

**Stockdale, David**

**From:** [REDACTED]  
**To:** [REDACTED]  
**Subject:** RE: Further to my original message.  
**Date:** 19 August 1993 9:23

David,

Incidences of LI devices held in state busy are quite common in both mainstream and rural and require Test System procedure to release them.

Often faults are reported to NSS Field support involving locked up devices e.g. SULTD/SLCT or BT in which the involvement of an LI device may not be evident. Call traces do not always reflect the complete picture. RE individuals, for example, may have multiple users. Interim Operating Procedures address these lockups, with recommend call traces, having particular reference to look for PD individuals which may incur ongoing metering after the termination of a call.

→ Lockups not deemed to be affecting customer services are not given priority over those that do.

When lockups of this nature are subsequently cleared, devices not evident in call tracings may be cleared as a matter of course.

Lockups are not automatically cleared by the system if they are under external control. E.g. requiring a clear forward signal from a supervisory device as you described in the case of SR-B or a locked up junction relayset holding a BT device. If other software devices (e.g. CJ, CL, RE, PD, CAW, MCT) are involved, they too will not be released.

This is a possible scenario under which LI devices may be held in state busy. I'm sure others exist and as CAW penetrates further into the Network (particularly in AXE Rural), the incidence is likely to increase. Such lockups have been addressed with Ericsson Australia but solutions are slow in coming due to the difficulty in trapping them as they occur. We don't have the luxury of LI audit or ROSI as is the case with /66 and we are not likely to.

Regards

[REDACTED]  
For manager NSS Central West

[REDACTED]  
Subject: Further to my original message.  
Date: Monday, 16 August 1993 5:36PM  
Priority: High

I have been discussing the sequence of events on this call with a colleague and we have realised the probable scenario for this odd call sequence.

The SR - B at Horsnam will be set for Last Party Release and will not therefore provide a clear forward should the A party hang up. When the B party hangs up the call, the charging point exchange does not pass the B party clear back to the originating exchange immediately due to the 90 second time supervision period. Even though the A party hangs up after this point, the clear forward does not occur due to the Last Party Release condition at the SR-B, therefore the B party will be held in the "awaiting time supervision expiration" phase for 90 seconds. Once the time supervision period expires a force release will be generated from the charge point exchange and the call will be cleared down.

This answers the oddity observed during testing, but my original question still stands: Do you know of any event or sequence of events in a 104 which would result in a call be held or a B party LI be held Busy for an extended period of time (e.g. > 120 minutes)?

I look forward to discussing this with you further, and apologise for not realising the correct sequence of events for the test call before I sent you the original mail message.

10A

Dwyer, Kevin

From: Dwyer, Kevin  
To: Gamble, Peter  
Cc: Humrich, Alan  
Subject: RE: Software query  
Date: Thursday, 24 February 1994 11:07AM

Peter,

You are quite correct in your thought that the anecdotal reference applies more to AXE than ARE-11. 'Lockups' are generally well-known as a problem in AXE exchanges, not only in Australia but in overseas countries as well. A number of upgrades have included software which would reduce the incidence of lockups.

There is nothing to add to my previous notes on ARE-11 exchanges concerning claims of 'incompatibility' problems.

Regarding the problems in AXE :

In the NASM database ( which has a record of faults reported from AXE exchanges, dating from 1958 when it was introduced, although it was not in widespread use till 1992/3) there are 105 reports of Lockups affecting customers. Two of these reports refer to PBX services, but there are no reports referring specifically to 'Commander' services.

The TR database (Trouble Report system controlled by TNE to monitor problems reported, passed to Ericsson, and fixed by Ericsson) which was used prior to NASM for all records of faults does show lockups on AXE equipment which would have affected customers and PBX functions, but does not provide any realistic count of problem occurrences. It does not record any lockups specifically related to 'Commander' systems.

As a general comment, if the first line was locked up and calls allowed to flow on to the other lines, then no calls would be lost until all lines were busy, so I fail to see how an estimate that "call loss could be up to 15%" could be made or repeated with any degree of integrity.

There is also another NSIS database which would contain records of AXE faults which I have not checked yet but which I believe has records of large numbers of lockup instances affecting individual customers lines. I am reluctant to initiate a search of the NSIS database at present as the faults recorded therein would have no bearing on the CoT services in question, unless the fault occurred on their individual line.

Kevin.

From: Gamble, Peter  
To: Humrich, Alan; Dwyer, Kevin  
Cc: Wagland, Fran  
Subject: Software query  
Date: Thursday, 17 February 1994 7:04PM

Fran, I am not sure where Alan is - please pass to him if he is on the 24th floor.

A13980

Kevin, Alan

Kevin, I did not use your comments on software (COMPATBL) at this time as they didn't seem relevant to the additional information that Austel have provided. John MacMahon writes as follows:

"I have references to Ericssons having considered a lock up fault which was occurring where the first line would be locked out and this would allow calls to flow to the other lines. It was said to arise through the

10B

incompatibility of exchange software and Telecom's equipment. Ericssons apparently provided a solution and advised that particular Commander systems were most vulnerable. Ericssons are said to have suggested that call loss could be up to 15%.

Any thoughts on this new line ? It sounds a bit like AXE rather than ARE to me !

Peter.

A13981

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**SENATE ESTIMATES COMMITTEE A  
RESPONSES BY AUSTEL TO QUESTIONS TAKEN ON NOTICE  
(Reference to page numbers are references to page numbers in the  
Senate Hansard of the proceedings of Estimate Committee 'A' on 25  
February 1994)**

**11. AUSTEL'S RESPONSE TO A TELECOM MINUTE OF 2 JULY 1992 (page  
A133)**

Senator Alston requested AUSTEL to indicate what action it has taken in relation to a Telecom minute dated 2 July 1992 which states, amongst other things -

*"Our local technicians believe that Mr Smith is correct in raising complaints about incoming callers to his number receiving a Recorded Voice Announcement saying that the number is disconnected. They believe that it is a problem that is occurring in increasing numbers as more and more customers are connected to AXE."*

By letter dated 2 March 1994, AUSTEL sought from Telecom an explanation of the opinion expressed in Telecom's minute of 2 July 1992 as quoted by Senator Alston.

**AUSTEL'S DIRECTION TO TELECOM IN RELATION TO THE COT CASES  
(page A133)**

At page A133 of the Senate Hansard of the Estimate Committee 'A's proceedings of 25 February 1994 the Chairman of AUSTEL indicated that AUSTEL's direction to Telecom may have been published in AUSTEL's 1992-93 Annual Report.

The direction referred to was made on 12 August 1993 and will be published in AUSTEL's 1993-94 Annual Report.

*wh  
provide  
letter?*

*Joullie*

*- 5393 requires direction to be included in annual report but that was until 93/94  
- is attached A (the direction already on the public record or will the 1993/94 be its first public appearance.  
Bony*

File HA-AC 4/1/18 Subject GRADE OF SERVICE COMPLAINT  
MR ALAN SMITH 055-26 7267

000571

Phone 055-73 0200 From MARK ROSS  
CUSTOMER SERVICES MANAGER  
HAMILTON - VIC/TAS REGION

To CHRIS DOODY - NETWORK OPERATIONS  
GRAEME DAVIES - FAULT BUREAU VIC/TAS

Chris/Graeme

Please find enclosed documentation in regard to a Grade of Service Complaint from Mr Alan Smith of Cape Bridgewater.

Our local technicians believe that Mr Smith is correct in raising complaints about incoming callers to his number receiving a Recorded Voice Announcement saying that the number is disconnected.

They believe that it is a problem that is occurring in increasing numbers as more and more customers are connected to AXE.

Can you please investigate this problem and provide me with a written reply so as I can forward this to Mr Smith and our local Federal Member, before what is already a difficult situation, gets right out of hand.

*Mark Ross*  
Mark Ross  
Customer Services Manager - Hamilton

*2/7/92*

mr1981b3

*Add to  
Chronology.*

*10c*

Dwyer, Kevin

From: ~~McMahon, Peter~~  
To: ~~McMahon, Peter; Dwyer, Kevin~~  
Subject: ~~McMahon - Valley~~  
Date: Wednesday, 22 June 1994 11:57AM

You may recall that we were trying to find a reference in our software problem data bases that matched a query from John MacMahon at AUSTEL. We were looking, as I recall for a problem that might have caused a compatibility problem with CPE.

We first searched the ARE data base and then the AXE data base with no luck. AUSTEL accused us of looking with too narrow a search criteria, but would not give us any real details to go on.

The "Telecommunications Survey Analysis and Report" recently lodged by Ann Garms provides the following handwritten file note:

"Ref: 1993/16

May 1993

Rob Brooker of ericsson Australia advised that Telecom had a problem for a long time with an incapability problem with computer software in their exchanges and telephone equipment. The call loss resulted in a 50% loss.

Took 1st of all along time to identify. After some time Ericsson were asked to solve the problem. Took them 9 months to identify. Rob Brooker advised that this was substantially delayed because Telecom did not place this problem in the top 10 faults."

Kevin, does this shed any more light on it ?

If not, can I suggest that you contact Rob Brooker directly and get his side of the story. As we will want to present this as part of our rebuttal of Ann Garms claim, we will probably need to eventually get a statement in writing.

Peter.

*Holdoff calling Rob Brooker. He gave some time ago to Alan Hamrick, & Alan will check details of what he was on about at that time.  
The 'top 10' reference implies AXE, while GARMS problems were ARE-related and that was the implication in the request from AUSTEL for us to investigate.  
Insert further things from A.H.*

*For coming, with Notes & references from Ericsson  
Copy of questions from GARMS to BROOKER  
response .. BROOKER to GARMS.*

A13725

AXE software performance since December 1991

After nine months of operating as an AXE cell, it is timely to look at the performance of the AXE software. Listed are figures for each of the nodes we maintain.

LCHF /17	System initiated restarts	9.
	Manual restarts after software faults	7.
	Other restarts (CNA/ISU)	6.
SPNF /17	System initiated restarts	9.
	Manual restarts after software faults	18.
	Other restarts (CNA/ISU)	4.
LCHG /36	System initiated restarts	3.
	Manual restarts after software faults	4.
	Other restarts (CNA/ISU)	3.

These numbers indicate to me the poor standard of Ericsson software. For as long as we have had AXE we have been having software lockups and almost every CNA/ISU that comes along promises a solution to this problem but they still occur.

In the last while we have had a return to the bad old days with software upgrades causing disasters. SPNF was loaded with CNA16 and had to be reverted back because of a software fault in block IT3 where an Ericsson patch had replaced a Telecom patch. Attempts to load CNA16 and some corrections into LCHF were an absolute disaster. The first attempt was foiled after five restarts and a reload back to the previous CNA between 5.30 am and 6.47 am. The second attempt resulted in a small restart at 1107 and a large at 1112 followed with a large at 1258 to revert back when the previous CNA was loaded into the standby side and a side switch.

*Incomplete*

L23848

M02464

*10E*



Faint, illegible text, possibly bleed-through from the reverse side of the page.



## EXCLUSIONS

In addition to those customers who would be excluded under normal TELCATS provisions, such as of silent lines, corporate customers and customers interviewed by TELCATS recently the following phone numbers should be excluded from the survey:

### 03 area ✓

329 7355, 329 7255, 316 6666, 747 1111, 723 1221, ✓

### 07 area

252 8822, 252 8317, 252 8373, 257 1288, 852 1711, 852 1057 852 108, 257 1583, 252 1006, 252 8027, 252 7133, 252 7178, 252 8827, 252 8204, 252 8614, 252 8416, 252 8675, 252 8211, 252 893, 252 8715, 252 8608, 252 8417, 252 9033, 252 9411, 252 9601, 252 8976, 252 9459, 252 9551, 252 965, 252 9652, 252 9708, 252 985, 252 9852, 252 9903, 252 9833.

## TIMING

Sample will be provided on either Monday 6 or Tuesday 7 of September. Interviewing and reporting should take place as soon as possible after this time, with preliminary tables provided to Steve Paton of TELCATS as soon as they are available. A final report should then follow. As with other studies of this nature previously conducted, this study has a high profile and priority.

## OUTPUT REQUIRED

A summary of findings.

As written analysis of results concentrating on:

- \* perceptions of quality in each of the specified exchanges, detailing the factors that customers see as being a problem,
- \* a comparison of results between AXE and Non AXE customers.
- \* a comparison of results between the results of the specified exchanges and the results of the general Metropolitan AXE and ARE exchanges.

↓  
A complete breakdown of the questionnaire under the different exchange headings, and then AXE Customers, Non AXE Customers.

The above results should be bound, with appropriate title pages, etc.

"Confidential - For the information of Corporation Lawyers only." should be printed on every page.

A list of customers who are experiencing problems and who have agreed to follow-up. The list should contain the Customer's name, phone number and the problem(s) experienced.

This study is being managed by Stephen Paton for the Commercial Business Unit.

If any further details are required, please contact Stephen Paton on (03) 634 5503.

10F

R10710