - c. The CAPM is widely used across the private sector, finance institutions and utility regulators;
 - d. All approaches, including alternatives to the CAPM, suffer from theoretic and/or practical problems;
 - e. No consensus has emerged on the conclusions of Fama and French, if the study cited by Telecom is consistent with previous studies, and have been disputed by various academics; and
 - f. Availability of independently collected data limits the applicability of alternatives to the CAPM for regulatory applications.
106. MJA provide the following conclusions on whether an alternative should be used in preference to the CAPM, which TelstraClear agrees with:⁵⁰

“[I]t is therefore unclear that an alternative methodology will provide a better or more reasonable estimate of the cost of capital. Indeed it is likely that an alternative to the CAPM will introduce additional uncertainty and arbitrary decisions into the determination of a reasonable return on capital. In our view, the CAPM is an appropriate framework in a regulatory environment.”

Estimating the asset beta for CAPM

107. Telecom’s criticisms of the Commission’s decisions on the asset beta can be summarised as follows:
- a. the Commission has not justified placing less weight on the European telecommunications data;
 - b. the Commission has not considered the Lally-Swidler methodology to correct for the effect of differences in industry weights;
 - c. the Commission continues to use the ACCC PSTN data despite Telecom’s arguments that it is flawed; and
 - d. the Commission has not undertaken any beta segmentation analysis.
108. MJA provide the following comments on these points:
- a. It is unclear why Telecom suggests less weight is put on European data, and the Commission’s approach attempts to account for the largest pool of data possible. In TelstraClear’s view this is appropriate.
 - b. MJA acknowledge that the effect of differences in industry weights may distort results but, given the large sample of countries in the

⁵⁰ MJA, *Cross Submission on the TSLRIC Model for Designated Interconnection Services: Commerce Commission Draft Determination 11 April 2005*, 9 June 2005, para 67, page 18.

Commission's analysis, "any adjustment is difficult and the effect uncertain".⁵¹

- c. MJA do not regard the ACCC estimate as "fundamentally flawed" and the ACCC estimate is but one of many that makes up the relevant range of estimates in the Commission's analysis.
- d. MJA agree that a decomposition of Telecom's asset beta into different service components is desirable, although they note that the output of such analysis is uncertain, which is the case for any method when beta is not directly observable.

Term of the risk-free rate

109. The Commission's position is that the term of the risk-free rate should be the same as the regulatory period, which TelstraClear agrees with. Telecom considers that the term of the risk-free rate should be the same as the expected economic life of the asset base on the basis that this is consistent with standard commercial practice, the economic concept of long run cost, and the application of the tilted annuity calculation. These arguments have been widely canvassed in previous determinations. TelstraClear considers that Telecom has not presented any new information that would change our view that the appropriate term for the risk-free rate is the regulatory period.

Recommendation

110. TelstraClear recommends that the Commission reject:
- a. Telecom's comments regarding the appropriate inputs for the TSLRIC WACC; and
 - b. adopt the WACC and WACC input values recommended in paragraph 144 of TelstraClear's submission.

⁵¹ MJA, *Cross Submission on the TSLRIC Model for Designated Interconnection Services: Commerce Commission Draft Determination 11 April 2005*, 9 June 2005, para 70, page 18.

8. Minimum Call Duration

111. Telecom recommends that the minimum call duration be retained. TelstraClear indicated in its previous submission⁵² that it had no position on this issue at the time of submission and that it was continuing to investigate it and may report back subsequently.
112. After completing its investigations, TelstraClear does not consider that the Commission has demonstrated that the 1 minute minimum is efficient. This is as a result of considering Swedish and Danish information on call-set up costs, which is set out in figure 2:

Figure 2: Call set-up costs for Swedish and Danish models (Source: MJA analysis of Danish Hybrid Model public version 1.3 (2005) and Swedish Hybrid Model public version 2.1)

Country	Per call set-up cost (NZ cents)	Per minute set-up cost (NZ cents)
Danish model	0.56	0.14
Swedish model	0.14	0.03

113. This compares with an implied set-up cost for the Commission's 1 minute minimum of [] TCLRI cents per minute according to TelstraClear's calculations.
114. While the Danish model suggests that the Commission's estimate is reasonable, this estimate is based on technology that does not meet the forward-looking requirement of TSLRIC, namely Ericsson AXE technology. However, the Swedish estimate is based on technology that is more consistent with the forward-looking requirement, namely the Ericsson Engine solution.
115. TelstraClear considers that second-second billing is consistent with efficient recovery of call set-up costs and therefore recommends that the Commission set a minimum call duration of one second in its final determination.

Recommendation

116. TelstraClear recommends that the Commission:
- set a minimum call duration of one second in its final determination; or if the Commission considers more information is required to confirm this recommendation
 - investigate, whether the 1-minute minimum call duration is consistent with the requirements of TSLRIC, ie that it is based on efficient forward-looking costs.

⁵² TelstraClear, *Submission on the Draft Determination on the Application for Pricing Review for Designated Interconnection Services*, paragraph 167, page 44.

9. Full listing of TelstraClear's Recommendations

117. The following recommendations are made in this Submission and are repeated here in full for the convenience of the reader:

9.1 Scale Economies

118. TelstraClear recommends that the Commission note that scale economies are but one factor that contributes to interconnection costs and that such economies can be dominated by other factors such as coverage and the strategies of vendors.

9.2 Exclusion of TSO costs

119. TelstraClear reiterates its recommendation that the Commission interpret subparagraph (b) of the definition of forward-looking common costs as excluding:

- a. Net losses from CNVCs (if any); and
- b. Any other costs of providing TSO services, whether incremental or common, and whether to CNVCs or commercially-viable customers.

120. In the alternative, the common costs should be offset by the standalone common costs of a standalone business.

9.3 TELRIC or TSLRIC

121. TelstraClear recommends that the Commission reject Telecom's assertions regarding whether the Commission's model is consistent with the requirements of the Act for a TSLRIC model.

9.4 Land and building costs

122. TelstraClear recommends that land and building costs be considered as part of a workshop on the many technical matters covered by this determination.

9.5 Structure sharing

123. TelstraClear recommends that the Commission:

- a. reject Telecom's assertions regarding structure sharing; and
- b. adopt Network Strategies' suggestion of expanding the level of cost sharing to include sharing of cable sheaths.

9.6 Operating cost mark-ups

124. TelstraClear recommends that the Commission should:

- a. use the operating cost mark-ups in Telstra's forward looking PIE II model; and
- b. make no change to the approach used in the CostPro model for recovery of common costs – other than those necessary to properly accommodate

for excluding any TSO common costs (as discussed earlier in this submission).

9.7 Working capital

125. TelstraClear recommends that the Commission:

- a. reject Telecom's working capital estimate as it is likely to be excessive; and
- b. estimate the working capital using the bottom-up modelling technique proposed by MJA in paragraphs 46-56 of their report that accompanies this submission.

9.8 WACC issues

126. TelstraClear recommends that the Commission:

- a. reject Telecom's comments regarding the appropriate inputs for the TSLRIC WACC; and
- b. adopt the WACC and WACC input values recommended in paragraph 144 of TelstraClear's submission.

9.9 Minimum call duration

127. TelstraClear recommends that the Commission:

- a. set a minimum call duration of one second in its final determination; or if the Commission considers more information is required to confirm this recommendation,
- b. investigate whether the 1-minute minimum call duration is consistent with the requirements of TSLRIC, ie that it is based on efficient forward-looking costs.

TelstraClear