

E1-R2 and E1 ISDN PRI Installations

This guide describes the configuration procedures necessary to implement E1 R2 digital signaling for European, Pacific Rim, and other emerging markets. Please carefully follow the procedures step by step.

1. Change the **Configure Type** to **E1**:
 - a. From **Boards** view, double-click the board to be configured to open the Board Configuration window.
 - b. In the window, click the **Board Configuration** button.
 - c. In the next Board Configuration window, select **E1** as the configure type, and click **OK**.

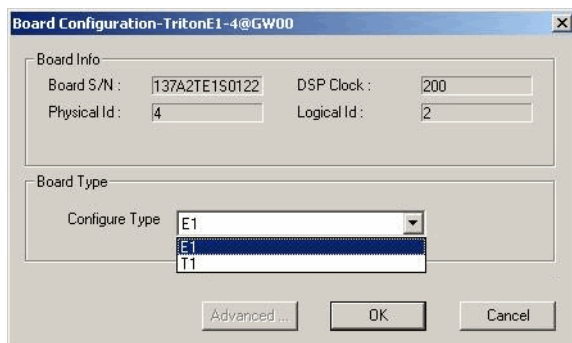


Figure 289. The Board Configuration window

Important: When changing from E1 to T1, then back to E1, trunk channel properties and channel group properties will be reset to default values. It is important to make sure the trunk channel properties are configured properly. Continue to follow the steps below to re-check your settings for the physical layer, data link layer and signaling layer.

2. In the Board Configuration window, double-click the channel group.

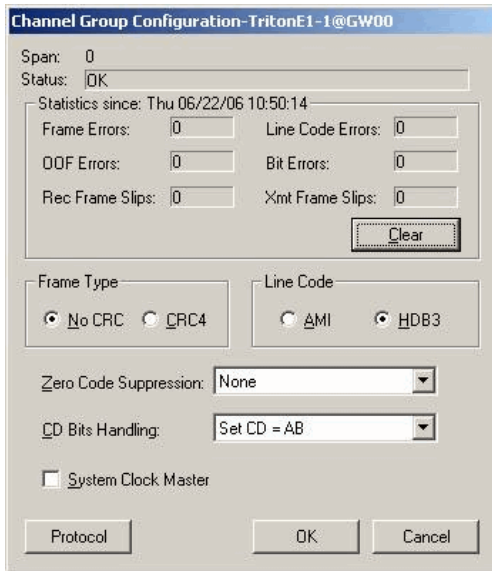


Figure 290. Physical Layer

Consult your CO for “**Frame Type**,” “**Line Code**,” or “**Zero Code Suppression**.” Do not check the **System Clock Master** check box because the CO is a clock provider, and the Altigen system is synchronized to the CO. If all configurations are correct, the status should be shown as “**OK**,” as in Figure 290.

3. Click the **Protocol** button in the Channel Group Configuration dialog box to open the Protocol Configuration window.

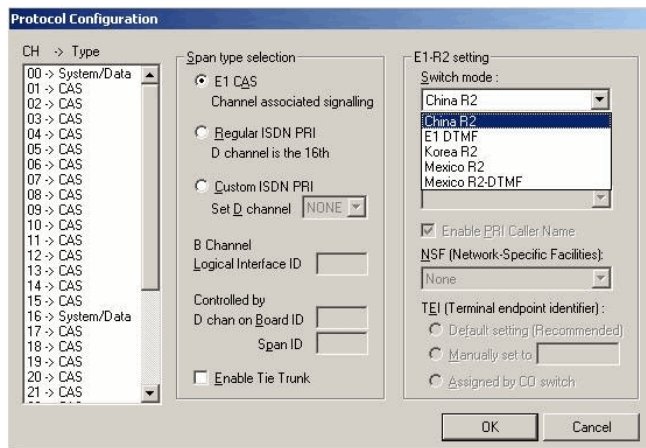


Figure 291. Data Link Layer

4. Select **E1 CAS** as the Span Type, and select the Switch Mode according to your country in the **E1 R2 Setting** field, and click **OK**.
5. In the Trunk Configuration window, click the **Trunk Properties** button to open the E1 Channel Configuration window.

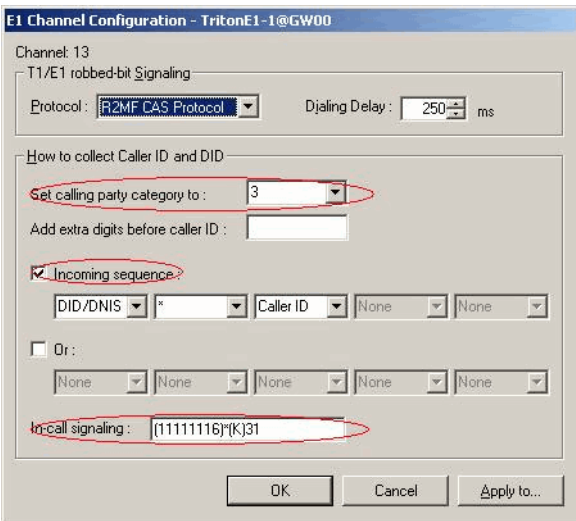


Figure 292. Signaling Layer

6. In the **E1 Channel Configuration** dialog box, configure the following fields:
- **Set Calling Party Category to** – the Calling Party Category indicates the type of calling party, (for example, operator, pay phone, priority, ordinary subscriber). Select **1**, **2** or **3** (for ordinary subscribers, refer to Table on page 426). If the subscribed line is intended for other purposes, contact your CO for the proper value.
 - **Add extra digits before caller ID** – consult your CO to find out if any extra digits are needed.
 - **Incoming sequences** – select check box and configure the sequence according to Table on page 426.
 - **In-call signaling** – configure the in-call signaling value according to Table on page 426.

The circled fields in Figure 292 represent values that depend on your country and its corresponding trunk property.

Note: Consult your CO to find out if caller ID digits are provided in the lines.

Signaling Values, By Country

Table 1. Signaling values, by country

Country	Signaling Values
Chile/Nacional MFC-R2	<p>Set calling part category: 1 [Assume no caller ID provided]: Incoming sequence: DID/DNIS In-call signaling (depend on how many DID digits): For 3-digit DID, set to (113)6 For 4-digit DID, set to (1113)6 For 5-digit DID, set to (11113)6 For 6-digit DID, set to (111113)6 For 7-digit DID, set to (1111113)6 For 8-digit DID, set to (11111113)6 [Assume caller ID provided]: Incoming sequence (same as above shown): DID/DNIS * Caller ID In-call signaling (depend on how many DID digits): For 3-digit DID, set to (115)*(K)36 For 4-digit DID, set to (1115)*(K)36 For 5-digit DID, set to (11115)*(K)36 For 6-digit DID, set to (111115)*(K)36 For 7-digit DID, set to (1111115)*(K)36 For 8-digit DID, set to (11111115)*(K)36</p>
China MFC-R2	<p>Set calling part category: 3 [Assume no caller ID provided]: Incoming sequence: DID/DNIS In-call signaling (depend on how many DID digits): For 3-digit DID, set to (113)1 For 4-digit DID, set to (1113)1 For 5-digit DID, set to (11113)1 For 6-digit DID, set to (111113)1 For 7-digit DID, set to (1111113)1 For 8-digit DID, set to (11111113)1 [Assume caller ID provided]: Incoming sequence (same as above shown): DID/DNIS * Caller ID In-call signaling (depend on how many DID digits): For 3-digit DID, set to (116)*(K)31 For 4-digit DID, set to (1116)*(K)31 For 5-digit DID, set to (11116)*(K)31 For 6-digit DID, set to (111116)*(K)31 For 7-digit DID, set to (1111116)*(K)31 For 8-digit DID, set to (11111116)*(K)31</p>

Country	Signaling Values
Colombia MFC-R2	<p>Set calling part category: 2 [Assume no caller ID provided]: Incoming sequence: DID/DNIS In-call signaling (depend on how many DID digits): For 3-digit DID, set to (113)6 For 4-digit DID, set to (1113)6 For 5-digit DID, set to (11113)6 For 6-digit DID, set to (111113)6 For 7-digit DID, set to (1111113)6 For 8-digit DID, set to (11111113)6 [Assume caller ID provided]: Incoming sequence (same as above shown): DID/DNIS * Caller ID In-call signaling (depend on how many DID digits): For 3-digit DID, set to (115)*(K)36 For 4-digit DID, set to (1115)*(K)36 For 5-digit DID, set to (11115)*(K)36 For 6-digit DID, set to (111115)*(K)36 For 7-digit DID, set to (1111115)*(K)36 For 8-digit DID, set to (11111115)*(K)36</p>
Ecuador MFC-R2	<p>Set calling part category: 1 [Assume no caller ID provided]: Incoming sequence: DID/DNIS In-call signaling (depend on how many DID digits): For 3-digit DID, set to (113)6 For 4-digit DID, set to (1113)6 For 5-digit DID, set to (11113)6 For 6-digit DID, set to (111113)6 For 7-digit DID, set to (1111113)6 For 8-digit DID, set to (11111113)6 [Assume caller ID provided]: Incoming sequence (same as above shown): DID/DNIS * Caller ID In-call signaling (depend on how many DID digits): For 3-digit DID, set to (115)*(K)36 For 4-digit DID, set to (1115)*(K)36 For 5-digit DID, set to (11115)*(K)36 For 6-digit DID, set to (111115)*(K)36 For 7-digit DID, set to (1111115)*(K)36 For 8-digit DID, set to (11111115)*(K)36</p>

Country	Signaling Values
Ecuador MFC-LME	<p>Set calling part category: 2 [The switch doesn't support caller ID transmission]: Incoming sequence: DID/DNIS In-call signaling (depend on how many DID digits): For 3-digit DID, set to (113)1 For 4-digit DID, set to (1113)1 For 5-digit DID, set to (11113)1 For 6-digit DID, set to (111113)1 For 7-digit DID, set to (1111113)1 For 8-digit DID, set to (11111113)1</p>
Korea MFC-R2	<p>Set calling part category: 1 [The switch doesn't support caller ID transmission]: Incoming sequence: DID/DNIS In-call signaling (depend on how many DID digits): For 3-digit DID, set to (113)6 For 4-digit DID, set to (1113)6 For 5-digit DID, set to (11113)6 For 6-digit DID, set to (111113)6 For 7-digit DID, set to (1111113)6 For 8-digit DID, set to (11111113)6</p>
Mexico / Teléfonos de Mexico	<p>Set calling part category: 2 [Assume no caller ID provided]: Incoming sequence: DID/DNIS In-call signaling (depend on how many DID digits): For 3-digit DID, set to (113)1 For 4-digit DID, set to (1113)1 For 5-digit DID, set to (11113)1 For 6-digit DID, set to (111113)1 For 7-digit DID, set to (1111113)1 For 8-digit DID, set to (11111113)1 [Assume caller ID provided]: Incoming sequence (same as above shown): DID/DNIS * Caller ID In-call signaling (depend on how many DID digits): For 3-digit DID, set to (116)*(K)31 For 4-digit DID, set to (1116)*(K)31 For 5-digit DID, set to (11116)*(K)31 For 6-digit DID, set to (111116)*(K)31 For 7-digit DID, set to (1111116)*(K)31 For 8-digit DID, set to (11111116)*(K)31</p>

Country	Signaling Values
Panamá / Nacional MFC-R2	<p>Set calling part category: 1 [Assume no caller ID provided]: Incoming sequence: DID/DNIS In-call signaling (depend on how many DID digits): For 3-digit DID, set to (113)6 For 4-digit DID, set to (1113)6 For 5-digit DID, set to (11113)6 For 6-digit DID, set to (111113)6 For 7-digit DID, set to (1111113)6 For 8-digit DID, set to (11111113)6 [Assume caller ID provided]: Incoming sequence (same as above shown): DID/DNIS * Caller ID In-call signaling (depend on how many DID digits): For 3-digit DID, set to (115)*(K)36 For 4-digit DID, set to (1115)*(K)36 For 5-digit DID, set to (11115)*(K)36 For 6-digit DID, set to (111115)*(K)36 For 7-digit DID, set to (1111115)*(K)36 For 8-digit DID, set to (11111115)*(K)36</p>
Venezuela / Nacional MFC-R2	<p>Set calling part category: 1 [Assume no caller ID provided]: Incoming sequence: DID/DNIS In-call signaling (depend on how many DID digits): For 3-digit DID, set to (113)6 For 4-digit DID, set to (1113)6 For 5-digit DID, set to (11113)6 For 6-digit DID, set to (111113)6 For 7-digit DID, set to (1111113)6 For 8-digit DID, set to (11111113)6 [Assume caller ID provided]: Incoming sequence (same as above shown): DID/DNIS * Caller ID In-call signaling (depend on how many DID digits): For 3-digit DID, set to (115)*(K)36 For 4-digit DID, set to (1115)*(K)36 For 5-digit DID, set to (11115)*(K)36 For 6-digit DID, set to (111115)*(K)36 For 7-digit DID, set to (1111115)*(K)36 For 8-digit DID, set to (11111115)*(K)36</p>

Country	Signaling Values
China MFC-R2	<p>Set calling part category: 3</p> <p>[Assume no caller ID provided]:</p> <p>Incoming sequence: DID/DNIS</p> <p>In-call signaling (depend on how many DID digits):</p> <p>For 3-digit DID, set to (113)1</p> <p>For 4-digit DID, set to (1113)1</p> <p>For 5-digit DID, set to (11113)1</p> <p>For 6-digit DID, set to (111113)1</p> <p>For 7-digit DID, set to (1111113)1</p> <p>For 8-digit DID, set to (11111113)1</p> <p>[Assume caller ID provided]:</p> <p>Incoming sequence (same as above shown):</p> <p>DID/DNIS * Caller ID</p> <p>In-call signaling (depend on how many DID digits):</p> <p>For 3-digit DID, set to (116)*(K)31</p> <p>For 4-digit DID, set to (1116)*(K)31</p> <p>For 5-digit DID, set to (11116)*(K)31</p> <p>For 6-digit DID, set to (111116)*(K)31</p> <p>For 7-digit DID, set to (1111116)*(K)31</p> <p>For 8-digit DID, set to (11111116)*(K)31</p>
Colombia MFC-R2	<p>Set calling part category: 2</p> <p>[Assume no caller ID provided] :</p> <p>Incoming sequence: DID/DNIS</p> <p>In-call signaling (depend on how many DID digits):</p> <p>For 3-digit DID, set to (113)6</p> <p>For 4-digit DID, set to (1113)6</p> <p>For 5-digit DID, set to (11113)6</p> <p>For 6-digit DID, set to (111113)6</p> <p>For 7-digit DID, set to (1111113)6</p> <p>For 8-digit DID, set to (11111113)6</p> <p>[Assume caller ID provided]:</p> <p>Incoming sequence (same as above shown):</p> <p>DID/DNIS * Caller ID</p> <p>In-call signaling (depend on how many DID digits):</p> <p>For 3-digit DID, set to (115)*(K)36</p> <p>For 4-digit DID, set to (1115)*(K)36</p> <p>For 5-digit DID, set to (11115)*(K)36</p> <p>For 6-digit DID, set to (111115)*(K)36</p> <p>For 7-digit DID, set to (1111115)*(K)36</p> <p>For 8-digit DID, set to (11111115)*(K)36</p>

Country	Signaling Values
Ecuador MFC-R2	<p>Set calling part category: 1 [Assume no caller ID provided]: Incoming sequence: DID/DNIS In-call signaling (depend on how many DID digits): For 3-digit DID, set to (113)6 For 4-digit DID, set to (1113)6 For 5-digit DID, set to (11113)6 For 6-digit DID, set to (111113)6 For 7-digit DID, set to (1111113)6 For 8-digit DID, set to (11111113)6 [Assume caller ID provided] : Incoming sequence (same as above shown): DID/DNIS * Caller ID In-call signaling (depend on how many DID digits): For 3-digit DID, set to (115)*(K)36 For 4-digit DID, set to (1115)*(K)36 For 5-digit DID, set to (11115)*(K)36 For 6-digit DID, set to (111115)*(K)36 For 7-digit DID, set to (1111115)*(K)36 For 8-digit DID, set to (11111115)*(K)36</p>
Ecuador MFC-LME	<p>Set calling part category: 2 [The switch doesn't support caller ID transmission]: Incoming sequence: DID/DNIS In-call signaling (depend on how many DID digits): For 3-digit DID, set to (113)1 For 4-digit DID, set to (1113)1 For 5-digit DID, set to (11113)1 For 6-digit DID, set to (111113)1 For 7-digit DID, set to (1111113)1 For 8-digit DID, set to (11111113)1</p>
Korea MFC-R2	<p>Set calling part category: 1 [The switch doesn't support caller ID transmission]: Incoming sequence: DID/DNIS In-call signaling (depend on how many DID digits): For 3-digit DID, set to (113)6 For 4-digit DID, set to (1113)6 For 5-digit DID, set to (11113)6 For 6-digit DID, set to (111113)6 For 7-digit DID, set to (1111113)6 For 8-digit DID, set to (11111113)6</p>

Country	Signaling Values
Mexico / Teléfonos de Mexico	<p>Set calling part category: 2 [Assume no caller ID provided] :</p> <p>Incoming sequence: DID/DNIS</p> <p>In-call signaling (depend on how many DID digits): For 3-digit DID, set to (113)1 For 4-digit DID, set to (1113)1 For 5-digit DID, set to (11113)1 For 6-digit DID, set to (111113)1 For 7-digit DID, set to (1111113)1 For 8-digit DID, set to (11111113)1</p> <p>[Assume caller ID provided]:</p> <p>Incoming sequence (same as above shown): DID/DNIS * Caller ID</p> <p>In-call signaling (depend on how many DID digits): For 3-digit DID, set to (116)*(K)31 For 4-digit DID, set to (1116)*(K)31 For 5-digit DID, set to (11116)*(K)31 For 6-digit DID, set to (111116)*(K)31 For 7-digit DID, set to (1111116)*(K)31 For 8-digit DID, set to (11111116)*(K)31</p>
Panamá / Nacional MFC-R2	<p>Set calling part category: 1 [Assume no caller ID provided]:</p> <p>Incoming sequence: DID/DNIS</p> <p>In-call signaling (depend on how many DID digits) :</p> <p>For 3-digit DID, set to (113)6 For 4-digit DID, set to (1113)6 For 5-digit DID, set to (11113)6 For 6-digit DID, set to (111113)6 For 7-digit DID, set to (1111113)6 For 8-digit DID, set to (11111113)6</p> <p>[Assume caller ID provided]:</p> <p>Incoming sequence (same as above shown): DID/DNIS * Caller ID</p> <p>In-call signaling (depend on how many DID digits): For 3-digit DID, set to (115)*(K)36 For 4-digit DID, set to (1115)*(K)36 For 5-digit DID, set to (11115)*(K)36 For 6-digit DID, set to (111115)*(K)36 For 7-digit DID, set to (1111115)*(K)36 For 8-digit DID, set to (11111115)*(K)36</p>

Country	Signaling Values
Venezuela / Nacional MFC-R2	<p>Set calling part category: 1</p> <p>[Assume no caller ID provided]:</p> <p>Incoming sequence: DID/DNIS</p> <p>In-call signaling (depend on how many DID digits):</p> <p>For 3-digit DID, set to (113)6</p> <p>For 4-digit DID, set to (1113)6</p> <p>For 5-digit DID, set to (11113)6</p> <p>For 6-digit DID, set to (111113)6</p> <p>For 7-digit DID, set to (1111113)6</p> <p>For 8-digit DID, set to (11111113)6</p> <p>[Assume caller ID provided]:</p> <p>Incoming sequence (same as above shown):</p> <p>DID/DNIS * Caller ID</p> <p>In-call signaling (depend on how many DID digits) :</p> <p>For 3-digit DID, set to (115)*(K)36</p> <p>For 4-digit DID, set to (1115)*(K)36</p> <p>For 5-digit DID, set to (11115)*(K)36</p> <p>For 6-digit DID, set to (111115)*(K)36</p> <p>For 7-digit DID, set to (1111115)*(K)36</p> <p>For 8-digit DID, set to (11111115)*(K)36</p>

E1 ISDN PRI Installation

This section describes the configuration procedures necessary to implement E1 ISDN PRI signaling for European, Pacific Rim, and other emerging markets. Please carefully follow the procedures step by step.

1. Change the **Configure Type** to **E1**:
 - a. From **Boards** view, double-click the board to be configured to open the Board Configuration window.
 - b. In the next window, click the **Board Configuration** button.
 - c. In the next configuration window, select **E1** as the configure type and click **OK**.

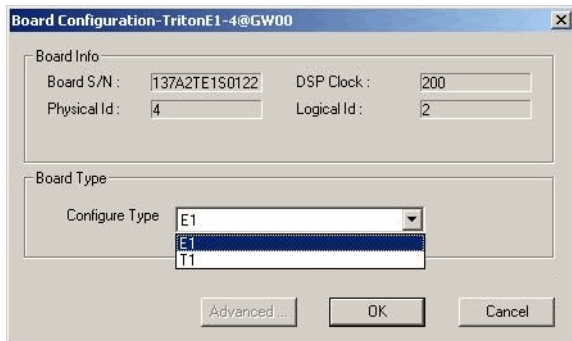


Figure 293. The Board Configuration window

Important: When changing from E1 to T1, then back to E1, channel group properties will be reset to default values. It is important to make sure the channel group properties are configured properly. Follow the steps below to re-check your settings for the physical layer and data link layer.

2. In the Board Configuration window, double-click the channel group.

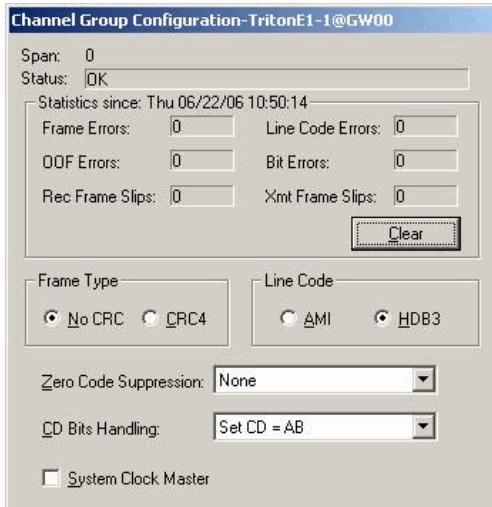


Figure 294. Physical Layer

Consult your CO for “**Frame Type**,” “**Line Code**,” or “**Zero Code Suppression**.” Do not check the **System Clock Master** check box because the CO is a clock provider, and our system is synchronized to the CO. If all configurations are correct, the status should be shown as “**OK**,” as in Figure 294.

3. Click the **Protocol** button in the Channel Group Configuration dialog box to open the Protocol Configuration window.
4. Select **Regular ISDN PRI** as the Span Type, and select the Switch Mode according to your country in the **ISDN PRI Setting** field, and click **OK**.

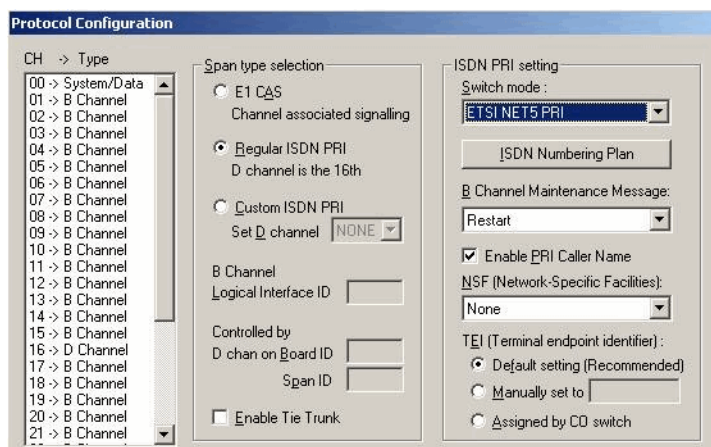


Figure 295. Data Link layer

What you should select in the **B Channel Maintenance Message** list depends on what country you reside in (see Table 2 on page 435).

Protocol/B Channel Maintenance Message Settings, By Country

Table 2. Protocol & B Channel Maintenance Message Setting, by Country

Country	Protocol Supported	B Channel Maintenance Message Setting
Argentina	ETSI	Restart
Australia	Austel TS014, ETSI	Restart
Belgium	ETSI	Restart
Brazil	ETSI	Restart
China, HK	ETSI	Restart
Czech	ETSI	Restart
France	ETSI, VN4	None
Germany	ETSI	Restart
Greece	ETSI	Restart
Italy	ETSI	Restart
Japan	NTT INS1500	Restart
Korea	ETSI	None
Macedonia	ETSI	Restart
Mexico	ETSI	Restart
Netherlands	ETSI	Restart
Nordic	ETSI	Restart
Poland	ETSI	Restart
Russia	ETSI	Restart
Saudi Arabia	ETSI	Restart
Singapore	ETSI	Restart
South Africa	ETSI	Restart
Spain	ETSI	Restart
Taiwan	Bellcore, ETSI	None
Thailand	ETSI	Restart
UK	ETSI (for DASS II/DPNSS)	Restart
UK, Ireland	ETSI, British Telecom ISDN 30	None
USA	Bellcore TR 1268	Restart and Service
USA, Canada	AT&T TR 41449/41459	Restart

