Configuring TSUs for a point to point voice and data connection between two routers and two PBXs

Introduction

This Technical Support Note describes how to configure an ADTRAN TSU for a typical voice and data connection between two sites.

NOTE: If you are using the TSU with a fractional T1 circuit or a Frame Relay circuit, you will need to adjust the number of channels to match what is being provided by telco. Also, if you being provided with a PRI from telco, you will need to set **ROB BIT SIG** to OFF.

Configuration

Network Settings:	
FORMAT:	ESF / D4 (Telco Provided)
CODE:	B8ZS / AMI (Telco Provided)
YEL ALRM:	ENABLE
XMIT PRM:	OFF
TIMING:	NET (See Timing)

Network Settings:	
FORMAT:	ESF / D4 (Telco Provided)
CODE:	B8ZS / AMI (Telco Provided)
YEL ALRM:	ENABLE
XMIT PRM:	OFF
TIMING:	NET (See Timing)

SET LBO:	0.0
INBAND LPBK:	ACCEPT
BIT STUFFING:	DISABLE
Port Settings:	
0.1 Nx 56/64	
INTRFCE:	V.35
RATE:	56 / 64
TX CLOCK:	NORM
DATA:	NORM
CTS:	NORM
DCD:	NORM
"0" INHIB:	OFF
0.2 DSX-1	
FORMAT:	ESF / D4 (Telco Provided)
CODE:	B8ZS / AMI (Telco Provided)
YEL ALRM:	ENABLE

SET LBO:	0.0
INBAND LPBK:	ACCEPT
BIT STUFFING:	DISABLE
Port Settings:	
0.1 Nx 56/64	
INTRFCE:	V.35
RATE:	56 / 64
TX CLOCK:	NORM
DATA:	NORM
CTS:	NORM
DCD:	NORM
"0" INHIB:	OFF
0.2 DSX-1	
FORMAT:	ESF / D4 (Telco Provided)
CODE:	B8ZS / AMI (Telco Provided)
YEL ALRM:	ENABLE

LINE LENGTH:	1-110	**LINE LENGTH:**	1-110
INBAND LPBK:	ACCEPT	**INBAND LPBK:**	ACCEPT
ROB BIT SIG:	ON	**ROB BIT SIG:**	ON

Timing

- If telco is providing a clock on the T1, then set Clock Source to Network on both units.
- If telco is NOT providing a clock on the T1, then set Clock Source to Network on one unit and Internal on the other unit.
- If the circuit is a Frame Relay circuit, then set the Clock Source to Network on both units.

Mapping

Note: In this example, channels 1-12 will be mapped to the 0.1 Nx 56/64 and channels 13-24 will be mapped to the 0.2 DSX-1.

1. From the front panel, select **2) CONFIG** and then press **ENTER**.
2. To determine which map is in use, select **4) MAP IN USE**. The map in use will be displayed (A is default and will be used in this example).
3. Select **5) DS0 MAP A** and then press **ENTER**. (If you have set up passcode protection, you will be challenged to enter your passcode at this time.)
4. Select **1) COPY A > TEMP** and then press **ENTER**.
5. Select **5) EDIT TEMP** and then press **ENTER**. (For some models this may be option 6 rather than 5.)
6. Scroll up/down until the top line shows **DS0: 01**.
7. Press **ENTER** and the cursor will start blinking on the bottom line.
8. Scroll up/down until the bottom line shows **PORT: 0.1 NX 56/64**. Press **ENTER** and the cursor will go back to the top line.
9. Repeat Steps 6-8, choosing each DS0 until you have completed 1-12.
10. Scroll up/down until the top line shows **DS0: 13**.
11. Press **ENTER** and the cursor will start blinking on the bottom line.
12. Scroll up/down until the bottom line shows **PORT: 0.2 DSX-1**. Press **ENTER** and the cursor will go back to the top line.
13. Repeat Steps 10-12, choosing each DS0 until you get to DS0 24.
14. Review all channels 1-24 by scrolling up/down to confirm the map.

15. Press **CANCEL** once and you will see **6) APPLY TEMP > A**. Press **ENTER** and you will be asked **DISRUPT DATA:**. Scroll up/down until you see **YES**; then press **ENTER**. The map will be applied.

NOTES:

If TSU DSX or TSU Nx56/64 modules are used instead of the built in 0.1 and 0.2 interfaces the appropriate channels must be mapped to the corresponding ports the modules are loaded in. The menu structure may differ slightly on the modules compared to built in ports. For example there is no ROB BIT SIG option on DSX modules, but it is present on built in DSX interfaces.

The built in V.35 interface on some TSU products is labeled as 0.1 NxDBU instead of 0.1 Nx56/64.