Disconnect Reason Guide

ISUP Disconnect Reasons based on ITU-T Q.931

Decimal Value	Hexadecimal Value	Definition
1	01	**Unallocated (unassigned) number.** This number is not in the routing table or it has no path across the ISDN cloud (network). 1. Check routing table to see it the number is available. 2. Check to make sure the correct digits were dialed and it is a valid number.
2	02	**No route to specified transit network (national use).** The number was dialed with a transit network code such as 108880 to from AT&T to MCI and there is no route across.
3	03	**No route to destination.** The dialed number is in the routing plan, but there is no physical route to the destination. 1. The PRI D-Channel may be down at one end or the other. 2. The span or WAN is not connected correctly.
4	04	**Send special information tone.** Indicates that the called party cannot be reached for reasons that are of a long term nature and that the special information tone should be returned to the calling party.
5	05	**Misdialed trunk prefix (national use).** Indicates the erroneous inclusion of a trunk prefix in the called party number.
6	06	**Channel Unacceptable.** Indicates that the channel most recently identified is not acceptable to the sending entity for use in this call.
7	07	**Call awarded and being delivered in an Established channel.** 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 user for similar calls (e.g. packet-mode virtual calls).
8	08	**Pre-Emption.** Indicates that the call is being pre-empted.
0	09	**Pre-Emption – Circuit reserved for reuse.** Indicates that the call is being cleared because one of the users involved in the call has requested that the call be cleared.
16	10	**Normal Call Clearing.** This is one of the most common cause codes and is received for many reasons. It usually occurs because someone hung up the call at one side or the other.
17	11	**User Busy.** The number dialed is busy and cannot receive any more calls.
18	12	**No User Responding.** The called party does not respond to the call, or does not wish to answer the call.

19	13	No Answer from User (User Alerted).
		The called party has been alerted to the incoming call, but does not respond with a connect indication within a prescribed period of time.
		NOTE: This cause is not necessarily generated by Q.931 procedures but may be generated by internal network timers.
20	14	Subscriber Absent.
		Used when a mobile station has logged off, radio contact is not obtained with a mobile station or if a personal telecommunications user is temporarily not addressable at any user-network interface.
21	15	Call Rejected.
		Indicates that the equipment sending this cause does not wish to accept this call, alth9ough it could have accepted the call because the equipment sending this cause is neither busy nor incompatible.
		May also be generated by the network, indicating that the call was cleared due to a supplementary service constraint.
22	16	Number Changed.
		This is returned to a calling party when the called party number indicated by the calling party is no longer assigned. The new called party number may optionally be included in the diagnostic field. If a network does not support this cause value, cause number 1 shall be used.
26	1A	Non-Selected User Clearing.
		Indicates that the user has not been awarded the incoming call.
27	1B	Destination Out-of-Order.
		This is a working number, but the span to the destination is not active or there is a problem sending messages to this destination.
28	1C	Invalid Number Format (address incomplete).
		Indicates that the called party cannot be reached because the called party number is not in a valid format or is not complete. This can happen when you are calling out using a network type number (enterprise) when you should be calling out Unknown or National for the Type of Number (TON).
29	1D	Facility Rejected.
		This cause is returned when a supplementary service requested by the user cannot be provided by the network.
30	1E	Response to STATUS ENQUIRY.
		This cause is included in the STATUS message when the reason for generating the STATUS message was the prior receipt of a STATUS ENQUIRY message.
31	1F	Normal, Unspecified.
		This is a very common cause code and happens when the network is not able to determine what to do with the call being made.
34	22	No Circuit/Channel Available.
		There are no B-Channels available to handle the selected call.
38	26	Network Out-of-Order.
		Indicates that the network is not functioning correctly and that the condition is likely to last a relatively long period of time.
39	27	Permanent Frame Mode Connection Out-of-Service.
		This cause is included in a STATUS message to indicate that a permanently established frame mode connection is out-of-service.
40	28	Permanent Frame Mode Connection Operational.
		This cause is included in a STATUS message to indicate that a permanently established frame mode connection is operational and capable of carrying user information.
41	29	Temporary Failure.
		The call was disconnected due to a network failure.

42	2A	Switching Equipment Congestion.
		Indicates that the switching equipment generating this cause is experiencing a period of high traffic.
43	2B	Access Information Discarded.
		Indicates that the network could not deliver access information to the remote user as requested, i.e. user-to-user information, low layer compatibility, high layer compatibility, or sub-address, as indicated in the diagnostic.
44	2C	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.
		This may happen when you get in a glare condition: Both sides are selected top-down or bottom-up channel hunting.
47	2F	Resource Unavailable, Unspecified.
		Used to report a resource unavailable event only when no other cause in the resource unavailable class applies.
49	31	Quality of Service Not Available.
		Used to report that the requested Quality of Service, as defined in Recommendation X.213, cannot be provided (e.g. throughput or transit delay cannot be supported).
50	32	Requested Facility Not Subscribed.
		This cause indicates that the user has requested a supplementary service which is implemented by the equipment which generated this cause, but the user is not authorized to use.
53	35	Outgoing Calls Barred Within Closed User Group (CUG).
		Indicates that although the calling party is a member of the CUG for the outgoing CUG call, outgoing calls are not allowed for this member of the CUG.
55	37	Incoming Calls Barred within CUG.
		Indicates that although the called party is a member of the CUG for the incoming CUG call, incoming calls are not allowed to this member of the CUG.
57	39	Bearer Capability Not Authorized.
		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.
58	3A	Bearer Capability Not Presently Available.
		Indicates that the user has requested a bearer capability, which is implemented by the equipment which generated this cause but which is not available at this time.
62	3E	Inconsistency in Designated Outgoing Access Information and Subscriber Class.
		This cause indicates that there is an inconsistency in the designated outgoing access information and subscriber class.
63	3F	Service or Option Not Available, Unspecified.
		Used to report a service or option not available event only when no other cause in the serive or option not available class applies.
65	41	Bearer Capability Not Implemented.
		Indicates that the equipment sending this cause does not support the bearer capability requested (i.e. requesting 64kb data when only speech is supported).
66	42	Channel Type Not Implemented.
		Indicates that the equipment sending this cause does not support the channel type requested.
69	45	Requested Facility Not Implemented.
		Indicates that the equipment sending this cause does not support the requested supplementary service.
70	46	Only Restricted Digital Information Bearer Capability is Available (national use).
		Indicates that the calling party has requested an unrestricted (64kb) bearer service but that the equipment sending this cause only supports the restricted version of the requested bearer capability.

79	4F	**Service or Option Not Implemented, Unspecified.** Used to report a service or option not implemented event only when no other cause in the service or option not implemented class applies.
81	51	**Invalid Call Reference Value.** Indicates that the equipment sending this cause has received a message with a call reference which is not currently in use or assigned on the user-network interface. E.G. The call that is being reference by this value, does not exist on this system.
82	52	**Identified Channel Does Not Exist.** 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 PRI numbered from 1 to 12 and the user equipment or the network attempts to use channels 13 through 23, this cause is generated.
83	53	**A Suspended Call Exists, but This Call Identity Does Not.** Indicates that a call resume has been attempted with a call identity which differs from that in use for any presently suspended calls(s).
84	54	**Call Identity in Use.** Indicates that the network has received a call suspended request containing a call identity which is already in use for a suspended call within the domain of interfaces over which the call might be resumed.
85	55	**No Call Suspended.** Indicates that the network has received a call resume request containing a call identity information element, which presently does not indicate any suspended call within the domain of interfaces over which calls may be resumed.
86	56	**Call Having the Requested Call Identity Has Been Cleared.** Indicates that the network has received a call resume request containing a call identity information element indicating a suspended call that has in the meantime been cleared while suspended.
87	57	**User Not Member of CUG.** Indicates that the called user for the incoming CUG call is not a member of the specified CUG or that the calling user is an ordinary subscriber calling a CUG subscriber.
88	58	**Incompatible Destination.** The number being dialed is not capable of the type of call. 　1. Calling a restricted line in unrestricted mode. 　2. Calling a pots phone using unrestricted mode. Indicates that the equipment sending this cause has received a request to establish a call which has low layer compatibility, high layer compatibility, or other compatibility attributes which cannot be accommodated.
90	5A	**Non-Existent CUG.** Indicates that the specified CUG does not exist.
91	5B	**Invalid Transit Network Selection (national use).** Indicates that a transit network identification was received which is of an incorrect format as defined in Annex C/Q.931.
95	5F	**Invalid Message, Unspecified.** Used to report an invalid message event only when no other cause in the invalid message class applies.
96	60	**Mandatory Information Element is Missing.** Indicates that the equipment sending this cause has received a message which is missing an information element which must be present in the message.
97	61	**Message Type Non-Existent or Not Implemented.** Indicates that the equipment sending this cause has received a message with a message type it does not recognize either because this is a message not defined or defined but not implemented by the equipment sending this cause.

98	62	**Message is Not Compatible with the Call State, or the Message Type is Non-Existent or Not Implemented.** Indicates that the equipment sending this cause has received a message such that the procedures do not indicate that this is a permissible message to receive while in the call state, or a STATUS message was received indicating an incompatible call state.
99	63	**An Information Element or Parameter Does Not Exist or is Not Implemented.** Indicates that the equipment sending this cause has received a message which includes information element(s)/parameter(s) not recognized because the information element identifier(s)/parameter name(s) are not defined or are defined but not implemented by the equipment sending the cause.
100	64	**Invalid Information Element Contents.** The call has an information element that is not understood by the switch being called. This cause is usually followed by the information element that is causing the problem.
101	65	**The Message is Not Compatible with the Call State.** Indicates that a message has been received which is incompatible with the current call state for this call.
102	66	**Recovery on Timer Expired.** This occurs when ISDN messages don't arrive in specified time according to the Q.931 specification. This cause is sometimes followed by the timer that has expired.
103	67	**Parameter Non-Existent or Not Implemented – Passed On (national use).** Indicates that the equipment sending this cause has received a message which includes parameters not recognized because the parameters are not defined or are defined but not implemented by the equipment sending the cause.
110	6E	**Message with Unrecognized Parameter Discarded.** Indicates that the equipment sending this cause has discarded a received message, which includes a parameter that is not recognized.
111	6F	**Protocol Error, Unspecified.** Used to report a protocol error event only when no other cause in the protocol error class applies.
127	7F	**Interworking, Unspecified.** Indicates that there has been interworking with a network which does not provide causes for actions it takes. Thus, the precise cause for a message which is being sent cannot be ascertained.

Sonus internal disconnect codes

128	**RESOURCES ALLOCATION FAILURE** [This Sonus code is mapped to Q.931 ID 34.] (The GSX may release a call with this cause value if: • No PSTN circuits are available to hunt. • The DSP call resources are exhausted. • Call admissions to the system have been suspended due to an event such as an MNS or GNS switchover, CNS switchover, etc. • The GSX memory resources are exhausted.)
131	**RESOURCE FAILURE** [This Sonus code is mapped to Q.931 ID 41.] (The GSX may release a call with this cause value if a resource that was being used by the call fails and is no longer available. Taking a span out of service could cause this code.)
132	**MODULE FAILURE** [This Sonus code is mapped to Q.931 ID 41.] (The GSX may release a call with this cause value if a catastrophic failure causes bulk tear down of one or more calls on the module when those calls are disconnected. A module failure, a module switchover, a span failure, a SGX that is temporarily placed into "PAUSED" state while calls are active, a GSX-to-SGX IP network failure resulting in loss of connectivity, and so on could cause this code.)
142	**AUTOMATIC CONGESTION CONTROL PROCEDURE** [This Sonus code is mapped to Q.931 ID 34.] (The GSX may release a call with this cause value if Automatic Congestion Control (ACC) is configured, insufficient resources are detected at the far end, and the call is cancelled. When ACC is active, calls may be rerouted or cancelled, depending on: • current congestion level • Alternate Route versus Direct Route requirements • Percentage of calls to be rerouted versus cancelled This release code indicates that this call was cancelled, rather than rerouted.)
144	**PACKET LOSS EXCEEDS THRESHOLD** [This Sonus code is mapped to Q.931 ID 31.] (The GSX may release a call with this cause value if RTCP disconnects the call because the measured packet loss within a specified timeframe exceeds a configured threshold. This timeframe, the RTCP Sender Report interval, and the threshold value are specified in the PSX Packet Service Profile.)
145	**NO RTP OR RTCP PACKETS** [This Sonus code is mapped to Q.931 ID 31.] (The GSX may release a call with this cause value if RTCP disconnects the call because no RTP or RTCP packets were received within the specified timeframe. This timeframe is two RTCP Sender Report intervals, as specified in the PSX Packet Service Profile. This absence of packets for this timeframe is "loss of RTP bearer channel".)
150	**CPC_DISC_NO_PSX_ROUTES** (The GSX may release a call with this cause code if a policy response from the PSX that should contain routes is received with no routes.)
151	**CPC_DISC_SETUP_REQ_TIMER_EXPIRY** (The GSX may release a call with this cause code if there is a timer expiry on a setup request, for example no response by the peer to a SIP INVITE message on the egress call leg. This reason code is in the default crankback profile, and will cause crankback on the next route returned by PSX for the destination.)
166	**CPC_DISC_PDD_TIMER_EXPIRED** This release code indicates that the call is released due to PDD timer expiry.

SIP to ISUP disconnect reason matching based on RFC 3398

SIP	Enumeration	ISUP	Enumeration
400	Bad Request	41	CPC_DISC_TEMPORARY_FAILURE
401	Unauthorized	21	CPC_DISC_CALL_REJECTED
402	Payment Required	21	CPC_DISC_CALL_REJECTED
403	Forbidden	21	CPC_DISC_CALL_REJECTED
404	Not Found	1	CPC_DISC_UNALLOCATED_NUMBER
405	Method Not Allowed	63	CPC_DISC_SERVICE_OR_OPTION_NOT_AVAILABLE_UNSPECIFIED
406	Not Acceptable	79	CPC_DISC_SERVICE_OR_OPTION_NOT_IMPLEMENTED_UNSPECIFIED
407	Proxy Authentication Required	21	CPC_DISC_CALL_REJECTED
408	Request Timeout	102	CPC_DISC_RECOVERY_ON_TIMER_EXPIRY
409**	Conflict	41	CPC_DISC_TEMPORARY_FAILURE
410	Gone	22	CPC_DISC_NUMBER_CHANGED
411**	Length Required	127	CPC_DISC_INTERWORKING_UNSPECIFIED
413	Request Entity Too Long	127	CPC_DISC_INTERWORKING_UNSPECIFIED
414	Request - URI Too Long	127	CPC_DISC_INTERWORKING_UNSPECIFIED
415	Unsupported Media Type	79	CPC_DISC_SERVICE_OR_OPTION_NOT_IMPLEMENTED_UNSPECIFIED
416	Unsupported URI Scheme	127	CPC_DISC_INTERWORKING_UNSPECIFIED
417**	Unknown Resource Priority	31	CPC_DISC_NORMAL_UNSPECIFIED
420	Bad Extension	127	CPC_DISC_INTERWORKING_UNSPECIFIED
421	Extension Required	127	CPC_DISC_INTERWORKING_UNSPECIFIED
423	Interval Too Brief	127	CPC_DISC_INTERWORKING_UNSPECIFIED
480	Temporarily Unavailable	18	CPC_DISC_NO_USER_RESPONDING
481	Call/Transaction Does Not Exist	41	CPC_DISC_TEMPORARY_FAILURE
482	Loop Detected	25	CPC_DISC_EXCHANGE_ROUTING_ERROR
483	Too Many Hops	25	CPC_DISC_EXCHANGE_ROUTING_ERROR
484	Address Incomplete	28	CPC_DISC_INVALID_NUMBER_FORMAT
485	Ambiguous	1	CPC_DISC_UNALLOCATED_NUMBER
486	Busy Here	17	CPC_DISC_USER_BUSY
487	Request Terminated	--	(Not applicable - the GSX acts as a B2BUA rather than as a Proxy; this request is internal to GSX interworking and is not passed through.)
488	Not Acceptable Here	31	CPC_DISC_NORMAL_UNSPECIFIED
489**	Bad Event	31	CPC_DISC_NORMAL_UNSPECIFIED
491**	Request Pending	31	CPC_DISC_NORMAL_UNSPECIFIED
493**	Undecipherable	31	CPC_DISC_NORMAL_UNSPECIFIED
494**	Security Agreement Required	31	CPC_DISC_NORMAL_UNSPECIFIED
500	Server Internal Error	41	CPC_DISC_TEMPORARY_FAILURE
501	Not Implemented	79	CPC_DISC_SERVICE_OR_OPTION_NOT_IMPLEMENTED_UNSPECIFIED
502	Bad Gateway	38	CPC_DISC_NETWORK_OUT_OF_ORDER
503	Service Unavailable	41	CPC_DISC_TEMPORARY_FAILURE
504	Server Timeout	102	CPC_DISC_RECOVERY_ON_TIMER_EXPIRY
505**	Version Not Supported	127	CPC_DISC_INTERWORKING_UNSPECIFIED
513	Message Too Large	127	CPC_DISC_INTERWORKING_UNSPECIFIED
600	Busy Everywhere	17	CPC_DISC_USER_BUSY
603	Decline	21	CPC_DISC_CALL_REJECTED
604	Does Not Exist Anywhere	1	CPC_DISC_UNALLOCATED_NUMBER

ISUP disconnect reason mapping to VoIP protocols

Disconnect Code Received	Enumeration	Standards			Disconnect Code Stored in CDR when Disconnect Initiated by Service Type:			
		Q.931	Q.850	GR-317	ISUP	ISDN	H.323	SIP
0	CPC_INVALID_DISC_REASON				31	16	127	500
1	CPC_DISC_UNALLOCATED_NUMBER	✓	✓	✓	1	1	1	404
2	CPC_DISC_NO_ROUTE_TO_SPECIFIED_TRANSIT_NETWORK		✓		2	2	2	404
3	CPC_DISC_NO_ROUTE_TO_DESTINATION	✓	✓	✓	3	3	3	404
4	CPC_DISC_SEND_SPECIAL_INFO_TONE		✓		4	4	4	500
5	CPC_DISC_MISDIALED_TRUNK_PREFIX		✓		5	5	5	500
6 (a)	CPC_DISC_CHANNEL_UNACCEPTABLE	✓	✓		31	31	6	500
7 (a)	CPC_DISC_CALL_AWARDED		✓		31	31	7	500
8	CPC_DISC_PREEMPTION		✓		8	8	8	500
9	CPC_DISC_PREEMPTION_CIRCUIT_RESERVED		✓		9	9	9	500
14	CPC_DISC_NUMBER_PORTED		(b)		14	31	14	500
16	CPC_DISC_NORMAL_CALL_CLEARING	✓	✓	✓	16	16	16	(c)
17	CPC_DISC_USER_BUSY	✓	✓	✓	17	17	17	486
18	CPC_DISC_NO_USER_RESPONDING	✓	✓		18	18	18	408
19	CPC_DISC_NO_ANSWER_FROM_USER	✓	✓		19	19	19	480
20	CPC_DISC_SUBSCRIBER_ABSENT		✓		20	20	20	480
21	CPC_DISC_CALL_REJECTED	✓	✓	✓	21	21	21	(d)
22	CPC_DISC_NUMBER_CHANGED	✓	✓	✓	22	22	22	(e)
23 (f)	CPC_DISC_UNALLOCATED_DEST_NUMBER		✓	✓	23	31	23	410
24 (f)	CPC_DISC_UNKNOWN_BUSINESS_GROUP		*		31	31	24	500
25	CPC_DISC_EXCHANGE_ROUTING_ERROR		✓		25	31	25	500
26	CPC_DISC_MISROUTED_CALL_TO_PORTED_NUMBER		✓		26	26	26	404
27	CPC_DISC_DESTINATION_OUT_OF_ORDER	✓	✓	✓	27	27	27	502

Disconnect Code Received	Enumeration	Standards			Disconnect Code Stored in CDR when Disconnect Initiated by Service Type:			
		Q.931	Q.850	GR-317	ISUP	ISDN	H.323	SIP
28	CPC_DISC_INVALID_NUMBER_FORMAT	✓	✓	✓	28	28	28	484
29	CPC_DISC_FACILITY_REJECTED		✓		29	29	29	501
30 (g)	CPC_DISC_RESPONSE_TO_STATUS_ENQUIRY		✓		31	31	30	500
31	CPC_DISC_NORMAL_UNSPECIFIED	✓	✓	✓	31	31	31	480
34	CPC_DISC_NO_CIRCUIT_AVAILABLE	✓	✓	✓	34	34	34	503
38	CPC_DISC_NETWORK_OUT_OF_ORDER	✓	✓		38	38	38	503
39	CPC_DISC_PERM_FM_CONNECTION_OOS		✓		47	47	39	500
40	CPC_DISC_PERM_FM_CONNECTION_OPERATIONAL		✓		47	47	40	500
41	CPC_DISC_TEMPORARY_FAILURE	✓	✓	✓	41	41	41	503
42	CPC_DISC_SWITCHINGEQUIP_CONGESTION	✓	✓	✓	42	47	42	503
43	CPC_DISC_ACCESS_INFORMATION_DISCARDED		✓		43	43	43	500
44	CPC_DISC_REQUESTED_CIRCUIT_NOT_AVAILABLE	✓	✓		44	44	44	500
45 (f)	CPC_DISC_ANSI_PREEMPTION				47	47	45	500
46	CPC_DISC_PRECEDENCE_CALL_BLOCKED		✓		46	46	46	500
47	CPC_DISC_RESOURCE_UNAVAILABLE_UNSPECIFIED	✓	✓	✓	47	47	47	503
49	CPC_DISC_QUALITY_OF_SERVICE_UNAVAIL	✓	✓		63	63	49	500
50	CPC_DISC_REQUESTED_FACILITY_NOT_SUBSCRIBED		✓		50	50	50	500
51 (f)	CPC_DISC_CALL_TYPE_INCOMPATIBLE_WITH_SERVICE				63	63	51	500
53	CPC_DISC_OUTGOING_CALL_BARRED_CUG		✓		53	53	53	500
54	CPC_DISC_CALL_BLOCKED_GROUP_RESTRICTIONS				63	63	54	500
55	CPC_DISC_INCOMING_CALL_BARRED_CUG		✓		55	55	55	403
57	CPC_DISC_BEARER_CAP_NOT_AUTHORIZED	✓	✓		57	57	57	403
58	CPC_DISC_BEARER_CAP_PRESENTLY_NOT_AVAILABLE	✓	✓		58	58	58	503
62	CPC_DISC_INCONSISTENT_OUTGOING_SUBSCRIBER_CLASS		✓		62	62	62	500
63	CPC_DISC_SERVICE_OR_OPTION_NOT_AVAILABLE_UNSPECIFIED	✓	✓		63	63	63	500
65	CPC_DISC_BEARER_CAP_NOT_IMPLEMENTED	✓	✓		65	65	65	488
66	CPC_DISC_CHANNEL_TYPE_NOT_IMPLEMENTED	✓	✓		79	79	66	500

Disconnect Code Received	Enumeration	Standards			Disconnect Code Stored in CDR when Disconnect Initiated by Service Type:			
		Q.931	Q.850	GR-317	ISUP	ISDN	H.323	SIP
69	CPC_DISC_REQUESTED_FACILITY_NOT_IMPLEMENTED		✓		69	69	69	500
70	CPC_DISC_ONLY_RESTRICTED_DIGITAL_INFO_BEARER_CAP_AVAIL		✓		70	70	70	488
79	CPC_DISC_SERVICE_OR_OPTION_NOT_IMPLEMENTED_UNSPECIFIED	✓	✓		79	79		501
81	CPC_DISC_INVALID_CALL_REFERENCE	✓	✓		95	95	81	500
82	CPC_DISC_CHANNEL_DOES_NOT_EXIST	✓	✓		95	95	82	500
83	CPC_DISC_SUSPENDED_CALL_NO_INDENTITY		✓		95	95	83	500
84	CPC_DISC_CALL_IDENTITY_IN_USE		✓		95	95	84	500
85	CPC_DISC_NO_CALL_SUSPENDED		✓		95	95	85	500
86	CPC_DISC_CALL_IDENTITY_CLEARED		✓		95	95	86	500
87	CPC_DISC_NOT_MEMBER_OF_CUG		✓		87	87	87	403
88	CPC_DISC_INCOMPATIBLE_DESTINATION	✓	✓	✓	88	88	88	503
90	CPC_DISC_NON_EXISTENT_CUG		✓		90	90	90	500
91	CPC_DISC_INVALID_TRANSIT_NETWORK_SELECTION		✓	✓	91	91	91	500
95	CPC_DISC_INVALID_MESSAGE_UNSPECIFIED	✓	✓	✓	95	95	95	500
96	CPC_DISC_MANDATORY_INFORMATION_ELEMENT_MISSING	✓	✓		111	96	96	500
97	CPC_DISC_MSG_TYPE_NON_EXISTENT_OR_NOT_IMPLEMENTED	✓	✓	✓	97	97	97	500
98	CPC_DISC_MSG_TYPE_NC_NE_OR_NI	✓	✓		111	111	98	500
99	CPC_DISC_IE_NOT_IMPLEMENTED	✓	✓	✓	99	99	99	500
100	CPC_DISC_INVALID_INFORMATION_ELEMENT_CONTENT	✓	✓		111	100	100	500
101	CPC_DISC_MSG_NOT_COMPATIBLE_WITH_STATE	✓	✓		111	111	101	500
102	CPC_DISC_RECOVERY_ON_TIMER_EXPIRY	✓	✓	✓	102	102	102	504
103	CPC_DISC_PARAMETER_NOT_IMPLEMENTED		✓	✓	103	103	103	500
110	CPC_DISC_UNRECOGNIZED_PARAMETER		✓		110	110	110	500
111	CPC_DISC_PROTOCOL_ERROR_UNSPECIFIED	✓	✓	✓	111	111	111	500
127	CPC_DISC_INTERWORKING_UNSPECIFIED	✓	✓	✓	127	127	127	500

Request Failure 4xx

4xx responses are definite failure responses from a particular   server. The client SHOULD NOT retry the same request without modification (for example, adding appropriate authorization). However, the same request to a different server might be successful.

400 Bad Request

The request could not be understood due to malformed syntax. The Reason-Phrase SHOULD identify the syntax problem in more detail, for example, "Missing Call-ID header field".

401 Unauthorized

The request requires user authentication. This response is issued by UASs and registrars, while 407 (Proxy Authentication Required) is used by proxy servers.

403 Forbidden

The server understood the request, but is refusing to fulfill it. Authorization will not help, and the request SHOULD NOT be repeated.

404 Not Found

The server has definitive information that the user does not exist at the domain specified in the Request-URI. This status is also returned if the domain in the Request-URI does not match any of the   domains handled by the recipient of the request.

405 Method Not Allowed

The method specified in the Request-Line is understood, but not allowed for the address identified by the Request-URI.

The response MUST include an Allow header field containing a list of valid methods for the indicated address.

406 Not Acceptable

The resource identified by the request is only capable of generating response entities that have content characteristics not acceptable according to the Accept header field sent in the request.

407 Proxy Authentication Required

This code is similar to 401 (Unauthorized), but indicates that the client MUST first authenticate itself with the proxy. SIP access authentication is explained in Sections 26 and 22.3.

This status code can be used for applications where access to the communication channel (for example, a telephony gateway) rather than the callee requires authentication.

408 Request Timeout

The server could not produce a response within a suitable amount of time, for example, if it could not determine the location of the user in time. The client MAY repeat the request without modifications at   any later time.

410 Gone

The requested resource is no longer available at the server and no forwarding address is known. This condition is expected to be considered permanent. If the server does not know, or has no facility to determine, whether or not the condition is permanent, the status code 404 (Not Found) SHOULD be used instead.

413 Request Entity Too Large

The server is refusing to process a request because the request entity-body is larger than the server is willing or able to process.   The server MAY close the connection to prevent the client from continuing the request.

If the condition is temporary, the server SHOULD include a Retry- After header field to indicate that it is temporary and after what time the client MAY try again.

414 Request-URI Too Long

The server is refusing to service the request because the Request-URI is longer than the server is willing to interpret.

415 Unsupported Media Type

The server is refusing to service the request because the message body of the request is in a format not supported by the server for the requested method. The server MUST return a list of acceptable formats using the Accept, Accept-Encoding, or Accept-Language header field, depending on the specific problem with the content.

416 Unsupported URI Scheme

The server cannot process the request because the scheme of the URI in the Request-URI is unknown to the server. Client processing of this response is described in Section 8.1.3.5.

420 Bad Extension

The server did not understand the protocol extension specified in a Proxy-Require (Section 20.29) or Require (Section 20.32) header field. The server MUST include a list of the unsupported extensions in an Unsupported header field in the response.

421 Extension Required

The UAS needs a particular extension to process the request, but this extension is not listed in a Supported header field in the request. Responses with this status code MUST contain a Require header field listing the required extensions.

A UAS SHOULD NOT use this response unless it truly cannot provide any useful service to the client. Instead, if a desirable extension is not listed in the Supported header field, servers SHOULD process the request using baseline SIP capabilities and any extensions supported by the client.

423 Interval Too Brief

The server is rejecting the request because the expiration time of the resource refreshed by the request is too short. This response can be used by a registrar to reject a registration whose Contact header field expiration time was too small.

480 Temporarily Unavailable

The callee's end system was contacted successfully but the callee is currently unavailable (for example, is not logged in, logged in but in a state that precludes communication with the callee, or has activated the "do not

disturb" feature). The response MAY indicate a better time to call in the Retry-After header field. The user could also be available elsewhere (unbeknownst to this server). The reason phrase SHOULD indicate a more precise cause as to why the callee is unavailable. This value SHOULD be settable by the UA. Status 486 (Busy Here) MAY be used to more precisely indicate a particular reason for the call failure.

   This status is also returned by a redirect or proxy server that recognizes the user identified by the Request-URI, but does not currently have a valid forwarding location for that user.

481 Call/Transaction Does Not Exist

   This status indicates that the UAS received a request that does not match any existing dialog or transaction.

482 Loop Detected

   The server has detected a loop.

483 Too Many Hops

   The server received a request that contains a Max-Forwards (Section   20.22) header field with the value zero.

484 Address Incomplete

   The server received a request with a Request-URI that was incomplete. Additional information SHOULD be provided in the reason phrase.

   This status code allows overlapped dialing. With overlapped dialing, the client does not know the length of the dialing string. It sends strings of increasing lengths, prompting the user for more input, until it no longer receives a 484 (Address Incomplete) status response.

485 Ambiguous

   The Request-URI was ambiguous. The response MAY contain a listing of possible unambiguous addresses in Contact header fields. Revealing alternatives can infringe on privacy of the user or the organization. It MUST be possible to configure a server to respond with status 404 (Not Found) or to suppress the listing of possible choices for ambiguous Request-URIs.

486 Busy Here

   The callee's end system was contacted successfully, but the callee is currently not willing or able to take additional calls at this end system. The response MAY indicate a better time to call in the Retry-After header

field. The user could also be available elsewhere, such as through a voice mail service. Status 600 (Busy Everywhere) SHOULD be used if the client knows that no other end system will be able to accept this call.

487 Request Terminated

   The request was terminated by a BYE or CANCEL request. This response is never returned for a CANCEL request itself.

488 Not Acceptable Here

   The response has the same meaning as 606 (Not Acceptable), but only applies to the specific resource addressed by the Request-URI and the request may succeed elsewhere.

   A message body containing a description of media capabilities MAY be present in the response, which is formatted according to the Accept header field in the INVITE (or application/sdp if not present), the   same as a message body in a 200 (OK) response to an OPTIONS request.

491 Request Pending

   The request was received by a UAS that had a pending request within the same dialog. Section 14.2 describes how such "glare" situations are resolved.

493 Undecipherable

   The request was received by a UAS that contained an encrypted MIME body for which the recipient does not possess or will not provide an appropriate decryption key. This response MAY have a single body containing an appropriate public key that should be used to encrypt MIME bodies sent to this UA.

Server Failure 5xx

   5xx responses are failure responses given when a server itself has erred.

500 Server Internal Error

   The server encountered an unexpected condition that prevented it from fulfilling the request. The client MAY display the specific error condition and MAY retry the request after several seconds. If the condition is temporary, the server MAY indicate when the client may retry the request using the Retry-After header field.

501 Not Implemented

The server does not support the functionality required to fulfill the request. This is the appropriate response when a UAS does not recognize the request method and is not capable of supporting it for any user. (Proxies forward all requests regardless of method.)

Note that a 405 (Method Not Allowed) is sent when the server recognizes the request method, but that method is not allowed or supported.

502 Bad Gateway

The server, while acting as a gateway or proxy, received an invalid response from the downstream server it accessed in attempting to fulfill the request.

503 Service Unavailable

The server is temporarily unable to process the request due to a temporary overloading or maintenance of the server. The server MAY indicate when the client should retry the request in a Retry-After header field. If no Retry-After is given, the client MUST act as if it had received a 500 (Server Internal Error) response.

A client (proxy or UAC) receiving a 503 (Service Unavailable) SHOULD attempt to forward the request to an alternate server. It SHOULD NOT forward any other requests to that server for the duration specified in the Retry-After header field, if present.

Servers MAY refuse the connection or drop the request instead of responding with 503 (Service Unavailable).

504 Server Time-out

The server did not receive a timely response from an external server it accessed in attempting to process the request. 408 (Request Timeout) should be used instead if there was no response within the period specified in the Expires header field from the upstream server.

505 Version Not Supported

The server does not support, or refuses to support, the SIP protocol version that was used in the request. The server is indicating that it is unable or unwilling to complete the request using the same major version as the client, other than with this error message.

513 Message Too Large

The server was unable to process the request since the message length exceeded its capabilities.