



# ISDN ERROR CODES

August 2000





# ISDN ERROR CODES

<b>A</b>	<b>REFERENCE</b>	<b>5</b>
1	<b>ISDN Error Codes</b>	<b>6</b>
1.1	Overview	6
1.2	Local Causes (BinTec router)	7
1.3	DSS1 Causes (Euro ISDN)	9
1.4	1TR6 Causes (National ISDN)	15



# REFERENCE

# 1 ISDN Error Codes

## 1.1 Overview

ISDN errors are reported in the *isdnCallHistoryTable*. Errors originating from the ISDN are reported in the *DSS1Cause* and *1TR6Causefc* fields, depending on which service you're using (Euro ISDN and National ISDN respectively). Errors originating locally on the BinTec router are reported in the *LocalCause* field.

## 1.2 Local Causes (BinTec router)

Local causes are reported in the *LocalCause* field of the ***isdnCallHistory-Table***

0x01:	ipi: Unknown primitive
0x02:	ipi: Outstate Message has been sent at inappropriate state of call reference.
0x03:	ipi: Mandatory information element (IE) missing
0x04:	ipi: IE not allowed
0x05:	ipi: IL_LOOK
0x06:	ipi: No link or L2 error ISDN-cable is not connected, or ISDN-connection is not available or Layer 2 Connection can not be established See isdniftable for Layer 1 details (Layer1State=F7 means connected i.e. Layer 1 is available). You may also use the program bricktrace to display Layer 2 protocol
0x07:	ipi: All call references are used
0x08:	ipi: Provider has not enough memory
0x09:	ipi: Provider is not ready
0x0a:	ipi: Busy An attempt was made to switch off a busy provider.
0x0b:	ipi: Channel busy
0x0c:	ipi: L3 timer for incoming calls: The call is received but nobody is responding to this call (please verify if the destination address and the LocalNumber of isdn DISPATCHTABLE are corresponding)
0x0d:	ipi: L3 restart
0x0e:	ipi: L3 error

0x0f:	ipi: L1 error
0x10:	no controller available
0x11:	another application got the call
-1:	no information available



### 1.3 DSS1 Causes (Euro ISDN)

DSS1 causes are reported in the *DSS1Cause* field of the *isdnCallHistory-Table*

---

0x80:	Normal call clearing No error occurred.
0x81:	Unallocated (unassigned) number This cause indicates that the destination, requested by the calling user cannot be reached because, although the number is in a valid format, it is not currently assigned (allocated).
0x82:	No route to specified transit network This cause indicates that the equipment sending this cause has received a request to route the call through a particular transit network which it does not recognise. The equipment sending this cause does not recognise the transit network either, because the transit network does not exist or because that particular, while it does exist, does not service the equipment which is sending this cause. This cause is supported on a network-dependent basis.
0x83:	No route to destination This cause indicates that the called user can not be reached because the network through which the call has been routed does not serve the destination desired. This cause is supported on a network-dependent basis.
0x86:	Channel unacceptable This cause indicates the channel most recently identified is not acceptable to the sending entity for use in this call.
0x87:	Call awarded & being delivered This cause indicates that the user has been awarded the incoming call, and that the incoming call is being connected to a channel already established to that similar calls (e.g. packet-mode X.25 virtual calls).
0x90:	Normal call clearing This cause indicates that the call is being cleared be-

cause one of the users involved in the call has requested that the call be cleared.

---

0x91: User busy  
This cause is used when the called user has indicated the inability to accept another call.

---

---

0x92:	User not responding This cause is used when a user does not respond to a call establishment message with either an alerting or connect indication within the prescribed period of time allocated.
0x93:	No answer from user (user alerted) This cause is used when a user has provided an alerting indication but has not provided a connect indication within a prescribed period of time.
0x95:	Call rejected This cause indicates that the equipment sending this cause does not wish to accept this call, although it could have accepted the call because the equipment sending this cause is neither busy nor incompatible.
0x96:	Number changed This cause is returned to a calling user when the called party number indicated by the calling user is no longer assigned.
0x9a:	Non-selected user clearing This cause indicates that the user has not been awarded the incoming call.
0x9b:	Destination out of order This cause indicates that the destination indicated by the user can not be reached because the interface to the destination is not functioning correctly. The term not functioning correctly indicates that signalling message was unable to be delivered to the remote user; e.g. a physical layer or data link layer failure at the remote user, user-equipment off-line.
0x9c:	Invalid number format This cause indicates that the called user can not be reached because the called party number is not in a valid format or is not complete.

---

- 0x9d: Facility rejected  
This cause is returned when a facility requested can not be provided by the network.
- 
- 0x9e: Response to STATUS ENQUIRY  
This cause included in the STATUS message when the reason for generating the STATUS message was the prior receipt of a STATUS ENQUIRY message.
- 
- 0x9f: Normal, unspecified  
This caused is used to report a normal event only when no other cause in the normal class applies.
- 

### Resource unavailable class

- 
- 0xa2: No circuit/channel available  
This cause indicates that there is no appropriate circuit/channel presently available to handle the call.
- 
- 0xa6: Network out of order  
This cause indicates that the network is not functioning correctly and that the condition is likely to last a relatively long period of time; e.g. immediately reattempting the call is not likely to be successful.
- 
- 0xa9: Temporarily failure  
This cause indicates that the network is not functioning correctly and that the condition is not likely to last a long period of time; e.g. the user may wish to try another call attempt almost immediately.
- 
- 0xaa: Switching equipment congestion  
This cause indicates that the switching equipment generating this cause is experiencing a period of high traffic.
- 
- 0xab: Access Information discarded  
This cause indicates that the network could not deliver access information to the remote user as requested. i.e. a user-to-user information, low layer compatibility, high

layer compatibility or subaddress as indicated in the diagnostic.

---

0xac:	Requested circuit/channel not available This cause is returned when the circuit or channel indicated by the requesting entity cannot be provided by the other side of the interface.
0xaf:	Resources unavailable, unspecified This cause is used to report a resource unavailable event only when no other cause in the resource unavailable class applies.

---

## Service/option not available class

- 
- 0xb1: Quality of service unavailable  
This cause is used to report that the requested quality of service, as defined in the ITU-T recommendation X.213, cannot be provided (e.g. throughput or transit delay cannot be supported).
- 
- 0xb2: Requested facility not subscribed  
This cause indicates that the requested supplementary service could not be provided by the network because the user has not completed the necessary administrative arrangements with its supporting network.
- 
- 0xb9: Bearer Capability not authorized  
This cause indicates that the user has requested a bearer capability which is implemented by the equipment which generated this cause but the user is not authorized to use.
- 
- 0xba: Bearer Capability not presently available  
This cause indicates that the user has requested a bearer capability which is implemented by the equipment which generated this cause but which is not available this time.
- 
- 0xbf: Service or option not available, unspec.  
This cause is used to report a service or option not available event only when no other cause in the service or option not available class applies.
- 

## Service/option not implemented class

- 
- 0xc1: Bearer capability not implemented  
This cause indicates that the equipment sending this cause does not support the bearer capability requested.
-

- 0xc2: Channel type not implemented  
This cause indicates that the equipment sending this cause does not support the channel type requested.
- 
- 0xc5: Requested facility not implemented  
This cause indicates that the equipment sending this cause does not support the requested supplementary service.
- 
- 0xc6: Only restricted digital info. bearer cap. is available  
This cause indicates that one equipment has requested an unrestricted bearer services but that the equipment sending this cause only supports the restricted version or the restated bearer capability.
- 
- 0xcf: Service or option not implemented, unspecified  
This cause is used to report a service or option not implemented event only when no other cause in the service or option not implemented class applies.
- 

### Invalid message class

- 
- 0xd1: Invalid call reference value  
This cause indicates that the equipment sending this cause has received a message with a call reference which is not currently in use on the user-network interface.
- 
- 0xd2: Identified channel does not exist  
This cause indicates that the equipment sending this cause has received a request to use a channel not activated on the interface for a call. For example, if a user has subscribed to those channels on a primary rate interface numbered from 1 to 12 and the user equipment or the network attempts to use channels 13 to 30 this cause is generated.
- 
- 0xd3: A suspended call exist, but call identity does not  
This cause indicates that a call resume has been attempted with a call identity which differs from that in use