The Hon Malcolm Turnbull,
Prime Minister of Australia

The Hon Barnaby Joyce
Deputy Prime Minister

Mr Dan Tehan, Federal Member for Wannon

Ms Sue Laver, Telstra General Counsel

Mr John P Mullen, Telstra Board Chair

Cape Bridgewater Holiday Camp
Service Verification Tests (Report)
Collision, Deception, Misleading and Deceptive Conduct

Exhibits 23-H to 30-A

Alan Smith
Seal Cove
1703 Bridgewater Road
Portland (Victoria) 3305

IN THE MATTER OF an arbitration pursuant to the Fast Track Arbitration Procedure dated April 1994

5

Between

ALAN SMITH

Claimant

and

TELSTRA CORPORATION LTD trading as TELECOM AUSTRALIA

Telecom

STATUTORY DECLARATION OF STEPHEN FOSTER BLACK

I Stephen Foster Black of 242 Exhibition Street, Melbourne solemnly and sincerely declare and affirm as follows:-

1. I am employed by Telstra Corporation Limited ("Telecom") in the position of Group General Manager, Customer Affairs and am authorised to make this Declaration on behalf of Telecom. I make this Declaration having made all due enquiries of employees, agents, consultants and contractors of Telecom.

2. I have been employed in my present position at Telecom since 1993. I am responsible for customer service policy.

3. The attached report dated 12 December 1994 (the "Report") has been prepared for the purposes of Telecom's defence to a claim made by the Claimant which is to be resolved by means of the Fast Track Arbitration Procedure.

4. The Report was prepared jointly by Telecom engineering and technical staff, Telecom's legal and accounting consultants and Telecom engineering and technical contractors (the "authors").

5. The Report has been prepared using contemporaneous documentary records produced in the usual course of Telecom's business and statements made by present and former Telecom staff which are recorded in statutory declarations.

6. I do not have personal knowledge of the facts set out in the Report or the facts upon which any statement contained in the Report is based. However, I have reviewed the Report and I am informed by each of the authors that the Report accurately states the facts stated in the Report.

AND I MAKE this solemn declaration conscientiously believing the same to be true and correct.

DECLARED at Melbourne)
in the State of Victoria)
this 12th day of December 1994.)

Steve Black

Before me:

P. M. Ryan
Solicitor,
Melbourne.

23H

properly mastered the technology that he or his callers are using and that this is the cause of many of Smith's complaints which he attributes to being caused by Telecom's network. A summary of the potential impact of CPE misuse or misinterpretation is contained in Document REF 1 under the heading "Customer Dialling Behaviour".

Attached to this report are the following:

- Appendix 1, is a summary of CBHC's incoming answered calls using the call data collected by ELMI SMART 10 during the period 27 May 1993 to 30 September 1994. It shows that Smith's incoming calling pattern is relatively uniform between approximately 8am and 9pm on most days.

- Appendix 2 defines words, acronyms and abbreviations used on this document. Other more general abbreviations are defined in the Glossary REF 3 and are described in the reference documents REF 1 and REF 2.

- Appendix 3 summarises events associated with the Goldphone service operated by CBHC for the use of its guests which is not integral to the operation of the CBHC business.

- Appendix 4 is a detailed summary of complaints relating to the CBHC service and responses by Telecom during Part B.

- Appendix 5 is an interpretation of the LEOPARD complaint history codes for CBHC.

During the period from 17 September 1994 to 29 September 1994, Telecom undertook a Service Verification Test on the services provided to CBHC. These tests are recognised by AUSTEL as an appropriate measure of service performance. Tests undertaken on the CBHC service were successful on all lines (reference document 4.40).

23i

Senator ALSTON—So Bell Canada made a contribution to that, presumably, but you are able to go further, are you?

Mr Davey—Yes.

Senator ALSTON—Is that proposition something that you have taken directly into account? I presume you have seen the minute, have you?

Mr Davey—Quite frankly, I cannot recall seeing that precise minute.

Senator ALSTON—Perhaps you might come back to me on any action that has been taken in response to this, if you have indeed previously seen it. If not, you might indicate what action you think should be taken as a result of seeing it. Can you do that?

Mr Davey—Certainly.

Senator ALSTON—You said that you hoped to be able to complete and presumably release your report in March.

Mr Davey—Mid-March, we are aiming for at this point.

Senator ALSTON—At that time, could you also include the total cost to Austel of the investigation; in other words, the amount of resources, human and financial, that has been absorbed by this exercise?

Mr Davey—I see no reason not to. I do not know whether we can give an accurate estimate—we have not until more recently kept it. It has been absorbed in our usual functions. We have not set aside specific resources until more recently.

Senator ALSTON—But it has been a major project.

Mr Davey—Yes. There is no doubt about it.

Senator ALSTON—It ought to be desirable to try to quantify the cost?

Mr Davey—Yes.

Senator ALSTON—Are you developing indicative performance standards to ensure that carriers provide an adequate phone service?

Mr Davey—Yes, indeed. In the context of the COT cases we are working specifically to get an agreement on a standard upon which we can sign off that the complainants, if they settle with Telecom, are receiving an adequate standard of telephone service at the time.

Senator ALSTON—Will that be backed up by direction?

Mr Davey—If necessary, yes.

Senator ALSTON—What about in relation to others, apart from the top eight?

Mr Davey—It would apply in relation to all of them. What we are aiming to do is to get an across-the-board standard that people can sign off and know these sorts of things.

Senator ALSTON—Meaning both carriers or the three carriers?

Mr Davey—It will apply principally to Telecom as the provider of the local loop.

Senator ALSTON—Very well. Have you issued any directives to Telecom in relation to COT matters?

Mr Davey—Yes. They are published in the 1992-93 annual report, I think.

Senator ALSTON—In relation to COT?

Mr Davey—I think it is. Do not hold me to it but we do publish our directions in the annual report.

Senator ALSTON—Have any directions been issued since that time?

Mr Davey—It has not been necessary to issue further directions.

Senator ALSTON—Of the 257 consumer complaints that Austel received in 1992-93, approximately 91, according to the report, were referred to other agencies. Does that sound right?

Mr Davey—It sounds right.

Senator ALSTON—Why did not Austel immediately refer COT's allegations of voice recording to the federal police instead of waiting for the minister to refer the matter to the Attorney-General and then on to the federal police?

Mr Davey—That is a question that I think I need some further detail on.

CHAIRMAN—Minister, we might confirm that you have accepted the questions from Senator Alston and Senator Tierney.

Senator McMullan—Yes, I accept.

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AUSTEL

AUSTRALIAN TELECOMMUNICATIONS AUTHORITY

890857

29 January 1990

Mr A Humrich
General Manager, Central Region
Network Operations
Telecom Australia

Facsimile 697 3529

Dear Mr Humrich,

VERIFICATION TESTS FOR DIFFICULT NETWORK FAULT CASES

As discussed late last year with Mr J Gitsham, the following comments are offered on your draft set of verification tests for public switched telephone services with recurring service difficulties.

General Comment

The tests would be applicable to a very small percentage of customers, and the emphasis should be on going to great lengths to ensure the absence of any type of fault condition rather than on minimising the amount of effort involved for the carrier.

The purpose of such tests would be to ensure that a particular service has every possible likilhood of working correctly. Prior to a service complaint being escalated to this level, Telecom's normal testing and maintenance activities would have failed to remedy the situation from the customer viewpoint. With this in mind, the verification testing should eliminate all potential sources of service difficulties. Therefore, the draft set of tests proposed are not seen to be sufficiently rigorous or extensive enough for application to these types of services.

In keeping with this approach, the use of the term "Desirable Outcome" for test results is inappropriate and should be changed to "Essential Outcome"

Specific Matters for Consideration

- The customer specific line tests nominate outcomes for insulation resistance and foreign battery which are considered to be at the margins of acceptable performance for any customer, much less a customer with a demonstrated history of service difficulties. The essential outcome of these tests must be to eliminate poor insulation resistance or foreign battery as potential sources of service difficulties. Performance less than that expected of new plant should be thoroughly investigated and the causes removed.

23K

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- Tests of outgoing call functions should also be performed, as well as checks of transmission quality. Tests involving the customer's equipment should be conducted to ensure that there is no fault in that equipment.

- The customer specific exchange tests should also examine aspects of the local exchange which have the potential to affect the customer. For example,

  - processor performance and loading in computer controlled exchanges should be checked, and marker, register and other common equipment operation in crossbar exchanges should be checked

  - alarm and exchange performance records should be examined for any possible service affecting conditions

  - customer originating and terminating classifications should be checked

  - customer specific transmission systems, such as those involving RGMs, should be checked thoroughly.

- The public network call delivery tests are seen to be adequate in scope, but the number of call attempts from each location would need to be considerably greater to produce results with any statistical significance (hundreds rather than tens). Calling periods must include significant periods of time when the customer would expect high traffic volumes. The essential outcomes must be much tighter than the 90% levels suggested in the draft. Sample results would need to be equal to or better than Telecom's target performance for the traffic type involved.

- Where test results do not meet the essential outcome, remedial action should be taken and the relevant tests repeated to confirm correct network operation.

I trust the above comments provide you with AUSTEL's view of what would represent a firm basis for further development of the verification test program.

Yours sincerely

Cliff Mathiesen
Specialist Adviser
Networks

Michael Elsegood
Manager
International Standards Section

23K

A10232

include the regulator, I believe it is in the interests that these matters are exposed and correctly addressed in the public interest. And my involvement in the current assignment has been assisted by obtaining legal assistance by parties who can identify what is or is not a criminal offence. The documents and reports that Alan is preparing I then give to other parties to vet, and those reports are then refined to make sure that we are only dealing with what we call substance. As part of this exercise, it has been necessary to turn around and have a look at the actual content of the document. So when we talk about what Alan is doing, Alan actually, to my surprise and also to the other person that is helping us, could be best described as an analyst. And while he got very excited here today, he is very good and very patient in looking at a document and analysing it to the point where we can get two documents – allegedly one a copy of the other – and identify the fact that one copy has been interfered with. Now that can mean removing certain words, removing a paragraph or if there has been certain deletions to it, we can identify the fact that the document has really been tampered with because even the type font has been changed. When we talk about interfering with a legal process, because my involvement started with the interference in a legal process in the Federal Court. My original complaint was not only did I have the fault, the problem, it was the denial of the problem and the falsely claiming of legal professional privilege and the falsely claiming of commercial in-confidence. None of it which was factual. Now when we talk about the root of, or the foundation of, our legal system being interfered with and being perpetrated by, not one organisation, but a group of people and that – to have dismissed that as not being in the public interest I find that a government regulator who has had their privilege in the past of having in depth discussions with myself because I was approached by the regulator, Robyn Davey, who was the gentleman who was the major architect of draftsperson of the Trades Practices Act and I was referred to him by Mr Alan Fells. I was told by Mr Alan Fells that Robyn Davey wrote most of the Trade Practices Act and to go to him because the matters that we raised with him in '92 and '93, he said, can be addressed by the regulator because Robyn Davey and Austel has the, not only the Telecommunication Act they also have the Trade Practices Act attached to their charter to be able to address these issues. So when I got the phone call from Robyn Davey on 4 August 1973 and he demanded I come down and see him immediately and the subsequent many meetings that took place with him and then I was very fortunate I met a gentleman who I consider a very sincere, genuine, gentleman by the name of Ian Campbell of Telstra, a lot of meaningful discussions took place. But as has been demonstrated here today everybody seems to feel as though, because these matters are a long time ago, that there is no public interest. What I am saying is that the public interest, and I believe that I have become a very good advocate of what is in the public interest as the spokesperson, is that these crimes that have been committed under the veils of secrecy and confidentialities are of public interest and no secret veil of confidentiality covers a criminal offence. So not only are we looking at the technical aspects we are looking at all the parties involved and what role they played to deceive the individual claimants and the public at large. Now my situation of 2007 is dealing with one of those other very interesting issues of how do you prove a point? How do you prove you have got a phone problem when the phone company says you don't have it? How do you prove when they say to you, but we rang you, you didn't

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Don, spent last Friday morning attempting to measure line resistances at Rockbank - but it was abortive because no-one was at the premises, and can't do measurements without someone at the premises. Aim to do the Fish Farm on Wednesday, all being well. Some measurements have been done on the Voice-link cables and they show a slightly higher resistance than theory. After travelling the cable run, I can understand why ! The measurements on Friday morning did, however, show that there are significant cable problems between Rockbank exchange and Dawson's premises. Ideal solution is to plow in new cable by shorter route - I will be talking to John McCoy (CAN) about this.

The measurements are being done by the Power Co-ordination people and they do have other work to do and are short staffed.

I am not aware how Alan H's ringer measurements are progressing, but I suspect they should have been finished by now.

The theoretical analysis is currently being refined to take into account the quirks in ringer installations that keep turning up - refer to earlier message about non-standard ringer at Jindabyne South! Parameters for Cape Bridegwater RCM have been obtained, but I don't believe them - I am attempting to check them. Some of the people supplying this information live in "old Telecom" !

Peter.

From: Pinel, Don
To: Gamble, Peter
Cc: Blake, Ed
Subject: RE: CAN Testing
Date: Monday, 15 November 1993 5:19PM

Peter

I need this more and more every day. When can I get it and which custoemrs will it cover. We need to extend this to all customers covered by teh Austel direction and get it completed by the end of this week.

Don

From: Gamble, Peter
To: Pinel, Don
Cc: Blake, Ed
Subject: RE: CAN Testing
Date: Wednesday, November 10, 1993 10:08AM

Don, I will put some words around it today and summarize the results in a table and then forward it to you. By then I should have resolved the Fish Farm cable details!
Peter.

From: Pinel, Don
To: Gamble, Peter
Cc: Blake, Ed
Subject: RE: CAN Testing

A09392

23M

Facsimile

Telecom AUSTRALIA

To	Graham Schorer	From	Peter Gamble Manager, Engineering and Technical Consultancy	Commercial & Consumer Customer Response Unit	
Facsimile	(03) 287 7001	File		[illegible] Exhibition Street Melbourne Vic 3000 Australia	
Company	Golden Messenger	Date	22 November, 1994	Telephone (03) 634 6405	
Location	483-485 Queensberry Street, Carlton	Total Pages	4	Facsimile (03) 634 6490	

PSTN and ISDN Testing

Dear Mr Schorer

An opportunity has become available for Telecom to carry out some specialised testing using a new piece of equipment which has only just become available.

The equipment is the Telephone Quality Measurement System (TQMS) Version 3, manufactured by Sotas Inc. The TQMS will enable the measurement of a number of call set up and transmission parameters. Attached is a copy of some material which describes the system. The equipment has been specifically set up to recognise the tones used within the Australian telephone network.

I am proposing that we use this equipment to carry out some tests on both your PSTN and ISDN services. The PSTN tests will require the use of a line from one of your PSTN rotary groups to receive calls from a second unit, with an additional control line also being required. The ISDN tests will require the allocation of an indial number to the test unit. Given the number of PSTN and ISDN lines you have available, this should have minimal impact on your use of the telephone network. The second unit will be moved between a number of locations which have been selected by taking note of your previous comments on locations where callers have reported difficulties in contacting your business.

The precise duration of the tests, and hence the numbers of tests calls, have not yet been finalised, but it is expected that they will last for about two and a half days. The units are capable of generating calls at an approximate rate of 20 calls per hour. Spread over a full 24 hour period, which will ensure that both high and low traffic periods are encountered, it is expected that approximately 1,000 calls will be generated during the test period.

The cost of any outgoing calls made by this test equipment during this period will be credited to your telephone account.

24A

The tests will be conducted by Mr Wayne Parker and Mr Jeff Thompson of Bell Canada International, who will also tabulate the results. The BCI staff will be assisted by two of my staff members, Mr Bruno Tonizzo and Mr Colin Roberts.

A copy of the results will be forwarded to you after the tests have been completed.

I would like these tests to start as soon as practicable and I will call you tomorrow morning to discuss the details further.

Peter Gamble

Peter Gamble

24A

UNION
DNF

ATTACHMENT ONE

CRU Engineering Tasks and Staffing

1) **Current staff are:**

Manager: Peter Gamble

Engineering: **Michael Pham** (Smith Case),
Vacant position (was Maurie Lean on loan for two months from Network Ops, goes back Friday 23 Sept to carry out work which will be of long term benefit. Network Ops reluctant to release him for further time and are currently looking for possible replacement.),
Geoff Keenan (currently providing backup material and writing briefing papers).

Technical: **Bruno Tonizzo** (needed to manage Service Verification Test process and provide backup to all cases on CAN and transmission aspects),
Colin Roberts (started one week ago, needed to provide backup to all cases on switching aspects).

2) Complete the preparation of the Engineering Reports for the first four DNF Cases in a reasonable time, ie 3-4 weeks, and in parallel. Following the preparation period, the reports will need to be reviewed as the defence case is prepared. This task will require 1 engineer plus 1 technical officer for each case, ie 4 engineers and 4 technical officers. **Note that this has to be in addition to current staff.** Current staff level was predicated on serial preparation of engineering reports and at an overview level only.

Case	Engineer	Technical Officer
Garms	–	Bruno Tonizzo (part time - currently also managing SVT)
Gillan	– (Was Maurie Lean, who is retuning to Network Ops)	–
Schorer	–	–
Smith	Michael Pham	Mark Owen (on loan from Network Ops, Ballarat for two weeks, probably can be extended)

Therefore, an additional three engineers and three technical officers (around PTTO1 / Level 5) for 6-8 weeks are needed urgently to carry out the case preparation work satisfactorily. If these staff are not available, then only minimal technical effort can be put into the cases. This requirement could be reduced to two engineers and two technical officers if one of the cases, say Schorer, was p on hold, but this is risky strategy. Back-up to these teams is to be provided by Geoff Keenan, Bruno Tonizzo and Colin Roberts.

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A59723

3) Completion of background and technical papers on the network and related matters. Should be finalised in the next two - three weeks. This task is to be carried out by Peter Gamble, Geoff Keenan and Colin Roberts with assistance from other authors and a consultant as required.

4) A review of the General DNF Files is to be made to locate material relevant to individual cases. Also, material is to be prepared relating to the Coopers and Lybrand, Bell Canada and Austel CoT Reports. Although a large part of this activity will be mainly administrative and legal, it will need a dedicated engineering resource. Accordingly, a further P3 Engineer is required for this activity, which is estimated to take 2 months. It can not be accomplished within existing resources.

5) Prepare the engineering reports for next 12. If required in the medium term, the best approach is to keep staff recruited for first four and allocate them a further two or three cases each. This would keep some continuity and the case staff would then be needed for four to five months.

6) Service Verification Tests need:

- management of individual tests ie scheduling the tests, co-ordination of customer, Network Ops, and C&C, establishment of call profile, finalisation of report and forwarding it to the customer and AUSTEL, etc etc
- further development work ie ISDN tests, CPE tests, originating call tests,
- negotiation and liaison with AUSTEL.

Management of the test process is being carried out by Bruno Tonizzo. Work on developing the tests would be carried out by engineer recruited into the vacant position. Negotiation and liaison with AUSTEL is carried out by Peter Gamble.

7) A Call Delivery Test (100 calls from a number of origins to customers premises) was developed by Maurie Lean and carried out on Turner's service. These tests are needed to demonstrate in a formal way the current performance of the network to the DNF customers. Accordingly, they need to be carried out on a number of services, eg [redacted], Smith etc. In order to carry these tests out, people are required to make the calls, network Ops need to be on standby in case of problems, a person is needed at the customer's premises to receive the calls, and, accordingly, the whole process needs managing. Management would be done within the existing resources, providing previous recruitment has taken place.

8) Resolve technical issues relating to the first 4 plus the next 12 that crop up from time to time (eg [redacted] ISDN service, [redacted] wiring, [redacted] lines etc etc). This task can be done within the existing staff of engineers and technical officers if Maurie Lean is replaced and the full complement of case staff are recruited.

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9) Discussion with David Fickling / Geoff Irvine / Fiona Hills on Fault Escalation process. There are a number of unresolved issues, particularly relating to the role of the CRU Engineering Group.

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10) Resolve technical issues relating to following 50 (?) and provide advice to Fiona Hills group. Once the SVT and support process are running smoothly, and initial work load is mostly complete, will be able to be handled within the existing group.

11) There are many other minor tasks which need action from time to time. These will be fitted in as time is available.

Conclusion

The following staff are needed **urgently**:

- One engineer at P3 level to fill the vacant position on a permanent basis. If permanent occupant can not be found, then a further rotation of an engineer from Network Operations is acceptable, with a three month minimum period.
- Three engineers at the P3 level (preferred, P2 acceptable if P3 not available) and three technical officers at the PTTO1 / Level 5 level for four to five months.
- One engineer at the P3 level for three months.

If these staff are not available, then the preparation of the general arbitration material and specific case material can not be completed in the required time frames.

The use of external staff on a consultant basis could be possible, providing there was a good working knowledge of Telecommunications. A possible pool of such staff could include engineers recently retrenched from Telecom, however, the selection process would have to ensure that the levels of knowledge and expertise were suitable.

Peter Gamble
16th September 1994

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A59731

Alleged unreasonable conduct

8.79 Telecom's conduct has been less than that which might be expected of a model corporate citizen -

- in insisting on strict proof of a causal link between faults and their effect on a business when its own records are deficient in recording faults

- in insisting on some complainants dealing with its lawyers rather than direct with it

- in concluding settlement negotiations expeditiously

- in insisting that payments in settlement of claims are goodwill payments/gestures rather than compensation.

RECOMMENDATIONS

8.80 AUSTEL recommends that -

- Telecom's advice to its customers experiencing difficult network faults on the outcome of its monitoring/testing should state the limitations of its monitoring/testing regime

- Telecom caution its staff engaged in resolution of difficult network faults against -

  - making statements to the effect that a customer's problem is unique before the causes of the faults have been identified

  - recommending customer equipment upgrades before other possible causes of the faults have been eliminated

  - making inaccurate representations of its liability for such faults

  - providing incomplete briefings to third parties who may take an interest in the resolution of the faults

- Telecom adopt a more flexible approach in its response to requests under the *Freedom of Information Act 1982* and ensure that it has the resources necessary to provide timely response to such requests

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(6)

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Telecom AUSTRALIA

28 November 1994

Commercial & Consumer
Customer Affairs

Engineering and Technical
Consultancy
8/242 Exhibition St
Melbourne, Vic
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Norm O'Doherty
General Manager, Customer Affairs
AUSTEL
5 Queens Road
Melbourne, Vic

Service Verification Tests - Individual Call Data

Norm,

As agreed at one of our recent meetings and as confirmed in your letter of 16th November 1994, attached please find the detailed Call Delivery Test information for the following customers:

- Bova - Ralphies Pizza, Mordialloc, Vic
- Love - Lovey's Restaurant, Dixons Creek, Vic
- Main - Glen Waters Fish Farm, Glenburn, Vic
- Smith - Cape Bridgewater Holiday Camp, Cape Bridgewater, Vic (PSTN and 1 800)
- Turner - Gourmet Revolution, Moorabbin, Vic
- Trzcionka - Trzcionka's Hairdressing, Glenelg, SA

This information is supplied to Austel on a strictly Telecom-in-Confidence basis for use in their Service Verification Test Review only and not for any other purpose. The information is not to be disclosed to any third party without the prior written consent of Telecom.

The detailed results of the Call Delivery Tests should be read in conjunction with the individual Service Verification Test Reports, which will provide further information on the origins and destinations, together with details of the time period to be used for the call analysis. It should be noted that in all cases more than 500 calls are included in the sample. As indicated in Section 6.3.1 of "Service Verification Tests for Telecom's PSTN", the first 500 calls of the sample which fall within the specified time period, but not including the errors and failures mentioned in this section are used.

As you are already aware, the equipment which carries out the SVT Call Delivery Tests is able to hold the call for the required 120 seconds (as is shown on the results sheets), but is unable to confirm that the call has been held past 40 seconds. A more detailed response to your questions on this issue is under preparation.

25 A

The detailed Call Delivery Test report for Dawson's Pest and Weed Control, Maidstone, is still being extracted from the data base and will be forwarded as soon as it is available. The report on Mr Bova's SVT is currently being finalised and will be forwarded as soon as it is available. As you are aware, Telecom is not completing the Service Verification Test for Mr Turner's service at his request. However, a report on that part of the test which has been completed is being prepared.

Also attached is a copy of the latest issue of a Result Summary document that has been prepared to show the key results from each SVT.

Two manual Call Delivery Tests have been carried out to Mr Main's service and to Mr Turner's service. Reports on the results of these tests are currently under preparation and will be forwarded to the customer, with a copy to AUSTEL, as soon as they are available.

Should you have any further queries, please do not hesitate to contact me.

Peter Gamble

25A

Meeting held at AUSTEL 15/12/94. MK.

(8)

94/0269-07

Telecom 173
AUSTRALIA

13 December 1994

Commercial & Consumer
Customer Response Unit

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Norm O'Doherty
AUSTEL
8 Queens Road
MELBOURNE

In response to issues raised in your letter of the 16 November, the following comments are made:

1) As you will be aware, in April 1993 Austel formally approved The Australian Telephone Number Plan. The new numbering plan is designed to allow expansion of "local" telephone numbers and to allow for a greater number of new services in the multi-carrier Australian environment. The 10 digit number code range 1800xxxxxx has been allocated by Austel for all "Freephone" services. Currently the 008 service is used as a "Freephone" service. However, with the introduction of 10 digit numbering, the 9 digit number range 008xxxxxx will eventually be phased out.

The introduction of 1-800 does not modify or change the current 008 service in any way. The 1-800 and 008 codes are currently parallel trunked in the network, allowing for the future migration of services to the new 1-800 product and subsequent withdrawal of the 008 service. It must be noted that any existing 008 service will have an equivalent 1-800 code allocated.

Thus for both Mr. Alan Smith and Mr. Gary Dawson, the network equipment utilised for calls to the test 1-800 numbers were the same as that which would have been used for their 008 services.

2) In G001, "Service Verification Tests for Telecom's PSTN", section 6.3.1, it states that the first 500 calls will be analysed to determine the Call Success Rate. The test call program being used in the NEAT system may result in a number of calls being generated outside the specified incoming call profile of volume, time and origin for the customer. This is particularly the case where two call delivery tests are being carried out at the same time, one for a business operating 9 am to 5 pm, and the second operating in the afternoon and evening, for example a takeaway food outlet. Further, as the analysis takes place after the test has concluded, it is necessary to generate more than 500 calls to ensure that at least 500 calls will meet the call delivery profile specified and are not excluded for NEAT system failure reasons outlined in Section 6.3. However, the ring voltage of all successful incoming calls is measured in accordance with Section 6.3.3. Thus a larger sample of calls is used in deriving this test result.

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Telecom believes that it is generally inappropriate to quote the Call Success Rate on this larger sample of calls, as some of them may be outside the time profile and some may have been excluded for NEAT system failures.

3) Telecom has previously supplied individual call data for seven Service Verification Tests as requested. Following Austel's original request for this data, I discussed the supply of this data with Cliff Mathieson, who indicated his belief that Austel had no need of the data at that time. Consequently the data was not supplied then. When a further request was received for the data for use by the consultant assisting Austel, immediate arrangements were made to obtain the data from Network Operations' database.

4) The original concept of the Demonstration Tests was to confirm the operation of the service after the customer specific line tests had been concluded and the service restored. It was originally set at ten calls, but was expanded to twenty calls to demonstrate end-to-end service capability. It is not practical to base a test on this methodology because the demonstration process incorporates elements of CPE performance, is manual and relatively inefficient. In the preamble to the tests (Section 7.1) it is suggested that: "The calls should come from several origins, and be oriented towards the incoming call profile of the customer(taking into account the nature of his business) whilst having regard to average traffic patterns."

In response to requests from customers for a more rigorous "end-to-end" testing procedure, a more detailed test specification was developed which aimed to generate 100 test calls to a customer's service from five or six locations. The test was designed to be carried out during, say, a morning. A copy of the document that describes this test, "Incoming Network Service Performance Measurement for Individual Customers Summary", S001, is attached for your information.

Two tests have been carried out using this procedure, one on Mr. Colin Turner's service, and one on Mr. John Main's service. However, there have been three key problem areas identified which apply both to the original demonstration tests and the revised procedure. The first has involved obtaining sufficient staff to carry out the test. Two alternative sources have been tried, but neither can be guaranteed on an ongoing basis, which is why the Test Program has not continued further. The second problem is the intrusiveness of the test. Where a service consists of one or two lines, the additional traffic from a substantial number of test calls is quite significant and can be disruptive to the business. Finally, the tests may produce inconclusive results when the test calls strike a busy condition from genuine business calls. This situation is exacerbated if any of the test calls is to be held for any length of time, such as two minutes. The intrusive nature of these tests is not so great if the customer under test has a larger number of lines.

The alternative is to maintain the Demonstration Tests as originally specified, with calls generated from one or two locations. However this also needs a Telecom person to attend the customer's premises and, if the calls are to be held for two minutes, can still represent a significant intrusion.

This issue is still being considered by Telecom and it was Telecom's intention to raise these issues as part of the current SVT review process. Austel's views on the matters raised above would be appreciated.

5) When the Service Verification Test was originally developed it was understood that the NEAT units could hold a call for 120 seconds. However when detailed test schedules were being prepared it was discovered that while the NEAT system could hold a call for 2 minutes, it could not confirm a call hold time beyond the 45 seconds taken to perform the transmission test.

A proposed software modification to NEAT has been discussed with the supplier who initially offered a modification to be available by November 1994. This feature has now, apparently, been delayed indefinitely. To meet the SVT requirement a variety of test call generating systems were investigated, but none was able to hold and confirm a test call for the required 2 minutes. Various modifications were considered and some tests carried out but they were unable to provide reliable results.

Telecom is currently concluding negotiations for the supply of a new generation of call generating equipment, for which the ability to hold and confirm a call for 120 seconds is mandatory. Further information will be provided as it comes to hand.

Peter Gamble
Manager, Engineering and Technical Consultancy
Customer Response Unit

FAXED 16/12/94 9.40

GOLDEN
Transport Agency

A Division of G.M. (MELBOURNE) HOLDINGS PTY. LTD. A.C.N. 005 905 040

IMPORTANT: WE ARE NOT COMMON CARRIERS. The Carrier directs your attention to its trading TERMS AND CONDITIONS OF CONTRACT. It is in your interests to read them to avoid any later confusion.

To:	Mr Steve Black Group General Manager, Customer Affairs	Date: Our Ref:	15 December 1994 1431
Company:	Telecom	Fax No:	632 3235
From:	Mr Graham Schorer	Total Pages (Incl. Header)	

MAILED: YES ( ) NO ( )

Dear Mr Black,

RE: PROPOSED TELECOM VERIFICATION TESTING

I refer you to our telephone conversation last week regarding this matter and as you recall, my drawing your attention to the Peter Gamble correspondence referring to the statement that there will be further testings conducted by Bell Canada using new American equipment especially designed for such types of testing.

I pointed out to you that I was aware that this equipment had run into problems when trying to run tests on Ralph Bova service, which you responded that you were not aware of.

I offered a suggestion that should have been mutually acceptable to both parties, that this type of testing be conducted by D.M.R., the technical communication resource unit attached to the Fast Track Arbitration Procedure, which you stated would not be appropriate.

I then offered a suggestion that this type of testing should be conducted in the presence of Cliff Matheson of Austel, and you undertook to investigate this possibility with Austel further.

During a more recent telephone conversation regarding many other matters, you informed me that Cliff Matheson would not be available while the Bell Canada people would be still in Australia. I asked the question of you, why would Bell Canada's presence in Australia be relevant if Cliff Matheson, on behalf of Austel, was to conduct the tests.

I have finally managed to make telephone contact with Cliff Matheson yesterday to discuss this matter with him in person and the outcome was as listed below:-

(a) He personally had no difficulty being involved in such testing program;

(b) His current commitment would prevent him from being available until approximately mid January;

(c) Austel management would have to approve of his involvement in such testing;

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(d) He is of the opinion that his involvement would have to be at the expense of Telecom;

(e) Telecom would have to formally request of Austel for Cliff Matheson's involvement in such testing.

During a telephone conversation between you and I earlier this week, I informed you:-

(a) I had not been able to make contact with Cliff Matheson;

(b) I was aware that Telecom/Bell Canada International had abandoned tests on Gary Dawson's telephone service last Friday, 9 December 1994, and the official reason given was that this new equipment does not like Australian conditions;

(c) I required in writing from Telecom the results and reasons for such tests were abandoned.

Mr Black, I am awaiting your written response.

Yours respectively,

Graham Schorer

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493-495 Queensberry Street NORTH MELBOURNE

Michael Rumsewicz, Ph.D.
Senior Research Fellow
CITRI
723 Swanston St
Carlton, Victoria, 3047
email: mpr@citri.edu.au
telephone: +61 3 282-2473
facsimile: +61 3 282-2444

December 15, 1994

Norm O'Doherty
General Manager
Consumer Affairs Branch, AUSTEL
Jetset Centre
5 Queens Road, Melbourne, 3004

Report on Telecom Australia's Service Verification Tests (G.801)

Dear Norm

Please find attached my report on Telecom Australia's Service Verification Tests in accordance with consultancy agreement specified under contract number 2060.

Should you require any further information or assistance please do not hesitate to call me at the above number.

Yours sincerely

Michael Rumsewicz

Report on Telecom Australia's Service Verification Tests (G.001)

Michael P. Rumsewicz

Executive Summary

This report is provided in response to AUSTEL's request for external assistance in reviewing the engineering, methodological and statistical issues arising from Telecom Australia's Service Verification Tests (as documented in General Information Paper G.001, Service Verification Tests for Telecom's PSTN, Reference [1]).

Quoting from G.001, the service verification tests have been developed:

> *"... as the basis upon which a telephone service at the Service Delivery Point may be considered to be operating satisfactorily at the time the tests were conducted."*

The report focuses upon four areas as specified in the consultant's brief (Attachment 1):

- Reasonableness of national targets for call connection and call continuity / call dropout and how these are impacted by network modernisation.
- Reasonableness of performance targets for individual customers and how these are impacted by variations in network equipment type / generation and time of day traffic variations.
- Statistical validity of individual verification tests based upon test call sampling
- The acceptability of Telecom Australia's General Information Paper G.001 describing the tests.

The main findings of this analysis are:

- Telecom Australia's national targets for call connection are more stringent than internationally accepted guidelines (E.721).
- Telecom Australia does not appear to have a documented national call continuity / call dropout target (no specific reference is provided in G.001). It is recommended that such targets be developed in order to more comprehensively monitor customer grade of service.

- The individual customer performance targets employed by Telecom Australia appear to be reasonable given the current stage of network evolution. Tightening of these targets may be appropriate as network modernisation nears completion.

- Customer calling profiles (which provide the basis of the Service Verification Test test calling pattern) would be more accurately determined through the use, for instance, of Telelec / CCS 7 equipment or, in the case of 008 / 1800 subscribers, customer billing records. The actual technique employed (including customer consultation as presently performed), however, should be determined on a case by case basis dependent upon technology, timeliness and resource constraints, with the additional proviso that customer confidence in the test be assured.

- The service verification tests performed by Telecom provide sufficient information to quantify, to a reasonable degree of accuracy, the call connection performance of the network. However, the statistical test being applied to the data is inconsistent with the goals of the testing as stated in Telecom's Customer Fault Management Process (000 841, Section 5.4.6) and AUSTEL's report, The COT Cases (April, 1994).

  An alternative statistical test, using the same data, is proposed in this report. We note that the alternative statistical test would also have been passed when applied to the data obtained in service verification tests performed to date.

- The General Information Paper G.001 overall provides an adequate and easy to understand description of service verification tests.

Beyond the scope of the consultancy brief, we also make the following observations:

- Service Verification Tests may at some stage need to be designed for other services (for instance, ISDN and mobile).

- In a multi-service deliverer environment it may be necessary to have an independent set of generic tests (endorsed by AUSTEL) to address difficult network faults in an equitable fashion across all service deliverers.

- In a multi-service deliverer environment, calls will be originated in a number of different networks to difficult network fault customers. In compiling testing profiles to mimic customer calling patterns, it may be necessary to send test calls through a variety of service deliverer's networks. Safeguards would need to be in place to protect the interests of the various parties with respect to information collected in such a fashion.

1. INTRODUCTION

This report is provided in response to AUSTEL's request for external assistance in reviewing the engineering, methodological and statistical issues arising from Telecom Australia's Service Verification Tests (as documented in General Information Paper G.001, Service Verification Tests for Telecom's PSTN).

Quoting from G.001, the service verification tests have been developed:

> *"... as the basis upon which a telephone service at the Service Delivery Point may be considered to be operating satisfactorily at the time the tests were conducted."*

The report focuses upon four areas as specified in the consultant's brief (Attachment 1):

- Reasonableness of national targets for call connection and call continuity / call drop-out and how these are impacted by network modernisation.
- Reasonableness of performance targets for individual customers and how these are impacted by variations in network equipment type / generation and time of day traffic variations.
- Statistical validity of individual verification tests based upon test call sampling.
- The acceptability of Telecom Australia's General Information Paper G.001 describing the tests.

The analysis provided herein is based upon documentation provided by AUSTEL and Telecom Australia, interviews with Telecom Australia personnel and public information resources.

This report is structured as follows:

- Section 2: Examination of issues directly related to the consultancy brief.
- Section 3: Other comments arising from the analysis but beyond the scope of the consultancy brief.
- There are also a number of Appendices and Attachments, including a copy of the consultancy brief and the author's *curriculum vitae*.

2. Analysis and discussion arising from the consultancy brief

2.1 National Performance Targets

"The reasonableness of national targets for call completion and call continuity / call drop-out and how these are impacted by network modernisation"

The Public Switched Telephone Services (PSTS) Tariff (Amended July 1994) states that the Telecom Australia prescribed national average levels of call failures due to network loss are:

- 1.5% for local calls (daily average), and
- 2.6% for STD day rate.

The primary international benchmarks for comparison with these targets are to be found in International Telecommunication Union - Telecommunication Sector (ITU-T, formerly known as CCITT) recommendations. Recommendation E.721 (Network Grade of Service Parameters and Target Values in the Evolving ISDN, 1991, Reference [3]) provides the following target values:

- 2% for local calls
- 3% for toll (long distance) calls.

Telecom Australia's targets are within these standards.

We note that these benchmarks apply to fully digital networks employing Signalling System Number 7, a stage that has not yet been reached in Telecom Australia's network.

We believe that Telecom Australia's present national call delivery targets are reasonable for the current stage of network evolution.

As Telecom Australia's network modernisation program continues (as prescribed under the Future Mode of Operations and subsequently accelerated) it can be expected that the actual call delivery performance levels achieved will naturally improve. Such improvements stem from improvements in switching technology (most digital exchanges are now either non-blocking or almost non-blocking with respect to internal switching connections), fewer exchanges in the end-to-end call path and lower costs for transmission bandwidth for circuit switched services. It is likely that congestion on circuit groups, in a fully digital network, will be almost the sole cause of non-delivery of a call (outside of equipment failure). As a result, customer expectations for call delivery may also increase as improved service levels become the norm. Tightening of target grade of service levels may be appropriate in the

future.

Providing a detailed analysis and recommendations for long term target grade of service levels is beyond the scope of the consultancy brief, although we note that market forces in a competitive environment may automatically shape future targets (for example, service quality is often used in advertising in the USA to differentiate the service provided by various long distance carriers).

In the above mentioned Tariff filing, no comment is made concerning call continuity / call dropout objectives.

ITU-T Recommendations E.428 (Call Retention, 1992, Reference [2]) and Q.543 Section 2.5.1.1 (Digital Exchange Performance Design Objectives, Reference [4]) provide guidance as to accepted international norms on call continuity / call dropout. E.428 states that in the intermediate term, the cut-off call ratio for subscriber to subscriber calls, measured over a 24 hour period, should be less than 0.5% for five minute calls. In any time consistent hour, the call cut-off rate may not exceed 3% (we assume this applies to five minute calls also).

Moreover, Recommendation Q.543 states that for 64 kb/s switched connections, the probability of premature release of an established connection, in any one minute interval, should be less than 0.002%. For two and five minute calls, this would translate to (approximately), call dropout probabilities of 0.004% and 0.01% respectively. We recognize that this applies to ISDN exchanges (rather than networks as a whole), but it clearly indicates the quality of service expected in mature digital networks and hence should be considered as potential longer term targets.

On a network level, such stringent dropout criteria would give rise to targets of approximately 0.008% for local calls (assuming less than five exchanges are used in a local call) and 0.016% for long distance calls (assuming a maximum of eight exchanges in such calls).

It is important to note that these dropout rates refer only to switch related causes and do not take into account the possibility of transmission facility failure (for example, due to high error rates or cable cuts). Such factors would also need to be considered in the final specification of call continuity grade of service targets.

On the national level, Telecom Australia appears to have no precise criteria for call continuity / call dropout and hence it is recommended that such criteria be developed or that international standards be adopted.

2.2 Individual Performance Targets

"The reasonableness of performance targets for individual customers for call connection and call continuity / call dropout and how these may be impacted by variations in network equipment type / generation and time of day traffic variations."

The ITU-T objectives described in the previous section refer to entire network averages, that is, an "all exchanges to all exchanges" (or multipoint to multipoint) description of objectives for service quality. No breakdowns into point to point, point to multipoint, or multipoint to point objectives are provided.

Also, AUSTEL has recently released a Draft Technical Standard for Comment on "End-to-End Network Performance" (Reference [6]). That document addresses overall network average performance, measured over monthly periods. As the measurement period consists of the full 24 hour day, including mass call-ins and special tariff discounts, service standards established there are not relevant to the service verification tests, which specifically exclude such situations and are aimed at multipoint to point service issues. As such, we will not be referring to the AUSTEL End-to-End Network Performance draft again in the following.

Certain national jurisdictions and service deliverers have, however, identified local levels at which action or notification of regulatory of bodies should occur.

For example, the Swedish Telecommunications Administration (STA) sets network wide call accessibility targets of 98% and 97% for whole day and busy time (defined as the ten most traffic intensive hours of the day) respectively (Reference [5]). In addition to this, they also set corresponding targets for individual traffic cases (exchange rather than network based) of 96% and 94% respectively, regardless of equipment type. We note here that call accessibility implies that calls are connected and speech is possible.

Also, these are 1991 targets and relate to the Swedish network as it existed then. Some of the targets used at that time were under review for tightening as a result of network modernization.

Similarly, the Florida Public Service Commission provided a benchmark (in 1991) of 90% call completion for calls originating at any exchange. While somewhat less than that set by the STA, the question of guaranteeing certain levels of service all subscribers is specifically addressed.

As implied in the STA reference cited above, specific attention must be given to time of day considerations in the formulation of grade of service objectives. Clearly, call blocking on circuit groups is most likely to occur during the daily busy periods, which may vary from

locale to locale. For instance, exchanges in the central business district are likely to experience peaks during the morning and afternoon while regional exchanges may see peaks in the evenings.

As part of the Service Verification Test procedure, information is compiled from the customer to determine a profile of incoming call attempts, by time of day and originating exchange. Note, however, that periods of mass calling and special discount tariff are precluded from the test regime. Thus, a "fair" reflection of the customer's incoming grade of service would appear to be provided by the Service Verification tests.

As different customers will have different busy periods, determining a single benchmark across all possible load profiles is difficult. However, the STA benchmarks of 96% and 94% for all day and busy time set an appropriate "best practice" standard. The use of a 95% objective, independent of equipment type, by Telecom Australia is directly in line with this practice.

As discussed in Section 2.1, network modernisation will almost naturally result in improved call delivery performance as a result of the internally non-blocking design of digital exchanges. Combined with the simpler process of adding circuit capacity in such exchanges, customers are likely to see improved service quality as the FMO proceeds and it may be necessary, in order to maintain such standards, to further tighteas the call delivery targets specified as part of the Service Verification Tests. Determining specific targets for fully digital networks is beyond the scope of this consultancy.

We believe that the individual performance target for call delivery established by Telecom Australia for the Service Verification tests is a reasonable target for the current stage of network evolution. In the future, when Telecom's Australia's network becomes fully digital, it may be appropriate to further tighten these targets.

The STA call delivery standard cited above requires that calls not only be delivered, but also have acceptable sound quality and are not dropped. Thus, the 96% / 94% individual targets cited apply overall to blocking, speech quality and call retention, but no specific breakdown is provided.

With regard to call continuity / call dropout, Telecom's stated objective of 98% call continuity is a significantly less stringent criterion than Recommendation E.428 (0.5% for five minute calls), especially as it applies only to two minute calls, although we note that E.428 applies to digital networks rather than analogue.

Given the present stage of network evolution, in itself Telecom Australia's call continuity target of 98% appears to be reasonable. However, when combined with the 95%

call delivery target, this could lead to unnecessarily looser standards. A combined standard, along the Swedish lines, allowing for a minimum 95% call delivery with acceptable speech quality and call retention, and a minimum 98% call retention may be more appropriate. In addition, as network digitization nears completion, a more stringent call retention criterion, along the lines of E.428, may be appropriate.

2.3 Statistical Validity of Testing Procedure

"The statistical validity of individual verification tests based upon call sampling and the adequacy and format of the test data collection."

This section of the brief pertains primarily to those tests described in Section 6.3, Public Network Call Delivery Tests of G.001. There are a number of issues to be covered in assessing the statistical validity of the testing described in Section 6.3.1 of G.001. In the following we shall raise the issues and discuss them in a narrative fashion. Similar discussion applies to testing described in Section 6.3.2 of G.001, so only differences will be noted at the end of the section to avoid needless repetition.

Are the test calls representative of calls being sent to the customer?

As part of the test procedure, Telecom consults with the customer in order to determine typical call profiles, busy and minimal traffic periods and incoming call distributions. Test calls are then generated according to this profile in order to mimic calls destined for the customer.

An alternative, and more accurate, technique to determine incoming call patterns that could be employed (with the cost of extra time in data collection) would be through the use of Signaling System 7 monitoring equipment (such as the Tekelec / CCS 7 monitoring tool or similar). Incoming call setup messaging to the host exchange destined for the customer could be trapped to allow for traffic distribution analysis. Collection of this data may take some time (many days to weeks) depending on the call volumes destined for the customer.

In the case of customers subscribing to 008 / 1800 service, detailed billing records are available which could be analyzed to determine, with a similar degree of precision, the incoming call distribution.

Note that these two alternative techniques would also allow accurate profiling on a day of week basis, allowing the test call pattern to be set up similarly. This would eliminate any potential concerns on traffic day of week variations affecting the "representativeness" of the test call pattern.

We believe that more accurate incoming customer call profiles could be created through use of Telstra / CCS7 equipment or, in the case of 008 / 1800 customers, use of billing records. The actual technique employed (including customer consultation as presently performed), however, should be determined on a case by case basis dependent upon technology, timeliness and resource constraints, with the additional proviso that customer confidence in the test be ensured.

Are sufficient calls being generated to collect a statistically valid sample?

Document G.001 recommends that at least 500 test calls be made. Samples of this size are sufficient to determine, with a reasonable degree of precision, the call delivery performance to the customer.

The document G.001 states that tests 6.3.1 (success rate of incoming calls), 6.3.2 (call continuity) and 6.3.3 (ring test) may be combined, that is, the test calls made can be used for the analysis of all three tests simultaneously. However, the procedure described in 6.3.1 requires that only the first 500 test calls be used. Test 6.3.2 requires 500 successful calls be made and thus more calls than test 6.3.1 are required. By restricting the data analysis in 6.3.1 to only the first 500 calls, incongruous situations may arise, as noted in discussions with Cliff Mathieson.

We believe that sufficient data is being collected to provide a statistically valid sample. In addition, the entire dataset should be analyzed for verifying that service standards are being met, rather than artificial limits of 500 calls.

Is sufficiently detailed data being collected to analyze the test results?

Telecom Australia has provided all call delivery data collected in the Service Verification Tests performed to date. The data includes, for every test call - time and date - originating number and exchange - terminating number and exchange - call disposition (for example, connected and blocked in network). Data in such detail allows the comprehensive analysis of ineffective call attempts, in particular, the ability to determine whether there are correlations in the ineffective calls, such as:

- time of day
- originating exchange
- type of call failure.

We believe that the data being collected is sufficiently detailed to allow a comprehensive analysis of ineffective attempts.

Are the statistical tests being performed appropriate to the question being asked?

The nature of the statistical test that should be applied to the data depends greatly on the information desired from the data. Telecom Australia, in its Customer Fault Management Procedure - Overview (draft dated 15 July, 1994) states in Section 5.4.6 (Verification Tests):

> "The purpose of verification tests is to demonstrate that the service provided to a specific SDP [Service Delivery Point] is satisfactory and meets published standards."

In addition, quoting directly from the AUSTEL COT Cases report,

> "Telecom, in consultation with AUSTEL, develop by May 1, 1994 -
>
> - a standard of service against which Telecom's performance may effectively be measured
>
> - a relevant service quality verification test."

These statements clearly indicate that the Verification Tests need to determine the actual call delivery performance to the customer.

Telecom Australia, as part of document G.001, applies a standard technique based on hypothesis testing. Hypothesis testing is used to determine whether there is sufficient evidence to reject one hypothesis (known as the null hypothesis) in favour of another (known as the alternative hypothesis). If insufficient evidence exists to reject the null hypothesis, the null hypothesis is accepted. It is critical to note that this is not the same as saying that the null hypothesis has been verified.

> *In the context of the Service Verification Tests, this means that the test applied checks to see whether it can be "proved" beyond reasonable level of doubt that less than 95% of calls to the customer are delivered, as opposed to showing that at least 95% are delivered.*

The standard being applied by Telecom in its proposed analysis of the data is that if the overall (population) call delivery performance is greater than 95% (the individual customer target), then there is only a 2.5% chance (the reasonable level of doubt mentioned in the previous paragraph) that the sampled data will fall below their stated benchmark (465 calls out of 500). In statistical parlance, this would be called a Type I error and reflects the chance that you will incorrectly reject the null hypothesis.

To verify that the performance meets published standards, the actual call delivery performance needs to be determined. A more appropriate analysis of the data would be to determine the overall probability that the call delivery performance is better than 95% (the individual customer benchmark), and provide (as a benchmark) a lower limit on this probability.

Such a test would be conducted as follows:

1. From the data, determine the number of successful call attempts (denote this by k in the following) out of the total number of call attempts (call this n).
2. Compute p = k/n.

   The variable p is the estimate of the call delivery performance obtained from the data.
3. Compute z = (p - 0.95) / sqrt (p * (1 - p) / n)
4. The probability that the overall call delivery performance is at least 95% is given by inverting a normal distribution on (0,1). This is simpler than it sounds because, for instance, Microsoft Excel provides the function NORMSDIST(z) which does exactly this.
5. If NORMSDIST(z) > 0.9, then say that the call delivery performance standards have been met. This would mean that there is a 90% chance that more than 95% calls are delivered to the customer, based on the test data.

Depending on the degree of confidence required to pass the test, 0.9 can be replaced by a more suitable benchmark. Examples of the use of this test are provided in Appendix A.

We note here that performing the above statistical test is identical to switching the null hypothesis prescribed by Telecom Australia to one which assumes that the call delivery performance is less than 95%, and then seeking sufficient evidence to show that the performance is actually higher than 95% (the new alternative hypothesis).

In other words, Telecom Australia should be provide convincing evidence that their call delivery performance meets their specified target, rather than seeking convincing evidence that their call delivery performance fails to meet their target.

There are a number of important points worth noting here:

- Application of such a test places the onus on the service deliverer to demonstrate that their targets are being met rather than on the customer to show that the performance targets are not being met.
- Using the test Telecom proposes is likely to lead to the dissatisfaction of customers if they are shown test statistics in the 93% to 95% range (which would pass Telecom Australia's criteria). For public relations reasons the test we propose may be more suitable.
- For comparison, if 500 test calls are made, the Telecom Australia pass criteria is that 465 calls be successfully delivered, whereas our proposed test would require

that 481 calls be successfully delivered.

- The higher benchmark needed to pass the test proposed here does not change the stated call delivery target of 95%. It merely provides a different pass / fail criterion for the test of whether 95% call delivery is being achieved.
- Application of our proposed method on actual customer data provided by Telecom Australia to AUSTEL on Service Verification Tests performed to date would still have resulted in all tests passing satisfactorily.

With regard to testing described in Section 6.3.2 of G.001 (Call Continuity / Drop-outs to Neighbouring LIC), an essentially identical discussion applies except for modification of the pass criteria due to the higher standard expected in call continuity (less than 2% of calls dropping out). In this case, references to 95% or 0.95 in the above are replaced by 98% or 0.98 as appropriate.

We believe that, given the stated purpose of the Service Verification Tests supplied in the Telecom Australia Customer Fault Management Procedures document (000 841) and that of the AUSTEL COT cases report, the statistical test being applied to the collected data is inappropriate. We believe the alternative test described above is more suitable and, in addition, promotes customer confidence in the test procedure and analysis.

Can anything else be learned from the test data, especially if the test fails?

As described in document G.001, the only statistical test applied to the data collected in Tests 6.3.1 and 6.3.2 is a "macro" test, *that is*, only the total number of failed calls and attempted calls is examined. No further analysis of the data, for example by originating exchange, is performed to determine whether there are any patterns to the way in which calls fail during the test. As mentioned earlier, the data collected is quite comprehensive and easily allows for such analysis. Furthermore, the use of Microsoft Excel easily facilitates such analysis.

In Appendix B we provide portions of such an analysis we have performed on the collected data.

Moreover, in instances in which the test fails to meet the pass criteria, such investigations may provide sufficient information to track down specific network or test equipment related problems which, upon rectification, may not require the entire test to be re-run, merely, that connected with affected portions of the network / test setup. This could result in significant time and cost savings.

We believe that the analysis of collected data should be expanded to include an examination of call failures broken down by originating exchange, time of day and type of failure. In the event that correlations in the failures are found, fur-

their investigations, as appropriate, should be undertaken.

2.4 Acceptability of Telecom Australia Document G.001

"The acceptability of Telecom's explanatory document "Service Verification Tests for Telecom's PSTN" as a user friendly and accurate description of the test purpose and regime".

We believe that the document is, overall, well-written and provides an adequate and simple description of the test procedure and data analysis. However, the discussion of demonstration tests (including pass / fail criteria) appears out of place in this document and should be removed altogether.

Some further minor changes, as noted below, would help to clarify the document.

Section 1: (a) The purpose of the testing is to determine whether satisfactory service is being delivered to a customer at the time the tests are performed. These tests serve as an integral part of Telecom Australia's Customer Fault Management Procedures, an on-going process. References to Coopers and Lybrand's "Review of Telecom Australia's Difficult Network Fault Policies and Procedures" and AUSTEL's "The COT Cases" report confuse the issue as to the purpose of the tests. For example, the reader may wonder whether the tests are to applied only as part of COT case resolution. This paragraph could be removed without loss of information to the reader.

(b) Presumably Paragraphs 4 and 5 will be removed when the document becomes stable.

Section 2:

This section states that the demonstrations described in Section 7 are not part of the verification test procedure. As such, Section 7, together with this reference should be removed from the document as its presence can be confusing to readers not familiar with the overall details of testing and data analysis.

Sections 3, 4 and 5: No comment.

Section 6: (a) If the target audience for this document includes customers whose service needs to be tested, the test details provided in Section 6.1 are overly in-depth for the average reader. We suggest a simple description of what the test is attempting to verify would be more appropriate in this case. For example, 6.1.2 could be replaced by something in the spirit of:

"A test will be performed to ensure that there is sufficient voltage applied to an incoming line to ring three phones when an incoming call arrives".

Details of the tests would be documented in the Service Verification Test Work Instructions or similar.

(b) Section 6.3 is reasonably clearly written although, as noted earlier, the test cases are not truly independent. Obviously the text will need to be modified if changes are made to the analysis of the data in accordance with recommendations made earlier.

(c) For the Ring Test (Section 6.3.3) some indication of what is considered a significant sample of test calls should be given.

Section 7: As mentioned earlier, we believe this section should be removed from the document. If it is not, the subsections marked "Desired Outcome" should be removed as the intent of the demonstration cannot be to verify the call delivery performance to the customer given the sample size. Such "Desired Outcomes" are confusing and, potentially, misleading to the customer (in terms of either too many calls failing or reading too much into cases in which all calls succeed).

3. COMMENTS OUTSIDE SCOPE OF CONSULTANCY BRIEF

This section provides discussion / findings arising from investigations associated with the consultancy, but outside the normal scope of the brief.

3.1 Service Verification Tests for Other Services

As specifically stated in document G.001, the service verification tests are to employed only as a test of "... operation of a fixed terrestrial analogue voice ring-in / loop out connection within Telecom's own Public Switched Telephone Network and connected to a standard exchange either directly or via a Pair Gain System." It is conceivable that the equivalent of difficult network faults may arise in the context of other services, for example, ISDN, high speed packet or mobile services. Service Verification Tests do not exist for such services at this time. In addition, the current set of tests focus on incoming calls to the customer line; tests for outgoing problems may also be necessary.

In terms of Customer Fault Management Procedures, it may be worth investigating the proactive creation and standardisation of tests covering difficult network faults for services such as ISDN or mobile.

The experience gained through the creation of tests associated with G.001 could be exploited to put in place a comprehensive plan in advance of any potential difficult network faults for other services.

3.2 Service Verification Tests for Other Network / Service Deliverers

Telecom Australia is clearly the author and owner of the tests / testing procedures associated with the Service Verification Tests. Just as other services may require similar procedures to be put in place, other network / service deliverers may also require procedures such as these for dealing with difficult network faults. It would appear inappropriate if Telecom Australia's intellectual property in this area were simply made public domain. The independent creation of such a set of tests may necessary to provide an equitable solution.

In terms of dispute resolution, it may be worth investigating whether AUSTEL needs to play a role as author of a set of generic tests for service verification which can be applied to all network / service deliverers. Such tests may need to be created for a variety of services (such as ISDN or mobile).

The creation of such tests would allow for uniform standards to be applied across the industry rather than in a piecemeal fashion to individual deliverers. It would also be a proactive step in handling potential future disputes.

3.3 Multiple Service Deliverer Environments

The service verification tests described in G.001 focus on incoming calls to the affected Telecom Australia customers. Such calls can, of course, be originated from people or businesses subscribing to other service deliverers, in particular Optus at the current time.

In the near future it may occur that 20% of long distance service between Sydney and Melbourne will be carried by Optus, with the rest carried, in the main, by Telecom Australia. The compilation of customer calling profiles is then complicated by the fact that the called party (the complaining customer) is probably unaware of the service deliverers used by their callers. To mimic the level of service perceived by the customer, it would then be necessary to send calls through both the Telecom Australia *and* Optus networks. As more service deliverers enter the arena, such considerations become even more complex.

It is important to note that this would then create situations in which testing regimes effectively provide a measure of delivered service of each network through which test calls are sent. Such information would may be proprietary and hence safeguards would need to be in

place to protect the interests of the various participants. This could include, for instance, the employment of independent testing and data analysis facilities.

It may be worth investigating whether service verification test calls should be originated in each service deliverers network, terminating on (or near) the difficult network fault customers line. Such investigations should include, but not be limited to, provisions that may have to be made for allowing test calls to be sent through another service deliverer's network.

We note that there is some synergy here with the suggestion that AUSTEL investigate the need for an independently created, generic set of verification tests that can be applied across all service deliverers.

REFERENCES

[1] Telecom Australia, G.001, *Service Verification Tests for Telecom's PSTN*, Issue Interim 27th September, 1994.

[2] CCITT Recommendation H.428, *Connection Retention*, 10/92

[3] CCITT Recommendation E.721, *Network Grade of Service Parameters and Target Values for Circuit-Switched Services in the Evolving ISDN*, 1991

[4] ITU-T Recommendation Q.543, *Digital Exchange Performance Objectives*, 3/93.

[5] Swedish Telecommunications Administration, *Accessibility and quality on the national network, 1st quarter of 1991.*

[6] AUSTEL, *End-to-End Network Performance*, Draft Technical Standard for Comment, December 5, 1994.

APPENDIX A: Example application of proposed alternative statistical test

Suppose 500 test calls are made. As stated in Telecom Australia's General Information Paper, the pass criteria for their statistical test is that at least 465 (93%) of call attempts be successfully delivered.

Suppose 470 calls are successfully delivered. Thus, the test passes the Telecom Australia's test criteria.

For the alternative test proposed,

Step 1: k = 470, n = 500.

Step 2: p = k / n = 470 / 500 = 0.94

Step 3: z = (p - 0.95) / sqrt (p * (1 - p) / n) = (0.94 - 0.95) / sqrt (0.94 * (1-0.94) / 500)

= -0.01 / sqrt (0.0001128) = -0.01 / 0.01062 = -0.9416

Step 4: NORMSDIST(-0.9416) = 0.1736. Thus, the probability that the call delivery performance exceeds 95% is about 17%.

Step 5: If we wish to be 90% sure that the call delivery performance is better than 95%, the test fails (because 0.1736 is less than 0.9).

Suppose, instead, that 485 calls are successfully delivered. Then

Step 1: k = 485, n = 500.

Step 2: p = k / n = 485 / 500 = 0.97

Step 3: z = (p - 0.95) / sqrt (p * (1 - p) / n) = (0.97 - 0.95) / sqrt (0.97 * (1-0.97) / 500)

= 0.02 / sqrt (0.0000582) = 0.02 / 0.007629 = 2.622

Step 4: NORMSDIST(2.622) = 0.9956. Thus, the probability that the call delivery performance exceeds 95% is about 99.56%.

Step 5: If we wish to be 90% sure that the call delivery performance is better than 95%, the test passes (because 0.9956 is greater than 0.9).

APPENDIX B: Detailed Analysis of Telecom Australia Service Verification Test Data

At AUSTEL's request, Telstra has provided the raw data on call delivery performance from the Service Verification Tests performed to date. Table 1 provides a breakdown of the failed calls according to cause code for each customer. Calls failing due to problems with test equipment have been removed from the data set. The code NWL represents network congestion, and WNO represents that an undefined tone was detected and is registered as a failed call attempt. Data in cases in which the customer had two lines tested are shown by # / #.

Table 1: Call failures broken down by cause code (Line 1 / Line 2)

Customer	NWL	WNO	Total calls
Bova	1		1161
Dawson	1 / 0	0 / 1	626 / 502
Love	2		522
Main	1	3	508
Smith	0 / 1		608 / 617
Trzcionka	3		1046
Turner	0 / 3 (A)	0 / 1	531 / 532

Breaking down the data in this fashion allows us to see whether there are common causes for the call failures. In addition, we examined the data to determine the originating nodes for the failed calls.

The marked entry is of interest when analyzed in this fashion as all three NWL calls originated at the BATMAN 2 exchange from a total of 92 generated there. While such a result might be expected from any one exchange (that is, one case of approximately 3% congestion), had, for instance, 10 more calls failed at BATMAN 2 the overall statistical pass /fail criteria would still have been passed and no further investigation taken place. This would be the case even though, in this hypothetical example, 14% of calls from BATMAN 2 had failed.

While some unusual results might be expected given the statistical nature of the testing, more detailed analysis should be performed to determine whether or not such situations occur. In the event that they do occur, further testing should be performed to determine

whether the observations are truly random in nature or are caused by some underlying fault in either the originating exchange, connecting network or test equipment during that phase of testing.

APPENDIX B: Consultant's curriculum vitae

MICHAEL PETER RUMSEWICZ, Ph.D.

Employer: CITRI, 723 Swanston St, Carlton, Victoria, 3053

Position: Senior Research Fellow

Telephone: +61 3 282-2473

Email: mpr@citri.edu.au

Educational Background: Ph.D. in Applied Mathematics from the University of Adelaide (1989)

EMPLOYMENT EXPERIENCE

July 1994 - Present — CITRI, Carlton, Victoria

Senior Research Fellow

RESEARCH AREAS

Overload control and performance of Advanced Intelligent Networks and Signalling System Number 7.

Performance analysis of the proposed Telecommunications Information Networking Architecture.

July 1988 - June 1994 — Bell Communications Research, Red Bank, NJ.

Member of Network Services Performance and Control group

SIGNALING SYSTEM NUMBER 7 (SS7)

Member of the team formed to analyze the cause of the SS7 Common Channel Signaling Network (CCSN) outages in California and Washington, D.C. in June/July, 1991. Specifically, performed design analysis of equipment involved and determined root cause of failures and mechanism by which the failure spread to other points in the network. Design change recommendations were made and subsequently implemented and demonstrated to significantly improve system and network robustness.

Member of the team formed after the outages that studied the contributions of SS7 protocol and network element standards to the problems that arose.

Introduced the concept of examining service completion rather than message throughput in the analysis of SS7 CCSNs, in the presence of application recovery procedures and realistic customer behavior. This analysis demonstrated that message throughput can be an extremely misleading measure of service (from the subscriber point of view) and illustrated the need for feedback flow control mechanisms during periods of Signalling Transfer Point (STP) processor (as opposed to link) overload.

Performed technical analysis of STP products, including both theoretical studies and testing. This involved analysis of software design algorithms for message processing, processing of network management traffic, overload controls, performance and capacity.

TELSTRA SERVICE DATABASE PLATFORM

Member of the team hired by Telstra (April - June 1994) to analyze the design of the Service DataBase (SDB) One3 platform. Specific responsibilities in the areas of system robustness and performance, including making recommendations on network controls that would improve the reliability of the service during periods of congestion.

ADVANCED INTELLIGENT NETWORK (AIN)

Identified performance issues in providing AIN, including switch and signaling network capacity impacts, delay constraints, overload control (from both the switch and signaling network viewpoints) and grade of service objectives.

Analyzed the switch capacity impact of providing a variety of AIN services.

Identified performance issues in which multiple services compete for the same network resources. These concerns highlight the need for well defined congestion control objectives so that essential services may be protected while maintaining good service levels for lower priority traffic.

PERSONAL COMMUNICATIONS SERVICES (PCS)

Identified performance issues in providing PCS, including switch and signaling network capacity impacts, delay constraints, overload control (from both the switch and signaling network viewpoints) and grade of service objectives.

Analyzed the switch capacity impact of providing PCS service for a specific switching system, demonstrating the extremely high processing cost of a PCS call relative to non-PCS calls. This work led directly to the inclusion of alternative architectures in Bellcore's Network and Operations Plan that limit the switch capacity impact of providing PCS.

CIRCUIT SWITCHING SYSTEMS

Analyzed the performance of various circuit switching systems. This included capacity estimation, delay performance modeling and overload control effectiveness. The work required a variety of approaches, from field testing, to mathematical modeling to simulation.

Developed models to study the effects of new service offerings on circuit switch capacity, taking into account customer characteristics.

MISCELLANEOUS

Analyzed the performance, capacity and overload characteristics of voice messaging systems. Identified problem areas in design and recommended appropriate changes which were subsequently incorporated into the systems.

Developed algorithms for determining operator team sizes when directory assistance and toll services are combined under various operating regimes. Involved in the implementation of these algorithms for use by field personnel.

Telecom AUSTRALIA

Customer Response Unit
Commercial & Consumer

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Telephone (03) 634 2877
Facsimile (03) 632 3235

23 December 1994

Mr Graham Schorer
Golden Transport Agency and
Associated Entities
493-495 Queensbury Street
NORTH MELBOURNE VIC 3051

Dear Sir

Proposed Telecom Verification Testing - Your reference 1431

I refer to your letter of 15 December (ref 1431) addressed to Mr Black. I note your comments.

I advise that Telecom is unable to make comments specifically relating to Gary Dawson's telephone service. However, in a general sense I can advise that the Bell Canada equipment utilised in the testing was a prototype. Some tests were carried out but, because Bell Canada and Telecom were not satisfied with the performance of the equipment in all respects it was decided not to continue with the tests. There are ongoing discussions with Bell Canada in relation to future possible testing.

As indicated previously, Telecom wishes to carry out Service Verification Testing on your PSTN and ISDN services. Your co-operation is sought. To properly explain the testing to you I suggest a meeting at Telecom offices in the week beginning 10 January 1995 to discuss the arrangements. The staff involved will include Mr Peter Gamble, together with an ISDN expert from Mr Roger Bamber's staff. We believe that Mr Peter Gamble would be the most appropriate person to accompany the ISDN specialist at the meeting. We have looked at options as to who is available for the meeting and believe that for technical and historical reasons Mr Gamble is the most suitable. He has expertise in Service Verification Testing, and is a highly respected engineer who understands your telephone service. Consequently he will be able to provide proper background for the ISDN specialist.

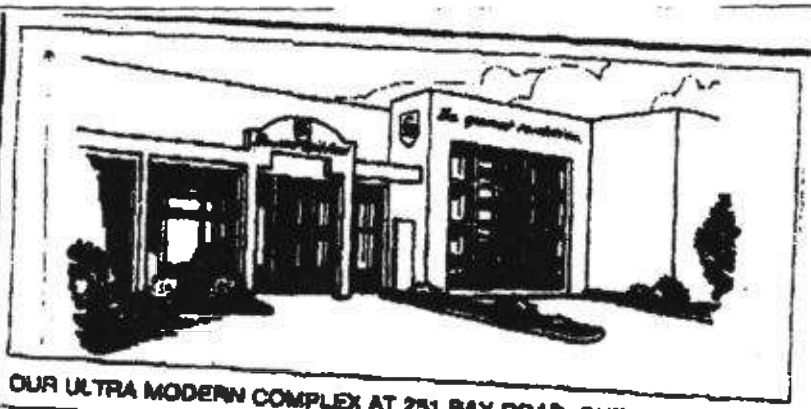
We look forward to hearing from you.

Yours faithfully

Ted Benjamin
National Manager
Customer Response Unit

tb-gb004.doc

29A



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TO: MR BENJAMIN FROM: MR TURNER. DATE: 27-10-94 PAGES: 2

WITHOUT PREJUDICE

Deed of Release and Indemnity. I will not tolerate your bullying standover tactics any longer. Your letter commenting on Mr Graham Schorer is a threat by Telecom and requires an immediate apology. I have never discussed the terms of settlement with any other COT or DNF customer. They are all aware that Telecom reached A settlement and that I was unhappy about being stood over and intimidated by Telecom. Any conclusions drawn are not my concern. No details have been discussed with anyone outside the people in the room on the day of settlement, my Bank Manager, my Accountant, and Legal Advisers.
I DEMAND AN APOLOGY BY RETURN FAX.

Service Verification Testing: You keep referring to the "Deed". You should have thought of that and tabled the G001 documents to the Arbitrator instead of keeping them secret. Don't give me any rubbish about agreement with Austel as they would have agreed to Telecom's recommendations. I was NOT consulted over the issue and any "in club" agreements would be designed to enhance Telecom's position. I complained about faulty cables for years. I complained about faults for years. I complained about service for years. Telecom then used abhorrent standover tactics which frightened me beyond belief to settle. As soon as that settlement took place Telecom came and replaced old water damaged cables in my street, and then you have the gall to want do tests AFTER you have probably fixed some of the faults.

Redialling Mobile Numbers: If I did not know better, I would suggest that your answers are on a parallel with those of a stupid uneducated child. Telecom have a great deal more expertise than I to determine Mobile dropouts and it is printed on your own accounts. As I suggested, you work it out, as you are more knowledgeable than I in this field.

In relation to fault reports, please try and get it into your head that I do not have the time to do your work for you. Cheryl Prins insisted I report direct to her. Now it's a your turn.

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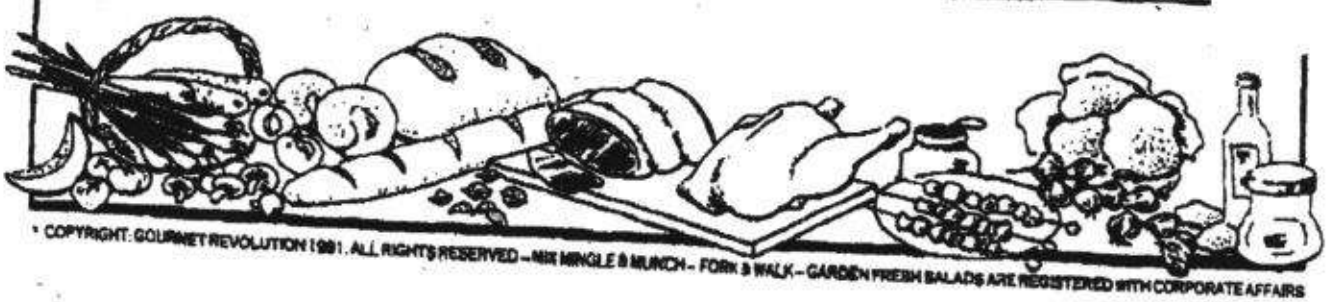

In regard to the unsupplied documents, you are telling a pack of LIES. Your twisting of the facts is to be expected. Your stupid statement regarding what Rod Pollock was supposed to have said is absolute rubbish. Get your fingers out and start counting Mr Benjamin. Mr Black's letter promised the documents within FOUR weeks. That's the 29th July Mr Benjamin. You see the 29th is FOUR weeks after the 1st. Don't just believe me, check your own calendar.

The dispute was resolved on your terms SIX DAYS after 29th July. It is stupidly to suggest your points in par. 3 are factual. When will anyone at Telecom be honest enough to admit they are totally **WRONG.** You included.

Your narrow minded, one track approach to this affair leaves me cold.

I am now convinced that all of you at Telecom have a major mental problem which needs to be addressed very quickly. But that's just my opinion.

DONT FORGET THE APOLOGY RE MR SCHORER. Your letter clearly implies that I have disclosed confidential information which offends me greatly. If you do not apologise by return fax, you will be force me to take action against you personally for Defamation of Character by innuendo, which I might add will give me a great deal of satisfaction. And just for the record, I want a proper apology which admits you are totally in the wrong, and not a half baked squirming Telecom standard answer which is full of the usual misleading statements that have been made in the past.

Colin Turner.

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GOLDEN
Transport Agency

To:	Mr Steve Black Group General Manager - Customer Affairs	Date:	10 January 1995
		Our Ref:	1494
Company:	Telecom	Fax No:	632 3241
From:	Mr Graham Schorer	Total Pages (Incl. Header)	8

MAILED: YES ( ) NO ( )

Dear Mr Black,

In response to Telecom's correspondence dated 23 December 1994, received at 12.49 pm:

RE: PROPOSED TELECOM VERIFICATION TESTING - IN RESPONSE TO GOLDEN'S CORRESPONDENCE DATED 15 DECEMBER 1994 REF 1431

I wish to draw your attention to the following correspondence between Golden and Telecom and meetings that took place and correspondence arising out of those meetings.

RE: TELECOM'S CORRESPONDENCE DATED 13 OCTOBER 1994

RE: MR RUMBLE'S CORRESPONDENCE DATED 17 AUGUST 1994

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GOLDEN
Transport Agency

RE: GOLDEN'S CORRESPONDENCE DATED 20 AUGUST 1994 REF 1144 REGARDING MEETING HELD THURSDAY 11 AUGUST 1994 BETWEEN MR PETER GAMBLE, MR ROD POLLOCK FROM TELECOM AND MR HARRY THORPE, GRAHAM SCHORER FROM GOLDEN TO DISCUSS AND RESOLVE GOLDEN'S CURRENT ISDN SERVICE DIFFICULTIES, PROBLEMS AND FAULTS INCLUDING THE MANNER IN WHICH TELECOM INVESTIGATE AND REPORT UPON INTERNALLY WITHIN TELECOM GOLDEN'S ISDN FAULT REPORTS WHICH CONTRADICT TELECOM'S FINDINGS DELIVERED BACK TO GOLDEN

RE: MEETING WITH TELECOM ON 26 OCTOBER 1994

RE: GOLDEN'S CORRESPONDENCE TO THE CHAIRMAN OF TELSTRA DATED 29 AUGUST 1994 REF 1156

RE: GOLDEN'S CORRESPONDENCE TO THE CHAIRMAN OF TELSTRA DATED 7 SEPTEMBER 1994 REF 1183

RE: GOLDEN'S CORRESPONDENCE DATED 19 SEPTEMBER 1994 REF 1212

RE: GOLDEN'S CORRESPONDENCE DATED 19 SEPTEMBER 1994 REF 1211

RE: GOLDEN'S CORRESPONDENCE DATED 10 OCTOBER 1994 REF 1261, IN PARTICULAR PAGE 4, POINT 10

30A

GOLDEN
Transport Agency

RE: TELECOM'S CORRESPONDENCE DATED 22 NOVEMBER 1994 RE PSTN AND ISDN TESTING

RE: GOLDEN'S CORRESPONDENCE DATED 29 NOVEMBER 1994 REF 1362, IN PARTICULAR PAGES 6 AND 7 REGARDING PETER GAMBLE'S INVOLVEMENT

RE: GOLDEN'S CORRESPONDENCE DATED 6 DECEMBER 1994 REF 1406

RE: GOLDEN'S CORRESPONDENCE DATED 6 DECEMBER 1994 REF 1405

RE: GOLDEN'S CORRESPONDENCE DATED 15 DECEMBER 1994 REF 1431

Plus the numerous telephone conversations I have had with you regarding the inappropriate manner of Telecom investigating my telephone service difficulties, problems and faults reported to Telecom and the conduct and continued involvement of Mr Peter Gamble regarding the above plus Mr Gamble's involvement of FOI matters still not correctly addressed (after Telecom have completed their voluntary internal review).

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GOLDEN
Transport Agency

I stated to you I was in a position to have an opinion on Mr Gamble's conduct towards my business telephone service difficulties, problems and faults and the supply of Telecom evidence and documents of same.

I drew to your attention that (now that I have received further documents under FOI), I now have in my possession documentary evidence of Mr Gamble's long term involvement in my telephone service difficulties, problems and faults at a very high level within Telecom's management, which included Mr Gamble's personal involvement in having Telecom concealing vital evidence of Telecom's knowledge of and the documentary evidence of fact that there were major performance problems within the North Melbourne exchange from me during a Federal Court action.

Mr Gamble's participation with other like minded people within Telecom were successful in achieving this secret agenda of Telecom wrongfully withholding documentation under a Federal Court proceeding as part of a Federal Court action.

I am of the opinion, based upon the information I have read contained in the internal Telecom documents, as a result of partial success of my FOI applications, that there was a group of Telecom people who were wrongly conspiring to unlawfully withhold evidence which I was entitled to receive had Telecom correctly conformed with the Federal Court proceedings.

There is documentary evidence that Telecom had received two independent legal opinions regarding the withholding of this type of documentary evidence, which stated that Telecom had no legal right to withhold this type of evidence Telecom were attempting to withhold.

3.01

Transport Agency

I also draw your attention to the contents of our telephone conversations late last week, Friday, 6 January 1995 and Monday, 9 January 1995, in particular, to Mr Gamble's incorrect assertions which is resulting in Telecom still incorrectly withholding information after the completion of the Telecom voluntary internal review.

I now wish to refer to our telephone conversation of Tuesday, 10 January 1995, regarding Telecom's 23 December 1994 correspondence re a proposed meeting on 10 January 1995.

Mr Black, again this morning, I confirmed I am not interested in any verification testing by Telecom until such time as Telecom correctly address the manner in which they investigate my telephone service difficulties, problems and faults reported to Telecom.

Again, I reiterated, I am not interested in having Mr Gamble involved in any of my telephone service difficulties, problems and faults.

I acknowledge that you stated that Mr Gamble was a very competent engineer.

I stated to you I was not challenging one way or the other Mr Gamble's engineering expertise as I was not in a position to have an opinion on Mr Gamble's expertise.

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GOLDEN
Transport Agency

There is even documentary evidence of one Telecom management person communicated to Telecom that the information/evidence that Telecom were attempting and ultimately did conceal and/or withhold, was information that would have to be made available under FOI Act.

As Mr Gamble was one of those people who created reasons, including "Telecom logic", plus advocated to Telecom Corporate Legal Department, the withholding of evidentiary material to do with my telephone service difficulties, problems and faults, I believe it is inappropriate for Telecom to even suggest that Mr Gamble should remain at any level involved in my telephone service difficulties, problems and faults or the Arbitration procedure Telecom and I are responding to.

I believe there is a distinct possibility that Mr Gamble's conduct, in concert with other Telecom persons, have wrongly intervened in the due process of the law and may even be by their involvement and conduct along with Telecom be in contempt of the Federal Court Act of Conduct.

On my now becoming aware of the conduct and actions of Mr Gamble's involvement to conceal vital information and evidence of Telecom's irregularities within the North Melbourne exchange and sections of the Telecom network during my Federal Court proceedings, the very presence of Mr Gamble's involvement with all but two meetings between Telecom and myself regarding my FOI applications to sought out Telecom's wrongful withholding of information and documentation, is just unbelievable and intolerable.

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I am of the opinion, based upon the evidence I have in my possession, Telecom are required, in accordance with Telecom's publicly stated objectives that Telecom at all times will conduct themselves as a model Australian corporate citizen, to withdraw Mr Gamble from any matters associated with my telephone service difficulties, problems and faults, including being involved or associated on any level, technical or otherwise, with the Arbitration process.

I believe the evidence I hold is serious enough to justify an inquiry, whether it be a Telecom impartial internal inquiry or by outside intervention, to determine whether there has been a group of people within Telecom who have wrongly conspired to convert the course of justice and the law of the land regarding my telephone service difficulties, problems and faults.

Mr Black, as I have brought this matter to your attention many times, and still there is no rightful, prompt decision from Telecom to immediately withdraw Mr Gamble of all matters associated with Graham Schorer, Other Associated Entities, Companies, etc.

I believe, out of self interest, I am placed in the position of having to draw to the Telstra Board Members' attention, the conduct of a certain group of senior Telecom personnel wrongfully concealing and/or withholding correctly sought and applied for evidentiary material, therefore I am sending a copy of this correspondence to Mr David Hoare, Chairman of the Telstra Board, to give Telstra Board the opportunity to correctly respond on behalf of Telecom Australia to such a serious matter that threatens the due process of natural justice that Telecom have publicly stated that I, with other C.o.T. members, will receive as the overall objective of the Fast Track Arbitration Procedure

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Transport Agency

Mr Black, you may choose to directly respond to this letter, however, I am requiring Mr Hoare to personally address this matter as a matter of urgency.

Yours respectfully,

Graham Schorer

3.0A