



## Cause and Location Codes

This appendix contains the cause and location codes for the result types listed in [Table 1-3 on page 1-18](#).

- [Internal Cause Codes, page B-1](#)
- [DPNSS Cause Codes, page B-4](#)
- [ISDN Cause Codes, page B-10](#)
- [ISDN PRI Cause Codes, page B-15](#)
- [Q.761 Cause Codes, page B-23](#)
- [ANSI SS7 Cause Codes, page B-31](#)
- [Release Cause Location Codes, page B-37](#)

Each of the cause codes listed in these sections are followed by an explanation.

### Internal Cause Codes

The cause codes listed in [Table B-1](#) are generated internally when a call is rejected by, or clearance is initiated by, the system. For more information, see the “[Cause Table](#)” section on [page 1-26](#).

**Table B-1 Internally Generated Cause Codes**

Internal Cause Code	Explanation
IC_ADDRESS_INCOMPLETE	Sending Complete received from originating side, or overlap digit timer expired, with insufficient digits received to route call.
IC_BLACKLIST_BNUMBER_MATCHED	Called Number matches blacklist settings.
IC_BLACKLIST_CLI_LENGTH_INVALID	Received CLI has invalid length.
IC_BLACKLIST_CLI_MATCHED	CLI of incoming call matches black list settings.
IC_BLACKLIST_CPC_RESTRICTED	Calling party category (CPC) of incoming call matches black list settings, or it is missing.
IC_BLACKLIST_NO_CLI	No CLI present with CLIP Essential parameter set.
IC_BLACKLIST_NOA_RESTRICTED	Calling/Called NOA matches black list settings.
IC_CONGESTION	All terminating circuits are currently busy.
IC_INTERWORK_UNSPEC	BSM or FSM required, but not supplied.
IC_NO_CIRCUIT_AVAILABLE	No available trunks.

**Table B-1 Internally Generated Cause Codes (continued)**

Internal Cause Code	Explanation
IC_NORMAL_CLEARING	Unsupported Suspend/Resume events.
IC_SERVICE_UNAVAILABLE	Receipt of virtual call, with no ASC channel possible.
IC_TEMPORARY_FAILURE	Internal processing has produced an unexpected event, such as a failure to determine the validity of the call, an unimplemented service request, or an ASC failure.
IC_VACANT_CODE	System configuration error.

## Internal Cause Code Values

Table B-2 lists the internal cause codes in numerical order by their corresponding numerical values.

**Table B-2 Internal Cause Code Values**

Internal Cause Code	Value	Internal Cause Code	Value
IC_ACCESS_INFO_DISCARDED	1	IC_MSG_TYPE_NOT_IMP_OR_WRONG_STATE	25
IC_BEARCAP_NOT_AUTHORIZED	2	IC_NETWORK_OUT_OF_ORDER	26
IC_BEARCAP_NOT_AVAIL	3	IC_NO_CALL_SUSPENDED	27
IC_BEARCAP_NOT_IMP	4	IC_NO_ANSWER_ALERTED_USER	28
IC_CALL_AWARDED_DELIVERED_EST_CH	5	IC_NO_CIRCUIT_AVAILABLE	29
IC_CALL_ID_HAS_BEEN_CLEARED	6	IC_NON_SELECTED_USER_CLEARING	30
IC_CALL_ID_IN_USE	7	IC_NORMAL_CLEARING	31
IC_CALL_REJECTED	8	IC_NORMAL_UNSPECIFIED	32
IC_CH_ID_NOT_EXIST	9	IC_NO_ROUTE_TO_DEST	33
IC_CH_TYPE_NOT_IMP	10	IC_NO_ROUTE_TO_TNS	34
IC_CH_UNACCEPTABLE	11	IC_NO_USER_RESPONDING	35
IC_DEST_OUT_OF_ORDER	12	IC_NUMBER_CHANGED	36
IC_ELEM_TYPE_NOT_IMP	13	IC_ONLY_RESTRICT_DIG_INFO_BEARER	37
IC_FACILITY_REJECTED	14	IC_PROTOCOL_ERROR_UNSPEC	38
IC_INCOMPATIBLE_DEST	15	IC_QUALITY_UNAVAIL	39
IC_INTERWORK_UNSPEC	16	IC_RECOVERY_ON_TIMER_EXPIRY	40
IC_INVALID_CALL_REFERENCE_VALUE	17	IC_REQ_CIRCUIT_UNAVAIL	41
IC_INVALID_ELEM_CONTENTS	18	IC_REQ_FACILITY_NOT_IMP	42
IC_INVALID_MSG_UNSPEC	19	IC_REQ_FACILITY_NOT_SUBSCR	43
IC_INVALID_NUMBER_FORMAT	20	IC_RESOURCES_UNAVAIL_UNSPEC	44
IC_INVALID_TNS	21	IC_RESPONSE_TO_STATUS_ENQUIRY	45
IC_MANDATORY_ELEMENT_MISSING	22	IC_SERVICE_OR_OPTION_NOT_IMP_UNSPEC	46
IC_MSG_IN_WRONG_STATE	23	IC_SERVICE_OR_OPTION_NOT_AVAIL	47
IC_MSG_TYPE_NOT_IMP	24	IC_SUSPEND_EXIST_BUT_NOT_THIS_ID	48

Table B-2 Internal Cause Code Values (continued)

Internal Cause Code	Value	Internal Cause Code	Value
IC_SWITCHING_EQUIP_CONGESTION	49	IC_PARAM_UNREC_PASSED	85
IC_TEMPORARY_FAILURE	50	IC_PROPRIETARY	86
IC_UNALLOCATED_NUMBER	51	IC_PREEMPTION	87
IC_USER_BUSY	52	IC_PREEMPTION_CCT_UNAVAILABLE	88
IC_INTERCEPTED_SUBSCRIBER	53	IC_UNALLOCATED_DEST_NUMBER	89
IC_ACCESS_BARRED	54	IC_UNREC_ELEM_PASSED_ON	90
IC_ACKNOWLEDGEMENT	55	IC_SUB_ABSCENT	91
IC_ADDRESS_INCOMPLETE	56	IC_UNDEFINED_BG	92
IC_BUSY	57	IC_ROUTING_ERROR	93
IC_CHANNEL_OUT_OF_SERVICE	58	IC_PRECEDENCE_BLOCKED	94
IC_DTE_CONTROLLED_NOT_READY	59	IC_CALL_TYPE_INCOMPATIBLE	95
IC_CONGESTION	60	IC_GROUP_RESTRICIONS	96
IC_CALL_TERMINATION	61	IC_CALLING_PARTY_OFF_HOLD	97
IC_FACILITY_NOT_REGISTERED	62	IC_CALLING_DROPPED_WHILE_ON_HOLD	98
IC_INCOMING_CALLS_BARRED	63	IC_NEW_DESTINATION	99
IC_SERVICE_INCOMPATIBLE	64	IC_OUTGOING_CALLS_BARRED	100
IC_MESSAGE_NOT_UNDERSTOOD	65	IC_SUB_CONTROLLED_ICB	101
IC_NETWORK_ADDRESS_EXTENSION_ERROR	66	IC_CALL_REJECT_CALL_GAPPING	102
IC_NETWORK_TERMINATION	67	IC_REJECTED_DIVERTED_CALL	103
IC_NUMBER_UNOBTAINABLE	68	IC_SELECTIVE_CALL_BARRING	104
IC_PRIORITY_FORCED_RELEASE	69	IC_REMOTE_PROC_ERROR	105
IC_REJECT	70	IC_TEMPORARY_OOS	106
IC_ROUTE_OUT_OF_SERVICE	71	IC_OPERATOR_PRIORITY_ACCESS	107
IC_SUBSCRIBER_INCOMPATIBLE	72	IC_CUG_ACCESS_BARRED	108
IC_SIGNAL_NOT_UNDERSTOOD	73	IC_SUBSCRIBER_CALL_TERMINATE	109
IC_SIGNAL_NOT_VALID	74	IC_FLOW_CONTROLLED_CONGESTION	110
IC_SUBSCRIBER_OUT_OF_SERVICE	75	IC_OUT_OF_CATCHMENT_AREA	111
IC_SIGNALLING_SYSTEM_INCOMPATIBLE	76	IC_TRANSLATION_OOS	112
IC_SERVICE_TEMPORARILY_UNAVAILABLE	77	IC_PERMANENT_ICB	113
IC_SERVICE_UNAVAILABLE	78	IC_SUBSCRIBER_MOVED	114
IC_DTE_UNCONTROLLED_NOT_READY	79	IC_SUB_NOT_FOUND_DLE	115
IC_TRANSFERRED	80	IC_ANONYMOUS_CALL_REJECTION	116
IC_INCOMING_CALLS_BARRED_IN_CUG	81	IC_TERMINAL_CONGESTION	117
IC_SPECIAL_INFORMATION_TONE	82	IC_REPEAT_ATTEMPT	118
IC_USER_NOT_MEMBER_OF_CUG	83	IC_VACANT_CODE	119
IC_MISDIALLED_TK_PREFIX	84	IC_PREFIX_0_DIALLED_IN_ERROR	120

Table B-2 Internal Cause Code Values (continued)

Internal Cause Code	Value	Internal Cause Code	Value
IC_PREFIX_1_DIALLED_IN_ERROR	121	IC_BLACKLIST_CLI_LENGTH_INVALID	133
IC_PREFIX_1_NOT_DIALLED	122	IC_BLACKLIST_CLI_MATCHED	134
IC_EXCESSIVE_DIG_CALL_PROCEEDING	123	IC_BLACKLIST_CPC_RESTRICTED	135
IC_PROT_ERR_THRESHOLD_EXCEEDED	124	IC_BLACKLIST_NOA_RESTRICTED	136
IC_OUTGOING_CALLS_BARRED_IN_CUG	125	IC_BLACKLIST_BNUMBER_MATCHED	137
IC_INCON_OUTGOING_ACC_AND_SUB_CLASS	126	IC_WHITELIST_CLI_NOT_MATCHED	138
IC_NON_EXISTENT_CUG	127	IC_PORTED_NUMBER	139
IC_MESG_WITH_UNREC_ELEM_DISCARDED	128	IC_REDIRECTION_TO_NEW_DEST	140
IC_PREEMPTION_CCT_RES	129	IC_COT_FAILURE	141
IC_PERMANENT_FRAME_MODE_OOS	130	IC_MISROUTED_CALL_PORTED_NUM	142
IC_PERMANENT_FRAME_MODE_OPERATIONAL	131	IC_INVALID_CALL_REF	143
IC_BLACKLIST_NO_CLI	132	IC_UNKNOWN	144

## DPNSS Cause Codes

The next two tables provide received DPNSS cause code to internal cause code mappings and internal cause code to transmitted DPNSS cause code mappings.

### Received DPNSS Cause Code Mappings

Table B-3 lists received DPNSS cause codes in alphabetical order with their associated hexadecimal values and maps each of them to the corresponding internal cause code and its associated value.

Table B-3 Received DPNSS Cause Code to Internal Cause Code Mappings

Received DPNSS Cause Code	Value	Internal Cause Code	Value
ICP_ACCESS_BARRED	29H	IC_ACCESS_BARRED	54
ICP_ACKNOWLEDGEMENT	14H	IC_ACKNOWLEDGEMENT	55
ICP_ADDRESS_INCOMPLETE	01H	IC_ADDRESS_INCOMPLETE	56
ICP_BUSY	08H	IC_BUSY	57
ICP_CALL_TERMINATION	30H	IC_CALL_TERMINATION	61
ICP_CHANNEL_OUT_OF_SERVICE	23H	IC_CHANNEL_OUT_OF_SERVICE	58
ICP_CONGESTION	07H	IC_CONGESTION	60
ICP_DTE_CONTROLLED_NOT_READY	2DH	IC_DTE_CONTROLLED_NOT_READY	59
ICP_DTE_UNCONTROLLED_NOT_READY	2EH	IC_DTE_UNCONTROLLED_NOT_READY	79
ICP_FACILITY_NOT_REGISTERED	18H	IC_FACILITY_NOT_REGISTERED	62
ICP_INCOMING_CALLS_BARRED	0AH	IC_INCOMING_CALLS_BARRED	63
ICP_MESSAGE_NOT_UNDERSTOOD	1AH	IC_MESSAGE_NOT_UNDERSTOOD	65

**Table B-3** Received DPNSS Cause Code to Internal Cause Code Mappings (continued)

Received DPNSS Cause Code	Value	Internal Cause Code	Value
ICP_NETWORK_ADDRESS_EXTENSION_ERROR	1EH	IC_NETWORK_ADDRESS_EXTENSION_ERROR	66
ICP_NETWORK_TERMINATION	02H	IC_NETWORK_TERMINATION	67
ICP_NUMBER_UNOBTAINABLE	00H	IC_NUMBER_UNOBTAINABLE	68
ICP_PRIORITY_FORCED_RELEASE	24H	IC_PRIORITY_FORCED_RELEASE	69
ICP_REJECT	19H	IC_REJECT	70
ICP_ROUTE_OUT_OF_SERVICE	1CH	IC_ROUTE_OUT_OF_SERVICE	71
ICP_SERVICE_INCOMPATIBLE	13H	IC_SERVICE_INCOMPATIBLE	64
ICP_SERVICE_TEMPORARILY_UNAVAILABLE	17H	IC_SERVICE_TEMPORARILY_UNAVAILABLE	77
ICP_SERVICE_UNAVAILABLE	03H	IC_SERVICE_UNAVAILABLE	78
ICP_SIGNALLING_SYSTEM_INCOMPATIBLE	1BH	IC_SIGNALLING_SYSTEM_INCOMPATIBLE	76
ICP_SIGNAL_NOT_UNDERSTOOD	15H	IC_SIGNAL_NOT_UNDERSTOOD	73
ICP_SIGNAL_NOT_VALID	16H	IC_SIGNAL_NOT_VALID	74
ICP_SUBSCRIBER_INCOMPATIBLE	04H	IC_SUBSCRIBER_INCOMPATIBLE	72
ICP_SUBSCRIBER_OUT_OF_SERVICE	09H	IC_SUBSCRIBER_OUT_OF_SERVICE	75
ICP_TRANSFERRED	1DH	IC_TRANSFERRED	80

## Transmitted DPNSS Cause Code Mappings

Table B-4 lists internal cause codes in alphabetical order with their associated numerical values and maps each of them to the corresponding transmitted DPNSS cause code and its hexadecimal value.

**Table B-4** Internal Cause Code to Transmitted DPNSS Cause Code Mappings

Internal Cause Code	Value	Transmitted DPNSS Cause Code	Value
IC_ACCESS_BARRED	54	ICP_ACCESS_BARRED	29H
IC_ACCESS_INFO_DISCARDED	1	ICP_CALL_TERMINATION	30H
IC_ACKNOWLEDGEMENT	55	ICP_ACKNOWLEDGEMENT	14H
IC_ADDRESS_INCOMPLETE	56	ICP_ADDRESS_INCOMPLETE	01H
IC_ANONYMOUS_CALL_REJECTION	116	ICP_CALL_TERMINATION	30H
IC_BEARCAP_NOT_AUTHORIZED	2	ICP_CALL_TERMINATION	30H
IC_BEARCAP_NOT_AVAIL	3	ICP_CALL_TERMINATION	30H
IC_BEARCAP_NOT_IMP	4	ICP_SERVICE_INCOMPATIBLE	13H
IC_BLACKLIST_BNUMBER_MATCHED	137	ICP_CALL_TERMINATION	30H
IC_BLACKLIST_CLI_LENGTH_INVALID	133	ICP_ACCESS_BARRED	29H
IC_BLACKLIST_CLI_MATCHED	134	ICP_ACCESS_BARRED	29H
IC_BLACKLIST_CPC_RESTRICTED	135	ICP_ACCESS_BARRED	29H
IC_BLACKLIST_NO_CLI	132	ICP_ACCESS_BARRED	29H
IC_BLACKLIST_NOA_RESTRICTED	136	ICP_ACCESS_BARRED	29H

Table B-4 Internal Cause Code to Transmitted DPNSS Cause Code Mappings (continued)

Internal Cause Code	Value	Transmitted DPNSS Cause Code	Value
IC_BUSY	57	ICP_BUSY	08H
IC_CALL_AWARDED_DELIVERED_EST_CH	5	ICP_CALL_TERMINATION	30H
IC_CALL_ID_HAS_BEEN_CLEARED	6	ICP_CALL_TERMINATION	30H
IC_CALL_ID_IN_USE	7	ICP_CALL_TERMINATION	30H
IC_CALL_REJECT_CALL_GAPPING	102	ICP_CONGESTION	07H
IC_CALL_REJECTED	8	ICP_CALL_TERMINATION	30H
IC_CALL_TERMINATION	61	ICP_CALL_TERMINATION	30H
IC_CALL_TYPE_INCOMPATIBLE	95	ICP_SUBSCRIBER_INCOMPATIBLE	04H
IC_CALLING_DROPPED_WHILE_ON_HOLD	98	ICP_CALL_TERMINATION	30H
IC_CALLING_PARTY_OFF_HOLD	97	ICP_CALL_TERMINATION	30H
IC_CH_ID_NOT_EXIST	9	ICP_CALL_TERMINATION	30H
IC_CH_TYPE_NOT_IMP	10	ICP_CALL_TERMINATION	30H
IC_CH_UNACCEPTABLE	11	ICP_CALL_TERMINATION	30H
IC_CHANNEL_OUT_OF_SERVICE	58	ICP_CHANNEL_OUT_OF_SERVICE	23H
IC_CONGESTION	60	ICP_CONGESTION	07H
IC_COT_FAILURE	141	ICP_CALL_TERMINATION	30H
IC_CUG_ACCESS_BARRED	108	ICP_ACCESS_BARRED	29H
IC_DEST_OUT_OF_ORDER	12	ICP_SUBSCRIBER_OUT_OF_SERVICE	09H
IC_DTE_CONTROLLED_NOT_READY	59	ICP_DTE_CONTROLLED_NOT_READY	2DH
IC_DTE_UNCONTROLLED_NOT_READY	79	ICP_DTE_UNCONTROLLED_NOT_READY	2EH
IC_ELEM_TYPE_NOT_IMP	13	ICP_CALL_TERMINATION	30H
IC_EXCESSIVE_DIG_CALL_PROCEEDING	123	ICP_CALL_TERMINATION	30H
IC_FACILITY_NOT_REGISTERED	62	ICP_FACILITY_NOT_REGISTERED	18H
IC_FACILITY_REJECTED	14	ICP_CALL_TERMINATION	30H
IC_FLOW_CONTROLLED_CONGESTION	110	ICP_NETWORK_TERMINATION	02H
IC_GROUP_RESTRICTIONS	96	ICP_SUBSCRIBER_INCOMPATIBLE	04H
IC_INCOMING_CALLS_BARRED	63	ICP_INCOMING_CALLS_BARRED	0AH
IC_INCOMING_CALLS_BARRED_IN_CUG	81	ICP_INCOMING_CALLS_BARRED	0AH
IC_INCOMPATIBLE_DEST	15	ICP_SUBSCRIBER_INCOMPATIBLE	04H
IC_INCON_OUTGOING_ACC_AND_SUB_CLASS	126	ICP_CALL_TERMINATION	30H
IC_INTERCEPTED_SUBSCRIBER	53	ICP_CALL_TERMINATION	30H
IC_INTERWORK_UNSPEC	16	ICP_CALL_TERMINATION	30H
IC_INVALID_CALL_REF	143	ICP_CALL_TERMINATION	30H
IC_INVALID_CALL_REFERENCE_VALUE	17	ICP_CALL_TERMINATION	30H
IC_INVALID_ELEM_CONTENTS	18	ICP_CALL_TERMINATION	30H
IC_INVALID_MSG_UNSPEC	19	ICP_CALL_TERMINATION	30H

Table B-4 Internal Cause Code to Transmitted DPNSS Cause Code Mappings (continued)

Internal Cause Code	Value	Transmitted DPNSS Cause Code	Value
IC_INVALID_NUMBER_FORMAT	20	ICP_ADDRESS_INCOMPLETE	01H
IC_INVALID_TNS	21	ICP_CALL_TERMINATION	30H
IC_MANDATORY_ELEMENT_MISSING	22	ICP_CALL_TERMINATION	30H
IC_MESG_WITH_UNREC_ELEM_DISCARDED	128	ICP_CALL_TERMINATION	30H
IC_MESSAGE_NOT_UNDERSTOOD	65	ICP_MESSAGE_NOT_UNDERSTOOD	1AH
IC_MISDIALLED_TK_PREFIX	84	ICP_NUMBER_UNOBTAINABLE	00H
IC_MISROUTED_CALL_PORTED_NUM	142	ICP_CALL_TERMINATION	30H
IC_MSG_IN_WRONG_STATE	23	ICP_CALL_TERMINATION	30H
IC_MSG_TYPE_NOT_IMP	24	ICP_CALL_TERMINATION	30H
IC_MSG_TYPE_NOT_IMP_OR_WRONG_STATE	25	ICP_CALL_TERMINATION	30H
IC_NETWORK_ADDRESS_EXTENSION_ERROR	66	ICP_NETWORK_ADDRESS_EXTN_ERROR	1EH
IC_NETWORK_OUT_OF_ORDER	26	ICP_ROUTE_OUT_OF_SERVICE	1CH
IC_NETWORK_TERMINATION	67	ICP_NETWORK_TERMINATION	02H
IC_NEW_DESTINATION	99	ICP_CALL_TERMINATION	30H
IC_NO_ANSWER_ALERTED_USER	28	ICP_NETWORK_TERMINATION	02H
IC_NO_CALL_SUSPENDED	27	ICP_CALL_TERMINATION	30H
IC_NO_CIRCUIT_AVAILABLE	29	ICP_CONGESTION	07H
IC_NO_ROUTE_TO_DEST	33	ICP_CALL_TERMINATION	30H
IC_NO_ROUTE_TO_TNS	34	ICP_CALL_TERMINATION	30H
IC_NO_USER_RESPONDING	35	ICP_NETWORK_TERMINATION	02H
IC_NON_EXISTENT_CUG	127	ICP_CALL_TERMINATION	30H
IC_NON_SELECTED_USER_CLEARING	30	ICP_CALL_TERMINATION	30H
IC_NORMAL_CLEARING	31	ICP_CALL_TERMINATION	30H
IC_NORMAL_UNSPECIFIED	32	ICP_CALL_TERMINATION	30H
IC_NUMBER_CHANGED	36	ICP_NUMBER_UNOBTAINABLE	00H
IC_NUMBER_UNOBTAINABLE	68	ICP_NUMBER_UNOBTAINABLE	00H
IC_ONLY_RESTRICT_DIG_INFO_BEARER	37	ICP_SERVICE_INCOMPATIBLE	13H
IC_OPERATOR_PRIORITY_ACCESS	107	ICP_PRIORITY_FORCED_RELEASE	24H
IC_OUT_OF_CATCHMENT_AREA	111	ICP_NUMBER_UNOBTAINABLE	00H
IC_OUTGOING_CALLS_BARRED	100	ICP_ACCESS_BARRED	29H
IC_OUTGOING_CALLS_BARRED_IN_CUG	125	ICP_CALL_TERMINATION	30H
IC_PARAM_UNREC_PASSED	85	ICP_CALL_TERMINATION	30H
IC_PERMANENT_FRAME_MODE_OOS	130	ICP_CALL_TERMINATION	30H
IC_PERMANENT_FRAME_MODE_OPERATIONAL	131	ICP_CALL_TERMINATION	30H
IC_PERMANENT_ICB	113	ICP_INCOMING_CALLS_BARRED	0AH
IC_PORTED_NUMBER	139	ICP_CALL_TERMINATION	30H

Table B-4 Internal Cause Code to Transmitted DPNSS Cause Code Mappings (continued)

Internal Cause Code	Value	Transmitted DPNSS Cause Code	Value
IC_PRECEDENCE_BLOCKED	94	ICP_CALL_TERMINATION	30H
IC_PREEMPTION	87	ICP_CALL_TERMINATION	30H
IC_PREEMPTION_CCT_RES	129	ICP_CALL_TERMINATION	30H
IC_PREEMPTION_CCT_UNAVAILABLE	88	ICP_CALL_TERMINATION	30H
IC_PREFIX_0_DIALLED_IN_ERROR	120	ICP_CALL_TERMINATION	30H
IC_PREFIX_1_DIALLED_IN_ERROR	121	ICP_CALL_TERMINATION	30H
IC_PREFIX_1_NOT_DIALLED	122	ICP_CALL_TERMINATION	30H
IC_PRIORITY_FORCED_RELEASE	69	ICP_PRIORITY_FORCED_RELEASE	24H
IC_PROPRIETARY	86	ICP_CALL_TERMINATION	30H
IC_PROT_ERR_THRESHOLD_EXCEEDED	124	ICP_CALL_TERMINATION	30H
IC_PROTOCOL_ERROR_UNSPEC	38	ICP_CALL_TERMINATION	30H
IC_QUALITY_UNAVAIL	39	ICP_CALL_TERMINATION	30H
IC_RECOVERY_ON_TIMER_EXPIRY	40	ICP_NETWORK_TERMINATION	02H
IC_REDIRECTION_TO_NEW_DEST	140	ICP_CALL_TERMINATION	30H
IC_REJECT	70	ICP_REJECT	19H
IC_REJECTED_DIVERTED_CALL	103	ICP_CONGESTION	07H
IC_REMOTE_PROC_ERROR	105	ICP_NETWORK_TERMINATION	02H
IC_REPEAT_ATTEMPT	118	ICP_CALL_TERMINATION	30H
IC_REQ_CIRCUIT_UNAVAIL	41	ICP_CONGESTION	07H
IC_REQ_FACILITY_NOT_IMP	42	ICP_CALL_TERMINATION	30H
IC_REQ_FACILITY_NOT_SUBSCR	43	ICP_CALL_TERMINATION	30H
IC_RESOURCES_UNAVAIL_UNSPEC	44	ICP_CALL_TERMINATION	30H
IC_RESPONSE_TO_STATUS_ENQUIRY	45	ICP_CALL_TERMINATION	30H
IC_ROUTE_OUT_OF_SERVICE	71	ICP_ROUTE_OUT_OF_SERVICE	1CH
IC_ROUTING_ERROR	93	ICP_NUMBER_UNOBTAINABLE	00H
IC_SELECTIVE_CALL_BARRING	104	ICP_ACCESS_BARRED	29H
IC_SERVICE_INCOMPATIBLE	64	ICP_SERVICE_INCOMPATIBLE	13H
IC_SERVICE_OR_OPTION_NOT_AVAIL	47	ICP_CALL_TERMINATION	30H
IC_SERVICE_OR_OPTION_NOT_IMP_UNSPEC	46	ICP_CALL_TERMINATION	30H
IC_SERVICE_TEMPORARILY_UNAVAILABLE	77	ICP_SERVICE_TEMPORARILY_UNAVAILABLE	17H
IC_SERVICE_UNAVAILABLE	78	ICP_SERVICE_UNAVAILABLE	03H
IC_SIGNAL_NOT_UNDERSTOOD	73	ICP_SIGNAL_NOT_UNDERSTOOD	15H
IC_SIGNAL_NOT_VALID	74	ICP_SIGNAL_NOT_VALID	16H
IC_SIGNALING_SYSTEM_INCOMPATIBLE	76	ICP_SIGNALING_SYSTEM_INCOMPATIBLE	1BH
IC_SPECIAL_INFORMATION_TONE	82	ICP_CALL_TERMINATION	30H
IC_SUB_ABSCENT	91	ICP_CALL_TERMINATION	30H



**Table B-4 Internal Cause Code to Transmitted DPNSS Cause Code Mappings (continued)**

<b>Internal Cause Code</b>	<b>Value</b>	<b>Transmitted DPNSS Cause Code</b>	<b>Value</b>
IC_SUB_CONTROLLED_ICB	101	ICP_INCOMING_CALLS_BARRED	0AH
IC_SUB_NOT_FOUND_DLE	115	ICP_NUMBER_UNOBTAINABLE	00H
IC_SUBSCRIBER_CALL_TERMINATE	109	ICP_CALL_TERMINATION	30H
IC_SUBSCRIBER_INCOMPATIBLE	72	ICP_SUBSCRIBER_INCOMPATIBLE	04H
IC_SUBSCRIBER_MOVED	114	ICP_NUMBER_UNOBTAINABLE	00H
IC_SUBSCRIBER_OUT_OF_SERVICE	75	ICP_SUBSCRIBER_OUT_OF_SERVICE	09H
IC_SUSPEND_EXIST_BUT_NOT_THIS_ID	48	ICP_CALL_TERMINATION	30H
IC_SWITCHING_EQUIP_CONGESTION	49	ICP_CONGESTION	07H
IC_TEMPORARY_FAILURE	50	ICP_CONGESTION	07H
IC_TEMPORARY_OOS	106	ICP_SUBSCRIBER_OUT_OF_SERVICE	09H
IC_TERMINAL_CONGESTION	117	ICP_CALL_TERMINATION	30H
IC_TRANSFERRED	80	ICP_TRANSFERRED	1DH
IC_TRANSLATION_OOS	112	ICP_ROUTE_OUT_OF_SERVICE	1CH
IC_UNALLOCATED_DEST_NUMBER	89	ICP_CALL_TERMINATION	30H
IC_UNALLOCATED_NUMBER	51	ICP_NUMBER_UNOBTAINABLE	00H
IC_UNDEFINED_BG	92	ICP_CALL_TERMINATION	30H
IC_UNKNOWN	144	ICP_CALL_TERMINATION	30H
IC_UNREC_ELEM_PASSED_ON	90	ICP_CALL_TERMINATION	30H
IC_USER_BUSY	52	ICP_BUSY	08H
IC_USER_NOT_MEMBER_OF_CUG	83	ICP_CALL_TERMINATION	30H
IC_VACANT_CODE	119	ICP_CALL_TERMINATION	30H
IC_WHITELIST_CLI_NOT_MATCHED	138	ICP_CALL_TERMINATION	30H

# ISDN Cause Codes

This section explains how to interpret the Integrated Services Digital Network (ISDN) disconnect cause codes to identify the reason a call was disconnected.

Table B-5 provides a breakdown of the ISDN Q931 disconnect cause code.

**Table B-5 Q931 Disconnect Cause Code Explanation**

Cause i =		0x829F08	
Parsed Hex Digits	0x82	9F	08
<b>Description</b>	Cause Code origination point	Disconnect Cause Code	Optional Diagnostic field

The leading **0x** in the disconnect code indicates the digits that follow are in hexadecimal.

The first two digits after **0x** indicate the point in the circuit path where the disconnected cause code was generated. In the example above, **0x82** indicates that the call was disconnected from the local telco switch.

You can use this list to determine where a call was disconnected:

- **0x80**—From the router
- **0x81**—From the private network near the local user (possibly a local private branch exchange [PBX])
- **0x82**—From the public network near the local user (local telco switch)
- **0x83**—From the transit network (in the ISDN cloud)
- **0x84**—From the public network near the remote user (remote telco switch)
- **0x85**—From the private network near the remote user (possibly a remote PBX)
- **0x87**—From the international network
- **0x8A**—From a network beyond the internetworking point

The two hexadecimal digits that follow the cause code digits above are significant in troubleshooting (**9F** in Table B-5). Table B-6 shows the cause value field and description.

The last two hexadecimal digits (**08** in Table B-5) are optional and are not commonly used for diagnostic purposes. Use Table B-6 to associate a disconnect cause code and the reason for the disconnect.

**Table B-6 Q931 Disconnect Cause Codes**

Code	Cause Description	Additional Information
81	Unallocated or unassigned number	The ISDN number is sent to the switch in the correct format. However, the number is not assigned to destination equipment.
82	No route to specified network	The ISDN exchange is asked to route the call through an unrecognized intermediate network.
83	No route to destination	The call routes through an intermediate network that does not serve the destination address.
86	Channel unacceptable	The service quality of the specified channel is insufficient for the connection to be accepted.

**Table B-6 Q931 Disconnect Cause Codes (continued)**

<b>Code</b>	<b>Cause Description</b>	<b>Additional Information</b>
87	Call awarded and delivered in established channel	The user assigns an incoming call that is connecting to an already established call channel.
90	Normal call clearing	Normal call clearing occurs. No action is required.
91	User busy	Called system acknowledges the connection request, but cannot accept the call because all B-channels are in use.
92	No user responding	Destination does not respond to the call.
93	No answer from user	Destination responds to the connection request, but fails to complete the connection within the prescribed time. The problem is at the remote end of the connection.
95	Call rejected	Destination can accept call, but rejects it for an unknown reason.
96	Number changed	ISDN number used to set up the call is not assigned to a system.
9A	Non-selected user clearing	Destination can accept the call, but rejects it because it is not assigned to the user.
9B	Destination out of order	Destination cannot be reached because of an interface malfunction, and a signaling message cannot be delivered. This can be a temporary condition, but it could last for an extended period. (The remote equipment might be turned off.)
9C	Invalid number format	Connection fails because destination address is presented in an unrecognizable format, or destination address is incomplete.
9D	Facility rejected	Facility requested by user cannot be provided by the network.
9E	Response to STATUS ENQUIRY	Status message is generated in direct response to the reception of a status inquiry message.
9F	Normal, unspecified	Reports the occurrence of a normal event when no standard cause applies. No action required.
A2	No channel available	Connection fails because no appropriate channel is available to take the call.
A6	Network out of order	Destination cannot be reached because of network malfunction, and the condition can last for an extended period. An immediate reconnect attempt is likely to fail.
A9	Temporary failure	Error occurs because of a network malfunction. The problem is resolved shortly.
AA	Switching equipment congestion	Destination cannot be reached because the network switching equipment is temporarily overloaded.
AB	Access information discarded	Network cannot provide the requested access information.
AC	Requested channel not available	Remote equipment cannot provide the requested channel for an unknown reason. This can be a temporary problem.
AF	Resources unavailable, unspecified	Requested channel or service is unavailable for an unknown reason. This can be a temporary problem.
B1	Quality of service unavailable	Requested quality of service cannot be provided by the network. This can be a subscription problem.

**Table B-6 Q931 Disconnect Cause Codes (continued)**

B2	Requested facility not subscribed	Remote equipment supports requested supplementary service by subscription only.
B9	Bearer capability not authorized	User requests a bearer capability that the network provides, but the user is not authorized to use it. This can be a subscription problem.
<b>Code</b>	<b>Cause Description</b>	<b>Additional Information</b>
BA	Bearer capability not presently available	Network normally provides the requested bearer capability, but it is unavailable at the present time. This can be a temporary network problem or a subscription problem.
BF	Service/option not available, unspecified	Network or remote equipment cannot provide the requested service option for an unspecified reason. This can be a subscription problem.
C1	Bearer capability not implemented	Network cannot provide bearer capability requested by the user.
C2	Channel type not implemented	Network or destination equipment does not support requested channel type.
C5	Requested facility not implemented	Remote equipment does not support requested supplementary service.
C6	Only restricted digital info bearer capability available	Network cannot provide unrestricted digital information bearer capability.
CF	Service/option not implemented, unspecified	Network or remote equipment cannot provide requested service option for an unspecified reason. This can be a subscription problem.
D1	Invalid call reference value	Remote equipment receives a call with a call reference that is not currently in use on the user-network interface.
D2	Channel does not exist	Receiving equipment is requested to use a channel that is not activated on the interface for calls.
D3	Suspended call exists, but call id does not	Network receives a call resume request that contains a Call Identify that indicates it is being used for a suspended call.
D4	Call ID in use	Network receives a call resume request that contains a Call ID that indicates the resume request is in use for a suspended call.
D5	No call suspended	Network receives a call resume request when there is not a suspended call pending. This can be a transient error that will be resolved by successive call retries.
D6	Call with requested call ID has been cleared	Network receives a call resume request that contains a Call ID that once indicated a suspended call. However, the suspended call was cleared either by time-out or by remote user.
D8	Incompatible destination	Indicates that an attempt is made to connect to non-ISDN equipment. (For example, an analog line.)
DB	Invalid transit network selection	ISDN exchange is asked to route the call through an unrecognized intermediate network.
DF	Invalid message, unspecified	An invalid message is received with no standard cause. This is usually due to a D-channel error. If error occurs systematically, report it to your ISDN service provider.

**Table B-6 Q931 Disconnect Cause Codes (continued)**

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E0	Mandatory IE missing	Receiving equipment receives a message that does not include a mandatory information element. This is due to a D-channel error. Ensure that the switch type is configured correctly. A Cisco IOS Software upgrade on the router can alleviate this issue. If error occurs systematically, report it to your ISDN service provider.
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**Table B-6 Q931 Disconnect Cause Codes (continued)**

<b>Code</b>	<b>Cause Description</b>	<b>Additional Information</b>
E1	Message type not implemented	Receiving equipment receives an unrecognized message, because the message type is invalid or the message type is valid, but not supported. The cause is a problem with the remote configuration or with the local D-channel.
E2	Message not compatible with call state or not implemented	Remote equipment receives an invalid message with no standard cause. The cause is a D-channel error. If the error occurs systematically, report it to ISDN service provider.
E3	IE not implemented	Remote equipment receives a message that includes unrecognized information elements. This is a D-channel error. If the error occurs systematically, report it to your ISDN service provider.
E4	Invalid IE contents	Remote equipment receives a message that includes invalid information elements. This is due to a D-channel error.
E5	Message not compatible with call state	Remote equipment receives an expected message that does not correspond to the current state of the connection. This is a D-channel error.
EF	Protocol error, unspecified	An unspecified D-channel error with no other standard cause.
FF	Interworking, unspecified	An event occurs, but the network does not provide causes for the action it takes. The precise problem is unknown.
??	Unknown Cause value	The cause value is unknown.

# ISDN PRI Cause Codes

The next four tables provide received ISDN PRI cause code to internal cause code mappings, and the fifth table provides internal cause code to transmitted ISDN PRI cause code mappings.

## Received ISDN PRI Cause Code Mappings

Table B-7 lists received ISDN PRI cause codes in alphabetical order along with their associated values and maps each of them to the corresponding internal cause code and its associated value.

**Table B-7** Received PRI Cause Code to Internal Cause Code Mappings

Received PRI Cause Code	Value	Internal Cause Code	Value
ICPAccessInfoDiscarded	43	IC_ACCESS_INFO_DISCARDED	1
ICPBearCapNotAuthorized	57	IC_BEARCAP_NOT_AUTHORIZED	2
ICPBearCapNotAvail	58	IC_BEARCAP_NOT_AVAIL	3
ICPBearCapNotImp	65	IC_BEARCAP_NOT_IMP	4
ICPCallAwardedDeliveredEstCh	7	IC_CALL_AWARDED_DELIVERED_EST_CH	5
ICPCallIdHasBeenCleared	86	IC_CALL_ID_HAS_BEEN_CLEARED	6
ICPCallIdInUse	84	IC_CALL_ID_IN_USE	7
ICPCallRejected	21	IC_CALL_REJECTED	8
ICPChIdNotExist	82	IC_CH_ID_NOT_EXIST	9
ICPChTypeNotImp	66	IC_CH_TYPE_NOT_IMP	10
ICPChUnacceptable	6	IC_CH_UNACCEPTABLE	11
ICPDestOutOfOrder	27	IC_DEST_OUT_OF_ORDER	12
ICPElemTypeNotImp	99	IC_ELEM_TYPE_NOT_IMP	13
ICPFacilityRejected	29	IC_FACILITY_REJECTED	14
ICPIncompatibleDest	88	IC_INCOMPATIBLE_DEST	15
ICPInterworkUnspec	127	IC_INTERWORK_UNSPEC	16
ICPInvalidCallReferenceValue	81	IC_INVALID_CALL_REFERENCE_VALUE	17
ICPInvalidElemContents	100	IC_INVALID_ELEM_CONTENTS	18
ICPInvalidMsgUnspec	95	IC_INVALID_MSG_UNSPEC	19
ICPInvalidNumberFormat	28	IC_INVALID_NUMBER_FORMAT	20
ICPInvalidTNS	91	IC_INVALID_TNS	21
ICPMandatoryElementMissing	96	IC_MANDATORY_ELEMENT_MISSING	22
ICPMsgInWrongState	101	IC_MSG_IN_WRONG_STATE	23
ICPMsgTypeNotImp	97	IC_MSG_TYPE_NOT_IMP	24
ICPMsgTypeNotImpOrWrongState	98	IC_MSG_TYPE_NOT_IMP_OR_WRONG_STATE	25
ICPNetworkOutOfOrder	38	IC_NETWORK_OUT_OF_ORDER	26
ICPNoAnswerAlertedUser	19	IC_NO_ANSWER_ALERTED_USER	28
ICPNoCallSuspended	85	IC_NO_CALL_SUSPENDED	27

**Table B-7** Received PRI Cause Code to Internal Cause Code Mappings (continued)

Received PRI Cause Code	Value	Internal Cause Code	Value
ICPNoCircuitAvailable	34	IC_NO_CIRCUIT_AVAILABLE	29
ICPNonSelectedUserClearing	26	IC_NON_SELECTED_USER_CLEARING	30
ICPNormalClearing	16	IC_NORMAL_CLEARING	31
ICPNormalUnspecified	31	IC_NORMAL_UNSPECIFIED	32
ICPNoRouteToDest	3	IC_NO_ROUTE_TO_DEST	33
ICPNoRouteToTNS	2	IC_NO_ROUTE_TO_TNS	34
ICPNoUserResponding	18	IC_NO_USER_RESPONDING	35
ICPNumberChanged	22	IC_NUMBER_CHANGED	36
ICPOnlyRestrictDigInfoBearer	70	IC_ONLY_RESTRICT_DIG_INFO_BEARER	37
ICPProtocolErrorUnspec	111	IC_PROTOCOL_ERROR_UNSPEC	38
ICPQualityUnavail	49	IC_QUALITY_UNAVAIL	39
ICPRecoveryOnTimerExpiry	102	IC_RECOVERY_ON_TIMER_EXPIRY	40
ICPReqCircuitUnavail	44	IC_REQ_CIRCUIT_UNAVAIL	41
ICPReqFacilityNotImp	69	IC_REQ_FACILITY_NOT_IMP	42
ICPReqFacilityNotSubscr	50	IC_REQ_FACILITY_NOT_SUBSCR	43
ICPResourcesUnavailUnspec	47	IC_RESOURCES_UNAVAIL_UNSPEC	44
ICPResponseToStatusEnquiry	30	IC_RESPONSE_TO_STATUS_ENQUIRY	45
ICPServiceOrOptionNotAvail	63	IC_SERVICE_OR_OPTION_NOT_AVAIL	47
ICPServiceOrOptionNotImpUnspec	79	IC_SERVICE_OR_OPTION_NOT_IMP_UNSPEC	46
ICPSuspendExistButNotThisId	83	IC_SUSPEND_EXIST_BUT_NOT_THIS_ID	48
ICPSwitchingEquipCongestion	42	IC_SWITCHING_EQUIP_CONGESTION	49
ICPTemporaryFailure	41	IC_TEMPORARY_FAILURE	50
ICPUnallocatedNumber	1	IC_UNALLOCATED_NUMBER	51
ICPUserBusy	17	IC_USER_BUSY	52

## Received AT&T TR41459 Specific PRI Cause Code Mappings

[Table B-8](#) lists received AT&T TR41459 specific PRI cause codes in alphabetical order along with their associated values and maps each of them to the corresponding internal cause code and its value.

**Table B-8** Received AT&T TR41459 Specific PRI Cause Code to Internal Cause Code Mappings

Received AT&T TR41459 PRI Cause Codes	Value	Internal Cause Code	Value
ICPCallingDroppedWhileOnHold	3	IC_CALLING_DROPPED_WHILE_ON_HOLD	97
ICPCallingPartyOffHold	2	IC_CALLING_PARTY_OFF_HOLD	96
ICPIncomingCallsBarred	54	IC_INCOMING_CALLS_BARRED	62
ICPNewDestination	47	IC_NEW_DESTINATION	98
ICPOutgoingCallsBarred	52	IC_OUTGOING_CALLS_BARRED	99



## Received BELL 1268 Specific PRI Cause Code Mappings

Table B-9 lists received Bell 1268 specific PRI cause codes in alphabetical order along with their associated values, and maps each of them to the corresponding internal cause code and its associated value.

**Table B-9** Received Bell 1268 Specific PRI Cause Code to Internal Cause Code Mappings

Received Bell 1268 PRI Cause Codes	Value	Internal Cause Code	Value
ICPExcessiveDigCallProceeding	11	IC_EXCESSIVE_DIG_CALL_PROCEEDING	122
ICPPrefix0DialledInError	8	IC_PREFIX_0_DIALLED_IN_ERROR	119
ICPPrefix1DialledInError	9	IC_PREFIX_1_DIALLED_IN_ERROR	120
ICPPrefix1NotDialled	10	IC_PREFIX_1_NOT_DIALLED	121
ICPProtErrThresholdExceeded	101	IC_PROT_ERR_THRESHOLD_EXCEEDED	123
ICPVacantCode	4	IC_VACENT_CODE	118

## Received INS 1500 Specific Cause Code Mappings

Table B-10 lists received INS 1500 specific PRI cause codes in alphabetical order along with their associated values, and maps each of them to the corresponding internal cause code and its associated value.

**Table B-10** INS 1500 Specific PRI Cause Code to Internal Cause Code Mappings

Received INS 1500 PRI Cause Codes	Value	Internal Cause Code	Value
ICPIncomingCallsBarredWithinCUG	55	IC_INCOMING_CALLS_BARRED_IN_CUG	80
ICPInconsistencyInOGAccess	62	IC_INCON_OUTGOING_ACC_AND_SUB_CLASS	125
ICPMisDialledTrunkPrefix	5	IC_MISDIALLED_TK_PREFIX	83
ICPMsgWithUnreqParamDiscarded	110	IC_MESG_WITH_UNREC_ELEM_DISCARDED	127
ICPNonExistentCUG	90	IC_NON_EXISTENT_CUG	126
ICPOutgoingCallsBarredWithinCUG	53	IC_OUTGOING_CALLS_BARRED_IN_CUG	124
ICPParameterNonExistentPassedOn	103	IC_PARAM_UNREC_PASSED	84
ICPPermFrameModeOOS	39	IC_PERMANENT_FRAME_MODE_OOS	129
ICPPermFrameModeOperational	40	IC_PERMANENT_FRAME_MODE_OPERATIONAL	130
ICPPrecedenceCallBlocked	46	IC_PRECEDENCE_BLOCKED	93
ICPPreemption	8	IC_PREEMPTION	86
ICPPreemptionCircuitReserved	9	IC_PREEMPTION_CCT_RES	128
ICPSendSpecialInformationTone	4	IC_SPECIAL_INFORMATION_TONE	81
ICPSubscriberAbsent	20	IC_SUB_ABSCENT	90
ICPUserNotMemberOfCUG	87	IC_USER_NOT_MEMBER_OF_CUG	82

## Transmitted ISDN PRI Cause Code Mappings

Table B-11 shows the mapping performed if a transmitted ISDN PRI cause code is supported by one or more of the protocol variants listed in the columns on the right. If the transmitted ISDN PRI cause code is not supported by a protocol variant, then that variant's column is not checked. If no transmitted ISDN PRI cause code value is mapped to the internal cause code, the ISDN PRI cause code value transmitted is NormalUnspecified (31).

**Table B-11 Internal Cause Code to Transmitted PRI Cause Code Mappings**

Internal Cause Code	Value	Transmitted PRI Cause Code	Value	ETSI 300-102	ETSI 300-172 (QSIG)	AT&T TR41459	BELL 1268	INS 1500 (INSNet)
IC_ACCESS_BARRED	54	ICPNormalClearing	16	X	X	X	X	X
IC_ACCESS_INFO_DISCARDED	1	ICPAccessInfoDiscarded	43	X			X	X
IC_ACKNOWLEDGEMENT	55	ICPNormalClearing	16	X	X	X	X	X
IC_ADDRESS_INCOMPLETE	55	ICPInvalidNumberFormat	28	X	X		X	X
IC_ADDRESS_INCOMPLETE	56	ICPNormalClearing	16			X		
IC_ANONYMOUS_CALL_REJECTION	116	ICPNormalUnspecified	31	X	X	X	X	X
IC_BEARCAP_NOT_AUTHORIZED	2	ICPBearCapNotAuthorized	57	X	X		X	X
IC_BEARCAP_NOT_AVAIL	3	ICPBearCapNotAvail	58	X	X	X		X
IC_BEARCAP_NOT_IMP	4	ICPBearCapNotImp	65	X	X	X	X	X
IC_BLACKLIST_BNUMBER_MATCHED	137	ICPServiceOrOptionNotAvail	63	X	X	X	X	X
IC_BLACKLIST_CLI_LENGTH_INVALID	133	ICPServiceOrOptionNotAvail	63	X	X	X	X	X
IC_BLACKLIST_CLI_MATCHED	134	ICPServiceOrOptionNotAvail	63	X	X	X	X	X
IC_BLACKLIST_CPC_RESTRICTED	135	ICPServiceOrOptionNotAvail	63	X	X	X	X	X
IC_BLACKLIST_NO_CLI	132	ICPServiceOrOptionNotAvail	63	X	X	X	X	X
IC_BLACKLIST_NOA_RESTRICTED	136	ICPServiceOrOptionNotAvail	63	X	X	X	X	X
IC_BUSY	57	ICPUserBusy	17	X	X	X	X	X
IC_CALL_AWARDED_DELIVERED_EST_CH	5	ICPCallAwardedDeliveredEstCh	7	X			X	X
IC_CALL_ID_HAS_BEEN_CLEARED	6	ICPCallIdHasBeenCleared	86	X				X
IC_CALL_ID_IN_USE	7	ICPCallIdInUse	84	X				X
IC_CALL_REJECT_CALL_GAPPING	102	ICPNormalUnspecified	31	X	X	X	X	X
IC_CALL_REJECTED	8	ICPCallRejected	21	X	X	X	X	X
IC_CALL_TERMINATION	61	ICPNormalClearing	16	X	X	X	X	X
IC_CALL_TYPE_INCOMPATIBLE	95	ICPNormalUnspecified	31	X	X	X	X	X
IC_CALLING_DROPPED_WHILE_ON_HOLD	98	ICPCallingDroppedWhileOnHold	3			X		
IC_CALLING_PARTY_OFF_HOLD	97	ICPCallingPartyOffHold	2			X		
IC_CH_ID_NOT_EXIST	9	ICPChIdNotExist	82	X	X	X		X

Table B-11 Internal Cause Code to Transmitted PRI Cause Code Mappings (continued)

Internal Cause Code	Value	Transmitted PRI Cause Code	Value					
				ETSI 300-102	ETSI 300-172 (OSIG)	AT&T TR41459	BELL 1268	INS 1500 (INSNet)
IC_CH_TYPE_NOT_IMP	10	ICPChTypeNotImp	66	X	X	X		X
IC_CH_UNACCEPTABLE	11	ICPChUnacceptable	6	X	X	X	X	X
IC_CHANNEL_OUT_OF_SERVICE	58	ICPTemporaryFailure	41	X	X	X	X	X
IC_CONGESTION	60	ICPNoCircuitAvailable	34	X	X	X	X	X
IC_COT_FAILURE	141	ICPNormalUnspecified	31	X	X	X	X	X
IC_CUG_ACCESS_BARRED	108	ICPNormalUnspecified	31	X	X	X	X	X
IC_DEST_OUT_OF_ORDER	12	ICPDestOutOfOrder	27	X	X			X
IC_DTE_CONTROLLED_NOT_READY	59	ICPNormalClearing	16	X	X	X	X	X
IC_DTE_UNCONTROLLED_NOT_READY	79	ICPNormalClearing	16	X	X	X	X	X
IC_ELEM_TYPE_NOT_IMP	13	ICPElemTypeNotImp	99	X	X	X	X	X
IC_EXCESSIVE_DIG_CALL_PROCEEDING	123	ICPExcessiveDigCallProceeding	11					X
IC_FACILITY_NOT_REGISTERED	62	ICPNormalClearing	16	X	X	X	X	X
IC_FACILITY_REJECTED	14	ICPFacilityRejected	29	X		X		X
IC_FLOW_CONTROLLED_CONGESTION	110	ICPNormalUnspecified	31	X	X	X	X	X
IC_GROUP_RESTRICTIONS	96	ICPNormalUnspecified	31	X	X	X	X	X
IC_INCOMING_CALLS_BARRED	62	ICPCallRejected	21	X	X		X	X
IC_INCOMING_CALLS_BARRED	63	ICPIncomingCallsBarred	54			X		
IC_INCOMING_CALLS_BARRED_IN_CUG	81	ICPIncomingCallsBarredWithinCUG	55					X
IC_INCOMPATIBLE_DEST	15	ICPIncompatibleDest	88	X	X	X	X	X
IC_INCON_OUTGOING_ACC_AND_SUB_CLASS	126	ICPInconsistencyInOGAccess	62					X
IC_INTERCEPTED_SUBSCRIBER	53	ICPNormalUnspecified	31	X	X	X	X	X
IC_INTERWORK_UNSPEC	16	ICPInterworkUnspec	127	X		X	X	X
IC_INVALID_CALL_REF	143	ICPNormalUnspecified	31	X	X	X	X	X
IC_INVALID_CALL_REFERENCE_VALUE	17	ICPInvalidCallReferenceValue	81	X	X	X	X	X
IC_INVALID_ELEM_CONTENTS	18	ICPInvalidElemContents	100	X	X	X	X	X
IC_INVALID_MSG_UNSPEC	19	ICPInvalidMsgUnspec	95	X				X
IC_INVALID_NUMBER_FORMAT	20	ICPInvalidNumberFormat	28	X	X	X	X	X
IC_INVALID_TNS	21	ICPInvalidTNS	91	X				X
IC_MANDATORY_ELEMENT_MISSING	22	ICPMandatoryElementMissing	96	X	X	X	X	X
IC_MESG_WITH_UNREC_ELEM_DISCARDED	128	ICPMsgWithUnreqParamDiscarded	110					X
IC_MESSAGE_NOT_UNDERSTOOD	65	ICPNormalClearing	16	X	X	X	X	X
IC_MISDIALLED_TK_PREFIX	84	ICPMisDialedTrunkPrefix	5					X

Table B-11 Internal Cause Code to Transmitted PRI Cause Code Mappings (continued)

Internal Cause Code	Value	Transmitted PRI Cause Code	Value	ETSI 300-102	ETSI 300-172 (QSIG)	AT&T TR41459	BELL 1268	INS 1500 (INSNet)
IC_MISROUTED_CALL_PORTED_NUM	142	ICPNormalUnspecified	31	X	X	X	X	X
IC_MSG_IN_WRONG_STATE	23	ICPMsgInWrongState	101	X	X		X	X
IC_MSG_TYPE_NOT_IMP	24	ICPMsgTypeNotImp	97	X	X	X	X	X
IC_MSG_TYPE_NOT_IMP_OR_WRONG_STATE	25	ICPMsgTypeNotImpOrWrongState	98	X	X	X		X
IC_NETWORK_ADDRESS_EXTENSION_ERROR	66	ICPNormalClearing	16	X	X	X	X	X
IC_NETWORK_OUT_OF_ORDER	26	ICPNetworkOutOfOrder	38	X				X
IC_NETWORK_TERMINATION	67	ICPNormalUnspecified	31	X	X	X	X	X
IC_NEW_DESTINATION	99	ICPNewDestination	47			X		
IC_NO_ANSWER_ALERTED_USER	28	ICPNoAnswerAlertedUser	19	X	X	X	X	X
IC_NO_CALL_SUSPENDED	27	ICPNoCallSuspended	85	X				X
IC_NO_CIRCUIT_AVAILABLE	29	ICPNoCircuitAvailable	34	X	X	X	X	X
IC_NO_ROUTE_TO_DEST	33	ICPNoRouteToDest	3	X	X		X	X
IC_NO_ROUTE_TO_TNS	34	ICPNoRouteToTNS	2	X			X	X
IC_NO_USER_RESPONDING	35	ICPNoUserResponding	18	X	X	X	X	X
IC_NON_EXISTENT_CUG	127	ICPNonExistentCUG	90					X
IC_NON_SELECTED_USER_CLEARING	30	ICPNonSelectedUserClearing	26	X				X
IC_NORMAL_CLEARING	31	ICPNormalClearing	16	X	X	X	X	X
IC_NORMAL_UNSPECIFIED	32	ICPNormalUnspecified	31	X	X	X	X	X
IC_NUMBER_CHANGED	36	ICPNumberChanged	22	X	X	X		X
IC_NUMBER_UNOBTAINABLE	68	ICPUnallocatedNumber	1	X	X	X	X	X
IC_ONLY_RESTRICT_DIG_INFO_BEARER	37	ICPOnlyRestrictDigInfoBearer	70	X				X
IC_OPERATOR_PRIORITY_ACCESS	107	ICPNormalUnspecified	31	X	X	X	X	X
IC_OUT_OF_CATCHMENT_AREA	111	ICPNormalUnspecified	31	X	X	X	X	X
IC_OUTGOING_CALLS_BARRED	100	ICPOutgoingCallsBarred	52			X		
IC_OUTGOING_CALLS_BARRED_IN_CUG	125	ICPOutgoingCallsBarredWithinCUG	53					X
IC_PARAM_UNREC_PASSED	85	ICPPParameterNonExistentPassedOn	103					X
IC_PERMANENT_FRAME_MODE_OOS	130	ICPPermFrameModeOOS	39					X
IC_PERMANENT_FRAME_MODE_OPERATIONAL	131	ICPPermFrameModeOperational	40					X
IC_PERMANENT_ICB	113	ICPNormalUnspecified	31	X	X	X	X	X
IC_PORTED_NUMBER	139	ICPNormalUnspecified	31	X	X	X	X	X
IC_PRECEDENCE_BLOCKED	94	ICPPrecedenceCallBlocked	46					X
IC_PREEMPTION	87	ICPPreemption	8					X

Table B-11 Internal Cause Code to Transmitted PRI Cause Code Mappings (continued)

Internal Cause Code	Value	Transmitted PRI Cause Code	Value						
				ETSI 300-102	ETSI 300-172 (OSIG)	AT&T TR41459	BELL 1268	INS 1500 (INSNet)	
IC_PREEMPTION_CCT_RES	129	ICPPreemption Circuit Reserved	9						X
IC_PREEMPTION_CCT_UNAVAILABLE	88	ICPPreemptionCircuitReserved	9						X
IC_PREFIX_0_DIALLED_IN_ERROR	120	ICPPrefix0DialledInError	8				X		
IC_PREFIX_1_DIALLED_IN_ERROR	121	ICPPrefix1DialledInError	9				X		
IC_PREFIX_1_NOT_DIALLED	122	ICPPrefix1NotDialed	10				X		
IC_PRIORITY_FORCED_RELEASE	69	ICPNormalClearing	16	X	X	X	X	X	X
IC_PROPRIETARY	86	ICPNormalUnspecified	31	X	X	X	X	X	X
IC_PROT_ERR_THRESHOLD_EXCEEDED	124	ICPProtErrorThresholdExceeded	101				X		
IC_PROTOCOL_ERROR_UNSPEC	38	ICPProtocolErrorUnspec	111	X	X		X	X	
IC_QUALITY_UNAVAIL	39	ICPQualityUnavail	49	X					X
IC_RECOVERY_ON_TIMER_EXPIRY	40	ICPRecoveryOnTimerExpiry	102	X	X	X	X	X	X
IC_REDIRECTION_TO_NEW_DEST	140	ICPNormalUnspecified	31	X	X	X	X	X	X
IC_REJECT	70	ICPNormalClearing	16	X	X	X	X	X	X
IC_REJECTED_DIVERTED_CALL	103	ICPNormalUnspecified	31	X	X	X	X	X	X
IC_REMOTE_PROC_ERROR	105	ICPNormalUnspecified	31	X	X	X	X	X	X
IC_REPEAT_ATTEMPT	118	ICPNormalUnspecified	31	X	X	X	X	X	X
IC_REQ_CIRCUIT_UNAVAIL	41	ICPReqCircuitUnavail	44	X	X	X	X	X	X
IC_REQ_FACILITY_NOT_IMP	42	ICPReqFacilityNotImp	69	X		X			X
IC_REQ_FACILITY_NOT_SUBSCR	43	ICPReqFacilityNotSubscr	50	X		X			X
IC_RESOURCES_UNAVAIL_UNSPEC	44	ICPResourcesUnavailUnspec	47	X					X
IC_RESPONSE_TO_STATUS_ENQUIRY	45	ICPResponseToStatusEnquiry	30	X	X	X	X	X	X
IC_ROUTE_OUT_OF_SERVICE	70	ICPNetworkOutOfOrder	38	X	X				X
IC_ROUTE_OUT_OF_SERVICE	70	ICPSwitchingEquipCongestion	42			X			
IC_ROUTE_OUT_OF_SERVICE	71	ICPDestOutOfOrder	27					X	
IC_ROUTING_ERROR	93	ICPNormalUnspecified	31	X	X	X	X	X	X
IC_SELECTIVE_CALL_BARRING	104	ICPNormalUnspecified	31	X	X	X	X	X	X
IC_SERVICE_INCOMPATIBLE	64	ICPBearCapNotImp	65	X	X	X	X	X	X
IC_SERVICE_OR_OPTION_NOT_AVAIL	47	ICPServiceOrOptionNotAvail	63	X	X	X			X
IC_SERVICE_OR_OPTION_NOT_IMP_UNSPEC	46	ICPServiceOrOptionNotImpUnspec	79	X					X
IC_SERVICE_TEMPORARILY_UNAVAILABLE	77	ICPNormalClearing	16	X	X	X	X	X	X
IC_SERVICE_UNAVAILABLE	78	ICPNormalClearing	16	X	X	X	X	X	X
IC_SIGNAL_NOT_UNDERSTOOD	73	ICPNormalClearing	16	X	X	X	X	X	X

Table B-11 Internal Cause Code to Transmitted PRI Cause Code Mappings (continued)

Internal Cause Code	Value	Transmitted PRI Cause Code	Value	ETSI 300-102	ETSI 300-172 (QSIG)	AT&T TR41459	BELL 1268	INS 1500 (INSNet)
IC_SIGNAL_NOT_VALID	74	ICPNormalClearing	16	X	X	X	X	X
IC_SIGNALLING_SYSTEM_INCOMPATIBLE	76	ICPNormalClearing	16	X	X	X	X	X
IC_SPECIAL_INFORMATION_TONE	82	ICPSendSpecialInformationTone	4					X
IC_SUB_ABSCENT	91	ICPSubscriberAbsent	20					X
IC_SUB_CONTROLLED_ICB	101	ICPNormalUnspecified	31	X	X	X	X	X
IC_SUB_NOT_FOUND_DLE	115	ICPNormalUnspecified	31	X	X	X	X	X
IC_SUBSCRIBER_CALL_TERMINATE	109	ICPNormalClearing	16	X	X	X	X	X
IC_SUBSCRIBER_INCOMPATIBLE	72	ICPIncompatibleDest	88	X	X	X	X	X
IC_SUBSCRIBER_MOVED	114	ICPNormalUnspecified	31	X	X	X	X	X
IC_SUBSCRIBER_OUT_OF_SERVICE	74	ICPDestOutOfOrder	27	X	X		X	X
IC_SUBSCRIBER_OUT_OF_SERVICE	75	ICPSwitchingEquipCongestion	42			X		
IC_SUSPEND_EXIST_BUT_NOT_THIS_ID	48	ICPSuspendExistButNotThisId	83	X				X
IC_SWITCHING_EQUIP_CONGESTION	49	ICPSwitchingEquipCongestion	42	X		X	X	X
IC_TEMPORARY_FAILURE	50	ICPTemporaryFailure	41	X	X	X	X	X
IC_TEMPORARY_OOS	106	ICPNormalUnspecified	31	X	X	X	X	X
IC_TERMINAL_CONGESTION	117	ICPNormalUnspecified	31	X	X	X	X	X
IC_TRANSFERRED	80	ICPNormalUnspecified	31	X	X	X	X	X
IC_TRANSLATION_OOS	112	ICPNormalUnspecified	31	X	X	X	X	X
IC_UNALLOCATED_DEST_NUMBER	89	ICPNormalUnspecified	31	X	X	X	X	X
IC_UNALLOCATED_NUMBER	51	ICPUnallocatedNumber	1	X	X	X	X	X
IC_UNDEFINED_BG	92	ICPNormalUnspecified	31	X	X	X	X	X
IC_UNKNOWN	144	ICPNormalUnspecified	31	X	X	X	X	X
IC_UNREC_ELEM_PASSED_ON	90	ICPNormalUnspecified	31	X	X	X	X	X
IC_USER_BUSY	52	ICPUserBusy	17	X	X	X	X	X
IC_USER_NOT_MEMBER_OF_CUG	83	ICPUserNotMemberOfCUG	87					X
IC_VACANT_CODE	119	ICPVacantCode	4				X	
IC_WHITELIST_CLI_NOT_MATCHED	138	ICPNormalUnspecified	31	X	X	X	X	X

## Q.761 Cause Codes

The next two tables provide received Q.761 cause code to internal cause code mappings and internal cause code to transmitted Q.7661 cause code mappings.

### Received Q.761 Cause Code Mappings

Table B-12 lists received Q.761 cause codes in alphabetical order, along with their associated values, and maps each of them to the corresponding internal cause code and its associated value.

**Table B-12 Received Q.761 Cause Code to Internal Cause Code Mappings**

Received Q.761 Cause Code	Value	Internal Cause Code	Value
ACCESS_INFO_DISCARD	43	IC_ACCESS_INFO_DISCARDED	1
ADDRESS_INCOMP	28	IC_ADDRESS_INCOMPLETE	55
BC_NOT_AUTH	57	IC_BEARCAP_NOT_AUTHORIZED	2
BC_NOT_AVAIL	58	IC_BEARCAP_NOT_AVAIL	3
BC_NOT_IMP	65	IC_BEARCAP_NOT_IMP	4
CALL_REJECTED	21	IC_CALL_REJECTED	8
CHAN_NOT_AVAIL	44	IC_REQ_CIRCUIT_UNAVAIL	41
DEST_OOO	27	IC_DEST_OUT_OF_ORDER	12
ELEM_UNREC_DISCARDED	99	IC_ELEM_TYPE_NOT_IMP	13
FAC_REJECTED	29	IC_FACILITY_NOT_REGISTERED	61
INCOMP_DEST	88	IC_INCOMPATIBLE_DEST	15
INTERWORK_UNSP	127	IC_INTERWORK_UNSPEC	16
INVALID_MESSAGE	95	IC_INVALID_MSG_UNSPEC	19
INVALID_TNS	91	IC_INVALID_TNS	21
MISDIALLED_TK_PREFIX	5	IC_MISDIALLED_TK_PREFIX	83
MSG_NOT_EXIST	97	IC_MSG_TYPE_NOT_IMP	24
MSG_UNREC_ELEM_DIS	110	IC_MESG_WITH_UNREC_ELEM_DISCARDED	127
NETWORK_OOO	38	IC_NETWORK_OUT_OF_ORDER	26
NO_ANSWER	19	IC_NO_ANSWER_ALERTED_USER	28
NO_CIRCUIT	34	IC_NO_CIRCUIT_AVAILABLE	29
NO_RESPONSE	18	IC_NO_USER_RESPONDING	35
NO_ROUTE_TO_DEST	3	IC_NO_ROUTE_TO_DEST	33
NO_ROUTE_TO_TRANSIT	2	IC_NO_ROUTE_TO_TNS	34
NORMAL_REL	16	IC_NORMAL_CLEARING	31
NORMAL_UNSPEC	31	IC_NORMAL_UNSPECIFIED	32
NUMBER_CHANGED	22	IC_NUMBER_CHANGED	36
PARAM_UNREC_PASSED	103	IC_PARAM_UNREC_PASSED	84

**Table B-12 Received Q.761 Cause Code to Internal Cause Code Mappings (continued)**

Received Q.761 Cause Code	Value	Internal Cause Code	Value
PROT_ERROR_UNSP	111	IC_PROTOCOL_ERROR_UNSPEC	38
REQ_FAC_NOT_IMP	69	IC_REQ_FACILITY_NOT_IMP	42
RES_DIG_BEARCAP_ONLY	70	IC_ONLY_RESTRICT_DIG_INFO_BEARER	37
RES_UNAVAIL	47	IC_RESOURCES_UNAVAIL_UNSPEC	44
SEND_SIT	4	IC_SPECIAL_INFORMATION_TONE	81
SERV_NOT_AVAIL	63	IC_SERVICE_OR_OPTION_NOT_AVAIL	47
SERV_NOT_IMP	79	IC_SERVICE_OR_OPTION_NOT_IMP_UNSPEC	46
SWITCH_CONG	42	IC_SWITCHING_EQUIP_CONGESTION	49
TEMP_FAILURE	41	IC_TEMPORARY_FAILURE	50
UNALLOCATED_NUM	1	IC_UNALLOCATED_NUMBER	51
USER_BUSY	17	IC_USER_BUSY	52

## Transmitted Q.761 Cause Code Mappings

Table B-13 shows the mapping performed if a transmitted Q.761 cause code is supported by one or more of the protocol variants listed in the 17 columns on the right. If the transmitted Q.761 cause code is not supported by a protocol variant, then that variant's column is not checked. If there is no transmitted Q.761 cause code value mapped to the internal cause code, the Q.761 cause code value that is transmitted is NormalUnspecified (31). For definitions of the Q.761 cause code values see Q.850, section 2.2.7.

Variants are:

1. Standard Q.761
2. Australian Q.761
3. Finnish Q.761
4. Japanese Q.761
5. Japanese ETS\_300\_356
6. Hong\_Kong Q.761
7. Belgian Mobistar
8. Korean Q.761
9. ETS\_300\_356 and NTT
10. ETS\_300\_356 and Spanish
11. ETS\_300\_356\_V3 and UK



- 12. Taiwan Q.761
- 13. German Q.761
- 14. Thailand Q.761
- 15. KPNPB Q.761
- 16. Swiss Q.761
- 17. China Q.761

**Table B-13 Internal Cause Code to Transmitted Q.761 Cause Code Mappings**

Internal Cause Code	Value	Transmitted Q.761 Cause	Value	Standard Q.761	Australian Q.761	Finnish Q.761	Japanese Q.761	Japanese ETS_300_356	Hong_Kong Q.761	Belgian Mobistar	Korean Q.761	ETS_300_356 & NTT	ETS_300_356 Spanish	ETS_300_356_V3 & UK	Taiwan Q.761	German Q.761	Thailand Q.761	KPNPB Q.761	Swiss Q.761	China. Q.761
IC_ACCESS_INFO_DISCARDED	1	ACCESSINFODISCARDED	43	X	X		X	X	X	X	X									
IC_BEARCAP_NOT_AUTHORIZED	2	BEARCAPNOTAUTHORIZED	57	X	X	X	X	X	X	X	X									
IC_BEARCAP_NOT_AVAIL	3	BEARCAPNOTAVAIL	58	X	X	X	X	X	X	X	X									
IC_BEARCAP_NOT_IMP	4	BEARCAPNOTIMP	65	X	X	X	X	X	X	X	X									
IC_CALL_AWARDED_DELIVERED_EST_CH	5	TEMPORARYFAILURE	41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_CALL_ID_HAS_BEEN_CLEARED	6	TEMPORARYFAILURE	41	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
IC_CALL_ID_IN_USE	7	NORMALUNSPECIFIED	31										X	X						
IC_CALL_ID_IN_USE	7	TEMPORARYFAILURE	41	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X
IC_CALL_REJECTED	8	CALLREJECTED	21	X	X	X	X	X	X	X	X									
IC_CH_ID_NOT_EXIST	9	INTERWORKUNSPEC	127	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_CH_TYPE_NOT_IMP	10	INTERWORKUNSPEC	127	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_CH_UNACCEPTABLE	11	TEMPORARYFAILURE	41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_DEST_OUT_OF_ORDER	12	DESTOUTOFORDER	27	X	X	X		X	X	X	X									
IC_ELEM_TYPE_NOT_IMP	13	ELEMUNRECDISCARDED	99	X	X	X	X	X	X	X	X									
IC_FACILITY_REJECTED	14	SERVNOTAVAIL	63	X		X	X	X	X	X	X	X	X		X		X			
IC_FACILITY_REJECTED	14	FACILITYREJECTED	29		X															
IC_INCOMPATIBLE_DEST	15	INCOMP_DEST	88	X	X	X	X	X	X	X	X									
IC_INTERWORK_UNSPEC	16	INTERWORKUNSPEC	127	X	X	X	X	X	X	X	X									
IC_INVALID_CALL_REFERENCE_VALUE	17	TEMPORARYFAILURE	41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_INVALID_ELEM_CONTENTS	18	MSGUNRECELEMENTDISCARDED	110	X	X				X	X	X			X						X
IC_INVALID_MSG_UNSPEC	19	INVALIDMESSAGE	95	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X

Table B-13 Internal Cause Code to Transmitted Q.761 Cause Code Mappings (continued)

Internal Cause Code	Value	Transmitted Q.761 Cause	Value	Standard Q.761	Australian Q.761	Finnish Q.761	Japanese Q.761	Japanese ETS_300_356	Hong_Kong Q.761	Belgian Mobistar	Korean Q.761	ETS_300_356 & NTT	ETS_300_356 Spanish	ETS_300_356 V3 & UK	Taiwan Q.761	German Q.761	Thailand Q.761	KPNPB Q.761	Swiss Q.761	China. Q.761
IC_INVALID_NUMBER_FORMAT	20	ADDRESSINCOMPLETE	28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_INVALID_TNS	21	INVALIDTNS	91	X		X			X	X	X									
IC_INVALID_TNS	21	NOROUTETODESTINATION	3		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_MANDATORY_ELEMENT_MISSING	22	PROTOCOLERRORUNSPECIFIED	111	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_MSG_IN_WRONG_STATE	23	PROTOCOLERRORUNSPECIFIED	111	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X
IC_MSG_IN_WRONG_STATE	23	MSG_IN_WRONG_STATE	101				X													
IC_MSG_TYPE_NOT_IMP	24	MSGNOTEXIST	97	X	X	X		X	X	X	X									
IC_MSG_TYPE_NOT_IMP_OR_WRONG_STATE	25	PROTOCOLERRORUNSPECIFIED	111	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_NETWORK_OUT_OF_ORDER	26	NETWORKOUTOFORDER	38	X	X	X	X	X	X	X	X									
IC_NO_CALL_SUSPENDED	27	TEMPORARYFAILURE	41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_NO_ANSWER_ALERTED_USER	28	NOANSWER	19	X	X	X	X	X	X	X	X									
IC_NO_CIRCUIT_AVAILABLE	29	NOCIRCUIT	34	X	X	X	X	X	X	X	X									
IC_NON_SELECTED_USER_CLEARING	30	NORMALUNSPECIFIED	31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_NORMAL_CLEARING	31	NORMALRELEASE	16	X	X	X	X	X	X	X	X									
IC_NORMAL_UNSPECIFIED	32	NORMALUNSPECIFIED	31	X	X	X		X	X	X										
IC_NO_ROUTE_TO_DEST	33	NOROUTETODEST	3	X	X		X	X	X	X	X									
IC_NO_ROUTE_TO_TNS	34	NOROUTETOTRANSIT	2	X		X		X	X	X										
IC_NO_USER_RESPONDING	35	NORESPONSE	18	X	X	X	X	X	X	X	X									
IC_NUMBER_CHANGED	36	NUMBERCHANGED	22	X	X	X	X	X	X	X	X									
IC_ONLY_RESTRICT_DIG_INFO_BEARER	37	RESTRICTDIGBEARERCAPOONLY	70	X		X		X	X	X										
IC_PROTOCOL_ERROR_UNSPEC	38	PROTOCOLERRORUNSPECIFIED	111	X	X	X	X	X	X	X	X									
IC_QUALITY_UNAVAIL	39	NORMALUNSPECIFIED	31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_RECOVERY_ON_TIMER_EXPIRY	40	TEMPORARYFAILURE	41	X	X	X	X	X	X	X	X		X		X		X			X
IC_REQ_CIRCUIT_UNAVAIL	41	CHANNELNOTAVAILABLE	44	X	X	X	X	X	X	X	X									
IC_REQ_FACILITY_NOT_IMP	42	REQFACILITYNOTIMP	69	X		X		X	X	X										
IC_REQ_FACILITY_NOT_IMP	42	SERVICENOTIMP	79		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_REQ_FACILITY_NOT_SUBSCR	43	SERVICENOTAVAILABLE	63	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_RESOURCES_UNAVAIL_UNSPEC	44	RESOURCESUNAVAILABLE	47	X	X	X	X	X	X	X	X									

Table B-13 Internal Cause Code to Transmitted Q.761 Cause Code Mappings (continued)

Internal Cause Code	Value	Transmitted Q.761 Cause	Value	Standard Q.761	Australian Q.761	Finnish Q.761	Japanese Q.761	Japanese ETS_300_356	Hong Kong Q.761	Belgian Mobistar	Korean Q.761	ETS_300_356 & NTT	ETS_300_356 Spanish	ETS_300_356_V3 & UK	Taiwan Q.761	German Q.761	Thailand Q.761	KPNPB Q.761	Swiss Q.761	China. Q.761
IC_RESPONSE_TO_STATUS_ENQUIRY	45	NORMALUNSPECIFIED	31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_SERVICE_OR_OPTION_NOT_IMP_UNSPEC	46	SERVICENOTIMPLEMENTED	79	X	X	X	X	X	X	X	X									
IC_SERVICE_OR_OPTION_NOT_AVAIL	47	SERVICENOTAVAILABLE	63	X	X	X	X	X	X	X	X									
IC_SUSPEND_EXIST_BUT_NOT_THIS_ID	48	TEMPORARYFAILURE	41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_SWITCHING_EQUIP_CONGESTION	49	SWITCHCONGESTION	42	X	X	X	X	X	X	X	X									
IC_TEMPORARY_FAILURE	50	TEMPORARYFAILURE	41	X	X	X	X	X	X	X	X									
IC_UNALLOCATED_NUMBER	51	UNALLOCATEDNUMBER	1	X	X	X	X	X	X	X	X									
IC_USER_BUSY	52	USERBUSY	17	X	X	X	X	X	X	X	X									
IC_INTERCEPTED_SUBSCRIBER	53	(No Q.761 cause code listed)																		
IC_ACCESS_BARRED	54	NORMALRELEASE	16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_ACKNOWLEDGEMENT	55	NORMALRELEASE	16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_ADDRESS_INCOMPLETE	56	ADDRESSINCOMPLETE	28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_BUSY	57	USERBUSY	17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_CHANNEL_OUT_OF_SERVICE	58	NETWORKOUTOFORDER	38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_DTE_CONTROLLED_NOT_READY	59	NORMALUNSPECIFIED	31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_CONGESTION	60	SWITCHCONGESTION	42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_CALL_TERMINATION	61	NORMALRELEASE	16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_FACILITY_NOT_REGISTERED	62	FACILITYREJECTED	29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_INCOMING_CALLS_BARRED	63	CALLREJECTED	21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_SERVICE_INCOMPATIBLE	64	SERVICENOTAVAILABLE	63	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_MESSAGE_NOT_UNDERSTOOD	65	PROTOCOLERRORUNSPECIFIED	111	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_NETWORK_ADDRESS_EXTENSION_ERROR	66	NORMALUNSPECIFIED	31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_NETWORK_TERMINATION	67	NORMALUNSPECIFIED	31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_NUMBER_UNOBTAINABLE	68	UNALLOCATEDNUMBER	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_PRIORITY_FORCED_RELEASE	69	NORMALUNSPECIFIED	31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_REJECT	70	NORMALUNSPECIFIED	31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_ROUTE_OUT_OF_SERVICE	71	NETWORKOUTOFORDER	38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_SUBSCRIBER_INCOMPATIBLE	72	INCOMPATIBLEDEST	88	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Table B-13 Internal Cause Code to Transmitted Q.761 Cause Code Mappings (continued)

Internal Cause Code	Value	Transmitted Q.761 Cause	Value	Standard Q.761	Australian Q.761	Finnish Q.761	Japanese Q.761	Japanese ETS_300_356	Hong_Kong Q.761	Belgian Mobistar	Korean Q.761	ETS_300_356 & NTT	ETS_300_356 Spanish	ETS_300_356_V3 & UK	Taiwan Q.761	German Q.761	Thailand Q.761	KPNPB Q.761	Swiss Q.761	China. Q.761
IC_SIGNAL_NOT_UNDERSTOOD	73	PROTOCOLERRORUNSPECIFIED	111	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_SIGNAL_NOT_VALID	74	PROTOCOLERRORUNSPECIFIED	111	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_SUBSCRIBER_OUT_OF_SERVICE	75	DESTOUTOFORDER	27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_SIGNALLING_SYSTEM_INCOMPATIBLE	76	INTERWORKINGUNSPECIFIED	127	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_SERVICE_TEMPORARILY_UNAVAILABLE	77	SERVICENOTAVAILABLE	63	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_SERVICE_UNAVAILABLE	78	SERVICENOTAVAILABLE	63	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_DTE_UNCONTROLLED_NOT_READY	79	NORMALUNSPECIFIED	31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_TRANSFERRED	80	(No Q.761 cause code listed)						X												
IC_INCOMING_CALLS_BARRED_IN_CUG	81	NORMALUNSPECIFIED	31	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X
IC_SPECIAL_INFORMATION_TONE	82	NORMALUNSPECIFIED	31	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_SPECIAL_INFORMATION_TONE	82	SENDSIT	4			X		X	X	X										
IC_USER_NOT_MEMBER_OF_CUG	83	CALLREJECTED	21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_USER_NOT_MEMBER_OF_CUG	83	USERNOTMEMBEROFCUG	87				X													X
IC_MISDIALLED_TK_PREFIX	84	MISDIALEDTRUNKPREFIX	5	X	X	X	X	X	X	X	X									
IC_PARAM_UNREC_PASSED	85	PARAMETERUNRECPASSED	103	X	X		X	X	X	X										
IC_PARAM_UNREC_PASSED	85	PROTOCOLERRORUNSPECIFIED	111				X													
IC_PROPRIETARY	86	NORMALRELEASE	16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_PREEMPTION	87	NORMALUNSPECIFIED	31	X	X	X	X	X	X	X			X		X					X
IC_PREEMPTION_CCT_UNAVAILABLE	88	NOCIRCUIT	34	X	X	X	X	X	X	X			X		X					X
IC_UNALLOCATED_DEST_NUMBER	89	UNALLOCATEDNUMBER	1	X	X	X	X	X	X	X										
IC_UNREC_ELEM_PASSED_ON	90	PARAMETERUNRECPASSED	103	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_UNREC_ELEM_PASSED_ON	90	PROTOCOLERRORUNSPECIFIED	111				X													
IC_SUB_ABSENT	91	NORESPONSE	18	X	X	X	X	X	X	X			X		X					X
IC_UNDEFINED_BG	92	UNALLOCATEDNUMBER	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_ROUTING_ERROR	93	NOROUTETODESTINATION	3	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_PRECEDENCE_BLOCKED	94	NOROUTETODESTINATION	3	X	X	X	X	X	X	X			X		X					X
IC_CALL_TYPE_INCOMPATIBLE	95	CALLREJECTED	21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_GROUP_RESTRICTIONS	96	CALLREJECTED	21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

**Table B-13 Internal Cause Code to Transmitted Q.761 Cause Code Mappings (continued)**

Internal Cause Code	Value	Transmitted Q.761 Cause	Value	Standard Q.761	Australian Q.761	Finnish Q.761	Japanese Q.761	Japanese ETS_300_356	Hong_Kong Q.761	Belgian Mobistar	Korean Q.761	ETS_300_356 & NTT	ETS_300_356 Spanish	ETS_300_356_V3 & UK	Taiwan Q.761	German Q.761	Thailand Q.761	KPNPB Q.761	Swiss Q.761	China. Q.761
IC_CALLING_PARTY_OFF_HOLD	97	NORMALUNSPECIFIED	31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_CALLING_DROPPED_WHILE_ON_HOLD	98	NORMALRELEASE	16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_NEW_DESTINATION	99	NORMALUNSPECIFIED	31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_OUTGOING_CALLS_BARRED	100	CALLREJECTED	21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_SUB_CONTROLLED_ICB	101	CALLREJECTED	21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_CALL_REJECT_CALL_GAPPING	102	CALLREJECTED	21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_REJECTED_DIVERTED_CALL	103	CALLREJECTED	21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_SELECTIVE_CALL_BARRING	104	CALLREJECTED	21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_REMOTE_PROC_ERROR	105	TEMPORARYFAILURE	41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_TEMPORARY_OOS	106	UNALLOCATEDNUMBER	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_OPERATOR_PRIORITY_ACCESS	107	NORMALUNSPECIFIED	31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_CUG_ACCESS_BARRED	108	CALLREJECTED	21	X	X	X	X	X	X	X	X	X	X	X	X		X			X
IC_CUG_ACCESS_BARRED	108	USERNOTMEMOFCUG	87													X		X		
IC_SUBSCRIBER_CALL_TERMINATE	109	NORMALRELEASE	16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_FLOW_CONTROLLED_CONGESTION	110	SWITCHCONGESTION	42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_OUT_OF_CATCHMENT_AREA	111	NORESPONSE	18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_TRANSLATION_OOS	112	UNALLOCATEDNUMBER	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_PERMANENT_ICB	113	CALLREJECTED	21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_SUBSCRIBER_MOVED	114	NORESPONSE	18	X	X	X	X	X	X	X	X				X		X			X
IC_SUBSCRIBER_MOVED	114	SUBSCRIBERABSENT	20								X	X	X	X	X	X	X	X		
IC_SUB_NOT_FOUND_DLE	115	UNALLOCATEDNUMBER	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_ANONYMOUS_CALL_REJECTION	116	CALLREJECTED	21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_TERMINAL_CONGESTION	117	SWITCHCONGESTION	42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_REPEAT_ATTEMPT	118	(No Q.761 cause code listed)																		
IC_VACENT_CODE	119	UNALLOCATEDNUMBER	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_PREFIX_0_DIALLED_IN_ERROR	120	NORMALUNSPECIFIED	31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_PREFIX_1_DIALLED_IN_ERROR	121	NORMALUNSPECIFIED	31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_PREFIX_1_NOT_DIALLED	122	NORMALUNSPECIFIED	31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Table B-13 Internal Cause Code to Transmitted Q.761 Cause Code Mappings (continued)

Internal Cause Code	Value	Transmitted Q.761 Cause	Value	Standard Q.761	Australian Q.761	Finnish Q.761	Japanese Q.761	Japanese ETS_300_356	Hong Kong Q.761	Belgian Mobistar	Korean Q.761	ETS_300_356 & NTT	ETS_300_356 Spanish	ETS_300_356_V3 & UK	Taiwan Q.761	German Q.761
IC_EXCESSIVE_DIG_CALL_PROCEEDING	123	NORMALUNSPECIFIED	31	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_PROT_ERR_THRESHOLD_EXCEEDED	124	PROTOCOLERRORUNSPECIFIED	111	X	X	X	X	X	X	X	X	X	X	X	X	X
IC_OUTGOING_CALLS_BARRED_IN_CUG	125	CALLREJECTED	21	X	X	X	X	X	X	X					X	
IC_INCON_OUTGOING_ACC_AND_SUB_CLASS	126	INTERWORKINGUNSPECIFIED	127	X	X		X	X	X	X	X			X	X	
IC_INCON_OUTGOING_ACC_AND_SUB_CLASS	126	INCON_OUT_ACC_SUB	62			X										
IC_NON_EXISTENT_CUG	127	CALLREJECTED	21	X	X	X	X	X	X	X	X				X	
IC_MSG_WITH_UNREC_ELEM_DISCARDED	128	MSGUNRECELEMDISCARDED	110	X	X		X	X	X	X	X					
IC_MSG_WITH_UNREC_ELEM_DISCARDED	128	PROTOCOLERRORUNSPECIFIED	111				X									
IC_PREEMPTION_CCT_RES	129	NORMALUNSPECIFIED	31	X	X	X	X	X		X	X				X	
IC_PREEMPTION_CCT_RES	129	PREEMPTION	8								X	X	X			X
IC_PERMANENT_FRAME_MODE_OOS	130	(No Q.761 cause code listed)														
IC_PERMANENT_FRAME_MODE_OPERATIONAL	131	(No Q.761 cause code listed)														
IC_BLACKLIST_NO_CLI	132	(No Q.761 cause code listed)														
IC_BLACKLIST_CLI_LENGTH_INVALID	133	(No Q.761 cause code listed)														
IC_BLACKLIST_CLI_MATCHED	134	(No Q.761 cause code listed)														
IC_BLACKLIST_CPC_RESTRICTED	135	(No Q.761 cause code listed)														
IC_BLACKLIST_NOA_RESTRICTED	136	(No Q.761 cause code listed)														
IC_BLACKLIST_BNUMBER_MATCHED	137	(No Q.761 cause code listed)														
IC_WHITELIST_CLI_NOT_MATCHED	138	(No Q.761 cause code listed)														
IC_PORTED_NUMBER	139	(No Q.761 cause code listed)														
IC_REDIRECTION_TO_NEW_DEST	140	(No Q.761 cause code listed)														
IC_COT_FAILURE	141	(No Q.761 cause code listed)														
IC_MISROUTED_CALL_PORTED_NUM	142	(No Q.761 cause code listed)														
IC_INVALID_CALL_REF	143	(No Q.761 cause code listed)														
IC_UNKNOWN	144	(No Q.761 cause code listed)														

# ANSI SS7 Cause Codes

The next two tables provide received ANSI SS7 cause code to internal cause code mappings and internal cause code to transmitted ANSI SS7 cause code mappings.

## Received ANSI SS7 Cause Code Mappings

Table B-14 lists received ANSI SS7 cause codes (CCITT Coding Standard), along with their associated values, and maps each of them to the corresponding internal cause code and its associated value.

**Table B-14 Received ANSI SS7 Cause Code to Internal Cause Code Mappings**

Received ANSI SS7 Cause Code	Value	Internal Cause Code	Value
UNALLOCATED_NUM	1	IC_UNALLOCATED_NUMBER	51
NO_ROUTE_TO_TRANSIT	2	IC_NO_ROUTE_TO_TNS	34
NO_ROUTE_TO_DEST	3	IC_NO_ROUTE_TO_DEST	33
SEND_SIT	4	IC_SPECIAL_INFORMATION_TONE	81
MISDIALLED_TRUNK_PREFIX	5	IC_NORMAL_UNSPECIFIED	32
PREEMPTION	8	IC_PREEMPTION	86
NORMAL_REL	16	IC_NORMAL_CLEARING	31
USER_BUSY	17	IC_USER_BUSY	52
NO_RESPONSE	18	IC_NO_USER_RESPONDING	35
NO_ANSWER	19	IC_NO_ANSWER_ALERTED_USER	28
SUB_ABSCENT	20	IC_SUB_ABSCENT	90
CALL_REJECTED	21	IC_CALL_REJECTED	8
NUMBER_CHANGED	22	IC_NUMBER_CHANGED	36
DEST_OOO	27	IC_DEST_OUT_OF_ORDER	12
ADDRESS_INCOMP	28	IC_ADDRESS_INCOMPLETE	55
FAC_REJECTED	29	IC_FACILITY_REJECTED	14
NORMAL_UNSPEC	31	IC_NORMAL_UNSPECIFIED	32
NO_CIRCUIT	34	IC_NO_CIRCUIT_AVAILABLE	29
NETWORK_OOO	38	IC_NETWORK_OUT_OF_ORDER	26
TEMP_FAILURE	41	IC_TEMPORARY_FAILURE	50
SWITCH_CONG	42	IC_SWITCHING_EQUIP_CONGESTION	49
ACCESS_INFO_DISCARD	43	IC_ACCESS_INFO_DISCARDED	1
CHAN_NOT_AVAIL	44	IC_REQ_CIRCUIT_UNAVAIL	41
PRECEDENCE_BLOCKED	46	IC_PRECEDENCE_BLOCKED	93
RES_UNAVAIL	47	IC_RESOURCES_UNAVAIL_UNSPEC	44
FACILITY_NOT_SUBSC	50	IC_REQ_FACILITY_NOT_SUBSCR	43
OUT_CALLS_BARRED	53	IC_SERVICE_OR_OPTION_NOT_AVAIL	47

Table B-14 Received ANSI SS7 Cause Code to Internal Cause Code Mappings (continued)

Received ANSI SS7 Cause Code	Value	Internal Cause Code	Value
IN_CALLS_BARRED	55	IC_SERVICE_OR_OPTION_NOT_AVAIL	47
BC_NOT_AUTH	57	IC_BEARCAP_NOT_AUTHORIZED	2
BC_NOT_AVAIL	58	IC_BEARCAP_NOT_AVAIL	3
SERV_NOT_AVAIL	63	IC_SERVICE_OR_OPTION_NOT_AVAIL	47
BC_NOT_IMP	65	IC_BEARCAP_NOT_IMP	4
FAC_NOT_IMP	69	IC_REQ_FACILITY_NOT_IMP	42
RES_DIG_BEARCAP_ONLY	70	IC_ONLY_RESTRICT_DIG_INFO_BEARER	37
SERV_NOT_IMP	79	IC_SERVICE_OR_OPTION_NOT_IMP_UNSPEC	46
NOT_MEMBER_CUG	87	IC_INVALID_MSG_UNSPEC	19
INCOMP_DEST	88	IC_INCOMPATIBLE_DEST	15
NON_EXISTENT_CUG	90	IC_INVALID_MSG_UNSPEC	19
INVALID_TNS	91	IC_INVALID_TNS	21
INVALID_MESSAGE	95	IC_INVALID_MSG_UNSPEC	19
MSG_NOT_EXIST	97	IC_MSG_TYPE_NOT_IMP	24
ELEM_UNREC_DISCARDED	99	IC_ELEM_TYPE_NOT_IMP	13
PARAM_WITH_INVALID_CODING	100	IC_INVALID_ELEM_CONTENTS	18
RECOVERY_ONTIMER	102	IC_RECOVERY_ON_TIMER_EXPIRY	40
PARAM_UNREC_PASSED	103	IC_UNREC_ELEM_PASSED_ON	89
MSG_UNREC_PARAM_DISC	110	IC_INVALID_ELEM_CONTENTS	18
PROT_ERROR_UNSP	111	IC_PROTOCOL_ERROR_UNSPEC	38
INTERWORK_UNSP	127	IC_INTERWORK_UNSPEC	16

## Transmitted ANSI SS7 Cause Code Mappings

Table B-15 lists the internal cause codes, along with their associated values, and maps each of them to the corresponding transmitted ANSI SS7 cause code and its associated value.

Table B-15 Internal Cause Code to Transmitted ANSI SS7 Cause Code Mappings

Internal Cause Code	Value	Transmitted ANSI SS7 Cause Code	Value
IC_ACCESS_INFO_DISCARDED	1	ACCESS_INFO_DISCARD	43
IC_BEARCAP_NOT_AUTHORIZED	2	BC_NOT_AUTH	57
IC_BEARCAP_NOT_AVAIL	3	BC_NOT_AVAIL	58
IC_BEARCAP_NOT_IMP	4	BC_NOT_IMP	65
IC_CALL_AWARDED_DELIVERED_EST_CH	5	TEMP_FAILURE	41
IC_CALL_ID_HAS_BEEN_CLEARED	6	TEMP_FAILURE	41
IC_CALL_ID_IN_USE	7	TEMP_FAILURE	41
IC_CALL_REJECTED	8	CALL_REJECTED	21



Table B-15 Internal Cause Code to Transmitted ANSI SS7 Cause Code Mappings (continued)

Internal Cause Code	Value	Transmitted ANSI SS7 Cause Code	Value
IC_CH_ID_NOT_EXIST	9	INTERWORK_UNSP	127
IC_CH_TYPE_NOT_IMP	10	INTERWORK_UNSP	127
IC_CH_UNACCEPTABLE	11	TEMP_FAILURE	41
IC_DEST_OUT_OF_ORDER	12	DEST_OOO	27
IC_ELEM_TYPE_NOT_IMP	13	ELEM_UNREC_DISCARDED	99
IC_FACILITY_REJECTED	14	FAC_REJECTED	29
IC_INCOMPATIBLE_DEST	15	INCOMP_DEST	88
IC_INTERWORK_UNSPEC	16	INTERWORK_UNSP	127
IC_INVALID_CALL_REFERENCE_VALUE	17	TEMP_FAILURE	41
IC_INVALID_ELEM_CONTENTS	18	MSG_UNREC_PARAM_DISCARDED	110
IC_INVALID_MSG_UNSPEC	19	INVALID_MESSAGE	95
IC_INVALID_NUMBER_FORMAT	20	ADDRESS_INCOMPLETE	28
IC_INVALID_TNS	21	INVALID_TNS	91
IC_MANDATORY_ELEMENT_MISSING	22	PROT_ERROR_UNSPEC	111
IC_MSG_IN_WRONG_STATE	23	PROT_ERROR_UNSPEC	111
IC_MSG_TYPE_NOT_IMP	24	MSG_NOT_EXIST	97
IC_MSG_TYPE_NOT_IMP_OR_WRONG_STATE	25	PROT_ERROR_UNSPEC	111
IC_NETWORK_OUT_OF_ORDER	26	NETWORK_OOO	38
IC_NO_CALL_SUSPENDED	27	TEMP_FAILURE	41
IC_NO_ANSWER_ALERTED_USER	28	NO_ANSWER	19
IC_NO_CIRCUIT_AVAILABLE	29	NO_CIRCUIT	34
IC_NON_SELECTED_USER_CLEARING	30	NORMAL_UNSPEC	31
IC_NORMAL_CLEARING	31	NORMAL_REL	16
IC_NORMAL_UNSPECIFIED	32	NORMAL_UNSPEC	31
IC_NO_ROUTE_TO_DEST	33	NO_ROUTE_TO_DEST	3
IC_NO_ROUTE_TO_TNS	34	NO_ROUTE_TO_TRANSIT	2
IC_NO_USER_RESPONDING	35	NO_RESPONSE	18
IC_NUMBER_CHANGED	36	NUMBER_CHANGED	22
IC_ONLY_RESTRICT_DIG_INFO_BEARER	37	RES_DIG_BEARCAP_ONLY	70
IC_PROTOCOL_ERROR_UNSPEC	38	PROT_ERROR_UNSP	111
IC_QUALITY_UNAVAIL	39	NORMAL_UNSPEC	31
IC_RECOVERY_ON_TIMER_EXPIRY	40	RECOVERY_ONTIMER	102
IC_REQ_CIRCUIT_UNAVAIL	41	CHAN_NOT_AVAIL	44
IC_REQ_FACILITY_NOT_IMP	42	FAC_NOT_IMP	69
IC_REQ_FACILITY_NOT_SUBSCR	43	FACILITY_NOT_SUBSC	50
IC_RESOURCES_UNAVAIL_UNSPEC	44	RES_UNAVAIL	47

Table B-15 Internal Cause Code to Transmitted ANSI SS7 Cause Code Mappings (continued)

Internal Cause Code	Value	Transmitted ANSI SS7 Cause Code	Value
IC_RESPONSE_TO_STATUS_ENQUIRY	45	NORMAL_UNSPEC	31
IC_SERVICE_OR_OPTION_NOT_IMP_UNSPEC	46	SERV_NOT_IMP	79
IC_SERVICE_OR_OPTION_NOT_AVAIL	47	SERV_NOT_AVAIL	63
IC_SUSPEND_EXIST_BUT_NOT_THIS_ID	48	TEMP_FAILURE	41
IC_SWITCHING_EQUIP_CONGESTION	49	SWITCH_CONG	42
IC_TEMPORARY_FAILURE	50	TEMP_FAILURE	41
IC_UNALLOCATED_NUMBER	51	UNALLOCATED_NUM	1
IC_USER_BUSY	52	USER_BUSY	17
IC_INTERCEPTED_SUBSCRIBER	53	(No cause code listed.)	
IC_ACCESS_BARRED	54	NORMAL_REL	16
IC_ACKNOWLEDGEMENT	55	NORMAL_REL	16
IC_ADDRESS_INCOMPLETE	56	ADDRESS_INCOMP	28
IC_BUSY	57	USER_BUSY	17
IC_CHANNEL_OUT_OF_SERVICE	58	NETWORK_OOO	38
IC_DTE_CONTROLLED_NOT_READY	59	NORMAL_UNSPEC	31
IC_CONGESTION	60	SWITCH_CONG	42
IC_CALL_TERMINATION	61	NORMAL_REL	16
IC_FACILITY_NOT_REGISTERED	62	FAC_REJECTED	29
IC_INCOMING_CALLS_BARRED	63	NORMAL_REL	16
IC_SERVICE_INCOMPATIBLE	64	SERV_NOT_AVAIL	63
IC_MESSAGE_NOT_UNDERSTOOD	65	PROT_ERROR_UNSPEC	111
IC_NETWORK_ADDRESS_EXTENSION_ERROR	66	NORMAL_UNSPEC	31
IC_NETWORK_TERMINATION	67	NORMAL_UNSPEC	31
IC_NUMBER_UNOBTAINABLE	68	UNALLOCATED_NUM	1
IC_PRIORITY_FORCED_RELEASE	69	NORMAL_UNSPEC	31
IC_REJECT	70	NORMAL_UNSPEC	31
IC_ROUTE_OUT_OF_SERVICE	71	NETWORK_OOO	38
IC_SUBSCRIBER_INCOMPATIBLE	72	NORMAL_UNSPEC	31
IC_SIGNAL_NOT_UNDERSTOOD	73	PROT_ERROR_UNSPEC	111
IC_SIGNAL_NOT_VALID	74	PROT_ERROR_UNSPEC	111
IC_SUBSCRIBER_OUT_OF_SERVICE	75	NORMAL_UNSPEC	31
IC_SIGNALLING_SYSTEM_INCOMPATIBLE	76	INTERWORK_UNSPEC	127
IC_SERVICE_TEMPORARILY_UNAVAILABLE	77	SERV_NOT_AVAIL	63
IC_SERVICE_UNAVAILABLE	78	SERV_NOT_AVAIL	63
IC_DTE_UNCONTROLLED_NOT_READY	79	NORMAL_UNSPEC	31
IC_TRANSFERRED	80	NORMAL_UNSPEC	31

Table B-15 Internal Cause Code to Transmitted ANSI SS7 Cause Code Mappings (continued)

Internal Cause Code	Value	Transmitted ANSI SS7 Cause Code	Value
IC_INCOMING_CALLS_BARRED_IN_CUG	81	NORMAL_UNSPEC	31
IC_SPECIAL_INFORMATION_TONE	82	SEND_SIT	4
IC_USER_NOT_MEMBER_OF_CUG	83	NORMAL_UNSPEC	31
IC_MISDIALLED_TK_PREFIX	84	MISDIALLED_TRUNK_PREFIX	5
IC_PARAM_UNREC_PASSED	85	NORMAL_UNSPEC	31
IC_PROPRIETARY	86	NORMAL_UNSPEC	31
IC_PREEMPTION	87	PREEMPTION	8
IC_PREEMPTION_CCT_UNAVAILABLE	88	NORMAL_UNSPEC	31
IC_UNALLOCATED_DEST_NUMBER	89	UNALLOCATED_NUM	1
IC_UNREC_ELEM_PASSED_ON	90	PARAM_UNREC_PASSED	103
IC_SUB_ABSCENT	91	SUB_ABSCENT	20
IC_UNDEFINED_BG	92	UNDEFIND_BG	
IC_ROUTING_ERROR	93	ROUTING_ERROR	
IC_PRECEDENCE_BLOCKED	94	PRECEDENCE_BLOCKED	46
IC_CALL_TYPE_INCOMPATIBLE	95	CALL_TYPE_INCOMP	
IC_GROUP_RESTRICTIONS	96	GROUP_RESTRICT	
IC_CALLING_PARTY_OFF_HOLD	97	NORMAL_UNSPEC	31
IC_CALLING_DROPPED_WHILE_ON_HOLD	98	NORMAL_UNSPEC	31
IC_NEW_DESTINATION	99	NORMAL_UNSPEC	31
IC_OUTGOING_CALLS_BARRED	100	NORMAL_UNSPEC	31
IC_SUB_CONTROLLED_ICB	101	NORMAL_UNSPEC	31
IC_CALL_REJECT_CALL_GAPPING	102	NORMAL_UNSPEC	31
IC_REJECTED_DIVERTED_CALL	103	NORMAL_UNSPEC	31
IC_SELECTIVE_CALL_BARRING	104	NORMAL_UNSPEC	31
IC_REMOTE_PROC_ERROR	105	NORMAL_UNSPEC	31
IC_TEMPORARY_OOS	106	NORMAL_UNSPEC	31
IC_OPERATOR_PRIORITY_ACCESS	107	NORMAL_UNSPEC	31
IC_CUG_ACCESS_BARRED	108	NORMAL_UNSPEC	31
IC_SUBSCRIBER_CALL_TERMINATE	109	NORMAL_UNSPEC	31
IC_FLOW_CONTROLLED_CONGESTION	110	NORMAL_UNSPEC	31
IC_OUT_OF_CATCHMENT_AREA	111	NORMAL_UNSPEC	31
IC_TRANSLATION_OOS	112	NORMAL_UNSPEC	31
IC_PERMANENT_ICB	113	NORMAL_UNSPEC	31
IC_SUBSCRIBER_MOVED	114	NORMAL_UNSPEC	31
IC_SUB_NOT_FOUND_DLE	115	NORMAL_UNSPEC	31
IC_ANONYMOUS_CALL_REJECTION	116	NORMAL_UNSPEC	31

Table B-15 Internal Cause Code to Transmitted ANSI SS7 Cause Code Mappings (continued)

Internal Cause Code	Value	Transmitted ANSI SS7 Cause Code	Value
IC_TERMINAL_CONGESTION	117	NORMAL_UNSPEC	31
IC_REPEAT_ATTEMPT	118	NORMAL_UNSPEC	31
IC_VACENT_CODE	119	NORMAL_UNSPEC	31
IC_PREFIX_0_DIALLED_IN_ERROR	120	NORMAL_UNSPEC	31
IC_PREFIX_1_DIALLED_IN_ERROR	121	NORMAL_UNSPEC	31
IC_PREFIX_1_NOT_DIALLED	122	NORMAL_UNSPEC	31
IC_EXCESSIVE_DIG_CALL_PROCEEDING	123	NORMAL_UNSPEC	31
IC_PROT_ERR_THRESHOLD_EXCEEDED	124	NORMAL_UNSPEC	31
IC_OUTGOING_CALLS_BARRED_IN_CUG	125	NORMAL_UNSPEC	31
IC_INCON_OUTGOING_ACC_AND_SUB_CLASS	126	NORMAL_UNSPEC	31
IC_NON_EXISTENT_CUG	127	NORMAL_UNSPEC	31
IC_MESG_WITH_UNREC_ELEM_DISCARDED	128	NORMAL_UNSPEC	31
IC_PREEMPTION_CCT_RES	129	NORMAL_UNSPEC	31
IC_PERMANENT_FRAME_MODE_OOS	130	NORMAL_UNSPEC	31
IC_PERMANENT_FRAME_MODE_OPERATIONAL	131	NORMAL_UNSPEC	31
IC_BLACKLIST_NO_CLI	132	NORMAL_UNSPEC	31
IC_BLACKLIST_CLI_LENGTH_INVALID	133	NORMAL_UNSPEC	31
IC_BLACKLIST_CLI_MATCHED	134	NORMAL_UNSPEC	31
IC_BLACKLIST_CPC_RESTRICTED	135	NORMAL_UNSPEC	31
IC_BLACKLIST_NOA_RESTRICTED	136	NORMAL_UNSPEC	31
IC_BLACKLIST_BNUMBER_MATCHED	137	NORMAL_UNSPEC	31
IC_WHITELIST_CLI_NOT_MATCHED	138	NORMAL_UNSPEC	31
IC_PORTED_NUMBER	139	NORMAL_UNSPEC	31
IC_REDIRECTION_TO_NEW_DEST	140	NORMAL_UNSPEC	31
IC_COT_FAILURE	141	NORMAL_UNSPEC	31
IC_MISROUTED_CALL_PORTED_NUM	142	NORMAL_UNSPEC	31
IC_INVALID_CALL_REF	143	NORMAL_UNSPEC	31
IC_UNKNOWN	144	NORMAL_UNSPEC	31

# Release Cause Location Codes

The following section lists the internal and protocol-specific release cause location values associated with Cisco Media Gateway Controller Software Release 7.4(x) and later.

## Internal Release Cause Location Codes

Table B-16 lists the internal release cause location binary values for Release 7.4(x) and later.

**Table B-16 Internal Release Cause-Location Values**

Cause Location	Binary Value
LOCATION_USER	0001
LOCATION_PRIVATE_LOCAL	0010
LOCATION_PUBLIC_LOCAL	0011
LOCATION_TRANSIT	0100
LOCATION_PUBLIC_REMOTE	0101
LOCATION_PRIVATE_REMOTE	0110
LOCATION_INTERNATIONAL	0111
LOCATION_INTERWORKING	1000
LOCATION_LOCAL_INTERFACE	1001
LOCATION_LOCAL_LOCAL	1010
LOCATION_LOCAL_REMOTE	1011
LOCATION_PACKET_MANAGER	1100
LOCATION_UNKNOWN	1101

## Protocol Specific Release Cause Location Codes

The following sections list the protocol-specific release cause location values for the protocols supported in Cisco Media Gateway Controller Software Release 7.3(x) and later.

The release cause location values for each protocol are listed with their variants in a separate column on the right side of the following tables. Note that an “X” in any column indicates that the mapping in question is supported by that particular protocol.

### ANSI SS7 Protocol to Internal Mapping

Described in this section are the protocol-specific release cause location values, pertinent to the ANSI SS7 protocol. The received values are in binary.

**Table B-17 Protocol-specific Release Cause Location Values**

Received Binary Value	Cause Location	Standard	Bellcore	MCI	Sprint
0000	LOCATION_USER	X	X	X	X
0010	LOCATION_LOCAL_LOCAL	X	X	X	X
0110	LOCATION_LOCAL_INTERFACE	X	X		
0001	LOCATION_PRIVATE_LOCAL	X		X	X
0011	LOCATION_TRANSIT_DEFAULT	X		X	X
0100	LOCATION_LOCAL_REMOTE	X		X	X
0101	LOCATION_PRIVATE_REMOTE	X		X	X
0110	LOCATION_LOCAL_INTERFACE	X		X	X
0111	LOCATION_INTERNATIONAL	X		X	X
1010	LOCATION_INTERWORKING	X		X	X

MCI and Sprint default location on no map for received value:  
LOCATION\_TRANSIT ANSI STANDARD

Bellcore default location on no map for received value:  
LOCATION\_LOCAL\_INTERFACE

## Internal to ANSI SS7 Protocol Mapping

Table B-18 describes the internal-to-protocol location mappings supported in the ANSI SS7 protocol. The transmitted bit code values are in binary.

**Table B-18 Internal-to-ANSI SS7 Protocol Location Mappings**

Transmitted Binary Value	Cause Location	Standard	Bellcore	MCI	Sprint
0000	LOCATION_USER	X	X	X	X
0010	LOCATION_LOCAL_LOCAL	X	X	X	X
0110	LOCATION_LOCAL_INTERFACE	X	X		
0001	LOCATION_PRIVATE_LOCAL	X		X	X
0011	LOCATION_TRANSIT_DEFAULT	X		X	X
0100	LOCATION_LOCAL_REMOTE	X		X	X
0101	LOCATION_PRIVATE_REMOTE	X		X	X
0110	LOCATION_LOCAL_INTERFACE	X		X	X
0111	LOCATION_INTERNATIONAL	X		X	X
1010	LOCATION_INTERWORKING	X		X	X

## Q.767 Protocol to Internal Mapping

Table B-19 describes the protocol-specific release cause location values pertinent to the Q767 protocol. The received values are in binary.

**Table B-19 Release Cause Location Values for the Q.767 Protocol**

Received Binary Value	Cause Location	Standard	Italian	Russian	Spanish	Swedish	Mexican	Italian and Interconnect	ETS_300_121 and Polish	ETS_300_121
0000	LOCATION_USER	X	X	X	X	X	X	X	X	X
0010	LOCATION_LOCAL_LOCAL									
0110	LOCATION_LOCAL_INTERFACE									
0010	LOCATION_PUBLIC_LOCAL		X		X		X	X		
0001	LOCATION_PRIVATE_LOCAL		X		X		X	X		
0011	LOCATION_TRANSIT	X	X	X	X	X	X	X	X	X
0100	LOCATION_LOCAL_REMOTE									
0100	LOCATION_PUBLIC_REMOTE	X	X	X	X	X	X	X	X	X
0101	LOCATION_PRIVATE_REMOTE	X	X	X	X	X	X	X	X	X
0110	LOCATION_LOCAL_INTERFACE									
0111	LOCATION_INTERNATIONAL	X	X	X	X	X	X	X	X	X
1010	LOCATION_INTERWORKING	X	X	X	X	X	X	X	X	X

Default location on no map for received value ITALIAN:  
LOCATION\_INTERWORKING. All others: LOCATION\_INTERNATIONAL.



## Internal to Q.767 Protocol Mapping

Table B-20 describes the internal to protocol location mappings supported in the Q.767 protocol. The transmitted values are in binary.

**Table B-20 Internal to Protocol Location Mappings for the Q.767 Protocol**

Transmitted Binary Value	Cause Location	Standard			Italian and Interconnect			ETS_300_121 and Polish ETS_300_121		
		Standard	Italian	Russian	Spanish	Swedish	Mexican	ETS_300_121	ETS_300_121	ETS_300_121
0000	LOCATION_USER	X	X	X	X	X	X	X	X	X
0010	LOCATION_LOCAL_LOCAL									
0110	LOCATION_LOCAL_INTERFACE									
0010	LOCATION_PUBLIC_LOCAL		X		X	X	X			
0001	LOCATION_PRIVATE_LOCAL		X		X	X	X			
0011	LOCATION_TRANSIT	X	X	X	X	X	X	X	X	X
0100	LOCATION_LOCAL_REMOTE									
0100	LOCATION_PUBLIC_REMOTE	X	X	X	X	X	X	X	X	X
0101	LOCATION_PRIVATE_REMOTE	X	X	X	X	X	X	X	X	X
0110	LOCATION_LOCAL_INTERFACE									
0111	LOCATION_INTERNATIONAL	X	X	X	X	X	X	X	X	X
1010	LOCATION_INTERWORKING	X	X	X	X	X	X	X	X	X

## Q.761 Protocol to Internal Mapping

Table B-21 describes the protocol specific release cause location values pertinent to the Q.761 protocol.

**Table B-21 Release Cause Location Values for the Q.761 Protocol**

Received Binary Value	Cause Location	Standard Q.761	Australian Q.761	Finnish Q.761	Japanese Q761	Korean Q.761	Q.761 Korean	Hong Kong Q761	Taiwan Q.761	Belgian Mobistar	Spanish ETS_300_356	Swiss ETS_300_356	ETS_300_356_V3 and UK	Japanese ETS_300_356	ETS_300_356 and Japan
0000	LOCATION_USER	X	X	X	X	X	X	X	X	X	X	X	X	X	X
0010	LOCATION_LOCAL_LOCAL														
0110	LOCATION_LOCAL_INTERFACE														
0010	LOCATION_PUBLIC_LOCAL	X	X	X	X	X	X	X	X	X	X	X	X		X
0001	LOCATION_PRIVATE_LOCAL	X	X	X	X	X	X	X	X	X	X	X	X		X
0011	LOCATION_TRANSIT	X		X	X	X	X	X	X	X	X	X	X	X	X
0100	LOCATION_LOCAL_REMOTE														
0100	LOCATION_PUBLIC_REMOTE	X	X	X	X	X	X	X	X	X	X		X	X	X
0101	LOCATION_PRIVATE_REMOTE	X	X	X	X	X	X	X	X	X	X		X	X	X
0110	LOCATION_LOCAL_INTERFACE														
0111	LOCATION_INTERNATIONAL	X	X	X	X	X	X	X	X	X	X		X	X	X
1110	LOCATION_PACKET_MANAGER										X				
1010	LOCATION_INTERWORKING	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Default location on no map for received value: KOREAN: LOCATION\_INTERWORKING

## Internal to Q.761 Protocol Mapping

Table B-22 describes the internal to protocol location mappings supported in the Q.761 protocol. The transmitted values are in binary.

**Table B-22 Internal to Protocol Location Mappings for the Q.761 Protocol**

Transmitted Binary Value	Cause Location	Standard Q.761	Australian Q.761	Finnish Q.761	Japanese Q761	Korean Q.761	Q.761 Korean	Hong Kong Q761	Taiwan Q.761	Belgian Mobistar	Spanish ETS_300_356	Swiss ETS_300_356	ETS_300_356_V3 and UK	Japanese ETS_300_356	ETS_300_356 and Japan
0000	LOCATION_USER	X	X	X	X	X	X	X	X	X	X	X	X	X	X
0010	LOCATION_LOCAL_LOCAL														
0110	LOCATION_LOCAL_INTERFACE														
0010	LOCATION_PUBLIC_LOCAL	X	X	X	X	X	X	X	X	X	X	X	X		X
0001	LOCATION_PRIVATE_LOCAL	X	X	X	X	X	X	X	X	X	X	X	X		X
0011	LOCATION_TRANSIT	X	X	X	X	X	X	X	X	X	X	X	X	X	X
0100	LOCATION_LOCAL_REMOTE														
0100	LOCATION_PUBLIC_REMOTE	X	X	X	X	X	X	X	X	X	X		X	X	X
0101	LOCATION_PRIVATE_REMOTE	X	X	X	X	X	X	X	X	X	X		X	X	X
0110	LOCATION_LOCAL_INTERFACE														
0111	LOCATION_INTERNATIONAL	X	X	X	X	X	X	X	X	X	X		X	X	X
1110	LOCATION_PACKET_MANAGER										X				
1010	LOCATION_INTERWORKING	X	X	X	X	X	X	X	X	X	X	X	X	X	X

