The ATM Forum

Technical Committee

Operation of the Bearer Independent Call Control (BICC) Protocol with SIG 4.0/PNNI 1.0/AINI

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Preface

This specification uses three levels for indicating the degree of compliance necessary for specific functions, procedures, or coding. They are indicated by the use of key words as follows:

- **Requirement:** "Shall" indicates a required function, procedure, or coding necessary for compliance. The word "shall" used in text indicates a conditional requirement when the operation described is dependent on whether or not an objective or option is chosen.

- **Objective:** "Should" indicates an objective which is not required for compliance, but which is considered desirable.

- **Option: "May" indicates an optional operation without implying a desirability of one** operation over another. That is, it identifies an operation that is allowed while still maintaining compliance.

1.   Introduction

1.1   General

This specification contains the description and specification of the mapping of Bearer Independent Call Control (BICC) signalling to SIG 4.0[12], PNNI 1.0[8, 13] and AINI[14] bearer control signalling for AAL Type 1 ATM-based connections. It also specifies the use of the Generic Identifier Transport feature for support of BICC interactions with ATM-based bearer control signaling.

The organization of this specification is as follows:

Section 1 contains information about the purpose of this specification and its scope

Section 2 identifies the references used in this specification

Section 3 expands the abbreviations used in this specification

Section 4 describes the adaptation/mapping functions of N-ISDN Services to SIG 4.0, PNNI 1.0 and AINI signalling

Section 5 describes the use of the GIT information element to transport BNC-ID in support of BICC.

Note – the specification associated with the use of the GIT information element may be included in other ATM Forum specifications at a future date.

1.2   Scope

This specification describes how BICC[1] call control signalling entities interwork with SIG 4.0[12], PNNI 1.0[8, 13] and AINI[14] bearer control signalling entities to construct an ATM bearer connection.

Information passed between BICC[1] and these ATM-based bearer control signalling entities in the context of a bearer connection and a call includes: binding information, bearer services information, address mapping information, and cause value mapping. While much of this information is independent of the AAL type used for the ATM-based connection, the bearer services information depends on the AAL type. This specification defines the mapping functions for bearer services information only for ATM-based connections that use AAL type 1 adaptation. Mapping functions for bearer services information for ATM-based connections that use other AALs are beyond the scope of this specification.

Figure 1 shows the scope of this specification.   Interaction with layer management and interworking between SIG 4.0[12], PNNI 1.0[8, 13] and AINI[14] are beyond the scope of this specification, with the exception that the transport of the binding information is required to be supported end-to-end across the ATM network.

Layer Management

SAP Primitives

BICC Signalling

BICC signalling PDUs

CSF

BCF

Scope of this specification

SAP Primitives

ATM Signalling

ATM signalling PDUs

Note

ATM Service End Point
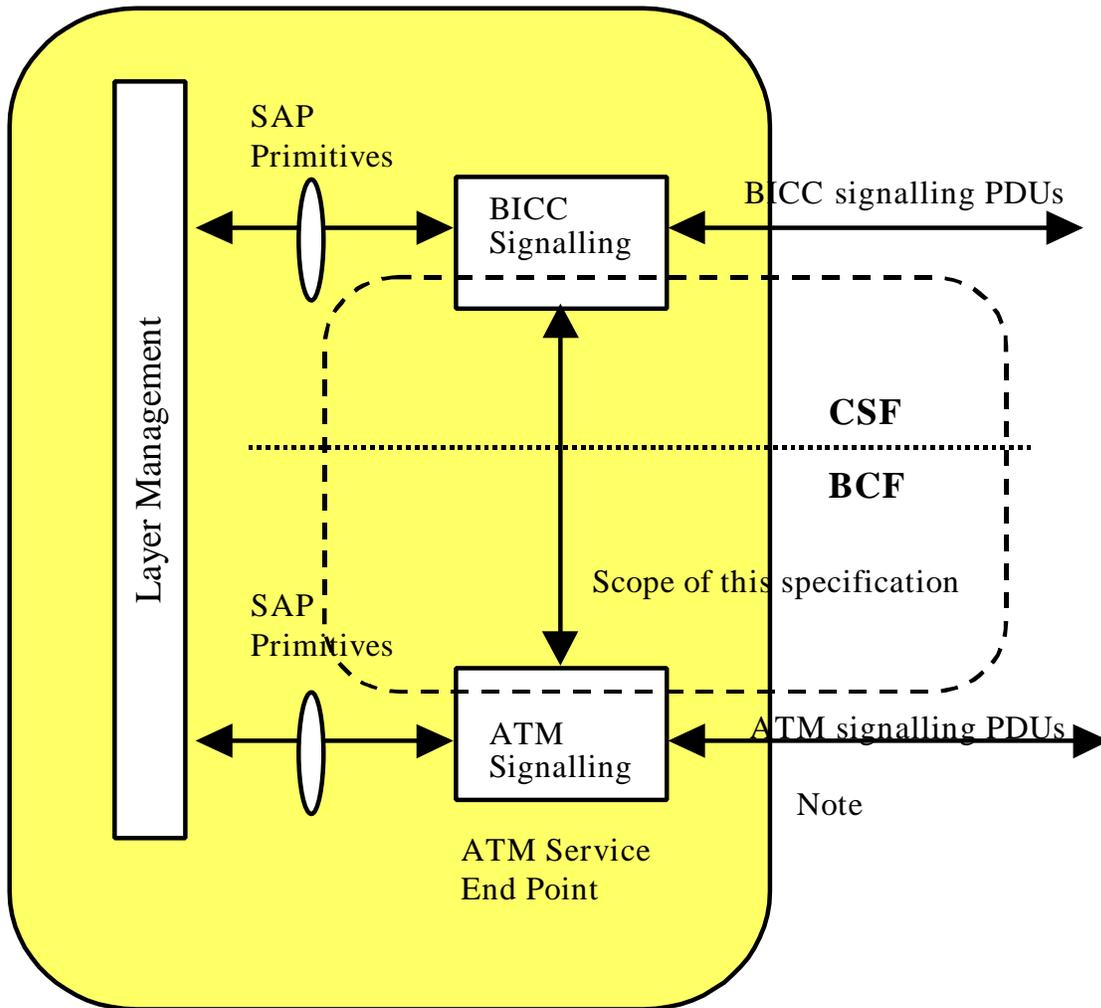
Note - This interface may be a SIG 4.0, PNNI 1.0, OR AINI interface. When it is a SIG 4.0 interface, it represents the User Side of the UNI.

Figure 1: Scope of BICC and ATM Signalling Protocols Mapping Specification

2.   References

The following references contain provisions that, through reference in this text, constitute provisions of this specification. At the time of publication, the editions indicated were valid. All references are subject to revision, and parties to agreements based on this specification are encouraged to investigate the possibility of applying the most recent editions of the references indicated below.

[1]   ITU-T Recommendation *Q.1901, Bearer Independent Call Control (BICC).*

[2]   ITU-T Recommendation I.363.1, *B-ISDN ATM Adaptation Layer Type 1 Specification.*

[3]   ITU-T Recommendation I.610, *Organization and maintenance principles of the B-ISDN access.*

[4]   af-tm-0121.000, *Traffic Management Specification Version 4.1*, The ATM Forum Technical Committee (September, 1999)

[5]   ITU-T Draft Recommendation Q.2941.3, *Broadband Integrated Services Digital Network (B-ISDN) – Digital Subscriber Signalling System No. 2 (DSS 2) – Generic Identifier Transport extension for support of Bearer Independent Call Control.*

[6]   ITU-T Recommendation Q.850, *Usage of cause and location in the Digital Subscriber Signalling System No. 1 and the Signalling System No. 7 ISDN User Part.*

[7]   ITU-T Recommendation Q.765.5, *Use of Application Transport Mechanism for Bearer Independent Call Control.*

[8]   af-pnni-0081.000, *PNNI v1.0 Errata and PICS*, The ATM Forum Technical Committee, *(May 1997).*

[9]   ITU-T Recommendation I.371, *Traffic control and congestion control in B-ISDN.*

[10]   ANSI T1.113.3, Signalling System No. 7 - ISDN User Part - Formats and Codes, American National Standards Institute, (1995).

[11]   ITU-T Recommendation Q.763, *Signalling System No. 7 – ISDN user part formats and codes.*

[12]   af-sig-0061.000, *ATM User-Network Interface (UNI) Signalling Specification Version 4.0*, The ATM Forum Technical Committee, (April, 1996).

[13]   af-pnni-0055_000, *Private Network-Network Interface Specification Version 1.0*, The ATM Forum Technical Committee, (March, 1996).

[14]   af-cs-0125.000, *ATM Inter-Network Interface (AINI) Specifications*, The ATM Forum Technical Committee, (April, 1999).

3.   Abbreviations

AAL	ATM Adaptation Layer
APP	Application Transport Parameter
ATM	Asynchronous Transfer Mode
B-BC	Broadband Bearer Capability
BCF	Bearer Control Function
BICC	Bearer Independent Call Control
BIWF	Bearer Interworking Function
BNC	Backbone Network Connection
CSF	Call Services Function
CS1	Capability Set 1
GIT	Generic Identifier Transport
IAM	Incoming Address Message
ISUP	ISDN User Part
N-ISUP	Narrowband ISDN User Part
QoS	Quality of Service
SN	Serving Node
SS7	Signalling System Number 7
TMR	Transmission Medium Requirement
USI	User Service Information
VCC	Virtual Channel Connection

4.   Mapping Functions Between a BICC Signalling Entity and a SIG 4.0, PNNI 1.0, OR AINI Signalling Entity

The following subsections list the information passed between the BICC[1] signaling entity and the SIG 4.0[12], PNNI 1.0[8, 13], or AINI[14] signaling entity:

1. Binding information,

2. Bearer service information,

3. Address information, and

4. Cause information

The mapping reflected in the tables of this section show the information element or parameter name followed by the (information contents in parentheses).

4.1   Binding Information

Binding information is used to associate call control signalling and bearer control signalling for the establishment of an ATM bearer connection. The Backbone Network Connection Identifier (BNC-ID) is carried by call control in the Application Transport Parameter[7]. The BNC-ID is carried by bearer control in the Generic Identifier Transport information element[5].

The mapping of Binding information between the BICC signalling entity and the SIG 4.0[12], PNNI 1.0[8, 13], or AINI[14] signalling entity is shown in Table 1.

Table 1
Mapping of binding information

BICC Signalling Entity Parameter (Call Control)	SIG 4.0, PNNI 1.0, OR AINI Signalling Entity Information Element (Bearer Control)
Application Transport Parameter (BNC-ID)[7]	Generic Identifier Transport (BNC-ID)[5]

4.2   Bearer Service Information for AAL Type 1 Connections

This subsection defines the mapping of the bearer service information contained in the BICC TMR parameter to the required SIG 4.0[12], PNNI 1.0[8, 13], or AINI[14] information elements for the support of AAL Type 1 bearer connections.

> Note – Some networks may use the USI parameter instead of the TMR parameter within ISUP. Every reference within this section to TMR shall be interpreted to mean the USI parameter when USI mapping is being implemented for such networks. See ANSI T1.113.3[10] for the coding of the USI parameter.

The information elements of the SIG 4.0[12], PNNI 1.0[8, 13], or AINI[14] SETUP message required for the mapping of the bearer service information are shown in Table 2.

The Broadband Bearer Capability (B-BC) information element is always included in the SETUP message. This information element is mandatory for all services. It is interpreted by the B-ISDN (i.e., SIG 4.0, PNNI 1.0 and AINI) signalling entity.

The ATM traffic descriptor information element is always included in the SETUP message.

For N-ISDN services, a value for the ATM user cell rate is selected such that the bit rate of the N-ISDN service (64 kbit/s or Nx64 kbit/s) can be transported as the cell payload of the ATM cells, i.e. excluding the overhead of the ATM cell and AAL header.

The Quality of Service parameter information element is always included in the SETUP message.

Note – BICC Codec information is not used by this specification.

Table 2
SIG 4.0, PNNI 1.0 and AINI Information Elements required for the mapping of Bearer service information

	Information elements used to describe network relevant bearer attributes	Information elements used to describe lower layer attributes
SIG 4.0[12], PNNI 1.0[8, 13], or AINI[14] related information elements	- Broadband Bearer Capability (B-BC) - ATM traffic descriptor - QOS parameter	ATM adaptation layer Parameters (AAL parameters)

The bearer service characteristics derived from the TMR parameter are mapped to the link characteristics of the ATM AAL Type 1 bearer for connection establishment. Table 3 shows the mapping between the BICC TMR parameter and the SIG 4.0[12], PNNI 1.0[8, 13], or AINI[14] broadband bearer capability information element and QoS parameter information element. This mapping is independent of the TMR parameter codes. The ATM related bearer characteristics contained in the SETUP message are based on Traffic Management Specification Version 4.0[4].

Table 3
Mapping of the BICC TMR parameter and the SIG 4.0, PNNI 1.0, OR AINI Broadband bearer capability and QoS parameter information element

	BICC TMR parameter = Speech, 64kbit/s unrestricted, 3.1 kHz audio, N*64 kbit/s			
SIG 4.0[12], PNNI 1.0[8, 13], or AINI[14] Broadband bearer capability information element contents				
Bearer class	BCOB A	BCOB A	BCOB X	BCOB X
ATC	7	absent	7	5
Susceptibility to clipping	Not susceptible to clipping			
User plane configuration	Point to point			
SIG 4.0/PNNI/AINI QoS parameter information element contents[12]				
QoS class forward	* (Note 1)			
QoS class backward	* (Note 1)			

Note 1 – The allowed QoS class values are a network option. Class 0 is always supported for alignment with ITU-T QoS signalling specifications. For Extended QoS Parameters and End-to-end Transit Delay, see Table A9-2/SIG 4.0.

Table 4 shows the mapping between the BICC TMR parameter and the SIG 4.0[12], PNNI 1.0[8, 13], or AINI[14] AAL parameters information element. The mapping is independent of the TMR parameter codes except for the SIG 4.0[12], PNNI 1.0[8, 13], or AINI[14] CBR rate and Multiplier subfields.

Table 4
Mapping of the BICC TMR parameter and the SIG 4.0, PNNI 1.0, OR AINI AAL parameters information element

	TMR parameter codes				
	Speech, 64 kbit/s unrestricted or 3.1 kHz audio	384 kbit/s unrestricted	1536 kbit/s unrestricted	1920 kbit/s unrestricted	N*64kbit/s
SIG 4.0[12], PNNI 1.0[8, 13], or AINI[14] AAL parameters information element contents					
AAL type	1 (AAL type 1)				
Subtype	2 (Circuit transport)				
CBR rate	1 (64kbit/s)	64 (N)x64 kbit/s	64 (N)x64 kbit/s	64 (N)x64 kbit/s	64 N*64 kbit/s
Multiplier	Not applicable	6	24	30	N
Source clock frequency recovery method	0 (Null)				
Error correction method	0 (Null)				
SDT block size (Note 1)	1	N			
Partially filled cells	47 (Full fill)				

Note 1 – For single channel adaptation using AAL type 1, the SDT block size is set to 1. For 384 kbit/s, 1536 kbit/s, 1920 kbit/s and N*64, where N > 1, the SDT block size is set to N.

Table 5 shows the mapping between the BICC TMR parameter and the ATM peak cell rates (CLP=0+1) signalled in the SIG 4.0, PNNI 1.0, OR AINI ATM traffic descriptor information element. For each TMR parameter code, a value for the peak cell rate is selected such that the bit rate of the corresponding N-ISDN service (e.g. 64 kbit/s, Nx64 kbit/s) can be transported as the cell payload of the ATM cells, i.e. excluding the overhead of the ATM cell and AAL type 1 header.

Table 5
Mapping of BICC TMR codes and ATM Peak Cell Rates in the ATM traffic descriptor

BICC Signalling Entity (Call Control)		SIG 4.0[12], PNNI 1.0[8, 13], or AINI[14] Signalling Entity (Bearer Control)
TMR		ATM Traffic Descriptor[12] Forward/Backward peak cell rate (CLP=0+1) (no OAM cells) (Note 1)
TMR Codes	TMR DEFINITION	PCR
0 0 0 0 0 0 0 0	Speech	171 cells/sec
0 0 0 0 0 0 1 0	64 kbit/s unrestricted	171 cells/sec
0 0 0 0 0 0 1 1	3.1 kHz audio	171 cells/sec
0 0 0 0 1 0 0 0	384 kbit/s unrestricted	1024 cells/sec
0 0 0 0 1 0 0 1	1536 kbit/s unrestricted	4096 cells/sec
0 0 0 0 1 0 1 0	1920 kbit/s unrestricted	5120 cells/sec
0 0 0 0 0 1 1 0	64 kbit/s preferred	171 cells/sec
0 0 0 0 0 1 1 1	2×64 kbit/s unrestricted	342 cells/sec
0 0 0 1 0 0 0 0	3×64 kbit/s unrestricted	512 cells/sec
0 0 0 1 0 0 0 1	4×64 kbit/s unrestricted	683 cells/sec
0 0 0 1 0 0 1 0	5×64 kbit/s unrestricted	854 cells/sec
0 0 0 1 0 0 1 1	6 x 64 kbit/s unrestricted	1024 cells/sec
0 0 0 1 0 1 0 0	7×64 kbit/s unrestricted	1195 cells/sec
0 0 0 1 0 1 0 1	8×64 kbit/s unrestricted	1366 cells/sec
0 0 0 1 0 1 1 0	9×64 kbit/s unrestricted	1536 cells/sec
0 0 0 1 0 1 1 1	10×64 kbit/s unrestricted	1707 cells/sec
0 0 0 1 1 0 0 0	11×64 kbit/s unrestricted	1878 cells/sec
0 0 0 1 1 0 0 1	12×64 kbit/s unrestricted	2048 cells/sec
0 0 0 1 1 0 1 0	13×64 kbit/s unrestricted	2219 cells/sec
0 0 0 1 1 0 1 1	14×64 kbit/s unrestricted	2390 cells/sec
0 0 0 1 1 1 0 0	15×64 kbit/s unrestricted	2560 cells/sec
0 0 0 1 1 1 0 1	16×64 kbit/s unrestricted	2731 cells/sec
0 0 0 1 1 1 1 0	17×64 kbit/s unrestricted	2902 cells/sec
0 0 0 1 1 1 1 1	18×64 kbit/s unrestricted	3072 cells/sec
0 0 1 0 0 0 0 0	19×64 kbit/s unrestricted	3243 cells/sec
0 0 1 0 0 0 0 1	20×64 kbit/s unrestricted	3414 cells/sec
0 0 1 0 0 0 1 0	21×64 kbit/s unrestricted	3584 cells/sec
0 0 1 0 0 0 1 1	22×64 kbit/s unrestricted	3755 cells/sec
0 0 1 0 0 1 0 0	23×64 kbit/s unrestricted	3926 cells/sec
0 0 1 0 0 1 0 1	24 x 64 kbit/s unrestricted	4096 cells/sec
0 0 1 0 0 1 1 0	25×64 kbit/s unrestricted	4267 cells/sec
0 0 1 0 0 1 1 1	26×64 kbit/s unrestricted	4438 cells/sec
0 0 1 0 1 0 0 1	27×64 kbit/s unrestricted	4608 cells/sec
0 0 1 0 1 0 1 0	28×64 kbit/s unrestricted	4779 cells/sec
0 0 1 0 1 0 0 0	29×64 kbit/s unrestricted	4950 cells/sec

Note 1 - No OAM cells are included in the PCR calculations.

4.3   Address Information

This subsection describes address information mapping for both forward and backward establishment of backbone connections. The T-BIWF address is carried in the Application Transport Parameter in the BICC Incoming Address Message[1] or Application Transport Message[7]. The T-BIWF is considered to be the BIWF receiving a bearer setup request. Therefore, the address used for mapping only needs to indicate "T-BIWF address" for either forward or backward bearer setup; see Figure 2 for details. Address mapping between the BICC signalling entity and SIG 4.0[12], PNNI 1.0[8, 13], or AINI[14] signalling entity is shown in Table 6.

Backward SETUP Approach

Forward SETUP Approach
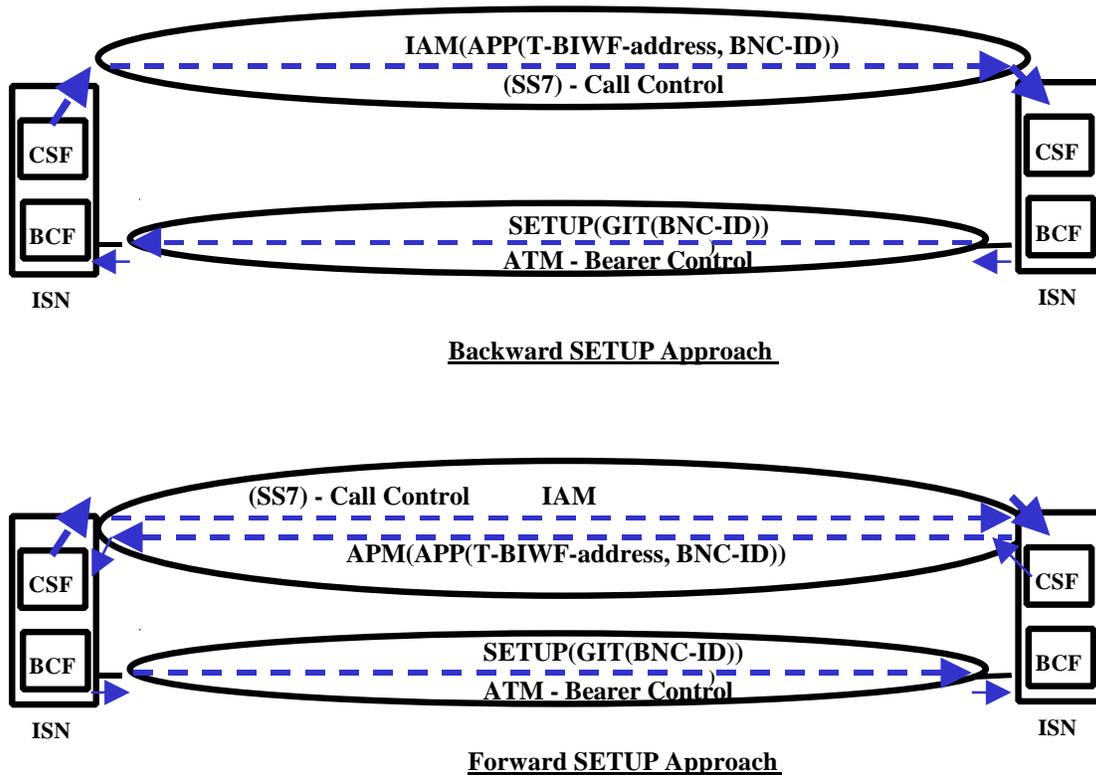
Figure 2: T-BIWF Address Exchange Control Flows

Table 6
Mapping of Address information

BICC Signalling Entity Parameter	SIG 4.0[12], PNNI 1.0[8, 13], or AINI[14] Signalling Entity Information Element
Application Transport Parameter[7] (T-BIWF-address)	Called Party Number[12] (T-BIWF-address)

4.4   Cause Information

This subsection describes the mapping of cause values[12,6] between BICC call control signalling and SIG 4.0[12], PNNI 1.0[8, 13], or AINI[14] bearer signalling at the reference point between the BCF and CSF. Cause values related to specific bearer operations in SIG 4.0[12], PNNI 1.0[8, 13], or AINI[14] bearer connection control are mapped to suitable bearer control related cause values in BICC.   The cause value mappings apply to the case where the BCF can no longer establish or sustain the bearer. Mapping of SIG 4.0[12], PNNI 1.0[8, 13], or AINI[14] Cause Values to BICC are only performed at the ISN that set up the connection. The scope of the cause value mapping is from the bearer protocol to the generic BCF-CSF primitive interface and not directly to the BICC protocol.

Table 7 identifies the Cause related information, derived from SIG 4.0[12], PNNI 1.0[8, 13], or AINI[14] signalling, which is passed from the SIG 4.0, PNNI 1.0, OR AINI signalling entity to the BICC signalling entity via the BCF/CSF logical interface, giving details on the circumstances of a call being cleared due to a SIG 4.0, PNNI 1.0, OR AINI bearer establishment failure.

Table 7
Mapping of Cause (SIG 4.0, PNNI 1.0, OR AINI Signalling Entity to the BCF/CSF logical interface)

SIG 4.0[12], PNNI 1.0[8, 13], or AINI[14] Signalling Entity – Cause	BCF/CSF logical interface - Cause Category
Coding Standard[12]	Cause category (see Table 8) (Note)
Cause value[12] (see Table 8)	
location and diagnostic	No mapping

Table 8, identifies the mapping of the Cause value received in the SIG 4.0[12], PNNI 1.0[8, 13], or AINI[14] signalling entity and passed by that signalling entity to the BICC entity. Applicable SIG 4.0[12], PNNI 1.0[8, 13], or AINI[14] cause values are mapped to one of five categories:

a)   "bearer routing failure",

b)   "normal call clearing",

c)   "resource unavailable unspecified",

d)   "service/option not implemented, unspecified", and

e)   "127 = interworking, unspecified".

Table 8
Mapping of SIG 4.0, PNNI 1.0, OR AINI Cause Values ® BICC Cause Categories

No.	SIG 4.0, PNNI 1.0, OR AINI	Cat.	BICC
1	Unallocated (unassigned) number	"a"	Bearer route failure
2	No route to specified transit network	"a"	Bearer route failure
3	No route to destination	"a"	Bearer route failure
16	Normal call clearing	"b"	Normal call clearing
22	Number changed	"a"	Bearer route failure
25	Exchange routing error	"a"	Bearer route failure
27	Destination out of order	"c"	Resource unavailable, unspecified
28	Invalid number format (address incomplete)	"a"	Bearer route failure
31	Normal, unspecified	"b"	Normal call clearing
34	No circuit/channel available	"c"	Resource unavailable, unspecified
35	Requested VPCI/VCI Not Available	"e"	Interworking, unspecified
36	VPCI/VCI Assignment Failure	"e"	Interworking, unspecified
37	User Cell Rate Not Available	"c"	Resource unavailable, unspecified
38	Network out of order	"c"	Resource unavailable, unspecified
41	Temporary failure	"c"	Resource unavailable, unspecified
42	Switching equipment congestion	"c"	Resource unavailable, unspecified
44	Requested circuit/channel not available	"c"	Resource unavailable, unspecified
45	No VPI/VCI Available	"c"	Resource unavailable, unspecified
46	Precedence call blocked	"c"	Resource unavailable, unspecified
47	Resource unavailable, unspecified	"c"	Resource unavailable, unspecified
49	Quality of service not available	"c"	Resource unavailable, unspecified
57	Bearer capability not authorized	"d"	Service or option not implemented,
58	Bearer capability not presently available	"c"	Resource unavailable, unspecified
63	Service or option not available, unspecified	"d"	Service or option not implemented,
65	Bearer capability not implemented	"d"	Service or option not implemented,
66	Channel type not implemented	"d"	Service or option not implemented,
69	Requested facility not implemented	"d"	Service or option not implemented,
70	Only restricted digital information bearer	"d"	Service or option not implemented,
73	Unsupported Combination of Traffic Parameters	"d"	Service or option not implemented,
79	Service or option not implemented, unspecified	"d"	Service or option not implemented,
91	Invalid transit network selection	"a"	Bearer route failure

Table 9 identifies the Cause related information that is passed from the BICC signalling entity via the BCF/CSF logical interface to the SIG 4.0[12], PNNI 1.0[8, 13], or AINI[14] signalling entity, to derive the Signalling Cause parameter field values to be used by the SIG 4.0, PNNI 1.0, OR AINI clearing procedure as result of a call being cleared. Any Cause values from BICC shall be mapped to SIG 4.0, PNNI 1.0, OR AINI cause value #16 "Normal Call Clearing".

Table 9
Mapping of Cause (BCF/CSF logical interface to SIG 4.0, PNNI 1.0, OR AINI Signalling Entity)

BICC Signalling Entity – Cause Categories	SIG 4.0, PNNI 1.0, OR AINI Signalling Entity - Cause
Cause Category set to any value	Coding Standard[12]
	Cause value #16 "Normal call clearing"

Note – default values are used in the "location and diagnostics" subfields of the bearer control protocol.

5.   BNC-ID transport via SIG 4.0, PNNI 1.0, OR AINI bearer control

The BNC-ID binds or correlates a narrowband call establishment with the corresponding ATM VCC establishment. The use of the BNC-ID in call control is defined in ITU-T Recommendation Q.1901[1]. The combination of BNC-ID and calling party number (of the ATM-based bearer connection) are unique for the duration of the connection.

The use of this capability between networks is through bilateral agreement.

5.1   Modifications to SIG 4.0

5.1.1   Coding requirements

[Normative]

This section describes the additional coding requirements for messages and information elements to support the BNC-ID.

5.1.1.1 Generic Identifier Transport Information Element

In addition to the coding defined in section 2.1.1/SIG 4.0[12], the text and encoding defined in section 8.2/Q2941.3[5] shall apply with the following modifications:
- The first paragraph shall not apply.
- Note1 and the references thereto shall not apply

5.1.2   Procedures

The procedures of section 9.2/Q.2941.3[5] **Procedures for the use of the BNC-ID** shall apply with the following modification:
- In the first paragraph, replace "Q.2931" with "SIG 4.0".

5.1.3   Compatibility with nodes not supporting the BNC-ID encoding of GIT

Upon receiving a Generic Identifier Transfer information element carrying a BNC-ID in a message for which the GIT information element is defined, a node shall forward the GIT information element transparently in accordance with section 2.2.2/SIG 4.0[12] independent of whether the node supports this specification or not.

5.2   Modifications to PNNI 1.0

[Normative]

5.2.1   Coding requirements

This section describes the additional coding requirements for messages and information elements to support the BNC-ID.

5.2.1.1 Generic Identifier Transport Information Element

Replace the text of section 6.4.5.31/PNNI 1.0[8, 13] with the following:

The information element coding defined in section 5.1.1.1 shall apply.

5.2.2   Procedures

The procedures of section 9.2/Q.2941.3[5] **Procedures for the use of the BNC-ID** shall apply with the following modification:
- In the first paragraph, replace "Q.2931" with "PNNI 1.0".

5.2.3   Compatibility with nodes not supporting the BNC-ID encoding of GIT

Upon receiving a Generic Identifier Transfer information element carrying a BNC-ID in a message for which the GIT information element is defined, a node shall forward the GIT information element transparently in accordance with section 6.5.2.8/PNNI 1.0[8, 13] independent of whether the node supports this specification or not.

5.3   Modifications to AINI

[Normative]

5.3.1   Coding requirements

The coding requirements defined in section 5.2.1 shall apply.

5.3.2   Procedures

The procedures of section 9.2/Q.2941.3[5] **Procedures for the use of the BNC-ID** shall apply with the following modification:
- In the first paragraph, replace "Q.2931" with "AINI".

5.3.3   Compatibility with nodes not supporting the BNC-ID encoding of GIT

Upon receiving a Generic Identifier Transfer information element carrying a BNC-ID in a message for which the GIT information element is defined, a node will forward the GIT information element transparently in accordance with section 6.5.2.8/PNNI 1.0[8, 13] independent of whether the node supports this specification or not.

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