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SERIES Q: SWITCHING AND SIGNALLING

**Technical Report TRQ.2120: Coordinated
call control and bearer control signalling
requirements – Third party coordinated
call and bearer control**

ITU-T Q-series Recommendations – Supplement 14

(Formerly CCITT Recommendations)

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SIGNALLING IN THE INTERNATIONAL MANUAL SERVICE	Q.1–Q.3
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FUNCTIONS AND INFORMATION FLOWS FOR SERVICES IN THE ISDN	Q.60–Q.99
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INTERWORKING WITH SATELLITE MOBILE SYSTEMS	Q.1100–Q.1199
INTELLIGENT NETWORK	Q.1200–Q.1699
SIGNALLING REQUIREMENTS AND PROTOCOLS FOR IMT-2000	Q.1700–Q.1799
BROADBAND ISDN	Q.2000–Q.2999

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SUPPLEMENT 14 TO ITU-T Q-SERIES RECOMMENDATIONS

TECHNICAL REPORT TRQ.2120: COORDINATED CALL CONTROL AND BEARER CONTROL SIGNALLING REQUIREMENTS – THIRD PARTY COORDINATED CALL AND BEARER CONTROL

Summary

This Supplement specifies the signalling requirements for the third-party coordinated call control and bearer control capability. The coordinated call control and bearer control functional entity actions, by a third party, are defined in terms of information flows.

This Supplement is intended to specify the essential UNI and NNI interactions required to develop third-party coordinated call control and bearer control functional entity actions.

Source

Supplement 14 to ITU-T Q-series Recommendations was prepared by ITU-T Study Group 11 (1997-2000) and was approved under the WTSC Resolution No. 5 procedure on 3 December 1999.

FOREWORD

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The World Telecommunication Standardization Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

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CONTENTS

	Page
1 Scope	1
2 Normative References	1
3 Definitions	2
4 Abbreviations	2
5 Information Flows used in this Supplement	3
6 Overview of Coordinated Call Control and Bearer Control Level Peer-to-Peer Functional Entity Actions.....	3
7 Simultaneous Call and Network Connection Establishment (single network connection)	5
7.1 Call and Type 1 Network Connection Establishment	5
7.1.1 Call and Network Connection Establishment – Single Network Connection by a Third Party – Without Look-Ahead	5
7.1.2 Call and Network Connection Establishment – Single Network Connection by a Third Party with Network Initiated Look-Ahead.....	11
7.2 Four- or more-Party Call and Single Network Connection Establishment with Three- or more-Party End Points by a Party that will not be an End Point.....	16
7.2.1 Call and Network Connection Establishment Single Network Connection – Without Look-Ahead	16
8 Addition of one or more new Parties to an Existing Call with Attachment to an Existing Network Connection – With or without network Look-ahead.....	25
8.1 Addition of one new Party and attachment to an existing Network Connection	26
8.1.1 Simultaneous Party Addition and Network Connection Attachment by a Third Party – Without Look-Ahead	26
8.2 Addition of one or more new Parties and establishment of a Type 1 Network Connection by a Third Party.....	30
8.2.1 Simultaneous Party Addition and Network Connection Attachment by a Third Party – Without Look-Ahead	30
9 Release of a Party from an existing call	37
9.1 General rules for release of a Party	37
9.2 Release of a Party from a Call requested by the Party Owner	37
9.2.1 Release of a Party which is the leaf-party of a Type 2 Connection by the Party Owner.....	37
10 Release of a call.....	37

Supplement 14 to Q-series Recommendations

TECHNICAL REPORT TRQ.2120: COORDINATED CALL CONTROL AND BEARER CONTROL SIGNALLING REQUIREMENTS – THIRD PARTY COORDINATED CALL AND BEARER CONTROL

(Geneva, 1999)

1 Scope

This Supplement presents the procedures, information flows and information elements needed for supporting control by a third party of coordinated calls and bearers involving types 1 and 2 network connections. Table 1-1 illustrates the scope of the capabilities contained within this Supplement.

Table 1-1 – Coordinated Call and Bearer Control Capabilities by a Third Party

	Network Connection Type
Coordinated call and network connection establishment Establishment of a three-party call containing one or more network connections, requested by a party that will not be a network connection endpoint. Establishment of a four- or more-party call containing one or more network connections with three- or more-party endpoints, requested by a party that will not be a network connection endpoint.	1, 2, 3 and 5 2, 3, and 5
Addition of one or more parties to an existing call with attachment to an existing network connection Addition of a new party with attachment to one or more existing network connections, requested by a party that will not be the root endpoint of the designated connection.	2, 3 and 5
Detachment of a party from an existing network connection Detachment of one or more parties from an existing network connection, requested by a party that is not a connection endpoint.	2
Release of a party from an Existing Call Release of one or more parties and network connections, requested by a party that is not a connection endpoint. Release of a party that is a leaf endpoint of one or more network connections, requested by a party that is not a connection endpoint.	1, 2, 3 and 5 2, 3 and 5

2 Normative References

The following Technical Reports and other references contain provisions which, through reference in this text, constitute provisions of this Supplement. At the time of publication, the editions indicated were valid. All supplements and other references are subject to revision; all users of this Supplement are therefore encouraged to investigate the possibility of applying the most recent edition of the supplements and other references listed below. A list of the currently valid ITU-T Recommendations and supplements are regularly published.

- [1] ITU-T Q-series Recommendations – Supplement 7 (1999), *Technical Report TRQ.2001: General aspects for the development of unified signalling requirements*.

- [2] ITU-T Q-series Recommendations – Supplement 10 (1999), *Technical Report TRQ.2002: Information Flow Elements*.
- [3] ITU-T Q-series Recommendations – Supplement 12 (1999), *Technical Report TRQ.2100: Coordinated call control and bearer control signalling requirements – Root-party coordinated call and bearer control*.
- [4] ITU-T Q-series Recommendations – Supplement 21 (1999), *Technical Report TRQ.2320: Bearer control signalling requirements – Third-party bearer control*.

3 Definitions

This Supplement defines the following terms:

- 3.1 bearer branch owner:** One who adds a bearer branch to a network connection is the owner of that bearer branch. There may be several Bearer Branch owners per network connection. A Bearer Branch owner may be associated with the root, a leaf, or a party not attached to the network connection.
- 3.2 call:** An end-to-end communications service between two- or more call party end points, or between one call party end point and its Serving Node.
- 3.3 call owner:** One who initiates a call is the Call Owner. There is only one Call Owner per call.
- 3.4 network connection:** An ATM network connection of topology type 1 to 5 as defined in Supplement 7.
- 3.5 network connection owner:** One who initiates a network connection is the Network Connection Owner. There is only one Network Connection Owner per network connection. There may be several Network Connection Owners per call. A Network Connection Owner may be associated with the root, a leaf, or a party not attached to the network connection.
- 3.6 party owner:** One who adds a party to a call is the owner of that party. There may be several party owners within a call.
- 3.7 relay node:** Network equipment, such as a transit bearer exchange, which contains a bearer control functional entity but no call control functional entity.
- 3.8 root party:** A bearer end point that communicates with one or more parties through a single user plane connection, such as the source end point of a type 2 connection.
- 3.9 serving node:** Network equipment, such as a local exchange (LEX) or private branch exchange (PBX), which contains call control and bearer control functional entities.
- 3.10 third party:** A party requesting actions on a call and bearer operation that will not be a connection endpoint of the designated bearer.

4 Abbreviations

This Supplement uses the following abbreviations:

ATM	Asynchronous Transfer Mode
B-ISDN	Broadband Integrated Services Digital Network
LEX	Local Exchange
PBX	Private Branch Exchange

5 Information Flows used in this Supplement

Table 5-1 contains the information flows for control by a third party that are used across the call control and bearer control interfaces as described in Supplement 7 [1]. These information flows are used to establish, modify and release third-party calls and network connections.

Table 5-1 – Information Flows used for Control by a third party

Information Flow	Begin	Ready	Commit	Cancel	Indication
CALL-&-BEARER-SETUP	✓	✓	✓		
CALL-&-BEARER-SETUP-REMOTE		✓	✓		
ADD-BEARER-TO-CALL	✓	✓	✓		
ADD-BEARER-TO-CALL-REMOTE		✓	✓		
DETACH-PARTY-FROM-BEARER		✓	✓		
DETACH-PARTY-FROM-BEARER-REMOTE		✓	✓		
RELEASE-BEARER		✓	✓		
RELEASE-BEARER-REMOTE		✓	✓		
RELEASE-PARTY-FROM-CALL		✓	✓		
LOOK-AHEAD	✓	✓		✓	
INTERROGATION-TERMINATING-END-POINT		✓	✓		
NOTIFY-BEARER-CHANGE					✓
NOTE – The information flows contained in this Supplement provide only successful examples, and therefore the cancel information flow is not used.					

In addition to the above table, the full set of information flow definitions for B-ISDN can be found in Supplement 10 [2].

6 Overview of Coordinated Call Control and Bearer Control Level Peer-to-Peer Functional Entity Actions

Stage 2 flows for each Signalling Capability is illustrated via a high level overview. The overview model does not illustrate all possible configurations, which could exist within an actual instant of the service, however, the examples have been chosen in order to illustrate the general principles. The overview will employ the network configuration shown in Figure 6-1. The actions illustrated in this figure can be used to describe signalling control actions associated with establishment or release of a coordinated Call and Network Connections.

The information flows and actions in Figure 6-1 illustrate the establishment of a three-party call with one network connection by a party other than one of the two parties to be attached to the network connection.

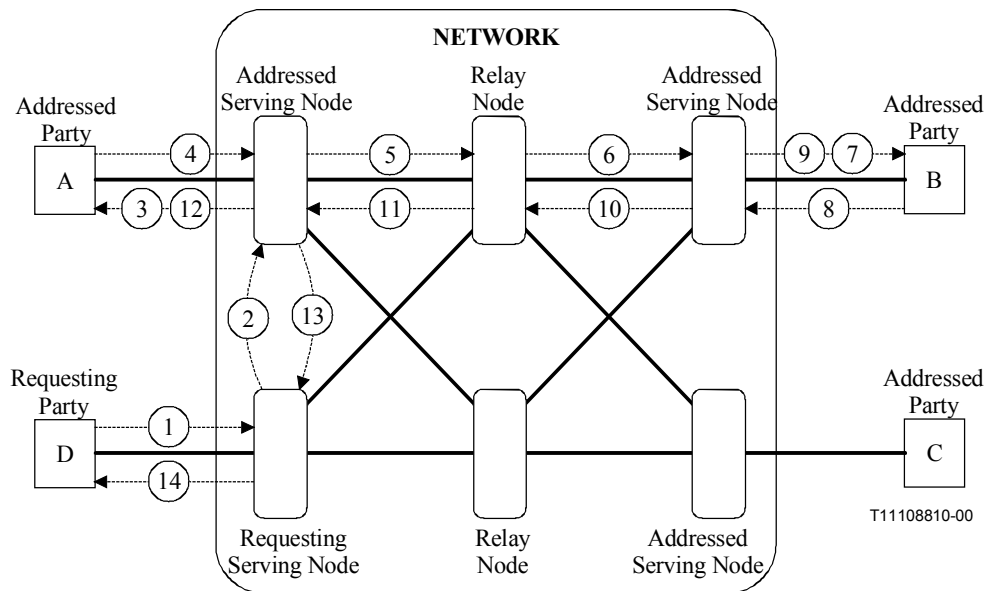


Figure 6-1 – Coordinated Call and Network Connection Establishment

The actions illustrated in the above figure are described as follows:

- 1) Signalling Service Request issued by service requester: Receiving entity validates request, modifies internal state information, and then issues action 2.
- 2) Relayed Signalling Service Request issued by requester's serving node: Receiving entity validates request, modifies internal state information, and then issues the request on the addressed party's interface as action 3.
- 3) Signalling Service Request issued by addressed party's serving node: Receiving entity validates request, modifies internal state information, and then issues its request as action 4.
- 4) Signalling Service Response issued by addressed party: Receiving entity records response, modifies internal state information and then relays response as action 5.
- 5) Relayed Signalling Service Response issued by addressed party's serving node: Receiving entity records response, modifies internal state information and then relays the response on as action 6.
- 6) Relayed Signalling Service Response issued by relay node: Receiving entity validates request, modifies internal state information, and then issues a request as action 7.
- 7) Signalling Service Request issued by addressed party's serving node: Receiving entity records response, modifies internal state information, and then issues its response as action 8.
- 8) Signalling Service Response issued by addressed party: Receiving entity records response, modifies internal state information, and returns a confirmation to the addressed party as action 9 and relays the response as action 10.
- 9) Signalling Service Confirmation issued by addressed party's serving node: Receiving entity records confirmation, modifies internal state information and notifies the user of the outcome of the requested service.
- 10) Signalling Service Response issued by addressed party's serving node: Receiving entity records response, modifies internal state information and relays response as action 11.
- 11) Signalling Service Response relayed by relay node: Receiving entity records response, modifies internal state information and returns a confirmation to the addressed party as action 12 and provides a response as action 13.

- 12) Signalling Service Confirm issued by addressed party's serving node: Receiving entity records confirmation, modifies internal state information, and notifies the user of the outcome of the requested service.
- 13) Signalling Service Response issued by addressed party's serving node: Receiving entity records response, modifies internal state information, and then issues the response on the requesting party's interface as action 14.
- 14) Signalling Service Response issued by requester's serving node: Receiving entity records response, modifies internal state information, and notifies the user of the outcome of the requested service.

The purpose of this overview model is that it provides an end-to-end pictorial representation of the signalling capability in one figure. The model does not present all possible network topologies, however, it illustrates the general configurations that would be encountered in intra-network operation. The extension to multiple networks can be extrapolated by replacing the serving nodes and relay nodes with local serving networks and transit networks.

The following subclauses will describe the basic coordinated call control and bearer control signalling capabilities using this model.

NOTE – In the information flows that follow, the "Call Information" can contain a "requesting party information" parameter. This has been used to assist the understanding, if reference is made to "General Aspects of Signalling Requirements" [1], it should be noted that the information object model does not contain an object or attribute with this name. The information is present in the information object model as a "Remote Party EndPoint" object.

7 Simultaneous Call and Network Connection Establishment (single network connection)

The simultaneous establishment of a call and network connection has two variations, establishing a call and a type 1 network connection between two parties; and establishing a call and a type 2 network connection with more than two parties. In both variations, the establishment is the result of a request by a third party. The number of called parties determines whether the one-phase or two-phase request mechanism is utilised.

7.1 Call and Type 1 Network Connection Establishment

One example variation of this capability will be illustrated in this subclause. This variation is as follows:

- 1) Call and network connection establishment by a party other than one of the two parties to be attached to the network connection without network initiated "look-ahead".
- 2) Call and network connection establishment by a party other than one of the two parties to be attached to the network connection with network initiated "look-ahead".

The overview of the type 1 simultaneous call and network connection establishment capabilities is contained in the following subclauses.

7.1.1 Call and Network Connection Establishment – Single Network Connection by a Third Party – Without Look-Ahead

The User (party D) requests a three-party call between party A, B, and party D. One network connection is to be associated with this call. parties A and B are to be attached to the network connection. The user (party D) also specifies the higher layer service to be carried on this network connection and the desired network bearer service that should be established. The requested service does not require human interaction. Therefore, immediate answer can be performed by the party A's and party B's equipment. If both the requested parties equipment can accept the requested service, the designated attachment method, and specified bearer service, the equipment will indicate

acceptance of the call and network connection request. This example also assumes that both requested parties are connected to a multi-signalling entity interface. In addition, the network does not perform a "look-ahead" procedure before progressing with the network connection establishment. Figure 7-1 illustrates the before and after view of this example.

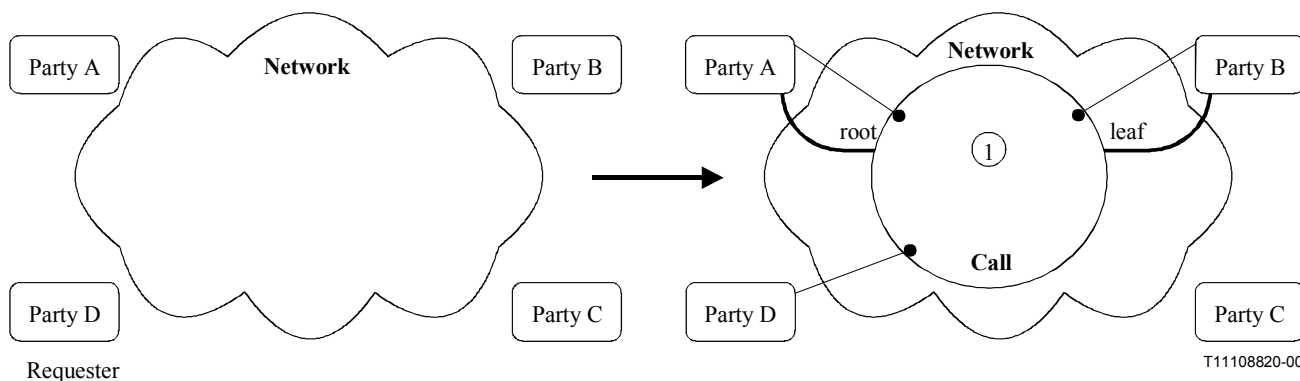


Figure 7-1 – Call and bearer transition diagram

The signalling capability of simultaneously establishing a call between three parties and establishing a point-to-point Network Connection between two of these parties without network "Look-ahead" is illustrated in Figure 7-2. This request was issued by party D who will not be attached to the requested Network Connection.

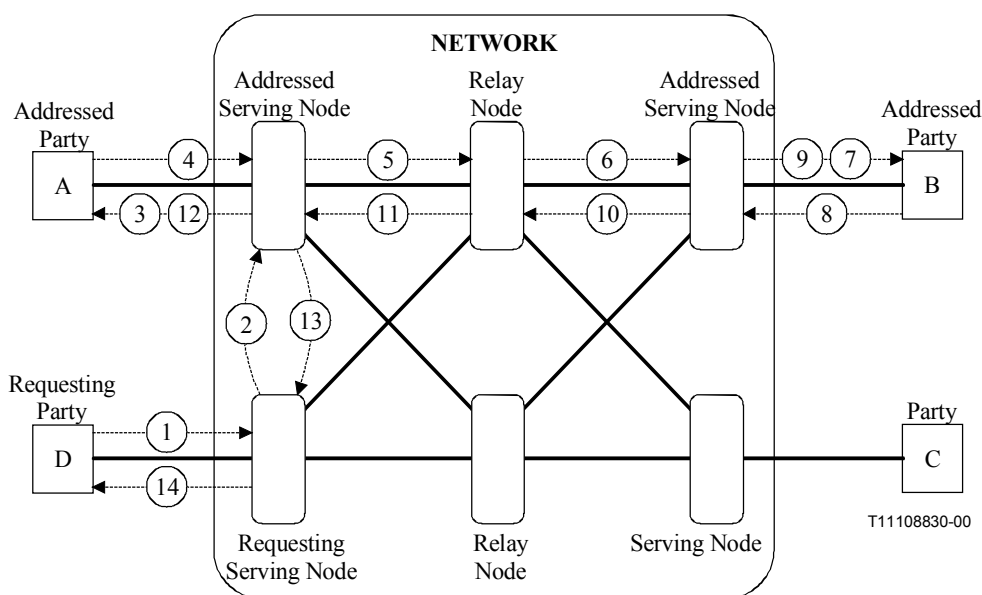


Figure 7-2 – Call and single Network Connection (between A and B) – Establishment by a Third Party

The actions illustrated in Figure 7-2 are as follows.

Requesting party's (party D) terminal equipment issues information flow 1 towards its serving node.

1	Call-&Bearer-Setup.ready	Party D to Serving Node D
<u>Resource information</u>	<u>Call information</u>	<u>Bearer information</u>
Session ID	Call Control Segment ID,	<u>Network connection 1</u>
<u>Resource 1</u>	Addressed party Information	[Bearer "1" ID, Bearer type,
[Resource 1 ID, Resource type,	[PEP "B" ID, Network Address]	Parties connected
Parties communicating	[PEP "B" ID, Network address],	(PEP "B" ID(root), PEP "B" ID(leaf)),
(PEP "B" ID, PEP "B" ID),	Requesting party information	Addressed party's bearer branch information
Addressed party's service component information	[PEP "D" ID, Network Address]	[(PEP "B" ID, Transit Network Selection, bearer branch characteristics),
(PEP "B" ID, Service component characteristics)]		[(PEP "B" ID, Transit Network Selection, bearer branch characteristics),
(PEP "B" ID, Service component characteristics)]		Addressed party's service module information
		[(PEP "B" ID, Service module characteristics
		[(PEP "B" ID, Service module characteristics
		Service component list
		[(Resource 1 ID)]

Processing upon receipt: The requester's serving node validates the request and determines which party will be designated the "root" party for this Network Connection (for this example party A is chosen) and the edge signalling route to the serving node associated with selected "root" party. Since party D is not attached to the requested Network Connection, and the "root" of the Network Connection is located in another serving node, a Remote operation request needs to be invoked. In addition, only one outgoing signalling port is needed, therefore party D's serving node can commit to the request and therefore issues information flow 2 towards the selected "root" serving node.

2	Remote-Call-&Bearer-Setup.ready	Serving Node D to Serving Node A
<u>Resource information</u>	<u>Call information</u>	<u>Bearer information</u>
Session ID	Call Control Segment ID,	<u>Network connection 1</u>
<u>Resource 1</u>	Call Owner: PEP "D" ID,	[Bearer "1" ID, Bearer type, Connection owner: PEP "D",
[Resource 1 ID, Resource type,	Remote Call association	Parties connected
Parties communicating	(SN(A):ref.a -SN(B):---) ID,	(PEP "B" ID(root), PEP "B" ID(leaf)),
(PEP "B" ID, PEP "B" ID),	Addressed party Information	Addressed party's bearer branch information
Addressed party's service component information	[PEP "B" ID, Network address],	[(PEP "B" ID, Transit Network Selection, bearer branch characteristics, branch owner: PEP "D" ID),
(PEP "B" ID, Service component characteristics)]	Party Owner: PEP "D" ID,	[(PEP "B" ID, Transit Network Selection, bearer branch characteristics, branch owner: PEP "D" ID),
(PEP "B" ID, Service component characteristics)]	[PEP "B" ID, Network address],	Addressed party's service module information
	Party Owner: PEP "D" ID,	[(PEP "B" ID, Service module characteristics
	Requesting party information	[(PEP "B" ID, Service module characteristics
	[PEP "D" ID, Network Address]	Service component list
	Party Owner: PEP "D" ID	[(Resource 1 ID)]

Processing upon receipt: The selected serving node validates the request and determines the interface associated with party A. Since this interface is a multi-signalling entity interface and that the Network Connection shall be established only after party B also is willing to commit to the Network Connection, the serving node cannot commit to the request and therefore issues information flow 3 towards the addressed party (party A).

NOTE 1 – The serving node can make a decision to allow party A or party B to select the network connection characteristics. If it decides A, then flow 3 would contain parameter list to select from, if B, then the parameter list would be in information flow 5.

3 **Call-&-Bearer-Setup.begin**

Serving Node A to Party A

Resource information

Session ID

Resource 1

[Resource 1 ID, Resource type,

Parties communicating

(PEP "B" ID, PEP "B" ID),

Addressed party's service component information

(PEP "B" ID, Service component characteristics)]

Remote party's service component information

(PEP "B" ID, Service component characteristics)]

Call information

Call Control Segment ID,

Addressed party Information

[PEP "B" ID, Network Address]

Remote party Information

[PEP "B" ID, Network address],

Requesting party information

[PEP "D" ID, Network Address]

Bearer information

Network connection 1

[Bearer "1" ID, Bearer type,

Parties connected

(PEP "B" ID(root), PEP "B" ID(leaf)),

Addressed party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics),

Remote party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics),

Addressed party's service module information

[(PEP "B" ID, Service module characteristics

Remote party's service module information

[(PEP "B" ID, Service module characteristics

Service component list

[(Resource 1 ID)]

Processing upon receipt: When party A receives information flow 3, it determines if it can accept the request contained in the flow. If it can accept the call and Network Connection, it responds using information flow 4. The terminal equipment then attaches to the backward portion of the Network Connection.

NOTE 2 – If the terminal cannot accept the network connection characteristics, it could either respond with an alternate set of characteristics or issue a cancel. If an alternate set of characteristics is desired, then this is indicated in the ready (information flow 4).

4 **Call-&-Bearer-Setup.ready**

Party A to Serving Node A

Resource information

Resource 1

[Resource 1 ID, Resource type,

Addressed party's service component information

(PEP "B" ID, Service component characteristics)]

Call information

Call Control Segment ID

Addressed party Information

[PEP "B" ID, Network address]

Bearer information

Network connection 1

[Bearer "1" ID,

Addressed party's bearer branch information

[(PEP "B" ID, bearer branch characteristics),

Addressed party's service module information

[(PEP "B" ID, Service module characteristics

Service component list

[(Resource 1 ID)]

Processing upon receipt: When the serving node associated with party A receives information flow 4, it then determines the route and the outgoing trunk facility. Since only one outgoing port is needed, and that party A can accept the request, the serving node can also commit to the request and therefore issues information flow 5 towards the selected relay node. The Network Connection is backward through connected.

Resource information**Session ID****Resource 1**

[Resource 1 ID, Resource type,

Parties communicating

(PEP "B" ID, PEP "B" ID),

Addressed party's service component information

(PEP "B" ID, Service component characteristics)]

Remote party's service component information

(PEP "B" ID, Service component characteristics)]

Call information**Call Control Segment ID,****Direct Call association**

(SN(A):ref.a -SN(B):----) ID,

Addressed party Information

[PEP "B" ID, Network Address]

Party Owner: PEP "D" ID

Remote party Information

[PEP "B" ID, Network address],

Party Owner: PEP "D" ID

Requesting party information

[PEP "D" ID, Network Address]

Bearer information**Network connection 1**

[Bearer "1" ID, Bearer type,

Parties connected

(PEP "B" ID(root), PEP "B" ID(leaf)),

Addressed party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics),

Remote party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics),

Addressed party's service module information

[(PEP "B" ID, Service module characteristics

Remote party's service module information

[(PEP "B" ID, Service module characteristics

Service component list

[(Resource 1 ID)]

Processing upon receipt: The selected relay node validates the request and determines the route and outgoing trunk facility. Since only one outgoing port is needed, the serving node can commit to the request and therefore issues information flow 6 towards the addressed serving node. The Network Connection is backward through connected.

Resource information**Session ID****Resource 1**

[Resource 1 ID, Resource type,

Parties communicating

(PEP "B" ID, PEP "B" ID),

Addressed party's service component information

(PEP "B" ID, Service component characteristics)]

Remote party's service component information

(PEP "B" ID, Service component characteristics)]

Call information**Call Control Segment ID,****Direct Call association**

(SN(A):ref.a -SN(B):----) ID,

Addressed party Information

[PEP "B" ID, Network Address]

Party Owner: PEP "D" ID

Remote party Information

[PEP "B" ID, Network address],

Party Owner: PEP "D" ID

Requesting party information

[PEP "D" ID, Network Address]

Bearer information**Network connection 1**

[Bearer "1" ID, Bearer type,

Parties connected

(PEP "B" ID(root), PEP "B" ID(leaf)),

Addressed party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics),

Remote party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics),

Addressed party's service module information

[(PEP "B" ID, Service module characteristics

Remote party's service module information

[(PEP "B" ID, Service module characteristics

Service component list

[(Resource 1 ID)]

Processing upon receipt: The addressed serving node validates the request and selects the terminating interface facility. Since the interface is classified as a multiple signalling entity interface, the serving node cannot commit to the addressed end point and therefore issues information flow 7 towards the selected interface facility. The Network Connection is backward through connected.

Resource information**Session ID****Resource 1**

[Resource 1 ID, Resource type,

Parties communicating

(PEP "B" ID, PEP "B" ID),

Addressed party's service component information

(PEP "B" ID, Service component characteristics)]

Remote party's service component information

(PEP "B" ID, Service component characteristics)]

Call information**Call Control Segment ID,****Addressed party Information**

[PEP "B" ID, Network address],

Party Owner: PEP "D" ID

Remote party Information

[PEP "B" ID, Network address],

Party Owner: PEP "D" ID

Requesting party information

[PEP "D" ID, Network Address]

Bearer information**Network connection 1**

[Bearer "1" ID, Bearer type,

Parties connected

(PEP "B" ID(root), PEP "B" ID(leaf)),

Addressed party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics),

Remote party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics),

Addressed party's service module information

[(PEP "B" ID, Service module characteristics

Remote party's service module information

[(PEP "B" ID, Service module characteristics

Service component list

[(Resource 1 ID)]

Processing upon receipt: The addressed terminal equipment determines that it can accept the request and issues information flow 8 towards its associated serving node.

Resource information**Resource 1**

[Resource 1 ID, Resource type,
Addressed party's service component information
 (PEP "B" ID, Service component characteristics)]

Call information**Call Control Segment ID**

Addressed party Information
 [PEP "B" ID, Network address]

Bearer information**Network connection 1**

[Bearer "1" ID,
Addressed party's bearer branch information
 [(PEP "B" ID, bearer branch characteristics),
Addressed party's service module information
 [(PEP "B" ID, Service module characteristics
Service component list
 [(Resource 1 ID)]]

Processing upon receipt: The addressed serving node records the responses to the action request and selects one of the responding terminals. The selected terminal is sent information flow number 9. The serving node then clears the non-selected terminals. (Note: this action is not illustrated for simplicity), and issues information flow 10 toward the requesting relay node. The Network Connection is through connected in both directions.

Resource information**Resource 1**

[Resource 1 ID, Resource type,
Addressed party's service component information
 (PEP "B" ID, Service component characteristics)]

Call information**Call Control Segment ID,**

Addressed party Information
 [PEP "B" ID, Network address]

Bearer information**Network connection 1**

[Bearer "1" ID,
Addressed party's bearer branch information
 [(PEP "B" ID, bearer branch characteristics),
Addressed party's service module information
 [(PEP "B" ID, Service module characteristics
Service component list
 [(Resource 1 ID)]]

Processing upon receipt: When the Terminal receives this information flow, it records the commitment and connects in both the forward and backward directions.

Resource information**Resource 1**

[Resource 1 ID, Resource type,
Remote party's service component information
 (PEP "B" ID, Service component characteristics)]

Call information**Call Control Segment ID,**

Direct Call association
 (SN(A):ref.a -SN(B) ref.b) ID,
Addressed party Information
 [PEP "B" ID, Network address]

Bearer information**Network connection 1**

[Bearer "1" ID,
Remote party's bearer branch information
 [(PEP "B" ID, bearer branch characteristics),
Remote party's service module information
 [(PEP "B" ID, Service module characteristics
Service component list
 [(Resource 1 ID)]]

Processing upon receipt: When the relay node receives this information flow, it records the commitment and relays this commitment to the requesting serving node by issuing information flow number 11, and performs forward through connect of the Network Connection.

Resource information**Resource 1**

[Resource 1 ID, Resource type,
Remote party's service component information
 (PEP "B" ID, Service component characteristics)]

Call information**Call Control Segment ID,**

Direct Call association
 (SN(A):ref.a -SN(B) ref.b) ID,
Addressed party Information
 [PEP "B" ID, Network address]

Bearer information**Network connection 1**

[Bearer "1" ID,
Remote party's bearer branch information
 [(PEP "B" ID, bearer branch characteristics),
Remote party's service module information
 [(PEP "B" ID, Service module characteristics
Service component list
 [(Resource 1 ID)]]

Processing upon receipt: When the service node associated with party A receives this information flow, it records the commitment and notifies this commitment to party A's user equipment by issuing information flow number 12, and performs forward through connect of the Network Connection. In addition, it issues the notification of the completion of the remote request by issuing information flow 13 towards the requesting serving node associated with party D.

12 Call-&-Bearer-Setup.commit**Serving Node A to Party A****Resource information****Resource 1**

[Resource 1 ID, Resource type,
Addressed party's service component information
(PEP "B" ID, Service component characteristics)]

Call information**Call Control Segment ID,**

Addressed party Information
[PEP "B" ID, Network address],
Party owner: PEP "D" ID

Bearer information**Network connection 1**

[Bearer "1" ID,
Addressed party's bearer branch information
[(PEP "B" ID, bearer branch characteristics),
Addressed party's service module information
[(PEP "B" ID, Service module characteristics
Service component list
[(Resource 1 ID)]]

Processing upon receipt: When the user equipment receives this information flow, it records the commitment and notifies the user of this commitment, and connects to the forward portion of the Network Connection.

13 Call-&-Bearer-Setup-Remote.commit**Serving Node A to Serving Node D****Resource information****Resource 1**

[Resource 1 ID, Resource type,

Call information**Call Control Segment ID,**

Remote Call association
(SN(A):ref.a -SN(B) ref'b) ID,
Remote party Information
[PEP "B" ID, Network address]
Remote party Information
[PEP "B" ID, Network address]

Bearer information**Network connection 1**

[Bearer "1" ID,
Remote party's bearer branch information
[(PEP "B" ID, bearer branch characteristics),
Remote party's bearer branch information
[(PEP "B" ID, bearer branch characteristics),
Remote party's service module information
[(PEP "B" ID, Service module characteristics
Remote party's service module information
[(PEP "B" ID, Service module characteristics
Service component list
[(Resource 1 ID)]]

Processing upon receipt: When the requesting service node receives this information flow, it records the commitment and relays the commitment to the requesting party (party D) by issuing the following information flow.

14 Call-&-Bearer-Setup.commit**Serving Node D to Party D****Resource information****Resource 1**

[Resource 1 ID, Resource type,

Call information**Call Control Segment ID,**

Remote Call association
(SN(A):ref.a -SN(B) ref'b) ID,
Remote party Information
[PEP "B" ID, Network address]
Remote party Information
[PEP "B" ID, Network address]

Bearer information**Network connection 1**

[Bearer "1" ID,
Remote party's bearer branch information
[(PEP "B" ID, bearer branch characteristics),
Remote party's bearer branch information
[(PEP "B" ID, bearer branch characteristics),
Remote party's service module information
[(PEP "B" ID, Service module characteristics
Remote party's service module information
[(PEP "B" ID, Service module characteristics
Service component list
[(Resource 1 ID)]]

Processing upon receipt: When the requesting party's user equipment receives this information flow, it records the commitment and notifies the user, thereby completing the requested action.

7.1.2 Call and Network Connection Establishment – Single Network Connection by a Third Party with Network Initiated Look-Ahead

The User (party D) requests a three-party call between party A, B, and party D. One network connection is to be associated with this call. Parties A and B are to be attached to the network connection. The user (party D) also specifies the higher layer service to be carried on this network connection and the desired network bearer service that should be established. The requested service does not require human interaction. Therefore, immediate answer can be performed by the party A's and party B's equipment. If both the requested parties equipment can accept the requested service, the designated attachment method, and specified bearer service, the equipment will indicate acceptance of the call and network connection request. This example also assumes that both

requested parties are connected to a multi-signalling entity interface. In addition, the network performs a "look-ahead" procedure before progressing with the network connection establishment. Figure 7-3 illustrates the before and after view of this example.

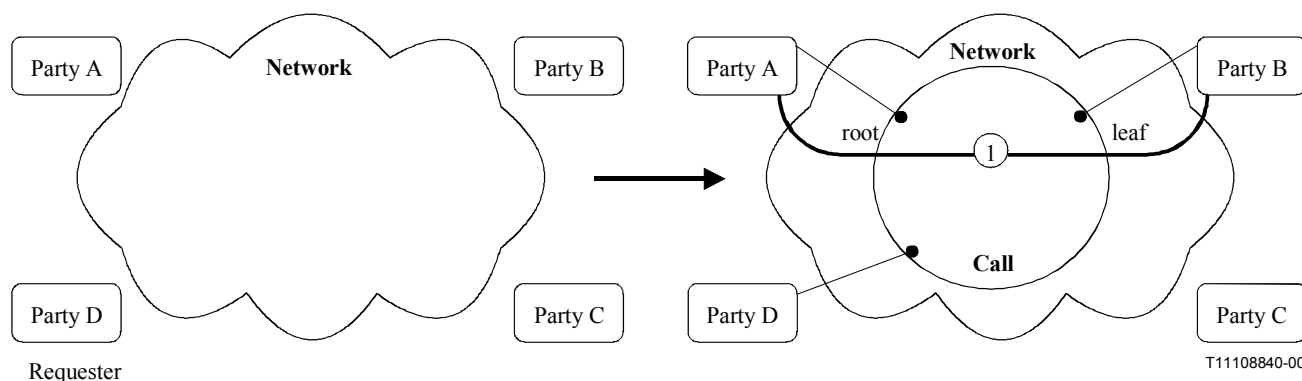


Figure 7-3 – Call and bearer transition diagram

The signalling capability of simultaneously establishing a call between three parties and establishing a point-to-point Network Connection between two of these parties with network initiated "Look-ahead" is illustrated in Figure 7-4. This request was issued by party D which will not be attached to the request Network Connection.

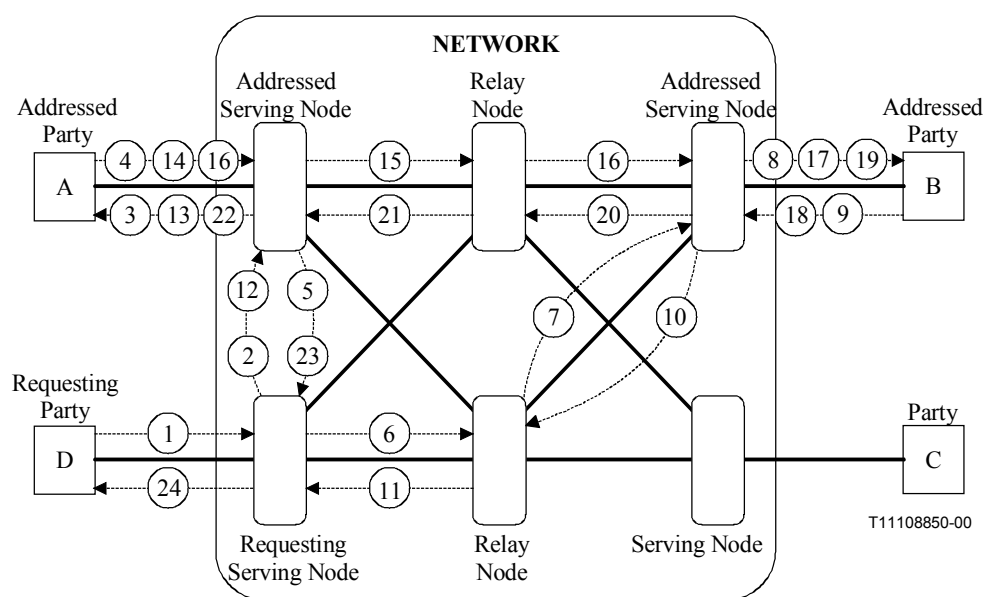


Figure 7-4 – Call and Point-to-point Network Connection (Type 1 between A and B) – Establishment by Third Party – With look-ahead

The actions illustrated in Figure 7-4 are as follows.

Requesting party's (party D) terminal equipment issues information flow 1 towards its serving node.

1	Call-&Bearer-Setup.ready	Party D to Serving Node D
<u>Resource information</u> Session ID <u>Resource 1</u> [Resource 1 ID, Resource type, Parties communicating (PEP "B" ID, PEP "B" ID), Addressed party's service component information (PEP "B" ID, Service component characteristics)] (PEP "B" ID, Service component characteristics)]	<u>Call information</u> Call Control Segment ID, Addressed party Information [PEP "B" ID, Network Address] [PEP "B" ID, Network address], Requesting party information [PEP "D" ID, Network Address]	<u>Bearer information</u> <u>Network connection 1</u> [Bearer "1" ID, Bearer type, Parties connected (PEP "B" ID(root), PEP "B" ID(leaf)), Addressed party's bearer branch information [(PEP "B" ID, Transit Network Selection, bearer branch characteristics), [(PEP "B" ID, Transit Network Selection, bearer branch characteristics), Addressed party's service module information [(PEP "B" ID, Service module characteristics [(PEP "B" ID, Service module characteristics Service component list [(Resource 1 ID)]

Processing upon receipt: The requester's serving node validates the request and determines which party will be designated the "root" party for this Network Connection, (for this example party A is chosen) and the edge signalling route to the serving node associated with selected "root" party. Since party D is not attached to the requested Network Connection, and the "root" of the Network Connection is located in another serving node, a Remote operation request needs to be invoked. In addition, party D's serving node decides to undertake a network initiated look-ahead and therefore issues information flow 2 towards the selected "root" serving node.

2	Interrogation-Terminating-End-Point.ready	Serving Node D to Serving Node A
<u>Resource information</u> Session ID <u>Resource 1</u> [Resource 1 ID, Resource type, Parties communicating (PEP "B" ID, PEP "B" ID), Addressed party's service component information (PEP "B" ID, Service component characteristics)]	<u>Call information</u> Transaction ID, Addressed party Information [PEP "B" ID, Network Address] Requesting party information [PEP "D" ID, Network Address]	<u>Bearer information</u> <u>Network connection 1</u> [Bearer "1" ID, Bearer type], Parties connected (PEP "B" ID(root), PEP "B" ID(leaf)), Addressed party's bearer branch information [(PEP "B" ID, Transit Network Selection, bearer branch characteristics), Addressed party's service module information [(PEP "B" ID, Service module characteristics Service component list [(Resource 1 ID)]

Processing upon receipt: The selected serving node validates the request and determines the interface associated with party A. The information contained in the look-ahead request are perceived to be acceptable by the addressed serving node and therefore issues information flow 3 towards the addressed party (party A).

3	Interrogation-Terminating-End-Point.ready	Serving Node A to Party Node A
<u>Resource information</u> Session ID <u>Resource 1</u> [Resource 1 ID, Resource type, Parties communicating (PEP "B" ID, PEP "B" ID), Addressed party's service component information (PEP "B" ID, Service component characteristics)]	<u>Call information</u> Transaction ID, Addressed party Information [PEP "B" ID, Network Address] Requesting party information [PEP "D" ID, Network Address]	<u>Bearer information</u> <u>Network connection 1</u> [Bearer "1" ID, Bearer type], Parties connected (PEP "B" ID, PEP "B" ID), Addressed party's bearer branch information [(PEP "B" ID, Transit Network Selection, bearer branch characteristics), Addressed party's service module information [(PEP "B" ID, Service module characteristics Service component list [(Resource 1 ID)]

Processing upon receipt: When party A receives information flow 3, it determines if it could accept the request contained in the flow. In this example it can accept the call and Network Connection, it responds with information flow 4. The terminal equipment does not store any of the information.

NOTE 1 – A terminal unable to accept the request (for compatibility and not availability reasons): then the terminal must either respond with a CANCEL, or select an alternate set of network connection characteristics (in the 'commit', flow 4).

4 Interrogation-Terminating-End-Point.commit Party A to Serving Node A

Resource information

Session ID

Resource 1

[Resource 1 ID, Resource type,

Parties communicating

(PEP "B" ID, PEP "B" ID),

Addressed party's service component information

(PEP "B" ID, Service component characteristics)]

Call information

Transaction ID,

Addressed party Information

[PEP "B" ID, Network Address]

Requesting party information

[PEP "D" ID, Network Address]

Bearer information

Network connection 1

[Bearer "1" ID, Bearer type],

Parties connected

(PEP "B" ID, PEP "B" ID),

Addressed party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics),

Addressed party's service module information

[(PEP "B" ID, Service module characteristics

Service component list

[(Resource 1 ID)]

Processing upon receipt: When the serving node associated with party A receives information flow 4, it needs only to return the information to the requesting serving node, as in flow 5.

5 Interrogation-Terminating-End-Point.commit Serving Node A to Serving Node D

Resource information

Session ID

Resource 1

[Resource 1 ID, Resource type,

Parties communicating

(PEP "B" ID, PEP "B" ID),

Addressed party's service component information

(PEP "B" ID, Service component characteristics)]

Call information

Transaction ID,

Addressed party Information

[PEP "B" ID, Network Address]

Requesting party information

[PEP "D" ID, Network Address]

Bearer information

Network connection 1

[Bearer "1" ID, Bearer type],

Parties connected

(PEP "B" ID, PEP "B" ID),

Addressed party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics),

Addressed party's service module information

[(PEP "B" ID, Service module characteristics

Service component list

[(Resource 1 ID)]

Processing upon receipt: The requesting serving node now knows that the addressed party A is compatible and free, and now chooses to determine the availability and compatibility of party B by initiating information flow 6. It should be noted that flow 6 may have been initiated at the same point in time as flow 2 (i.e. both parties are checked simultaneously, rather than sequentially). The decision as to order of checking is an implementation option.

6 Interrogation-Terminating-End-Point.ready Serving Node D to Relay Node 2

Resource information

Session ID

Resource 1

[Resource 1 ID, Resource type,

Parties communicating

(PEP "B" ID, PEP "B" ID),

Addressed party's service component information

(PEP "B" ID, Service component characteristics)]

Call information

Transaction ID,

Addressed party Information

[PEP "B" ID, Network Address]

Requesting party information

[PEP "D" ID, Network Address]

Bearer information

Network connection 1

[Bearer "1" ID, Bearer type],

Parties connected

(PEP "B" ID(root), PEP "B" ID(leaf)),

Addressed party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics),

Addressed party's service module information

[(PEP "B" ID, Service module characteristics

Service component list

[(Resource 1 ID)]

Enabling Condition: Flow 6 will not be initiated until a successful interrogation of party A has been reported.

Processing upon receipt: The relay node forwards the request to the addressed serving node as in flow 7.

7 Interrogation-Terminating-End-Point.ready Relay Node 2 to Serving Node B

Resource information**Session ID****Resource 1**

[Resource 1 ID, Resource type,

Parties communicating

(PEP "B" ID, PEP "B" ID),

Addressed party's service component information

(PEP "B" ID, Service component characteristics)]

Call information**Transaction ID,****Addressed party Information**

[PEP "B" ID, Network Address]

Requesting party information

[PEP "D" ID, Network Address]

Bearer information**Network connection 1**

[Bearer "1" ID, Bearer type],

Parties connected

(PEP "B" ID(root), PEP "B" ID(leaf)),

Addressed party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics),

Addressed party's service module information

[(PEP "B" ID, Service module characteristics

Service component list

[(Resource 1 ID)]

Processing upon receipt: The selected serving node validates the request and determines the interface associated with party B. The information contained in the look-ahead request is perceived to be acceptable by the addressed serving node and it therefore issues information flow 8 towards the addressed party (party A).

8 Interrogation-Terminating-End-Point.ready Serving Node B to Party B

Resource information**Session ID****Resource 1**

[Resource 1 ID, Resource type,

Parties communicating

(PEP "B" ID, PEP "B" ID),

Addressed party's service component information

(PEP "B" ID, Service component characteristics)]

Call information**Transaction ID,****Addressed party Information**

[PEP "B" ID, Network Address]

Requesting party information

[PEP "D" ID, Network Address]

Bearer information**Network connection 1**

[Bearer "1" ID, Bearer type],

Parties connected

(PEP "B" ID(root), PEP "B" ID(leaf)),

Addressed party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics),

Addressed party's service module information

[(PEP "B" ID, Service module characteristics

Service component list

[(Resource 1 ID)]

Processing upon receipt: When party B receives information flow 8, it determines if it could accept the request contained in the flow. In this example, it can accept the call and network connection, so it responds with information flow 9. The terminal equipment does not store any of the information.

NOTE 2 – A terminal unable to accept the request (for compatibility and not availability reasons): then the terminal must either respond with a CANCEL, or select an alternate set of network connection characteristics (in the 'commit', flow 9).

9 Interrogation-Terminating-End-Point.commit Party B to Serving Node B

Resource information**Session ID****Resource 1**

[Resource 1 ID, Resource type,

Parties communicating

(PEP "B" ID, PEP "B" ID),

Addressed party's service component information

(PEP "B" ID, Service component characteristics)]

Call information**Transaction ID,****Addressed party Information**

[PEP "B" ID, Network Address]

Requesting party information

[PEP "B" ID, Network Address]

Bearer information**Network connection 1**

[Bearer "1" ID, Bearer type],

Parties connected

(PEP "B" ID, PEP "B" ID),

Addressed party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics),

Addressed party's service module information

[(PEP "B" ID, Service module characteristics

Service component list

[(Resource 1 ID)]

Processing upon receipt: When the serving node associated with party B receives information flow 9, it needs only to return the information to the relay node, as in flow 10.

10 Interrogation-Terminating-End-Point.commit Serving Node B to Relay Node 2

Resource information

Session ID

Resource 1

[Resource 1 ID, Resource type,

Parties communicating

(PEP "B" ID, PEP "B" ID),

Addressed party's service component information

(PEP "B" ID, Service component characteristics)]

Call information

Transaction ID,

Addressed party Information

[PEP "B" ID, Network Address]

Requesting party information

[PEP "D" ID, Network Address]

Bearer information

Network connection 1

[Bearer "1" ID, Bearer type],

Parties connected

(PEP "B" ID, PEP "B" ID),

Addressed party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics),

Addressed party's service module information

[(PEP "B" ID, Service module characteristics

Service component list

[(Resource 1 ID)]

Processing upon receipt: The relay node passes the response back to the requesting serving node by issuing flow 11.

11 Interrogation-Terminating-End-Point.commit Relay Node 2 to Serving Node D

Resource information

Session ID

Resource 1

[Resource 1 ID, Resource type,

Parties communicating

(PEP "B" ID, PEP "B" ID),

Addressed party's service component information

(PEP "B" ID, Service component characteristics)]

Call information

Transaction ID,

Addressed party Information

[PEP "B" ID, Network Address]

Requesting party information

[PEP "D" ID, Network Address]

Bearer information

Network connection 1

[Bearer "1" ID, Bearer type],

Parties connected

(PEP "B" ID, PEP "B" ID),

Addressed party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics),

Addressed party's service module information

[(PEP "B" ID, Service module characteristics

Service component list

[(Resource 1 ID)]

Processing upon receipt: The requesting serving node now knows that both of the addressed parties (A and B) are compatible and free, and can now proceed with the call establishment at the addressed serving node associated with party A.

Number 12-24 information flows

The remaining flows, numbers 12 to 24 inclusive, are identical to flows 2 to 14 of 7.1.1 respectively. To match the flows, simply subtract 10 from flow numbers 12 to 24 in Figure 7-4 and look up the flow number in 7.1.1.

7.2 Four- or more-Party Call and Single Network Connection Establishment with Three- or more-Party End Points by a Party that will not be an End Point

One example variation of this capability will be illustrated in this subclause. This variation is as follows:

- Call and Network Connection Establishment with branching occurring at the relay node and without network initiated "Look-ahead". The requesting party is not to be attached to the Network Connection.

The overview of the Type 2 simultaneous Call and Network Connection establishment capabilities is contained in the following subsections.

7.2.1 Call and Network Connection Establishment Single Network Connection – Without Look-Ahead

The User (party D) requests a three-party call between party A, B, C, and party D. One Network Connection (type 2, 3 or 5) is to be associated with this call. Parties A, B and C are to be attached to the Network Connection. Party A is to be the "root" of the Network Connection. The User also specifies the Higher Layer service to be carried on this Network Connection and the desired Network Bearer service that should be established. The requested service is of the non-human interactive type.

Therefore, immediate answer can be performed by party A's party B's, and party C's equipment. If the Requested parties equipment can accept the requested service, the designated attachment method, and specified bearer service, the equipment will indicate acceptance of the call and Network Connection request. This example also assumes that the Requested parties are connected to a Multi-signalling entity interface. In addition, the network does not perform a "Look-ahead" procedure before progressing with the Network Connection establishment. Figure 7-5 illustrates the before and after view of this example.

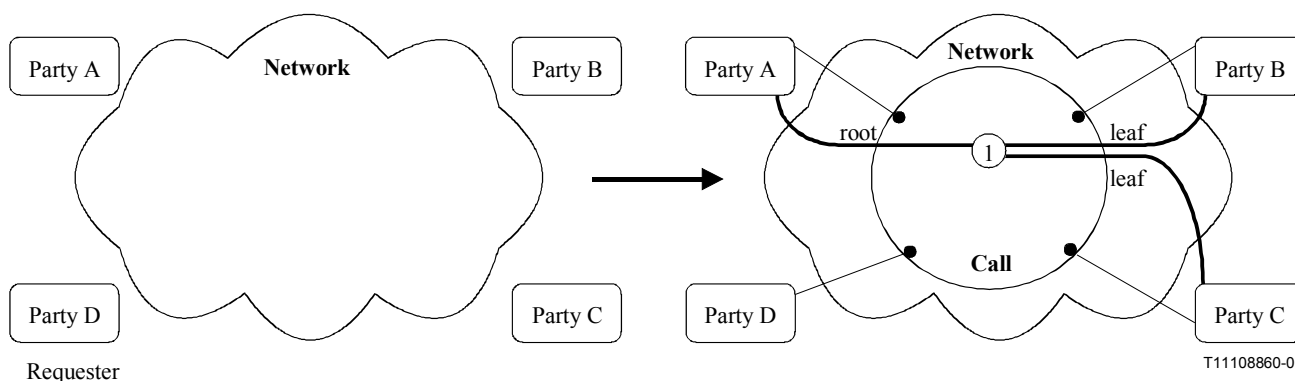


Figure 7-5 – Call and Bearer transition diagram

The signalling capability of simultaneously establishing this call and Network Connection between the three requested parties without network "Look-ahead" is illustrated in Figure 7-6 below.

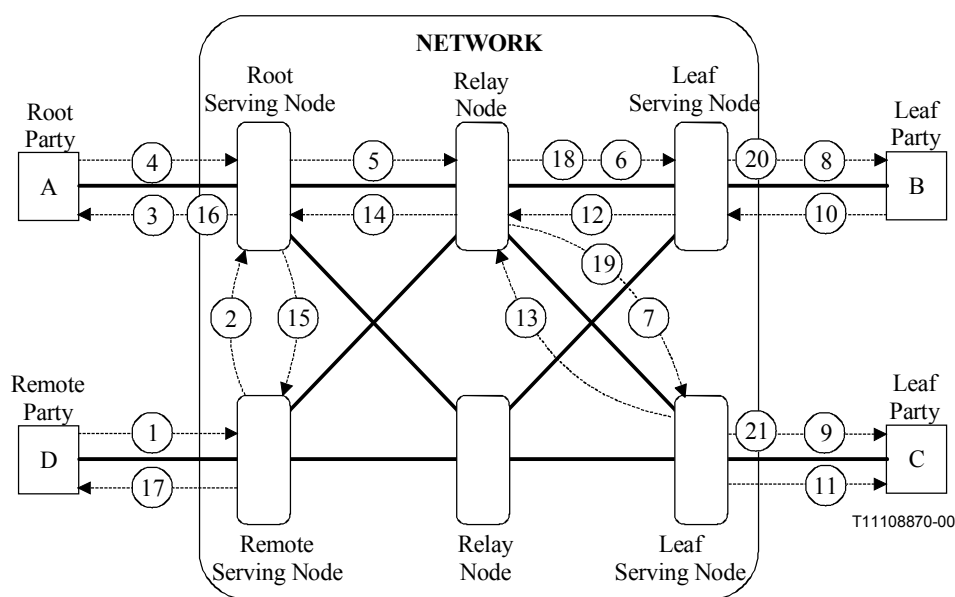


Figure 7-6 – Call and Network Connection between A, B and C by D – Without Look-Ahead

The actions illustrated in the above figure are as follows.

Requesting party D's terminal equipment and issues the following information flow towards its serving node.

1	Call-&-Bearer-Setup.ready	Party D to Serving Node D
<u>Resource information</u> Session ID <u>Resource 1</u> [Resource 1 ID, Resource type, Parties communicating (PEP "B" ID, PEP "B" ID, PEP "C" ID), Addressed party's service component information (PEP "B" ID, Service component characteristics)] (PEP "B" ID, Service component characteristics)] (PEP "C" ID, Service component characteristics)]	<u>Call information</u> Call Control Segment ID, Addressed party Information [PEP "B" ID, Network address], [PEP "B" ID, Network address], [PEP "C" ID, Network address] Requesting party information [PEP "D" ID, Network Address]	<u>Bearer information</u> <u>Network connection 1</u> [Bearer "1" ID, Bearer type, Parties connected (PEP "B" ID, PEP "B" ID), , PEP "C" ID) Addressed party's bearer branch information [(PEP "B" ID, Transit Network Selection, bearer branch characteristics), [(PEP "B" ID, Transit Network Selection, bearer branch characteristics), [(PEP "C" ID, Transit Network Selection, bearer branch characteristics) Addressed party's service module information [(PEP "B" ID, Service module characteristics [(PEP "B" ID, Service module characteristics [(PEP "C" ID, Service module characteristics Service component list [(Resource 1 ID)]

Processing upon receipt: The requester's serving node validates the request and determines the route to the serving node associated with the "root" of the Network Connection. Since the root of the Network Connection is located in another serving node, a Remote request needs to be invoked. The following information flow would be issued towards the serving node associated with party A.

2	Remote-Call-&-Bearer-Setup.ready	Serving Node D to Serving A
<u>Resource information</u> Session ID <u>Resource 1</u> [Resource 1 ID, Resource type, Parties communicating (PEP "B" ID, PEP "B" ID, PEP "C" ID), Addressed party's service component information (PEP "B" ID, Service component characteristics)] (PEP "B" ID, Service component characteristics)] (PEP "C" ID, Service component characteristics)]	<u>Call information</u> Call Control Segment ID, Call Owner: PEP "D" ID, Remote Call association (SN(A):ref.a -SN(B):----) ID, (SN(A):ref.a -SN(C):----) ID, Addressed party Information [PEP "B" ID, Network address], Party Owner: PEP "D" ID, [PEP "B" ID, Network address], Party Owner: PEP "D" ID, [PEP "C" ID, Network address] Party Owner: PEP "D" ID, Requesting party information [PEP "D" ID, Network Address]	<u>Bearer information</u> <u>Network connection 1</u> [Bearer "1" ID, Bearer type, Connection owner: PEP "D", Parties connected (PEP "B" ID, PEP "B" ID, PEP "C" ID) Addressed party's bearer branch information [(PEP "B" ID, Transit Network Selection, bearer branch characteristics, branch owner: PEP "D" ID), [(PEP "B" ID, Transit Network Selection, bearer branch characteristics, branch owner: PEP "D" ID), [(PEP "C" ID, Transit Network Selection, bearer branch characteristics, branch owner: PEP "D" ID) Addressed party's service module information [(PEP "B" ID, Service module characteristics [(PEP "B" ID, Service module characteristics [(PEP "C" ID, Service module characteristics Service component list [(Resource 1 ID)]

Processing upon receipt: When the above information flow is received by the serving node associated with the root party, it will validate the request. The serving node will determine the interface which is associated with party A and issues the following information flow.

3 **Call-&-Bearer-Setup.begin**

From Serving Node A to Party A

Resource information

Session ID

Resource 1

[Resource 1 ID, Resource type,

Parties communicating

(PEP "B" ID, PEP "B" ID, PEP "C" ID),

Addressed party's service component information

(PEP "B" ID, Service component characteristics)]

Remote party's service component information

(PEP "B" ID, Service component characteristics)

(PEP "C" ID, Service component characteristics)]

Call information

Call Control Segment ID,

Addressed party Information

[PEP "B" ID, Network Address]

Remote party Information

[PEP "B" ID, Network address],

[PEP "C" ID, Network address],

Requesting party information

[PEP "D" ID, Network Address]

Bearer information

Network connection 1

[Bearer "1" ID, Bearer type,

Parties connected

(PEP "B" ID, PEP "B" ID),

Addressed party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics),

Remote party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics),

[(PEP "C" ID, Transit Network Selection, bearer branch characteristics),

Addressed party's service module information

[(PEP "B" ID, Service module characteristics

Remote party's service module information

[(PEP "B" ID, Service module characteristics,

[(PEP "C" ID, Service module characteristics

Service component list

[(Resource 1 ID)]

Processing upon receipt: Party A's terminal equipment determines that it can accept the request and issues the following information flow towards its associated serving node.

NOTE 1 – If the terminal cannot accept the network connection characteristics, it could either respond with an alternate set of characteristics or issue a cancel. If an alternate set of characteristics is desired, then this is indicated in the ready (information flow 4).

4 **Call-&-Bearer-Setup.ready**

From Party A to Serving Node A

Resource information

Resource 1

[Resource 1 ID, Resource type,

Addressed party's service component information

(PEP "B" ID, Service component characteristics)]

Call information

Call Control Segment ID

Addressed party Information

[PEP "B" ID, Network address]

Bearer information

Network connection 1

[Bearer "1" ID,

Addressed party's bearer branch information

[(PEP "B" ID, bearer branch characteristics),

Addressed party's service module information

[(PEP "B" ID, Service module characteristics

Service component list

[(Resource 1 ID)]

Processing upon receipt: When the serving node associated with party A receives the above information flow, it records party A willingness to accept the call and Network Connection, determines the route to the requested parties B and C. For this example, the Network Connection will be routed through a single relay node, the serving node can commit to the request and therefore issues the following information flows towards the selected relay node. The Network Connection is backward through connected.

Resource information**Session ID****Resource 1**

[Resource 1 ID, Resource type,

Parties communicating

(PEP "B" ID, PEP "B" ID, PEP "C" ID),

Addressed party's service component information

(PEP "B" ID, Service component characteristics)]

(PEP "B" ID, Service component characteristics)]

(PEP "C" ID, Service component characteristics)]

Call information**Call Control Segment ID,****Call Owner: PEP "D" ID,****Remote Call association**

(SN(A):ref.a -SN(B):----) ID,

(SN(A):ref.a -SN(C):----) ID,

Addressed party Information

[PEP "B" ID, Network address],

Party Owner: PEP "D" ID,

[PEP "B" ID, Network address],

Party Owner: PEP "D" ID,

[PEP "C" ID, Network address]

Party Owner: PEP "D" ID,

Requesting party information

[PEP "D" ID, Network Address]

Bearer information**Network connection 1**

[Bearer "1" ID, Bearer type, Connection owner: PEP "D",

Parties connected

(PEP "B" ID, PEP "B" ID, PEP "C" ID)

Addressed party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics, branch owner: PEP "D" ID),

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics, branch owner: PEP "D" ID),

[(PEP "C" ID, Transit Network Selection, bearer branch characteristics, branch owner: PEP "D" ID)

Addressed party's service module information

[(PEP "B" ID, Service module characteristics

[(PEP "B" ID, Service module characteristics

[(PEP "C" ID, Service module characteristics

Service component list

[(Resource 1 ID)]

Processing upon receipt: The selected relay node validates the requests and determines the route and outgoing trunk facility. As a result of this routing, two separate routes are required to get to parties B and C. The selected relay node issues the information flows 6 and 7 towards the addressed serving nodes. The Network Connection in the relay node is backward through connected.

Resource information**Session ID****Resource 1**

[Resource 1 ID, Resource type,

Parties communicating

(PEP "B" ID, PEP "B" ID, PEP "C" ID),

Addressed party's service component information

(PEP "B" ID, Service component characteristics)]

Remote party's service component information

(PEP "B" ID, Service component characteristics)

(PEP "C" ID, Service component characteristics)]

Call information**Call Control Segment ID,****Call Owner: PEP "D" ID,****Direct Call association**

(SN(A):ref.a -SN(B):----) ID,

Remote Call association

(SN(A):ref.a -SN(C):----) ID,

Addressed party Information

[PEP "B" ID, network address],

Party Owner: PEP "D" ID]

Remote party Information

[PEP "B" ID, Network address],

[PEP "C" ID, Network address]

Requesting party information

[PEP "D" ID, Network Address]

Bearer information**Network connection 1**

[Bearer "1" ID, Bearer type, Connection owner: PEP "D",

Parties connected

[(PEP "B" ID), (PEP "B" ID)]

Addressed party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics, branch owner: PEP "D" ID)]

Addressed party's service module information

[(PEP "B" ID, Service module characteristics)]

Service component list

[(Resource 1 ID)]

Processing upon receipt: When the above information flow is received by the serving node associated with leaf party B, it will validate the request. The serving node will determine the interface which is associated with party B and issues the information flow 8.

Resource information**Session ID****Resource 1**

[Resource 1 ID, Resource type,

Parties communicating

(PEP "B" ID, PEP "B" ID, PEP "C" ID),

Addressed party's service component information

(PEP "C" ID, Service component characteristics)]

Remote party's service component information

(PEP "B" ID, Service component characteristics)

(PEP "B" ID, Service component characteristics)]

Call information**Call Control Segment ID,****Call Owner: PEP "D" ID,****Direct Call association**

(SN(A):ref.a -SN(C):----) ID,

Remote Call association

(SN(A):ref.a -SN(B):----) ID,

Addressed party Information

[PEP "C" ID, network address],

Party Owner: PEP "D" ID]

Remote party Information

[PEP "B" ID, Network address],

[PEP "B" ID, Network address]

Requesting party information

[PEP "D" ID, Network Address]

Bearer information**Network connection 1**

[Bearer "1" ID, Bearer type, Connection owner: PEP "D",

Parties connected

[(PEP "B" ID), (PEP "C" ID)]

Addressed party's bearer branch information

[(PEP "C" ID, Transit Network Selection, bearer branch characteristics, branch owner: PEP "D" ID)]

Addressed party's service module information

[(PEP "C" ID, Service module characteristics)]

Service component list

[(Resource 1 ID)]

Enabling Condition: The reception of information flow 5

Processing upon receipt: When the above information flow is received by the serving node associated with leaf party C, it will validate the request. The serving node will determine the interface which is associated with party C and issues the information flow 9.

8 Call-&-Bearer-Setup.begin	Serving Node B to Party B
<p><u>Resource information</u></p> <p>Session ID</p> <p><u>Resource 1</u> [Resource 1 ID, Resource type, Parties communicating (PEP “B” ID, PEP “B” ID, PEP “C” ID), Addressed party’s service component information (PEP “B” ID, Service component characteristics)] Remote party’s service component information (PEP “B” ID, Service component characteristics) (PEP “C” ID, Service component characteristics)]</p>	<p><u>Call information</u></p> <p>Call Control Segment ID, Addressed party Information [PEP “B” ID, Network Address] Remote party Information [PEP “B” ID, Network address], [PEP “C” ID, Network address], Requesting party information [PEP “D” ID, Network Address]</p> <p><u>Bearer information</u></p> <p><u>Network connection 1</u> [Bearer “1” ID, Bearer type, Parties connected (PEP “B” ID, PEP “B” ID), Addressed party’s bearer branch information [(PEP “B” ID, Transit Network Selection, bearer branch characteristics), Remote party’s bearer branch information [(PEP “B” ID, Transit Network Selection, bearer branch characteristics), Addressed party’s service module information [(PEP “B” ID, Service module characteristics Remote party’s service module information [(PEP “B” ID, Service module characteristics, Service component list [(Resource 1 ID)]</p>

Enabling Condition: The reception of information flow 6

Processing upon receipt: Party B's terminal equipment determines that it can accept the request and issues the information flow 10 towards its associated serving node.

NOTE 2 – If the terminal cannot accept the network connection characteristics, it could either respond with an alternate set of characteristics or issue a cancel. If an alternate set of characteristics is desired, then this is indicated in the ready (information flow 10).

9 Call-&-Bearer-Setup.begin	From Serving Node C to Party C
<p><u>Resource information</u></p> <p>Session ID</p> <p><u>Resource 1</u> [Resource 1 ID, Resource type, Parties communicating (PEP “B” ID, PEP “B” ID, PEP “C” ID), Addressed party’s service component information (PEP “C” ID, Service component characteristics)] Remote party’s service component information (PEP “B” ID, Service component characteristics) (PEP “B” ID, Service component characteristics)]</p>	<p><u>Call information</u></p> <p>Call Control Segment ID, Addressed party Information [PEP “C” ID, Network Address] Remote party Information [PEP “B” ID, Network address], [PEP “B” ID, Network address], Requesting party information [PEP “D” ID, Network Address]</p> <p><u>Bearer information</u></p> <p><u>Network connection 1</u> [Bearer “1” ID, Bearer type, Parties connected (PEP “B” ID, PEP “C” ID), Addressed party’s bearer branch information [(PEP “C” ID, Transit Network Selection, bearer branch characteristics), Remote party’s bearer branch information [(PEP “B” ID, Transit Network Selection, bearer branch characteristics), Addressed party’s service module information [(PEP “C” ID, Service module characteristics Remote party’s service module information [(PEP “B” ID, Service module characteristics, Service component list [(Resource 1 ID)]</p>

Enabling Condition: The reception of information flow 7

Processing upon receipt: Party C's terminal equipment determines that it can accept the request and issues the information flow 11 towards its associated serving node.

NOTE 3 – If the terminal cannot accept the network connection characteristics, it could either respond with an alternate set of characteristics or issue a cancel. If an alternate set of characteristics is desired, then this is indicated in the ready (information flow 11).

10 Call-&-Bearer-Setup.ready**From Party B to Serving Node B****Resource information****Resource 1**

[Resource 1 ID, Resource type,
Addressed party's service component information
(PEP "B" ID, Service component characteristics)]

Call information**Call Control Segment ID**

Addressed party Information
[PEP "B" ID, Network address]

Bearer information**Network connection 1**

[Bearer "1" ID,
Addressed party's bearer branch information
[(PEP "B" ID, bearer branch characteristics),
Addressed party's service module information
[(PEP "B" ID, Service module characteristics
Service component list
[(Resource 1 ID)]]

Enabling Condition: The reception of information flow 8

Processing upon receipt: The addressed service node associated with party B receives the above flow and records the response to the action request and issues information flow 12 (as a response to the request in 6) to its associated relay node.

NOTE 4 – The serving node can make a decision to allow party A or party B to select the network connection characteristics. If it decides A, then flow 3 would contain parameter list to select from, if B, then the parameter list would be in information flow 5.

11 Call-&-Bearer-Setup.ready**From Party C to Serving Node C****Resource information****Resource 1**

[Resource 1 ID, Resource type,
Addressed party's service component information
(PEP "C" ID, Service component characteristics)]

Call information**Call Control Segment ID**

Addressed party Information
[PEP "C" ID, Network address]

Bearer information**Network connection 1**

[Bearer "1" ID,
Addressed party's bearer branch information
[(PEP "C" ID, bearer branch characteristics),
Addressed party's service module information
[(PEP "C" ID, Service module characteristics
Service component list
[(Resource 1 ID)]]

Enabling Condition: The reception of information flow 9

Processing upon receipt: The addressed service node associated with party B receives the above flow and records the response to the action request, and issues information flow 13 (in response to the request in flow 7) to its associated relay node.

12 Call-&-Bearer-Setup.ready**From Serving Node B to Relay Node 1****Resource information****Resource 1**

[Resource 1 ID, Resource type,
Addressed party's service component information
(PEP "B" ID, Service component characteristics)]

Call information**Call Control Segment ID**

Addressed party Information
[PEP "B" ID, Network address]

Bearer information**Network connection 1**

[Bearer "1" ID,
Addressed party's bearer branch information
[(PEP "B" ID, bearer branch characteristics),
Addressed party's service module information
[(PEP "B" ID, Service module characteristics
Service component list
[(Resource 1 ID)]]

Enabling Condition: The reception of information flow 10

Processing upon receipt: The addressed relay node receives the above flow and records the response to the action request and awaits the response to the request in 7 before proceeding.

NOTE 5 – In this scenario, it is assumed that information flow 12 is received at the relay node before flow 13. The order of reception of information flows 12 and 13 may be reversed.

13 Call-&-Bearer-Setup.ready**From Serving Node C to Relay Node 1****Resource information****Resource 1**

[Resource 1 ID, Resource type,
Addressed party's service component information
[(PEP "C" ID, Service component characteristics)]]

Call information**Call Control Segment ID**

Addressed party Information
[(PEP "C" ID, Network address)]

Bearer information**Network connection 1**

[Bearer "1" ID],
Addressed party's bearer branch information
[(PEP "C" ID, bearer branch characteristics),
Addressed party's service module information
[(PEP "C" ID, Service module characteristics)
Service component list
[(Resource 1 ID)]]

Enabling Condition: The reception of information flow 11

Processing upon receipt: When the selected relay node receives both information flows 12 and 13 (responses to 6 and 7), it records them and relays the responses to the associated service nodes in the form illustrated by information flows 14, 18 and 19.

14 Call-&-Bearer-Setup.commit**From Relay Node 1 to Serving Node A****Resource information****Resource 1**

[Resource 1 ID, Resource type]

Remote party's service component information

[(PEP "B" ID, Service component characteristics),
(PEP "C" ID, Service component characteristics)]

Call information**Call Control Segment ID,****Direct Call association**

(SN(A):ref.a -SN(B) ref b) ID,
Addressed party Information
[(PEP "B" ID, Network address)],

Remote party Information
[(PEP "B" ID, Network address),
(PEP "C" ID, Network address)]

Bearer information**Network connection 1**

[Bearer "1" ID],

Remote party's bearer branch information

[(PEP "B" ID, bearer branch characteristics),
(PEP "C" ID, bearer branch characteristics)],

Remote party's service module information

[(PEP "B" ID, Service module characteristics),
(PEP "C" ID, Service module characteristics)],

Service component list

[(Resource 1 ID)]

Enabling Condition: The reception of information flows 12 and 13

Processing upon receipt: When the remote service node associated with party A receives information flow 14, it records the willingness of all parties to accept the call and the Network Connection, and sends commitment information flows towards the requesting service node (flow 15) and party A's terminal equipment (flow 16). Serving Node A then performs forward and backward through connect of the Network Connection.

15 Call-&-Bearer-Setup-Remote.commit**From Serving Node A to Serving Node D****Resource information****Resource 1**

[Resource 1 ID, Resource type]

Remote party's service component information

[(PEP "B" ID, Service component characteristics),
(PEP "C" ID, Service component characteristics)]

Call information**Call Control Segment ID,****Indirect Call association**

[(SN(A):ref.a -SN(B): ref b) ID,
(SN(A):ref.a -SN(C): ref c) ID],

Addressed party Information
[(PEP "D" ID, Network address),

Remote party Information
[(PEP "B" ID, Network address),
(PEP "B" ID, Network address),
(PEP "C" ID, Network address)]

Bearer information**Network connection 1**

[Bearer "1" ID],

Remote party's bearer branch information

[(PEP "B" ID, bearer branch characteristics),
(PEP "B" ID, bearer branch characteristics),
(PEP "C" ID, bearer branch characteristics)],

Remote party's service module information

[(PEP "B" ID, Service module characteristics),
(PEP "B" ID, Service module characteristics),
(PEP "C" ID, Service module characteristics)],

Service component list

[(Resource 1 ID)]

Processing upon receipt: When the service node associated with party D receives information flow 15, it records the willingness of all parties to accept the call and the Network Connection, and sends the commitment information flow towards party D's terminal equipment (flow 17).

16 Call-&-Bearer-Setup.commit**From Serving Node A to Party A****Resource information****Resource 1**

[Resource 1 ID, Resource type]

Remote party's service component information[(PEP "B" ID, Service component characteristics),
(PEP "C" ID, Service component characteristics)]**Call information****Call Control Segment ID,****Direct Call association**[(SN(A):ref.a -SN(B): ref b) ID,
(SN(A):ref.a -SN(C): ref c) ID],**Addressed party Information**

[(PEP "B" ID, Network address),

Remote party Information[(PEP "B" ID, Network address),
(PEP "C" ID, Network address)]**Bearer information****Network connection 1**

[Bearer "1" ID],

Remote party's bearer branch information[(PEP "B" ID, bearer branch characteristics),
(PEP "C" ID, bearer branch characteristics)],**Remote party's service module information**[(PEP "B" ID, Service module characteristics),
(PEP "C" ID, Service module characteristics)],**Service component list**

[(Resource 1 ID)]

Enabling Condition: The reception of information flow 14**Processing upon receipt:** When the user equipment receives this information flow, it records the commitment, and notifies the user of this commitment, and connects to the forward portion of the Network Connection.

17 Call-&-Bearer-Setup.commit**From Serving Node D to Party D****Resource information****Resource 1**

[Resource 1 ID, Resource type]

Remote party's service component information[(PEP "B" ID, Service component characteristics),
(PEP "C" ID, Service component characteristics)]**Call information****Call Control Segment ID,****Indirect Call association**[(SN(A):ref.a -SN(B): ref b) ID,
(SN(A):ref.a -SN(C): ref c) ID],**Addressed party Information**

[(PEP "D" ID, Network address),

Remote party Information[(PEP "B" ID, Network address),
(PEP "B" ID, Network address),
(PEP "C" ID, Network address)]**Bearer information****Network connection 1**

[Bearer "1" ID],

Remote party's bearer branch information[(PEP "B" ID, bearer branch characteristics),
(PEP "B" ID, bearer branch characteristics),
(PEP "C" ID, bearer branch characteristics)],**Remote party's service module information**[(PEP "B" ID, Service module characteristics),
(PEP "B" ID, Service module characteristics),
(PEP "C" ID, Service module characteristics)],**Service component list**

[(Resource 1 ID)]

Enabling Condition: The reception of information flow 15**Processing upon receipt:** When the user equipment receives this information flow, it records the commitment and notifies the user of this commitment.

18 Call-&-Bearer-Setup.commit**From Relay Node 1 to Serving Node B****Resource information****Resource 1**

[Resource 1 ID, Resource type]

Addressed party's service component information

[(PEP "B" ID, Service component characteristics)]

Call information**Call Control Segment ID,****Direct Call association**

[(SN(A):ref.a -SN(B): ref b) ID],

Addressed party Information

[(PEP "B" ID, Network address)]

Bearer information**Network connection 1**

[Bearer "1" ID],

Addressed party's bearer branch information

[(PEP "B" ID, bearer branch characteristics)]

Addressed party's service module information

(PEP "B" ID, Service module characteristics)],

Service component list

[(Resource 1 ID)]

Enabling Condition: The reception of information flows 12 and 13**Processing upon receipt:** When the service node associated with party B receives information flow 18, it records the willingness of all parties to accept the call and the Network Connection, and sends commitment information flows towards the party B's terminal equipment (flow 20). Serving Node B then performs forward and backward through-connect of the Network Connection.

19 Call-&-Bearer-Setup.commit**From Relay Node 1 to Serving Node C****Resource information****Resource 1**

[Resource 1 ID, Resource type]

Addressed party's service component information

[(PEP "C" ID, Service component characteristics)]

Call information**Call Control Segment ID,****Direct Call association**

[(SN(A):ref.a -SN(C): ref.c) ID],

Addressed party Information

[(PEP "C" ID, Network address)]

Bearer information**Network connection 1**

[Bearer "1" ID],

Addressed party's bearer branch information

[(PEP "C" ID, bearer branch characteristics)]

Addressed party's service module information

(PEP "C" ID, Service module characteristics)],

Service component list

[(Resource 1 ID)]

Enabling Condition: The reception of information flows 12 and 13

Processing upon receipt: When the service node associated with party C receives information flow 19, it records the willingness of all parties to accept the call and the Network Connection, and sends commitment information flows towards the party C's terminal equipment (flow 21). Serving Node C then performs forward and backward through connect of the Network Connection.

20 Call-&-Bearer-Setup.commit**From Serving Node B to Party B****Resource information****Resource 1**

[Resource 1 ID, Resource type]

Addressed party's service component information

[(PEP "B" ID, Service component characteristics)]

Call information**Call Control Segment ID,****Addressed party Information**

[(PEP "B" ID, Network address)]

Bearer information**Network connection 1**

[Bearer "1" ID],

Addressed party's bearer branch information

[(PEP "B" ID, bearer branch characteristics)]

Addressed party's service module information

(PEP "B" ID, Service module characteristics)],

Service component list

[(Resource 1 ID)]

Enabling Condition: The reception of information flow 18

Processing upon receipt: When the user equipment receives information flow 20, it records the commitment, notifies the user of this commitment, and through connects in both directions.

21 Call-&-Bearer-Setup.commit**From Serving Node C to Party C****Resource information****Resource 1**

[Resource 1 ID, Resource type]

Addressed party's service component information

[(PEP "C" ID, Service component characteristics)]

Call information**Call Control Segment ID,****Addressed party Information**

[(PEP "C" ID, Network address)]

Bearer information**Network connection 1**

[Bearer "1" ID],

Addressed party's bearer branch information

[(PEP "C" ID, bearer branch characteristics)]

Addressed party's service module information

(PEP "C" ID, Service module characteristics)],

Service component list

[(Resource 1 ID)]

Enabling Condition: The reception of information flow 19

Processing upon receipt: When the user equipment receives information flow 21, it records the commitment, notifies the user of this commitment, and through connects in both directions.

8 Addition of one or more new Parties to an Existing Call with Attachment to an Existing Network Connection – With or without network Look-ahead.

The simultaneous addition of a party and attachment to network connection has two variations, adding a party to a call with attachment to an existing type 2 network connection having two or more parties; and adding a party to a call and establishing a new type 1 network connection between the new party and one of the existing parties. In both variations, the addition of the party is requested by a third party. The number of called parties determines whether the one-phase or two-phase request mechanism is utilised.

The following capabilities will be illustrated:

- 1) Addition of one new party and attachment to an existing Type 2, 3 or 5 Network Connection.
- 2) Addition of one new party and simultaneous establishment of a new type 1 network connection between the new party and one of the existing parties.

8.1 Addition of one new Party and attachment to an existing Network Connection

One example variation of this capability will be illustrated:

- Add one new party requested by a party not associated with the Connection, without network-initiated look-ahead.

The overview of the simultaneous party addition and attachment to a network connection is contained in the following subclause.

8.1.1 Simultaneous Party Addition and Network Connection Attachment by a Third Party – Without Look-Ahead

The User (party D) requests the addition of a new party, C. The new party is to be attached to the existing network connection, which has parties A and B attached already. The requested service does not require human interaction. Therefore, immediate answer can be performed by the party C's equipment. If the requested party's equipment can accept the requested service, the designated attachment method, and specified bearer service, the equipment will indicate acceptance of the call and network connection attachment request. This example also assumes that the requested party is connected to a multi-signalling entity interface. In addition, the network does not perform a "look-ahead" procedure before progressing with the network connection establishment.

For the purposes of this example, Party A is the call owner, root party and connection owner. The presence or absence of other network connections, other leaf parties of the network connection or other parties not attached to the network connection are not significant in these flows.

The call and bearer transition diagram for adding another party and attaching to an existing network connection is shown in Figure 8-1.

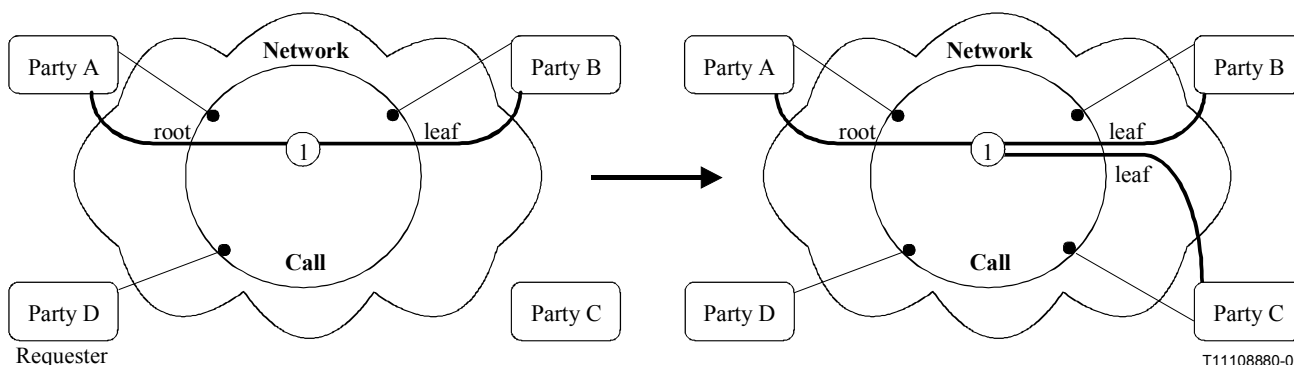


Figure 8-1 – Call and Bearer Transition for Party Addition with simultaneous Attachment

The signalling capability of simultaneously adding another party and attaching to an existing network connection without network "Look-ahead" is illustrated in Figure 8-2. This request was issued by party D which is not (and will not be) attached to the requested Network Connection.

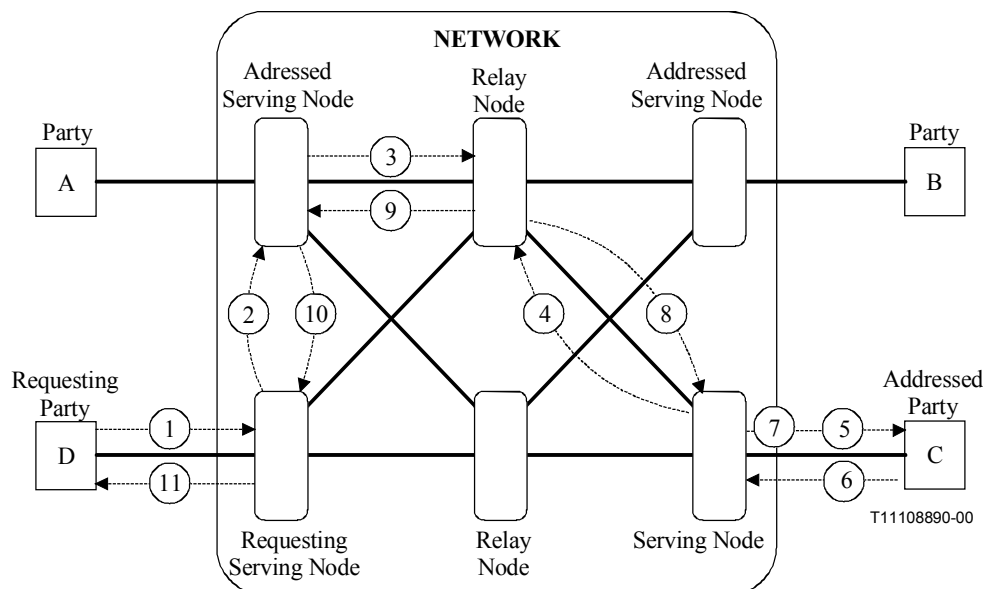


Figure 8-2 – Addition of a New Party with Attachment to an Existing single Network Connection (between A and C) – Establishment by a Third Party – Without Look-Ahead

The actions illustrated in Figure 8-2 are as follows.

Requesting party's (party D) terminal equipment issues information flow 1 towards its serving node.

1 Add-Party-to-Bearer.ready	Party D to Serving Node D
<p>Resource information</p> <p>Session ID</p> <p>Resource 1</p> <p>[Resource 1 ID, Resource type,</p> <p>Parties communicating</p> <p>(PEP "B" ID, PEP "B" ID, PEP "C" ID)</p> <p>Addressed party's service component information</p> <p>(PEP "B" ID, Service component characteristics),</p> <p>(PEP "C" ID, Service component characteristics)]</p>	<p>Bearer information</p> <p>Network connection 1</p> <p>[Bearer "1" ID]</p> <p>Parties connected</p> <p>(PEP "B" ID(root), PEP "B" ID(leaf), PEP "C" ID(leaf)),</p> <p>Addressed party's bearer branch information</p> <p>[(PEP "C" ID, Transit Network Selection, bearer branch characteristics),</p> <p>Addressed party's service module information</p> <p>[PEP "C" ID, Service module characteristics]</p> <p>Service component list</p> <p>[(Resource 1 ID)]</p>

Processing upon receipt: The requester's serving node validates the request and determines that the call owner must be requested to add the party (for this example party A is chosen), and the edge signalling route to the serving node associated with the call owner is selected. Since party D is not attached to the requested Network Connection, and the "root" of the Network Connection is located in another serving node, a Remote operation request needs to be invoked. In addition, only one outgoing signalling port is needed, therefore party D's serving node can commit to the request and therefore issues information flow 2 towards the selected "call owning" serving node.

2	Remote-Add-Party-to-Bearer.ready	Serving Node D to Serving Node A
<u>Resource information</u> Session ID <u>Resource 1</u> [Resource 1 ID, Resource type, Parties communicating (PEP “B” ID, PEP “B” ID, PEP “C” ID) Addressed party’s service component information (PEP “B” ID, Service component characteristics), (PEP “C” ID, Service component characteristics)]	<u>Call information</u> Call Control Segment ID, Addressed party Information [PEP “C” ID, Network Address] Requesting party information [PEP “D” ID, Network Address]	<u>Bearer information</u> <u>Network connection 1</u> [Bearer “1” ID] Parties connected (PEP “B” ID(root), PEP “B” ID(leaf), PEP “C” ID(leaf)), Addressed party’s bearer branch information [(PEP “C” ID, Transit Network Selection, bearer branch characteristics), Addressed party’s service module information [PEP “C” ID, Service module characteristics] Service component list [(Resource 1 ID)]

Processing upon receipt: The call owner's serving node validates the request and determines that the call owner need not be requested to add the party (in this example, it is party A's service logic that determines this). Since Party A is the root party of the indicated connection, Serving Node A determines the route to the requested party C. For this example, the Network Connection will be routed through a single relay node, through which the connection is already routed. The serving node can commit to the request and therefore issues the following information flows towards the selected relay node.

3	Remote-Add-Party-to-Bearer.ready	Serving Node A to Relay Node 1
<u>Resource information</u> Session ID <u>Resource 1</u> [Resource 1 ID, Resource type, Parties communicating (PEP “B” ID, PEP “B” ID, PEP “C” ID) Addressed party’s service component information (PEP “B” ID, Service component characteristics), (PEP “C” ID, Service component characteristics)]	<u>Call information</u> Call Control Segment ID, Addressed party Information [PEP “C” ID, Network Address] Requesting party information [PEP “D” ID, Network Address]	<u>Bearer information</u> <u>Network connection 1</u> [Bearer “1” ID] Parties connected (PEP “B” ID(root), PEP “B” ID(leaf), PEP “C” ID(leaf)), Addressed party’s bearer branch information [(PEP “C” ID, Transit Network Selection, bearer branch characteristics), Addressed party’s service module information [PEP “C” ID, Service module characteristics] Service component list [(Resource 1 ID)]

Processing upon receipt: The selected relay node validates the requests and determines the route and outgoing trunk facility. As a result of this routing, a new branch is required to get to party C. The selected relay node issues information flows 4 towards the addressed serving node.

4	Call-&-Bearer-Setup.ready	Relay Node 1 to Serving Node C
<u>Resource information</u> Session ID <u>Resource 1</u> [Resource 1 ID, Resource type, Parties communicating (PEP “B” ID, PEP “B” ID, PEP “C” ID) Addressed party’s service component information (PEP “B” ID, Service component characteristics), (PEP “C” ID, Service component characteristics)]	<u>Call information</u> Call Control Segment ID, Addressed party Information [PEP “C” ID, Network Address] Requesting party information [PEP “D” ID, Network Address]	<u>Bearer information</u> <u>Network connection 1</u> [Bearer “1” ID] Parties connected (PEP “B” ID(root), PEP “B” ID(leaf), PEP “C” ID(leaf)), Addressed party’s bearer branch information [(PEP “C” ID, Transit Network Selection, bearer branch characteristics), Addressed party’s service module information [PEP “C” ID, Service module characteristics] Service component list [(Resource 1 ID)]

Processing upon receipt: When the above information flow is received by the serving node associated with new leaf party C, it will validate the request. The serving node determines the interface which is associated with party C. In this example, it is classified as a multiple signalling entity interface, so the serving node cannot commit to the addressed end point and therefore issues information flow 5 towards the selected interface facility.

5 Call-&-Bearer-Setup.begin**Serving Node C to Party C****Resource information****Session ID****Resource 1**

[Resource 1 ID, Resource type,

Parties communicating

(PEP "B" ID, PEP "B" ID, PEP "C" ID)

Addressed party's service component information

(PEP "B" ID, Service component characteristics),

(PEP "C" ID, Service component characteristics)]

Call information**Call Control Segment ID,****Addressed party Information**

[PEP "C" ID, Network Address]

Requesting party information

[PEP "D" ID, Network Address]

Bearer information**Network connection 1**

[Bearer "1" ID]

Parties connected

(PEP "B" ID(root), PEP "B" ID(leaf), PEP "C" ID(leaf)),

Addressed party's bearer branch information

[(PEP "C" ID, bearer branch characteristics),

Addressed party's service module information

[PEP "C" ID, Service module characteristics]

Service component list

[(Resource 1 ID)]

Processing upon receipt: The addressed terminal equipment determines that it can accept the request and issues information flow 6 towards its associated serving node.

6 Call-&-Bearer-Setup.ready**Party C to Serving Node C****Resource information****Session ID****Resource 1**

[Resource 1 ID, Resource type,

Addressed party's service component information

(PEP "C" ID, Service component characteristics)]

Call information**Call Control Segment ID,****Addressed party Information**

[PEP "C" ID, Network Address]

Bearer information**Network connection 1**

[Bearer "1" ID]

Parties connected**Addressed party's bearer branch information**

[(PEP "C" ID, bearer branch characteristics),

Addressed party's service module information

[PEP "C" ID, Service module characteristics]

Service component list

[(Resource 1 ID)]

Processing upon receipt: The addressed serving node records the responses to the action requests and selects one of the responding terminals. The selected terminal is sent information flow number 7. The serving node then clears the non-selected terminals. (Note: this action is not illustrated for simplicity), and issues information flow 8 towards the requesting relay node. The network connection is through connected.

7 Call-&-Bearer-Setup.commit**Serving Node C to Party C****Resource information****Session ID****Resource 1**

[Resource 1 ID, Resource type,

Addressed party's service component information

(PEP "C" ID, Service component characteristics)]

Call information**Call Control Segment ID,****Addressed party Information**

[PEP "C" ID, Network Address]

Bearer information**Network connection 1**

[Bearer "1" ID]

Parties connected**Addressed party's bearer branch information**

[(PEP "C" ID, bearer branch characteristics),

Addressed party's service module information

[PEP "C" ID, Service module characteristics]

Service component list

[(Resource 1 ID)]

Processing upon receipt: When the Terminal receives this information flow, it records the commitment, and connects in both the forward and backward directions.

8 Call-&-Bearer-Setup.commit**Serving Node C to Relay Node 1****Resource information****Resource 1**

[Resource 1 ID, Resource type,

Remote party's service component information

(PEP "C" ID, Service component characteristics)]

Call information**Call Control Segment ID,****Direct Call association**

(SN(A):ref.a -SN(C) ref.b) ID,

Addressed party Information

[PEP "B" ID, Network address]

Bearer information**Network connection 1**

[Bearer "1" ID,

Remote party's bearer branch information

[(PEP "C" ID, bearer branch characteristics),

Remote party's service module information

[(PEP "C" ID, Service module characteristics]

Service component list

[(Resource 1 ID)]

Processing upon receipt: When the relay node receives this information flow, it records the commitment, and relays this commitment to the requesting serving node by issuing information flow number 9, and performs through connect of the Network Connection.

9 Remote-Add-Party-to-Bearer.commit		Relay Node 1 to Serving Node A
Resource information	Call information	Bearer information
Resource 1 [Resource 1 ID, Resource type, Remote party's service component information (PEP "C" ID, Service component characteristics)]	Call Control Segment ID, Direct Call association (SN(A):ref.a -SN(C) ref.b) ID, Addressed party Information [PEP "B" ID, Network address]	Network connection 1 [Bearer "1" ID, Remote party's bearer branch information [(PEP "C" ID, bearer branch characteristics), Remote party's service module information [(PEP "C" ID, Service module characteristics Service component list [(Resource 1 ID)]]

Processing upon receipt: Serving Node A records the commitment, noting that no notification to party A's user equipment is required. It then issues the notification of the completion of the remote request by issuing information flow 10 towards the requesting serving node associated with party D.

10 Remote-Add-Party-to-Bearer.commit.commit		Serving Node A to Serving Node D
Resource information	Call information	Bearer information
Resource 1 [Resource 1 ID, Resource type,	Call Control Segment ID, Remote Call association (SN(A):ref.a -SN(C) ref.b) ID, Remote party Information [PEP "C" ID, Network address]	Network connection 1 [Bearer "1" ID, Remote party's bearer branch information [(PEP "C" ID, bearer branch characteristics), Remote party's service module information [(PEP "C" ID, Service module characteristics Service component list [(Resource 1 ID)]]

Processing upon receipt: When the requesting service node receives this information flow, it records the commitment, and relays the commitment to the requesting party (party D) by issuing the following information flow.

11 Call-&-Bearer-Setup.commit		Serving Node D to Party D
Resource information	Call information	Bearer information
Resource 1 [Resource 1 ID, Resource type,	Call Control Segment ID, Remote party Information [PEP "C" ID, Network address]	Network connection 1 [Bearer "1" ID, Remote party's bearer branch information [(PEP "C" ID, bearer branch characteristics), Remote party's service module information [(PEP "C" ID, Service module characteristics Service component list [(Resource 1 ID)]]

Processing upon receipt: When the requesting party's user equipment receives this information flow, it records the commitment and notifies the user, thereby completing the requested action.

8.2 Addition of one or more new Parties and establishment of a Type 1 Network Connection by a Third Party

One example variation of this capability will be illustrated:

- Add one new party and one new network connection requested by a party not associated with the Connection.

The overview of the simultaneous party addition and establishment of a network connection is contained in the following subclause.

8.2.1 Simultaneous Party Addition and Network Connection Attachment by a Third Party – Without Look-Ahead

The User (party D) requests the addition of a new party, C, and the establishment of a new type 1 network connection between the new party and party B. The requested service does not require human interaction, therefore, immediate answer can be performed by the party C's equipment. If the requested existing party's equipment can accept the requested service, the designated attachment method, and specified bearer service, the equipment will indicate acceptance of the call and network connection establishment request before involving the new party. This example also assumes that the

requested new party is not connected to a multi-signalling entity interface. In addition, the network does not perform a "look-ahead" procedure before progressing with the network connection establishment.

For the purposes of this example, Party A is the call owner. The presence or absence of other network connections and other parties not required to be attached to the new network connection is not significant in these flows.

The call and bearer transition diagram for adding another party and establishing a new network connection is shown in Figure 8-3.

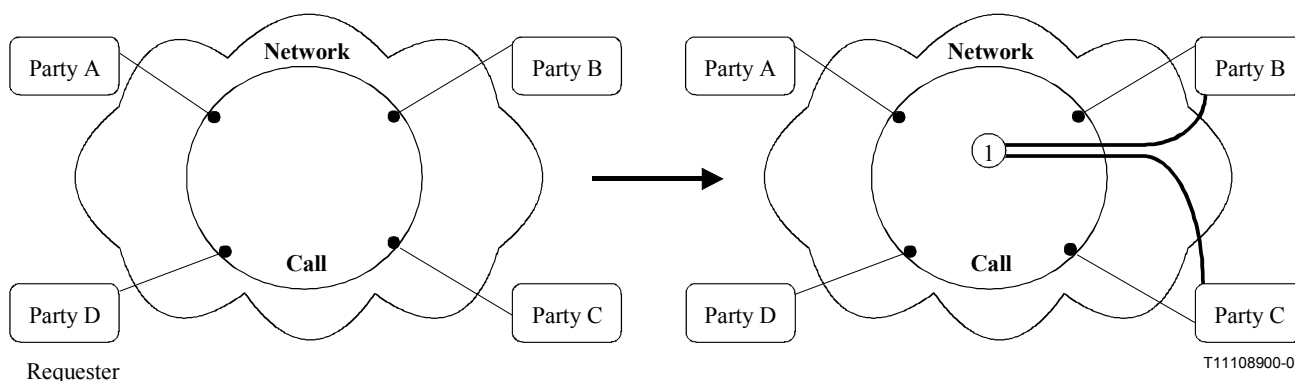


Figure 8-3 – Call and Bearer Transition for Party Addition with simultaneous Connection Establishment

The signalling capability of simultaneously adding another party and attaching to a new network connection without network "Look-ahead" is illustrated in Figure 8-4 below. This request was issued by party D which is not (and will not be) attached to the requested Network Connection.

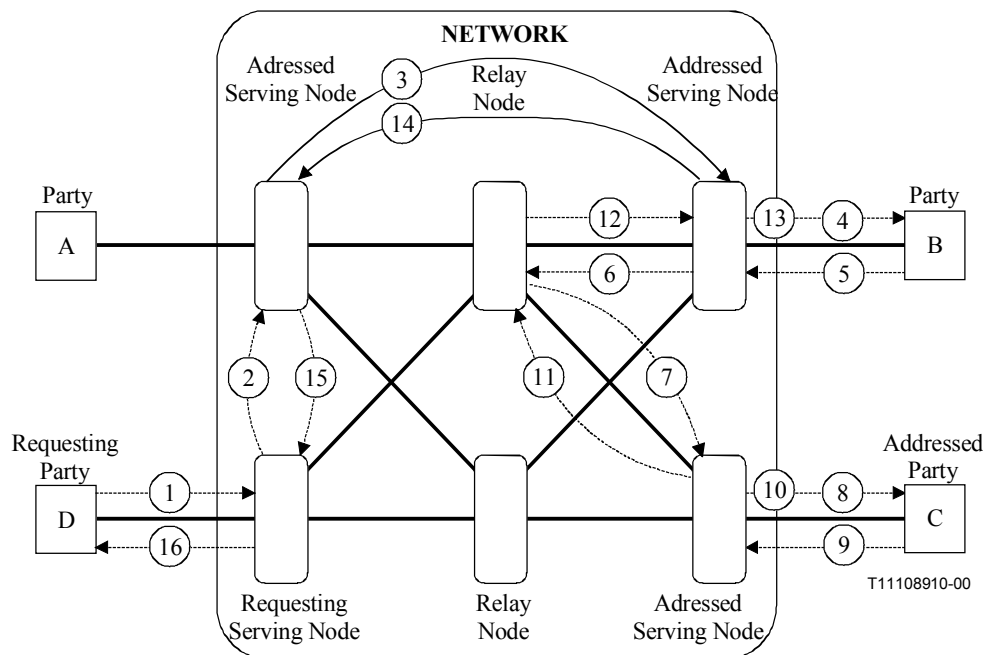


Figure 8-4 – Addition of a new party with attachment to a new network connection – Establishment by a Third Party

The actions illustrated in Figure 8-4 are as follows.

Requesting party's (party D) terminal equipment issues information flow 1 towards its serving node.

1	Add-Party-&-Bearer-to-Call.ready	Party D to Serving Node D
<u>Resource information</u> Session ID <u>Resource 1</u> [Resource 1 ID, Resource type, Parties communicating (PEP "B" ID, PEP "C" ID) Addressed party's service component information (PEP "B" ID, Service component characteristics), (PEP "C" ID, Service component characteristics)]	<u>Call information</u> Call Control Segment ID, Addressed party Information [(PEP "B" ID, Network Address), (PEP "C" ID, Network Address)] Requesting party information [PEP "D" ID, Network Address]	<u>Bearer information</u> <u>Network connection 1</u> [Bearer "1" ID] Parties connected (PEP "B" ID(root), PEP "C" ID(leaf)), Addressed party's bearer branch information [(PEP "B" ID, Transit Network Selection, bearer branch characteristics), (PEP "C" ID, Transit Network Selection, bearer branch characteristics)] Addressed party's service module information [(PEP "B" ID, Service module characteristics), (PEP "C" ID, Service module characteristics)] Service component list [(Resource 1 ID)]

Processing upon receipt: The requester's serving node validates the request and determines that the call owner (for this example party A is chosen) must be requested to add the new party ("C") and the new bearer, the edge signalling route to the serving node associated with the call owner is selected. Since party D is not attached to the requested Network Connection, and the "root" of the Network Connection is located in another serving node, a Remote operation request needs to be invoked. In addition, only one outgoing signalling port is needed, therefore party D's serving node can commit to the request and therefore issues information flow 2 towards the selected "call owning" serving node.

2	Remote-Add-Party-&-Bearer-to-Call.ready	Serving Node D to Serving Node A
<u>Resource information</u> Session ID <u>Resource 1</u> [Resource 1 ID, Resource type, Parties communicating (PEP "B" ID, PEP "C" ID) Addressed party's service component information (PEP "B" ID, Service component characteristics), (PEP "C" ID, Service component characteristics)]	<u>Call information</u> Call Control Segment ID, Direct Call association (SN(B):ref.a -SN(C) ref.b) ID, Addressed party Information [(PEP "B" ID, Network Address), (PEP "C" ID, Network Address)] Requesting party information [PEP "D" ID, Network Address]	<u>Bearer information</u> <u>Network connection 1</u> [Bearer "1" ID] Parties connected (PEP "B" ID(root), PEP "C" ID(leaf)), Addressed party's bearer branch information [(PEP "B" ID, Transit Network Selection, bearer branch characteristics), (PEP "C" ID, Transit Network Selection, bearer branch characteristics)] Addressed party's service module information [(PEP "B" ID, Service module characteristics), (PEP "C" ID, Service module characteristics)] Service component list [(Resource 1 ID)]

Processing upon receipt: The call owner's serving node validates the request and determines that the call owner need not be requested to add the party and the bearer (in this example, it is party A's service logic that determines this). Since Party A is the root party of the indicated connection, Serving Node A determines the route to the requested party C. For this example, the Network Connection will be routed through a single relay node, through which the connection is already routed. The serving node can commit to the request and therefore issues the following information flows towards the selected relay node.

3 Add-Party-&-Bearer.ready

Serving Node A to Serving Node B

Resource information

Session ID

Resource 1

[Resource 1 ID, Resource type,

Parties communicating
(PEP "B" ID, PEP "C" ID)

Addressed party's service component information

(PEP "B" ID, Service component characteristics),
(PEP "C" ID, Service component characteristics)]

Call information

Call Control Segment ID,

Direct Call association

(SN(B):ref.a -SN(C) ref.b) ID,

Addressed party Information

[(PEP "B" ID, Network Address),
(PEP "C" ID, Network Address)]

Requesting party information

[PEP "D" ID, Network Address]

Bearer information

Network connection 1

[Bearer "1" ID]

Parties connected

(PEP "B" ID(root), PEP "C" ID(leaf)),

Addressed party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics), (PEP "C" ID, Transit Network Selection, bearer branch characteristics)]

Addressed party's service module information

[(PEP "B" ID, Service module characteristics), (PEP "C" ID, Service module characteristics)]

Service component list

[(Resource 1 ID)]

Processing upon receipt: When the above information flow is received by the serving node associated with root party B, it will validate the request. The serving node determines the interface which is associated with party B. In this example, it is classified as a single-signalling entity interface, so the serving node can commit to the addressed end point and therefore issues information flow 4 towards the selected interface facility.

4 Add-Bearer-to-Call.begin

Serving Node B to Party B

Resource information

Session ID

Resource 1

[Resource 1 ID, Resource type,

Parties communicating
(PEP "B" ID, PEP "C" ID)

Addressed party's service component information

(PEP "B" ID, Service component characteristics),

Remote party's service component information

(PEP "C" ID, Service component characteristics)]

Call information

Call Control Segment ID,

Addressed party Information

[(PEP "B" ID, Network Address),

Remote party Information
(PEP "C" ID, Network Address)]

Requesting party information

[PEP "D" ID, Network Address]

Bearer information

Network connection 1

[Bearer "1" ID]

Parties connected

(PEP "B" ID(root), PEP "C" ID(leaf)),

Addressed party's bearer branch information

[(PEP "B" ID, Transit Network Selection, bearer branch characteristics),

Remote party's bearer branch information

(PEP "C" ID, Transit Network Selection, bearer branch characteristics)]

Addressed party's service module information

[(PEP "B" ID, Service module characteristics),

Remote party's service module information
(PEP "C" ID, Service module characteristics)]

Service component list

[(Resource 1 ID)]

Processing upon receipt: The addressed terminal equipment determines that it can accept the request and issues information flow 5 towards its associated serving node.

5 Add-Bearer-to-Call.ready

Party B to Serving Node B

Resource information

Session ID

Resource 1

[Resource 1 ID, Resource type,

Addressed party's service component information

(PEP "B" ID, Service component characteristics)]

Call information

Call Control Segment ID,

Addressed party Information

[PEP "B" ID, Network Address]

Bearer information

Network connection 1

[Bearer "1" ID]

Parties connected

Addressed party's bearer branch information

[(PEP "B" ID, bearer branch characteristics),

Addressed party's service module information

[PEP "B" ID, Service module characteristics]

Service component list

[(Resource 1 ID)]

Processing upon receipt: The addressed serving node records the acceptance of the new bearer, and issues information flow 6 toward the onward relay node.

<p>6 Add-Party-&-Bearer.ready</p> <p>Resource information Session ID Resource 1 [Resource 1 ID, Resource type, Addressed party's service component information (PEP "B" ID, Service component characteristics)]</p> <p>Call information Call Control Segment ID, Addressed party Information [PEP "C" ID, Network Address]</p>	<p>Serving Node B to Relay Node 1</p> <p>Bearer information Network connection 1 [Bearer "1" ID] Parties connected Addressed party's bearer branch information [(PEP "C" ID, bearer branch characteristics), Addressed party's service module information [PEP "C" ID, Service module characteristics] Service component list [(Resource 1 ID)]</p> <p>Processing upon receipt: When the selected node receives this information flow, it records the acceptance, and connects in both the forward and backward directions. It then issues flow 7 to serving node C.</p>
<p>7 Call-&-Bearer-Setup.ready</p> <p>Resource information Resource 1 [Resource 1 ID, Resource type, Remote party's service component information (PEP "C" ID, Service component characteristics)]</p> <p>Call information Call Control Segment ID, Direct Call association (SN(A):ref.a -SN(C) ref b) ID, Addressed party Information [PEP "C" ID, Network address]</p>	<p>Relay Node 1 to Serving Node C</p> <p>Bearer information Network connection 1 [Bearer "1" ID, Remote party's bearer branch information [(PEP "C" ID, bearer branch characteristics), Remote party's service module information [(PEP "C" ID, Service module characteristics) Service component list [(Resource 1 ID)]</p> <p>Processing upon receipt: When the relay node receives this information flow, it records the commitment, and relays this commitment to the requesting serving node by issuing information flow number 8, and performs through connect of the Network Connection.</p>
<p>8 Call-&-Bearer-Setup.ready</p> <p>Resource information Resource 1 [Resource 1 ID, Resource type, Remote party's service component information (PEP "C" ID, Service component characteristics)]</p> <p>Call information Call Control Segment ID, Direct Call association (SN(A):ref.a -SN(C) ref b) ID, Addressed party Information [PEP "C" ID, Network address]</p>	<p>Serving Node C to Party C</p> <p>Bearer information Network connection 1 [Bearer "1" ID, Remote party's bearer branch information [(PEP "C" ID, bearer branch characteristics), Remote party's service module information [(PEP "C" ID, Service module characteristics) Service component list [(Resource 1 ID)]</p> <p>Processing upon receipt: Serving Node A records the commitment, noting that no notification to party A's user equipment is required. It then issues the notification of the completion of the remote request by issuing information flow 9 towards the requesting serving node associated with party D.</p>
<p>9 Call-&-Bearer-Setup.commit</p> <p>Resource information Resource 1 [Resource 1 ID, Resource type,</p> <p>Call information Call Control Segment ID, Remote party Information [PEP "C" ID, Network address]</p>	<p>Party C to Serving Node C</p> <p>Bearer information Network connection 1 [Bearer "1" ID, Remote party's bearer branch information [(PEP "C" ID, bearer branch characteristics), Remote party's service module information [(PEP "C" ID, Service module characteristics) Service component list [(Resource 1 ID)]</p> <p>Processing upon receipt: When the requesting service node receives this information flow, it records the commitment, and relays the commitment to the requesting party (party D) by issuing the following information flow.</p>

10 Call-&-Bearer-Setup.commit		Serving Node C to Party C
<u>Resource information</u>	<u>Call information</u>	<u>Bearer information</u>
Session ID	Call Control Segment ID,	<u>Network connection 1</u>
<u>Resource 1</u>	Addressed party Information	[Bearer "1" ID]
[Resource 1 ID, Resource type,	[PEP "C" ID, Network Address]	Parties connected
Addressed party's service component information		Addressed party's bearer branch information
(PEP "C" ID, Service component characteristics)]		[(PEP "C" ID, bearer branch characteristics),
		Addressed party's service module information
		[PEP "C" ID, Service module characteristics]
		Service component list
		[(Resource 1 ID)]

Processing upon receipt: When the Terminal receives this information flow, it records the commitment and connects in both the forward and backward directions.

11 Call-&-Bearer-Setup.commit		Serving Node C to Relay Node 1
<u>Resource information</u>	<u>Call information</u>	<u>Bearer information</u>
<u>Resource 1</u>	Call Control Segment ID,	<u>Network connection 1</u>
[Resource 1 ID, Resource type,	Direct Call association	[Bearer "1" ID,
	(SN(A):ref.a -SN(C) ref b) ID,	Remote party's bearer branch information
	Remote party Information	[(PEP "C" ID, bearer branch characteristics),
	[PEP "C" ID, Network address]	Remote party's service module information
		[(PEP "C" ID, Service module characteristics
		Service component list
		[(Resource 1 ID)]

Processing upon receipt: When the requesting party's user equipment receives this information flow, it records the commitment and notifies the user, thereby completing the requested action.

12 Call-&-Bearer-Setup.commit		Relay Node 1 to Serving Node B
<u>Resource information</u>	<u>Call information</u>	<u>Bearer information</u>
<u>Resource 1</u>	Call Control Segment ID,	<u>Network connection 1</u>
[Resource 1 ID, Resource type,	Direct Call association	[Bearer "1" ID,
	(SN(A):ref.a -SN(C) ref b) ID,	Remote party's bearer branch information
	Remote party Information	[(PEP "C" ID, bearer branch characteristics),
	[PEP "C" ID, Network address]	Remote party's service module information
		[(PEP "C" ID, Service module characteristics
		Service component list
		[(Resource 1 ID)]

Processing upon receipt: When the requesting party's user equipment receives this information flow, it records the commitment and notifies the user, thereby completing the requested action.

13 Call-&-Bearer-Setup.commit		From Serving Node B to Party B
<u>Resource information</u>	<u>Call information</u>	<u>Bearer information</u>
<u>Resource 1</u>	Call Control Segment ID,	<u>Network connection 1</u>
[Resource 1 ID, Resource type]	Addressed party Information	[Bearer "1" ID],
Addressed party's service component information	[(PEP "B" ID, Network address)]	Addressed party's bearer branch information
[(PEP "B" ID, Service component characteristics)]		[(PEP "B" ID, bearer branch characteristics)]
		Addressed party's service module information
		(PEP "B" ID, Service module characteristics)],
		Service component list
		[(Resource 1 ID)]

Processing upon receipt: When the user equipment receives information flow 13, it records the commitment, notifies the user of this commitment, and through connects in both directions.

14 Remote-Add-Party-to-Bearer.commit**Relay Node 1 to Serving Node A****Resource information****Resource 1**

[Resource 1 ID, Resource type,
Remote party's service component information
(PEP "C" ID, Service component characteristics)]

Call information**Call Control Segment ID,**

Direct Call association
(SN(A):ref.a -SN(C) ref.b) ID,
Addressed party Information
[PEP "B" ID, Network address]

Bearer information**Network connection 1**

[Bearer "1" ID,
Remote party's bearer branch information
[(PEP "B" ID, bearer branch characteristics),
Remote party's service module information
[(PEP "B" ID, Service module characteristics)
Remote party's bearer branch information
[(PEP "C" ID, bearer branch characteristics),
Remote party's service module information
[(PEP "C" ID, Service module characteristics)
Service component list
[(Resource 1 ID)]

Processing upon receipt: Serving Node A records the commitment, noting that no notification to party A's user equipment is required. It then issues the notification of the completion of the remote request by issuing information flow 15 towards the requesting serving node associated with party D.

15 Remote-Add-Party-to-Bearer.commit**Serving Node A to Serving Node D****Resource information****Resource 1**

[Resource 1 ID, Resource type,

Call information**Call Control Segment ID,**

Remote Call association
(SN(A):ref.a -SN(C) ref.b) ID,
Addressed party Information
[PEP "D" ID, Network address]
Remote party Information
[PEP "B" ID, Network address]
Remote party Information
[PEP "C" ID, Network address]

Bearer information**Network connection 1**

[Bearer "1" ID,
Remote party's bearer branch information
[(PEP "B" ID, bearer branch characteristics),
Remote party's service module information
[(PEP "B" ID, Service module characteristics)
Remote party's bearer branch information
[(PEP "C" ID, bearer branch characteristics),
Remote party's service module information
[(PEP "C" ID, Service module characteristics)
Service component list
[(Resource 1 ID)]

Processing upon receipt: When the requesting service node receives this information flow, it records the commitment, and relays the commitment to the requesting party (party D) by issuing the following information flow.

16 Call-&-Bearer-Setup.commit**Serving Node D to Party D****Resource information****Resource 1**

[Resource 1 ID, Resource type,

Call information**Call Control Segment ID,**

Remote party Information
[PEP "B" ID, Network address]
Remote party Information
[PEP "C" ID, Network address]
Addressed party Information
[PEP "D" ID, Network address]

Bearer information**Network connection 1**

[Bearer "1" ID,
Remote party's bearer branch information
[(PEP "B" ID, bearer branch characteristics),
Remote party's service module information
[(PEP "B" ID, Service module characteristics)
Remote party's bearer branch information
[(PEP "C" ID, bearer branch characteristics),
Remote party's service module information
[(PEP "C" ID, Service module characteristics)
Service component list
[(Resource 1 ID)]

Processing upon receipt: When the requesting party's user equipment receives this information flow, it records the commitment and notifies the user, thereby completing the requested action.

9 Release of a Party from an existing call

9.1 General rules for release of a Party

- If the call owner releases himself, the general rules for releasing a call apply (see next subclause).
- If a non-call owner releases himself, the following actions will take place:
 - 1) Release all the connections he owns.
 - 2) Release all the branches he owns from the remaining connections.
 - 3) Release all the parties he owns.
 - 4) Detach itself from all the remaining connections it is attached to.
 - 5) Notify all relevant parties.

The procedures for 1), 2) and 4) are from the service point of view equivalent to the corresponding procedures:

- If a party releases another party, the serving node of the requesting party will send a Release-party-from-Call.ready to the serving node of the party to be released. The receiving serving node will acknowledge this flow and invoke 1), 2), 3), 4) and 5) as described above.
- If a not call owner (release 1 or 2) is attached to a release 1 serving node and releases itself, the Release-party flow need not to be send because it owns no other party (not the call owner).
- If a not call owner (release 1 or 2) is attached to a release 1 serving node, the Release-party flow will not be received. The connection however will be released and with it the party.

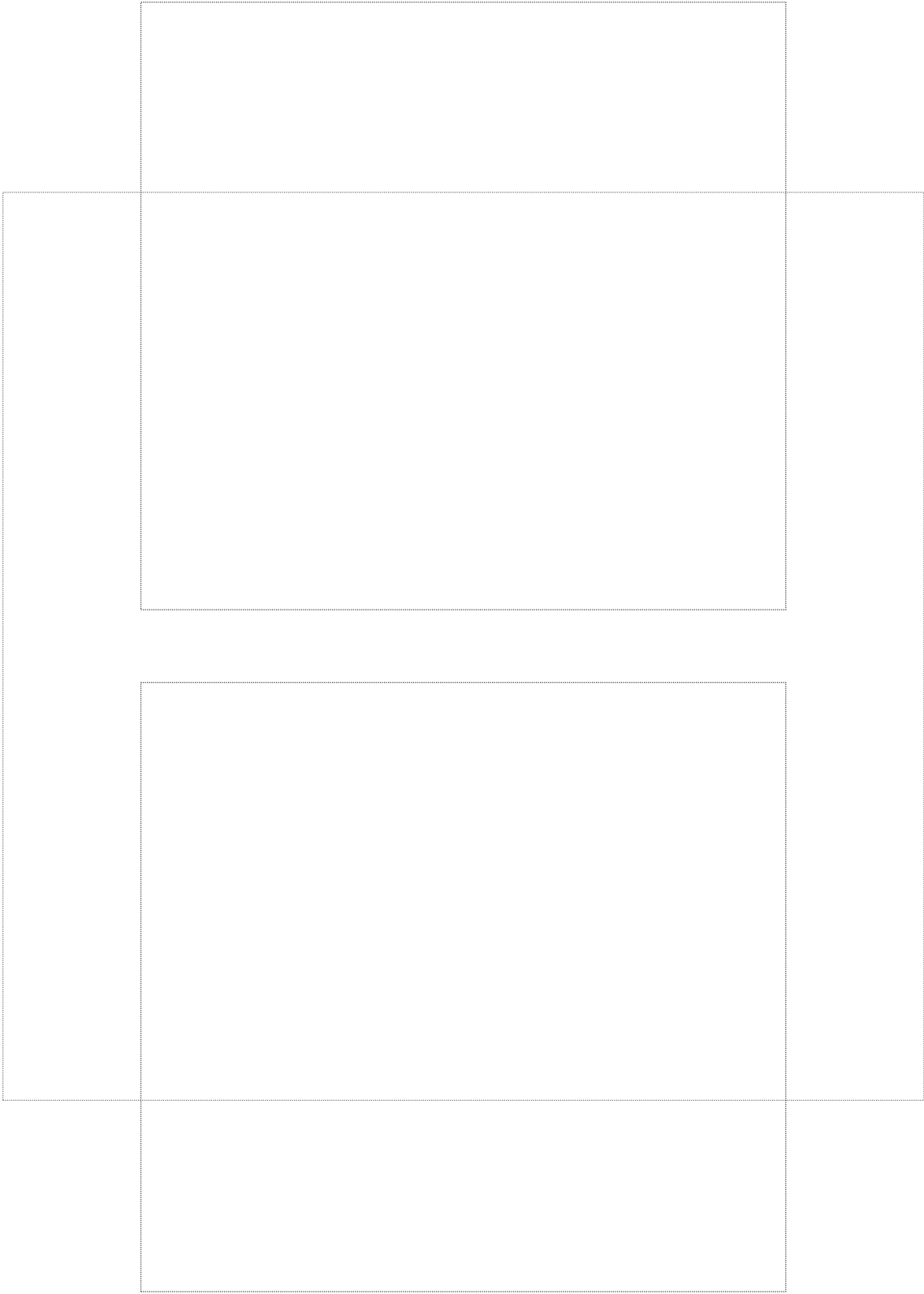
9.2 Release of a Party from a Call requested by the Party Owner

9.2.1 Release of a Party which is the leaf-party of a Type 2 Connection by the Party Owner

In this scenario, the party owner (who is not the call owner) requests the release of a party from the call. This scenario is identical to that shown in 9.3.2 of Supplement 12 [3]. This Supplement also contains many other examples of coordinated call and bearer release scenarios.

10 Release of a call

Scenarios for the release of a call can be found in Supplement 12 [3].



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Series C	General telecommunication statistics
Series D	General tariff principles
Series E	Overall network operation, telephone service, service operation and human factors
Series F	Non-telephone telecommunication services
Series G	Transmission systems and media, digital systems and networks
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