



AUSTRALIAN COMMUNICATIONS INDUSTRY FORUM

INDUSTRY SPECIFICATION

**SIGNALLING SYSTEM NO.7 –  
INTERCONNECTION ISUP  
INTRODUCTION**

ACIF G500:2000



## Industry Specification

This Specification was issued in draft form for comment as DR2 ACIF G500.

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## INTRODUCTION TO ACIF G.500 INTERCONNECTION ISUP

### Scope

This specification defines Version 2 of the ACIF G.500 Interconnection ISUP specification.

In order to permit a ready comparison between ACIF's definition and the ITU definition, this document is based on the relevant ITU 1992 Recommendations, and marked-up to reflect the ACIF definition as follows:

~~STRIKE THROUGH~~ : shows text deleted from the original ITU Recommendation.

UNDERLINE : shows text added to the original ITU Recommendation.

Struck out Messages, Codepoints, and Parameters, should be treated as "Unrecognised".

Struck out Messages, Codepoints and Parameters, which are marked as "not used" shall be treated as "Unrecognised".

Further to the above formats, where complete sections of text are not applicable, the words "This section is not applicable to this specification" have been inserted.

The ISUP protocol defined is based on the ISUP'92 ITU Q-Series recommendations Q.761, Q.762, Q.763, and Q.764 and the supplementary service recommendations Q.731 Clauses 3 and 4, Q.732 Clause 2 and Q.737 Clause 1.

*Note: The term "ISDN User Part", when used by itself in the G.500 specification, shall be taken to mean "Interconnection ISDN User Part".*

### Organisation of the Specification

This specification is organised into six parts. The first part is the Introduction. The other six parts coincide with the partitioning adopted by the ITU and are as follows:

Part A: Functional Description of the Interconnection ISDN User Part of Signalling System No. 7 (Q.761)

Part B: General Function of Messages and Signals of the Interconnection ISDN User Part of Signalling System No. 7 (Q.762)

Part C: Formats and Codes of the Interconnection ISDN User Part of Signalling System No. 7 (Q.763)

Part D: Signalling System No. 7 - Interconnection ISDN User Part Signalling Procedures (Q.764)

Part E: Supplementary Services

Part E.1: Stage 1 Supplementary Description - 3.1 kHz Audio Bearer Service Category (I.231)

Part E.2: Stage 1 Supplementary Description - 64 kbit/s Unrestricted Bearer Service Category (I.231)

Part E.3: Stage 1 Supplementary Description - Call Diversion Service (I.252.2, I.252.3, I.252.4)

Part E.4: Stage 3 Supplementary Description - Call Diversion Service (Q.732 Clause 2)

Part E.5: Stage 1 Supplementary Description - Calling Line Presentation/ Restriction (I.251.3, I.251.4)

Part E.6: Stage 3 Supplementary Description - Calling Line Presentation/ Restriction (Q.731 Clauses 3 and 4)

Part E.7: Stage 1 Supplementary Description - Speech Bearer Service Category (I.231)

Part E.8: Stage 1 Supplementary Description - User-to-User Signalling (I.257.1)

Part E.9: Stage 3 Supplementary Description - User-to-User Signalling (Q.737 Clause 1)

Part F: Application of the Message Transfer Part for National Interconnection (Q.701 to Q.709)

Subaddressing, Malicious Call Trace and Terminal Portability (SUSPEND/RESUME user initiated) are implicitly supported, as part of the basic procedures.

**Functional Changes between G500 Version 1 and this version of G.500. (Informative)**

For information purposes only. If there are any conflicts with the main body of the document, the main body takes precedence.

<b>Description</b>	<b>G500 Version 1 Status</b>	<b>G500 Version 2 Status</b>	<b>Remarks.</b>
Calling Party Number	<ul style="list-style-type: none"> <li>Nature Of Address = National Significant Number</li> <li>Address Presentation Restriction = Present or Restrict</li> </ul>	<ul style="list-style-type: none"> <li>Nature Of Address = National Significant Number</li> <li>Address Presentation Restriction = Present, or Restrict, or Address not Available</li> </ul>	<ul style="list-style-type: none"> <li>If no Calling Party Number parameter is present, the call is released.</li> <li>"Address not Available" is allowed for calls from non-ISUP origins, related to call forwarding.</li> <li>For charging purposes, the Redirecting Number shall be used.</li> </ul>
Original Called Number	Nature Of Address = Unknown	Nature Of Address = Unknown or National Significant Number	<ul style="list-style-type: none"> <li>Changed to line up with current industry practice.</li> </ul>
Redirecting Number)	Nature Of Address = Unknown	Nature Of Address = National Significant Number	<ul style="list-style-type: none"> <li>This change is required for consistency with Calling Party Number, and is required for charging of forwarded calls.</li> <li>No transition strategy is required for carrier networks, regarding the change in Nature Of Address.</li> <li>Nature Of Address = National Significant Number is in line with current industry practice, and the original G500 V1 was in error.</li> </ul>
Allowed Calling Party Categories	10, 239, 241, 242, 243, 244, <b>245</b> , 247, <b>249</b> , <b>250</b> , 251, 253, <b>254</b>	10, 239, 241, 242, 243, 244, <b>245</b> , 247, <b>249</b> , <b>250</b> , 251, 253, <b>254</b>	<ul style="list-style-type: none"> <li>Calling Party Categories = 244 has been redefined to mean "Dummy Calling Party Number".</li> <li>The CPC's in bold text are not recommended by G.549, however they may continue to be used according to this version of G500.</li> </ul>
Redirection Reason. (Part C, §3.45)	<p>The following is allowed;</p> <ul style="list-style-type: none"> <li>Deflection during alerting.</li> <li>Deflection immediate response.</li> </ul>	<p>The following is struck out;</p> <ul style="list-style-type: none"> <li>Deflection during alerting.</li> <li>Deflection immediate response.</li> </ul>	Call Deflection has never been a supported service.
Optional backward call indicator.	Not allowed in Connect message.	Allowed in Connect message.	<ul style="list-style-type: none"> <li>Alignment with ITU-T ISUP.</li> <li>Some carriers may not support Optional Backward Call indicators in the Connect message..</li> </ul>

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