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SL-1

# Traffic measurement

## Formats and output

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## Revision history

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This supplement is issued to provide information for Generic X11 with Supplementary Features, Group G (that is, Phase 7A).

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## About this document

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This supplement describes traffic data which is accumulated and reported in support of the Virtual Network Services (VNS) feature.

Additional commands are added to overlay program 2 which allow control of the Network Time Synchronization function.

The TFS004 Processor load output format has been changed to identify Line Load Control (LLC) and Digital Private Network Signaling System (DPNSS) information.

## Traffic measurement overview

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The following information is added at the end of the Time-of-day and date heading.

### **Time-of-day and date**

With the Network Time Synchronization feature equipped, a node will be able to obtain proper clock updates automatically from a Master node (clock) over the ISDN. (For further information, see 553-2921-100.)

## **System traffic measurement outputs**

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### **TFS004 Processor load**

The following format information is added to Figure 6 on two lines following (CR Overflow Peg).

**(LLC1 Denied Peg) (LLC2 Denied Peg) (LLC3 Denied Peg)**  
**(DPNSS Trk Input Buffer) (DPNSS Trk Output Buffer)**

## Customer network traffic measurement outputs

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Network traffic measurements are available at a Meridian SL-1 switch equipped with the Network Traffic (NTRF) feature. The measurements relate to the features described in the following documents

- *Basic Alternate Route Selection (BARS)* (553-2751-100)
- *Network Alternate Route Selection (NARS)* (553-2751-100)
- *Network queuing features* (553-2751-101)
- *Coordinated Dialing Plan (CDP)* (553-2751-102)
- *International ISDN PRA Product Description* (553-2901-101)

## TFN001 Routing measurements

Figure 1 was changed to add VNS information for 'Legend' 'e' and 'f'.

The following routing measurements are provided for each defined VNS route list.

### **Reuse Count of On Hold VNS Trunks**

This measurement identifies the total number of calls which successfully re-used an established VNS trunk on a given route (outgoing and incoming calls).

### **Total Time VNS Trunks Were Idle**

This measurement identifies the amount of time an established VNS trunk was available for re-use on a given route.

**Figure 1**  
**TFNO01 route list measurements**

<b>Format</b>									
System ID	TFN001								
Customer number									
RLST	xxx	aaaaa	bbbbbb	cccccc	dddddd	eeeeee	fffff		
	RT		ggggg	ggggg	ggggg	ggggg	ggggg	ggggg	ggggg
			ppppp	ppppp	ppppp	ppppp	ppppp	ppppp	ppppp
	OHQ	hhhhh	iiii	jjjjj					
	CBQ	kkkkk	lllll	mmmmm		nnnnn			
<b>Legend</b>									
aaaaa	route list requests								
bbbbbb	route list requests served without delay								
cccccc	expensive route acceptances								
dddddd	route list requests standard blocking								
eeeeee	reuse count of on hold VNS trunks								
fffff	total time VNS trunks were idle								
ggggg	route list entry usage count for each entry in the route list With X11 release 13 and later, the number of route list entries has increased from 8 to 32. As a result, there will be four rows of "ggggg."								
hhhhh	quantity of calls placed in the OHQ (Note)								
iiii	average time in OHQ (units of 0.1 second)								
jjjjj	quantity of cells abandoned from OHQ								
kkkkk	quantity of CBQ calls								
lllll	average time in CBQ (units of 0.1 second)								
mmmmm	quantity of CBQ offerings								
nnnnn	quantity of CBQ user cancellations								
ppppp	quantity of calls involving SL1TD on which alternate routing was performed during the call. With X11 release 13 and later, this number has increased to 32. As a result, there will be four rows of "ppppp."								
xxxxx	route list number								
— continued —									



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## Communicating with the system

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The following section is added for the Network Time Synchronization feature.

### Set network time synchronization parameters

A number of parameters can be adjusted for the Network Time Synchronization function.

To query the current node status:

TTSS

To set node status:

STSS *status* (MAST - master, SLAV - slave, STD - standard)

To query customer assigned to feature:

TTSC

To set customer assigned to feature:

STSC *customer number*

To query local virtual DN:

TLDN

To set local virtual DN:

SLDN *DN*

To query Master/Backup Time Sync Number:

TMDN

To set Master/Backup Time Sync Number (that is, set the Master DN):

SMDN *DN*

## 5-2 Communicating with the system

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To query time delta for the node:

TDEL

To set the time delta for the node:

SDEL *sign hour minute*

To query the requesting mode:

TMOD

To set the requesting mode:

SMOD *mode*

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## **Traffic measurement**

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