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Technical Report TRQ.2230: Call control signalling requirements for Join Call service

ITU-T Q-series Recommendations – Supplement 18

(Formerly CCITT Recommendations)

ITU-T Q-SERIES RECOMMENDATIONS
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SUPPLEMENT 18 TO ITU-T Q-SERIES RECOMMENDATIONS

TECHNICAL REPORT TRQ.2230: CALL CONTROL SIGNALLING REQUIREMENTS FOR JOIN CALL SERVICE

Summary

This Supplement specifies the signalling requirements for the Join Call (call only) service capability. These signalling requirements cover the UNI and NNI interactions (exchange of information flows) and internal serving node procedure requirements for a serving node associated with a joining party and associated with the call registering party. The signalling requirements include registered call creation (without network connections), attachment of new parties by themselves ("join call"), and detachment of parties by the call registering party or by themselves.

FOREWORD

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NOTE

In this publication, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

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CONTENTS

Supplement 18 to Q-series Recommendations

TECHNICAL REPORT TRQ.2230: CALL CONTROL SIGNALLING REQUIREMENTS FOR JOIN CALL SERVICE

(Geneva, 1999)

1   Scope

This Supplement presents the procedures, information flows and Information Elements needed for supporting calls containing call registering party screened and network screened registered call joins.

2   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 is 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 17 (1999), *Technical Report TRQ.2200*: *Call control signalling requirements for party call control.*

3   Definitions

This Supplement defines the following terms:

3.1   join call: Supplement 18 to Q-series Recommendations allows a party to join a call. This "Special Call Association" is called Join Call; it is referenced by a joining party via a unique "Registered Call ID". The following three types of Registered Calls are differentiated.

3.2   registered calls with initiator screening: The call registering party (initiator) receives a joining setup request for every party that wishes to join the call, then either creates the call or adds the party to the ongoing call. The initiator has the option of rejecting any join attempt. When using this mode, the network never automatically joins parties to the call.

3.3   registered calls network screening with initiator notification: The call registering party (initiator) creates the call as a registered join call, then the network automatically attempts to add all parties to the call that request to be added. After each party completes joining the registered call, the initiator receives a notification about the event.

3.4   registered calls network screening without initiator notification: The call registering party (initiator) creates the call as a registered join call, then the network automatically attempts to add all parties to the call that request to be added. In this case, the initiator gets no indication when parties are added by the network.

4   Abbreviations

This Supplement uses the following abbreviations:

ATM   Asynchronous Transfer Mode

CC-N   Call Control (NNI)

CC-T   Call Control (UNI)

SN   Serving Node

5   Information flows used in this Supplement

Table 5-1 contains the registered join information flow definitions that are used across the call control (CC-T to CC-N) interfaces specified in Supplement 10 [2]. These information flows are used to establish, modify, and release registered join calls.

Table 5-1 – Information Flows used to join Registered Call(s)

Information Flow	Begin	Ready	Commit	Cancel	Indication
Call-Setup	✔	✔	✔	(Note)	
Join-Call	✔	✔	✔	(Note)	
Release-Party-from-Call		✔	✔	(Note)	
Release-Call		✔	✔	(Note)	
Notify-Party-Change					✔
NOTE – The information flows in this Supplement show only successful operations; therefore, the "cancel" information flows are not used.					

6   Registered call registration

Any party has the capability of creating a call registration with its serving node that other parties may join. This registration illustrates its willingness to maintain a call allowing another party to join this call. This party can register several call instances each of which may be associated with network handling options for future requests from other parties which wish to be added to the registered call. The method of handling the join requests from other parties are specified as part of the registration for each call instance procedure. The methods of handling the requests can be categorized into two classifications; call registering party (initiator) controlled actions, and network controlled actions. These two classifications are illustrated as follows.

6.1   Call registering party controlled actions

If the call join request contains a valid single party address, pass the request to the call initiator for handling.

If multiple call join requests are received by the network for the same registered call and the call is not active, the network will queue all but the first request until the registered call has been established to the first request. Queued requests then will be sent to the initiating party.

6.2   Network controlled actions

6.2.1   Handling of call join requests when an active registered call has been established

If the call join request contains a valid single party address, and there is an active registered call, add the party to the call.

6.2.2 Handling of call join requests when no active registered call exists

If the call join request contains a valid single party address, pass the request to the call initiator for handling.

If multiple call join requests are received by the network for the same registered call, the network will queue all but the first request until the registered call has been established to the first request. Queued requests will be handled according to the options specified under handling during active call subclause above.

6.2.3 Call initiating party notification options upon completion of join requests

There are two notification options that can be specified by the call initiating party as to the manner in which party join request should be handled by the call initiating party's associated serving node. These options are as follows:

• No notification is to be given to call initiating party when the network adds a joining party to a registered call.

• If the request contains a valid single party address, notify the call initiating party that the joining party has been added to or deleted from the registered call.

NOTE – The initiator's serving node's information is also updated with this option.

6.3 Registration process for an initiator's serving node

The registration process may be accomplished via several methods. These methods are described in the following list:

1) Call establishment request (begin or ready) with call registration: When a call establishment request is sent to the network, the call initiating party will provide the registered call ID and Service Characteristics to the network for the registration. The local call control segment ID will be associated with the registered call ID in order to provide trace-ability.

2) Add party request (begin or ready) with call join registration: When an add party request is sent to the network, the call initiating party will provide the registered call ID and service characteristics to the network for the registration. The local call control segment ID will be associated with the registered call ID in order to provide trace-ability.

6.4 Registration process for a joining party's serving node

The registration process methods for a joining party's serving node are as follows:

1) Call establishment acceptance (commit) with call join registration: When a call establishment acceptance is received by the network from a joining party Basic Call state Model (BCSM), the registered call ID and service characteristics received from the initiating party's serving node via the call establishment request will be used for the joining party's serving node registration process. The local call control segment ID between the network and the joining party will be associated with the registered call ID in order to provide trace-ability.

2) Add party acceptance (commit) with call join registration: When an add party acceptance is received by the network from a joining party BCSM, the registered call ID and service characteristics received from the initiating party's serving node via the add party request will be used for the joining party's serving node registration process. The local call control segment ID between the network and the joining party will be associated with the registered call ID in order to provide trace-ability.

7 Serving node Call Join procedures

The serving node procedures within the network can be separated into two types, initiator's serving node procedures and joining party's serving node procedures. In many cases, a physical serving node may contain both sets of procedures if both a call initiating party and one or more joining parties are connected to it. The following diagram attempts to illustrate these two categories of procedures.

NOTE – A call gateway at an entry point of a network with respect to the call initiating party can perform the similar procedures as a initiator's serving node, and a call gateway at an exit point of a network with respect to the call initiating party can perform the similar procedures as a joining party's serving node.

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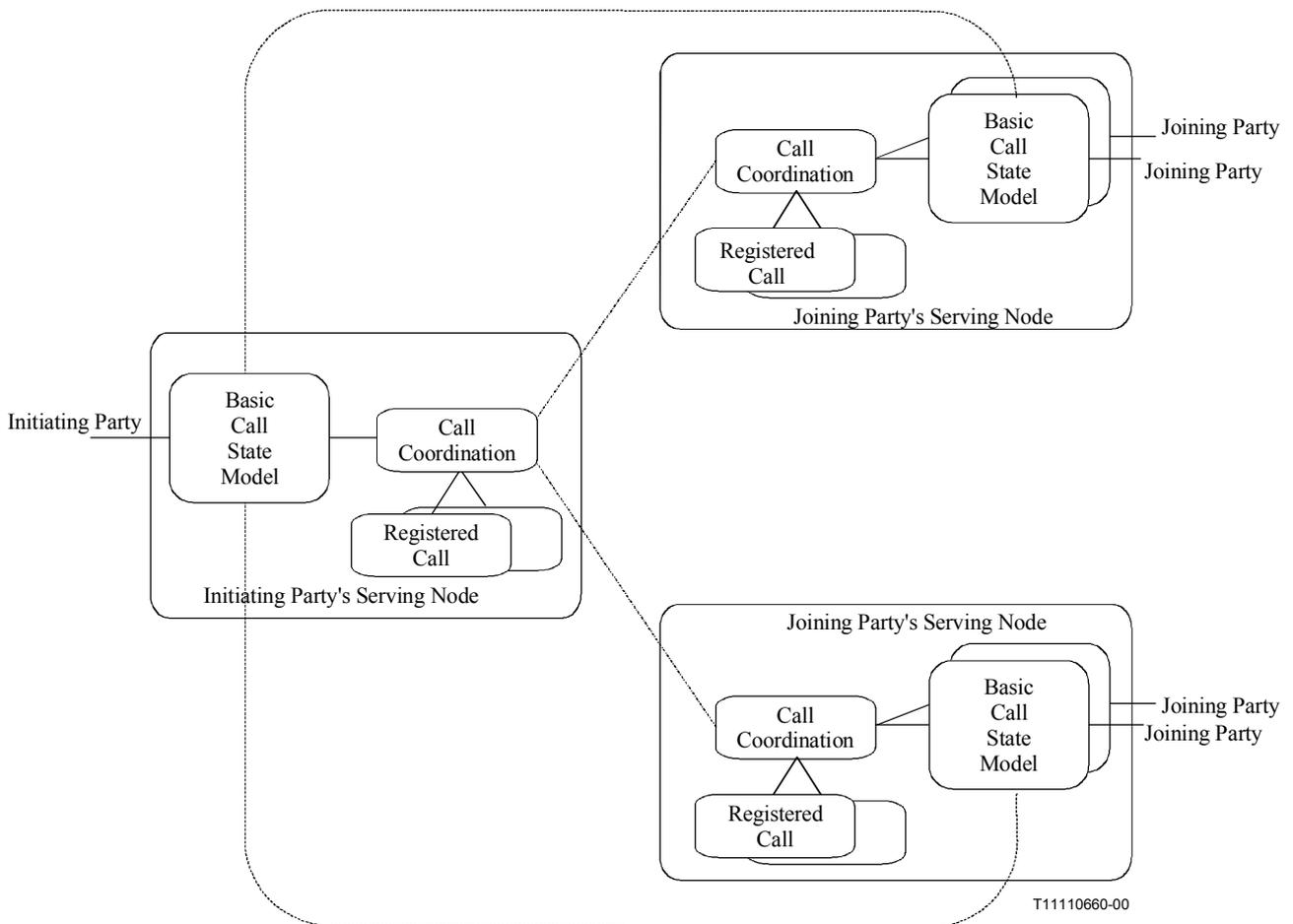
8 Overview of Peer-to-Peer Functional Entity Actions

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 instance 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 8-1. The actions illustrated in this figure can be used to describe signalling control actions associated with establishment or release of calls.

Note that for the purpose of this overview, the information flows and actions illustrate the establishment of a two-party call by the joining of a party to a registered but non-active call.
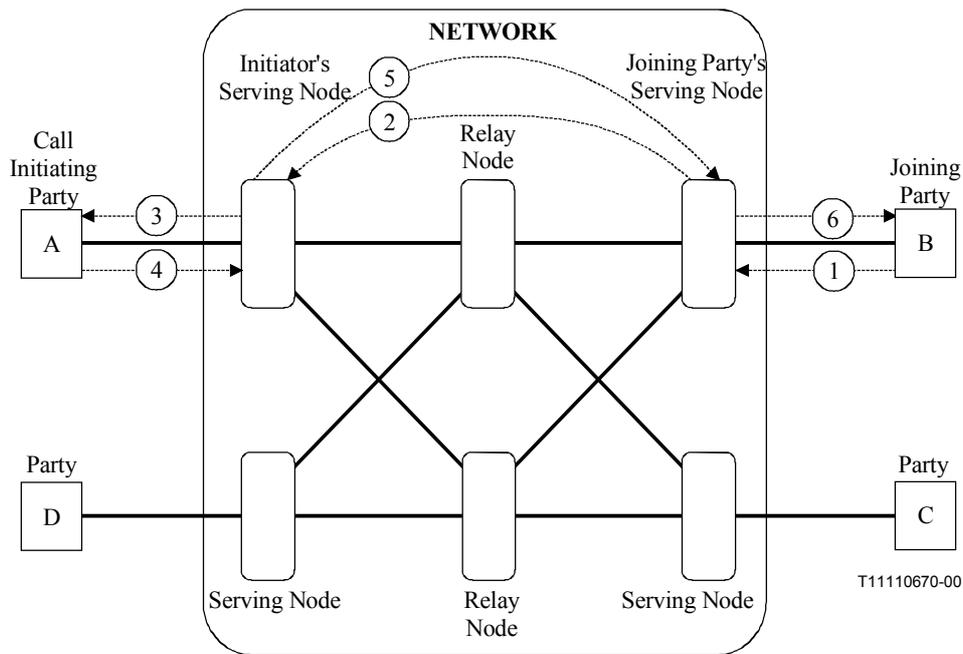
Figure 8-1 – Party requests to join a registered call – No active call

The actions illustrated in Figure 8-1 are described as follows:

1) Signalling Service Request issued by service requestor: Receiving entity validates request, modifies internal state information, and then issues action 2 towards the initiator's serving node.

2) Relayed Signalling Service Request issued by requestor's serving node: Receiving entity validates request, modifies internal state information, and then issues action 3 towards the call initiating party.

3) Relayed Signalling Service Request issued by initiator's serving node: Receiving entity validates request and requestor, modifies internal state information (record the establishment of the registered call), and then issues response as action 4.

4) Signalling Service Response issued by the call initiating party: Receiving entity validates response, modifies internal state information (records details about registered call), and then relays response as action 5.

5) Signalling Service Response issued by initiator's serving node: Receiving entity validates response, modifies internal state information (records details about registered call), and then relays response as action 6.

6) Signalling Service Response issued by requestor's serving node: Receiving entity records response, modifies internal state information, and then 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. Again, note that the model does not present all possible network topologies, however, it illustrates the general configurations that would be encountered in intra-network operations. The extension to multiple networks can be extrapolated by replacing the serving nodes and relay nodes with logical serving networks and transit networks.

The following clauses will describe the basic call control signalling capabilities using this model.

9 Functional Entity Actions

9.1 Registered Call Creation

The following subclauses describe the functional entity actions associated with the screened joining of a registered call only without associated bearers.

9.1.1 Call Initiating Party Request to Create a Registered Call (without attachment of a another Party)

This signalling capability illustrates the information flows necessary to establish the initial registered call. The call and bearer transition diagram for the creation of the registered call is shown in Figure 9-1. Only the call initiating party is present in the resulting call. Upon the completion of the functional entity action, the serving node associated with the initiating party A has created a registered call association.
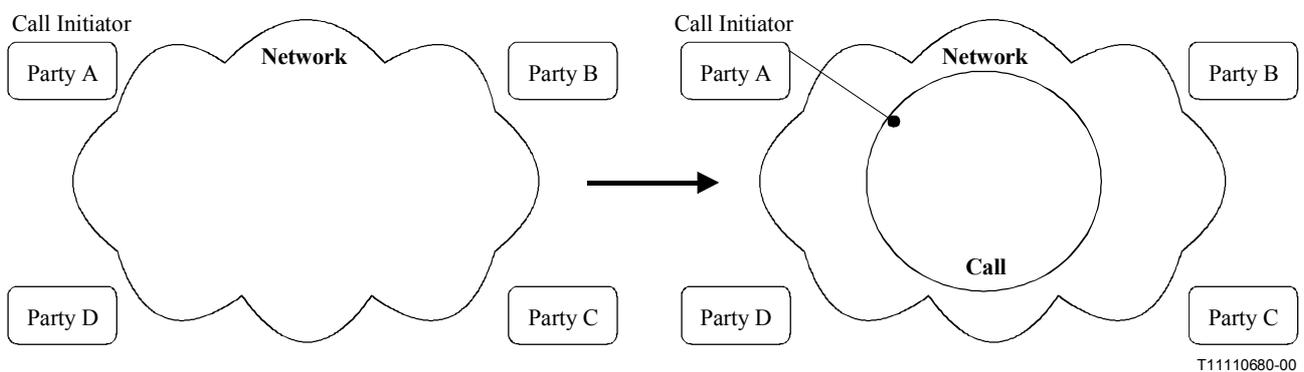
Figure 9-1 – Call and bearer transition diagram for a registered call creation

The information flows are illustrated in Figure 9-2.
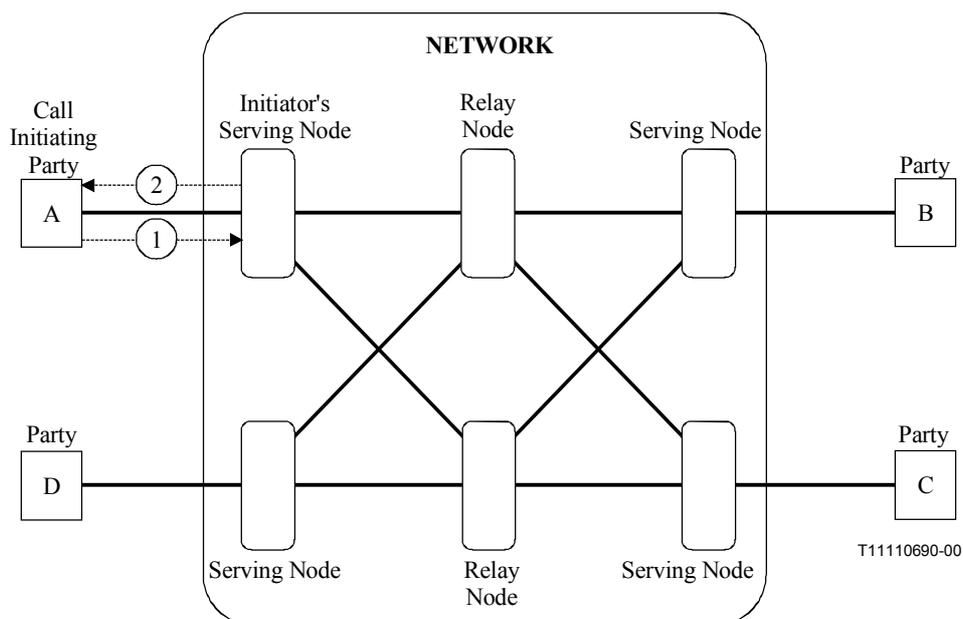
Figure 9-2 – Call initiating party request to create a registered call without attaching another party

1	**Call-Setup.ready**	**Party A to Serving Node A**

Resource information	**Call information**	**Bearer information**
Session ID	Registered call ID	(None)
	Call control segment ID	
	Requesting party information	
	[Party "A" Address, Call PEP "A" ID]	
	Addressed party information	
	[PEP "SN ID, "SN address]	
	Additional LIJ information	
	[Registration Parameter = initiator screening]	

NOTE – Depending on the type of the registered call, the Registration Parameter may also be "network screening with initiator notification" or "network screening without initiator notification"

Initiation of information flow: The call initiating party requests that a registered call be established between the call initiating party and its serving node without attaching another party.

Processing upon receipt: The serving node determines that there is no Registered Call Instant within the joining party's serving node and creates one.

2	**Call-Setup.commit**	**Serving Node A to Party A**

Resource information	**Call information**	**Bearer information**
Session ID	Registered call ID	(None)
	Call Owner PEP "A" ID,	
	Call control segment ID	
	Addressed party information	
	[Party "A" Address, Call PEP "A" ID]	

Processing upon receipt: When this information flow arrives at Party A, the requesting party knows that the requested action has been completed.

9.1.2 Call Initiating Party Request to Create a Registered Call (with attachment of another Party)

This signalling capability illustrates the information flows necessary to establish the initial registered call. Upon the completion of the functional entity action, both the serving node associated with the other party B and the serving node associated with the call initiating party A have created a registered call association.

Other than the carrying of the information elements necessary to convey the data to create the registered call association, the information flows are identical to the ones where a call initiating party establishes a call to a single party according to 7.1 of Supplement 17 [3].

9.1.3 Joining Party Request to Join a Registered Call – No Active Call

–   Registered Calls with initiator screening.

–   Registered Calls network screening with initiator notification.

–   Registered Calls network screening without initiator notification.

This signalling capability illustrates the information flows necessary to establish the initial registered call. The call and bearer transition diagram for other party request to join a registered call is shown in Figure 9-3. Upon the completion of the functional entity action, both the serving node associated with the joining party B and the serving node associated with the call initiating party A have created a registered call association. It should be noted that for the initial request from the joining party, the serving node associated with party B could be considered the requesting node, however, the choice of the designation of requesting serving node and addressed serving node was chosen from the perspective of the call initiating party, party A.
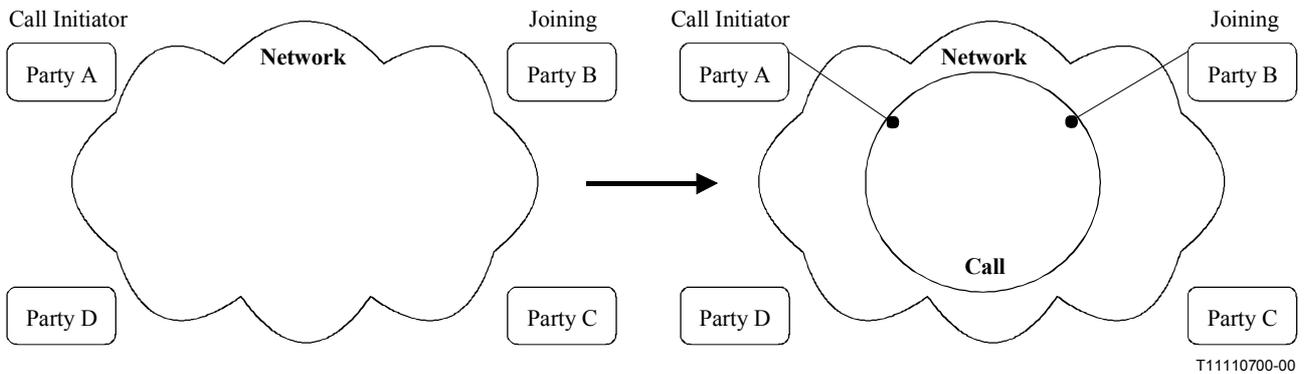
**Figure 9-3 – Call and bearer transition diagram for party request
to join a registered call – No active registered call**

The information flows are illustrated in Figure 9-4.
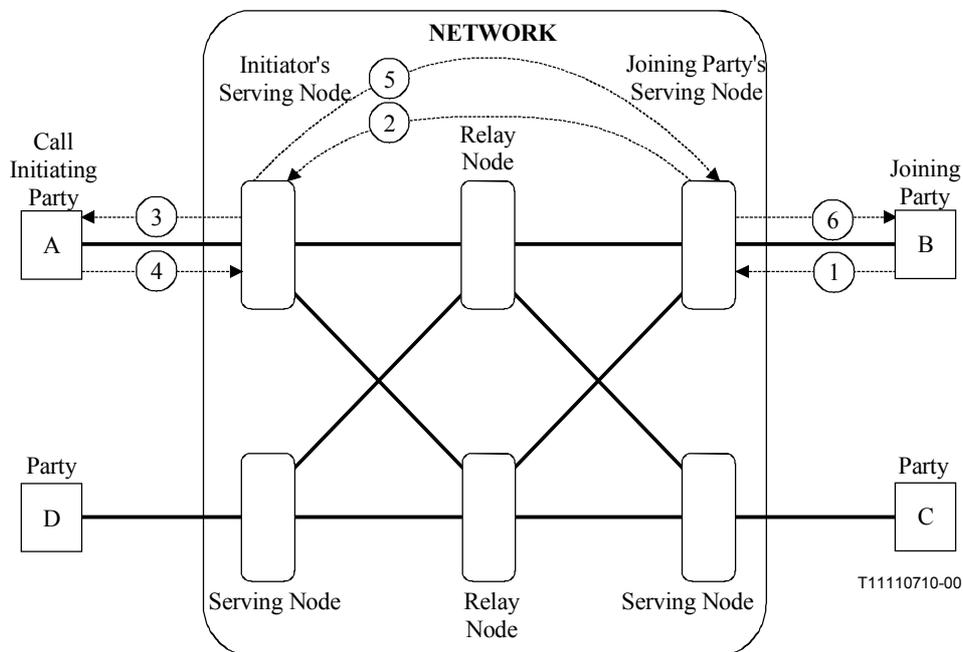
Figure 9-4 – Party requests to join a registered call – No active call

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1   **Join-Call.ready**   **Party B to Serving Node B**

Resource information	**Call information**	**Bearer information**
(None)	Registered call ID	(None)
	Call control segment ID	
	Requesting party information	
	[Party "B" Address, Call PEP "B" ID]	
	Addressed party information	
	[Party "A" Address, Call PEP "A" ID]	

Initiation of information flow: A party requests that it be permitted to join a registered call.

Processing upon receipt: The serving node determines that there is no Registered Call Instant within the joining party's serving node and issues an Edge-to-Edge flow to the initiator's serving node (information flow 2).

2	Join-Call.ready	Serving Node B to Serving Node A
Resource information	**Call information**	**Bearer information**
(None)	Registered call ID Call control segment ID Requesting party information 　　[Party "B" Address, Call PEP "B" ID] Addressed party information 　　[Party "A" Address, Call PEP 'A' ID]	(None)

Processing upon receipt: The initiator's serving node determines that there is no registered call instant within the node and issues a flow to the call initiating party (information flow 3).

3	Join-Call.ready	Serving Node A to Party A
Resource information	**Call information**	**Bearer information**
(None)	Registered call ID Call control segment ID Requesting party information 　　[Party "B" Address, Call PEP "B" ID] Addressed party information 　　[Party "A" Address, Call PEP "A" ID]	(None)

Processing upon receipt: The call initiating party decides to honour this request and acknowledges it (information flow 4); the registration parameters have been included in the information flow.

4	Join-Call.commit	Party A to Serving Node A
Resource information	**Call information**	**Bearer information**
Session ID	Registered call ID Call control segment ID Requesting party information 　　[Party "B" Address, Call PEP "B" ID] Addressed party information 　　[Party "A" Address, Call PEP "A" ID] Additional LIJ information 　　[Registration Parameter = initiator screening]	(None)

NOTE 1 – Depending on the LIJ type, the Registration Parameter may also be "network screening with initiator notification" or "network screening without initiator notification".

Processing upon receipt: The serving node A creates a Registered Call Instant and passes the acknowledgement to serving node B (information flow 5).

5	Join-Call.commit	Serving Node A to Serving Node B
Resource information	**Call information**	**Bearer information**
Session ID	Registered call ID Call Owner Call PEP "A" ID, Call control segment ID Requesting party information 　　[Party "B" Address, Call PEP "B" ID] Addressed party information 　　[Party "A" Address, Call PEP "A" ID] Additional LIJ information 　　[Registration Parameter = initiator screening]	(None)

NOTE 2 – Depending on the LIJ type, the Registration Parameter may also be "network screening with initiator notification" or "network screening without initiator notification".

Processing upon receipt: The serving node B stores the information such that a correlation can be detected upon receipt of bearer set-up requests. It then passes the acknowledgement to party B (information flow 6).

Resource information	Call information	Bearer information
Session ID	Registered call ID	(None)
	Call Owner Call PEP "A" ID,	
	Call control segment ID	
	Requesting party information	
	[Party "B" Address, Call PEP "B" ID]	
	Addressed party information	
	[Party "A" Address, Call PEP "A" ID]	

Processing upon receipt: Party B notices the acknowledgement; the call is set up.

NOTE 3 – The call initiating party is aware of the initial requesting joining party (party B).

9.2   Joining Party Request to Join Active Registered Call

The following subclauses describe the functional entity actions associated with the joining of a registered call.

9.2.1   Joining Party Request to Join Active Call in Initiator's Serving Node – Initiator Screening

–   Active registered call in initiator's serving node with initiator screening.

This signalling capability illustrates the information flows necessary to join another party to a previously established registered call. However, the joining party's serving node has no record of this Registered Call. Upon the completion of the functional entity action, the serving node associated with the joining party B has created a registered call association.

NOTE – For the initial request from the joining party, the serving node associated with party B is considered the requesting node, however, the choice of the designation of requesting serving node and addressed serving node was chosen from the perspective of the call initiating party, party A.

The information flows are the same as in 9.1.3. The parameters remain the same.

9.2.2   Joining Party Request to Join Active Call in Initiator's Serving Node – Network Screening

–   Active registered calls in initiator's serving node network screening with initiator notification.
–   Active registered calls in initiator's serving node network screening without initiator notification.

This signalling capability illustrates the information flows necessary to add another party to a previously established registered call. However, the joining party's serving node has no record of this registered call. The call and bearer transition diagram for the request to join the registered call is shown in Figure 9-5. Upon the completion of the functional entity action, the serving node associated with the joining party B has created a registered call association.

NOTE 1 – For the initial request from the joining party, the serving node associated with party B is considered the requesting node, however, the choice of the designation of requesting serving node and addressed serving node was chosen from the perspective of the call initiating party, party A.
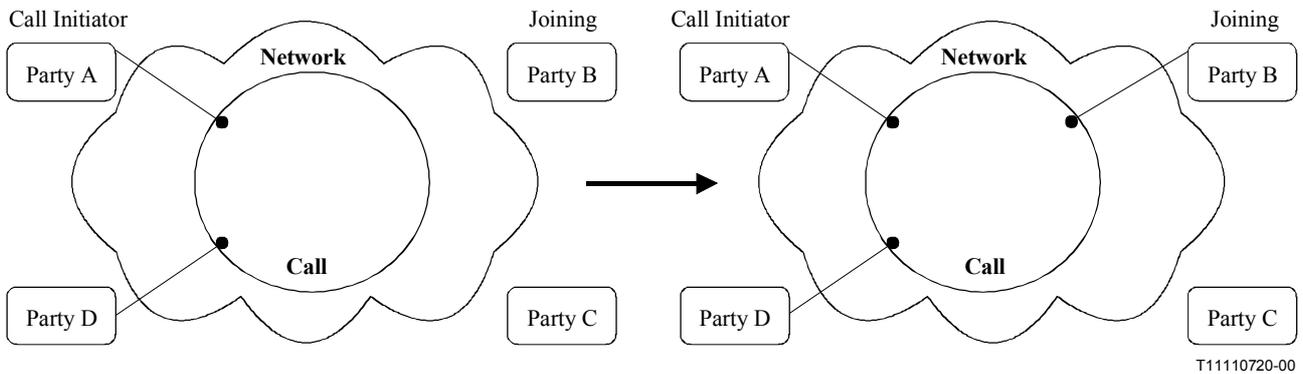
**Figure 9-5 – Call and bearer transition diagram for party request to join
a registered call – Active registered call in initiator's serving node –
Registered call not in joining party's serving node**

The information flows are illustrated in Figure 9-6.
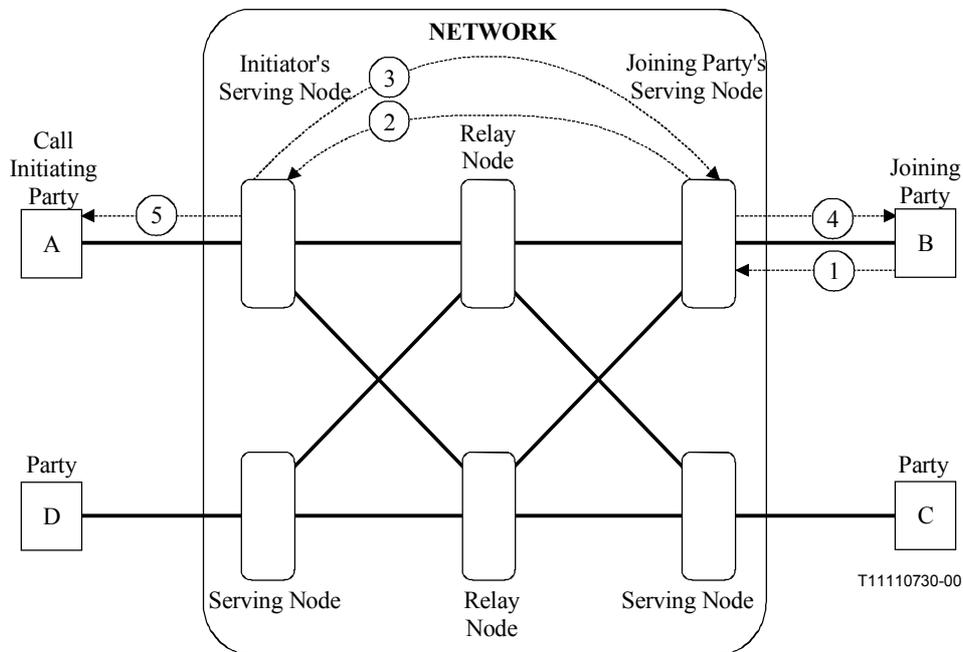
**Figure 9-6 – Party requests to join a registered call –
Active registered call in initiator's serving node**

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1   Join-Call.begin   **Party B to Serving Node B**

Resource information	**Call information**	**Bearer information**
(None)	**Registered call ID**	(None)
	Call control segment ID	
	Requesting party information	
	[Party "B" Address, Call PEP "B" ID]	
	Addressed party information	
	[Party "A" Address, Call PEP "A" ID]	

Initiation of information flow: A party requests that it be permitted to join a registered call.

Processing upon receipt: The serving node determines that there is no Registered Call Instant within the joining party's serving node and issues an Edge-to-Edge flow to the initiator's serving node (information flow 2).

2	Join-Call.ready		Serving Node B to Serving Node A

Resource information	**Call information**	**Bearer information**
(None)	**Registered call ID**	(None)
	Call control segment ID	
	Requesting party information	
	[Party "B" Address, Call PEP "B" ID]	
	Addressed party information	
	[Party "A" Address, Call PEP "A" ID]	

Processing upon receipt: The initiator's serving node determines that the registered call exists within the initiator's serving node, honours this request and acknowledges it (information flow 3); the registration parameters have been included in the information flow.

If the registration parameter is "network screening without initiator notification" no further information flows are required. However, if the registration parameter is "network screening with initiator notification," the initiator's serving node A issues information flow 5.

3	Join-Call.commit		Serving Node A to Serving Node B

Resource information	**Call information**	**Bearer information**
Session ID	**Registered call ID**	(None)
	Call Owner Call PEP "A" ID,	
	Call control segment ID	
	Requesting party information	
	[Party "B" Address, Call PEP "B" ID]	
	Addressed party information	
	[Party "A" Address, Call PEP "A" ID]	
	Additional LIJ information	
	[Registration Parameter = network screening with	
	initiator notification]	

NOTE 2 – Depending on the LIJ type, the Registration Parameter may also be "network screening without initiator notification".

Processing upon receipt: The serving node B – It then passes the acknowledgement to party B (information flow 6).

Processing upon receipt: When the above information flow arrives at the addressed serving node B, it stores the information such that a correlation can be detected upon receipt of bearer set-up requests; it also issues the acknowledgement to the requesting party B (information flow 4).

4	Join-Call.commit		Serving Node B to Party B

Resource information	**Call information**	**Bearer information**
Session ID	**Registered call ID**	(None)
	Call Owner Call PEP "A" ID,	
	Call control segment ID	
	Requesting party information	
	[Party "B" Address, Call PEP "B" ID]	
	Addressed party information	
	[Party "A" Address, Call PEP "A" ID]	

Processing upon receipt: Party B notices the acknowledgement; the call has been set up.

Resource information	**Call information**	**Bearer information**
Session ID	Registered call ID	(None)
	Call control segment ID	
	Added party information	
	[Party "B" Address, Call PEP "B" ID]	

Initiation of information flow: Information flow 2 processed by serving node A and the registration parameter is "network screening with initiator notification".

Processing upon receipt: When this information flow arrives at party A, the call initiating party is informed about the fact that party B has been added to the registered call.

9.2.3   Party Request to Join Active Call in a Joining Party's Serving Node – Initiator Screening

–   Active registered call in joining party's serving node with initiator screening.

This signalling capability illustrates the information flows necessary to add another party to a previously established registered call. The joining party's serving node has already a record of this registered call. Upon the completion of the functional entity action, the serving node associated with the joining party B has created a registered call association.

NOTE – For the initial request from the joining party, the serving node associated with party B is considered the requesting node, however, the choice of the designation of requesting serving node and addressed serving node was chosen from the perspective of the call initiating party, party A.

The information flows are the same as in 9.1.3. The parameters remain the same in all cases.

9.2.4   Party Request to Join Active Call in a Joining Party's Serving Node – Network Screening

–   Active registered call in joining party's serving node network screening with initiator notification.

–   Active registered call in joining party's serving node network screening without initiator notification.

This signalling capability illustrates the information flows necessary to add another party to a previously established registered call. The joining party's serving node has already a record of this registered call. The call and bearer transition diagram for party request to join a registered call is shown in Figure 9-7. Upon the completion of the functional entity action, the serving node associated with the joining party B has created a registered call association.

NOTE – For the initial request from the joining party, the serving node associated with Party B is considered the requesting node, however, the choice of the designation of Requesting serving node and Addressed serving node was chosen from the perspective of the call initiating party, Party A.
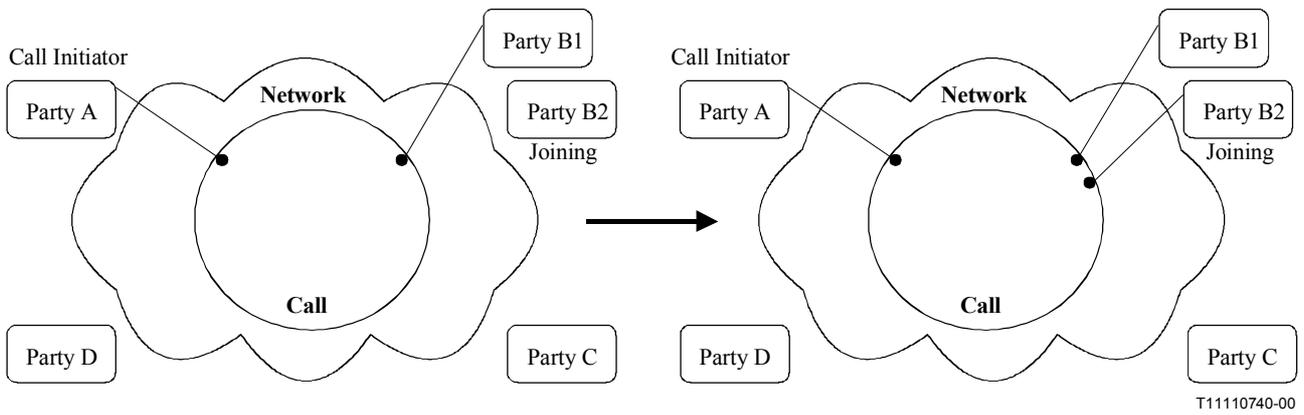
Figure 9-7 – Call and bearer transition diagram for a party request to join a registered call – Active registered call in joining party's serving node

The information flows are illustrated in Figure 9-8.
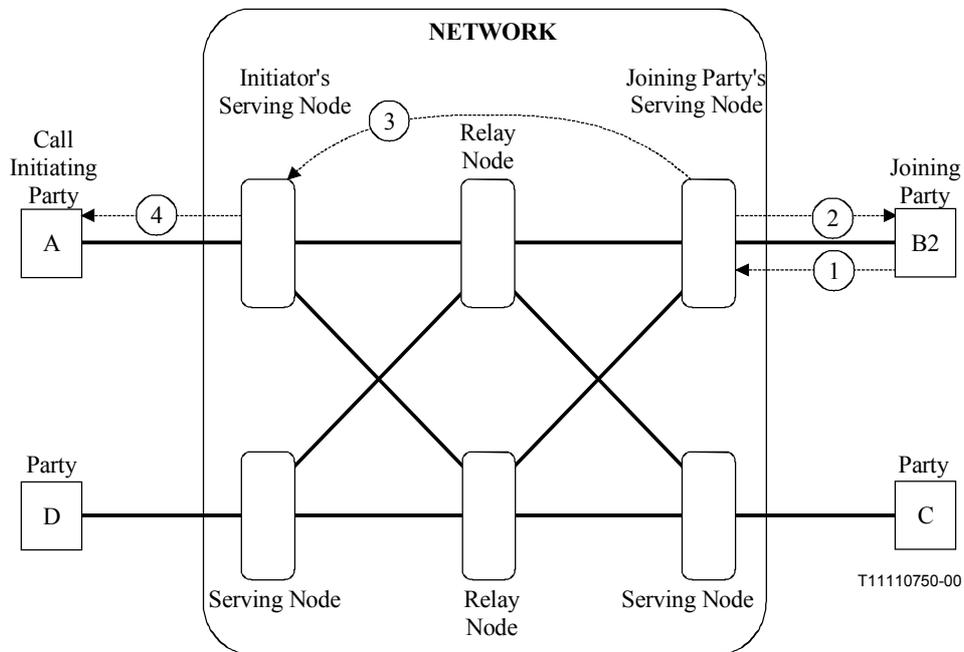
Figure 9-8 – Party Request to join a registered call

1	Join-Call.ready	Party B2 to Serving Node B

Resource information
(None)

Call information
Registered call ID
Call control segment ID
Requesting party information
    [Party "B" Address, Call PEP "B" ID]
Addressed party information
    [Party "A" Address, Call PEP "A" ID]

Bearer information
(None)

Initiation of information flow: A joining party requests that it be permitted to join a registered call.

Processing upon receipt: The serving node determines that there is a registered call instant within the joining party's serving node and decides to honour this request by acknowledging it (information flow 2).

If the registration parameter is "network screening without initiator notification" no further information flows are required. However, if the registration parameter is "network screening with initiator notification", the serving node B issues information flow 3 towards the initiator's serving node A.

2	Join-Call.commit	Serving Node B to Party B2

Resource information
Session ID

Call information
Registered call ID
Call Owner Call PEP "A" ID,
Call control segment ID
Requesting party information
    [Party "B" Address, Call PEP "B" ID]
Addressed party information
    [Party "A" Address, Call PEP "A" ID]

Bearer information
(None)

Processing upon receipt: Party B2 notices the acknowledgement; the call has been set up.

3	Notify-Party-Change.indication	Serving Node B to Serving Node A

Resource information
Session ID

Call information
Registered call ID
Call control segment ID
Direct Call association (SN(A):ref.a - SN(B):ref.b) ID,
Added party information
    [Party "B2" Address, Call PEP "B" ID]

Bearer information
(None)

Initiation of information flow: Information flow 2 processed by serving node B and the registration parameter is "network screening with initiator notification".

Processing upon receipt: When this information flow arrives at the initiator's serving node, it is informed about the fact that party B2 has been added to the registered call. In addition, the initiator's serving node passes this information onto the call initiating party (information flow 4).

4	Notify-Party-Change.indication	Serving Node A to Party A

Resource information
Session ID

Call information
Registered call ID
Call control segment ID
Added party information
    [Party "B2" Address, Call PEP "B" ID]

Bearer information
(None)

Processing upon receipt: When this information flow arrives at party A, the call initiating party is informed about the fact that party B2 has been added to the registered call.

9.3 Removal of Party from a Registered Call requested by the Call Initiating Party

The following subclause describes the functional entity actions associated with the removal of a party associated with a registered call by the call initiating party.

NOTE – If the registered call is of the type "network screening without initiator notification", the call initiating party, in general, has no knowledge about the attached parties and, hence, could not perform this operation. On the other hand, the call initiating party may have attached its own parties in addition to parties that joined themself; parties attached by the call initiating party are known to it in all cases and may be removed by initiator actions.

9.3.1 Removal of party requested by call initiating party – (multiple parties attached to registered call at joining party's serving node)

– Registered call with initiator screening.

– Registered call network screening with initiator notification.

– Registered call network screening without initiator notification.

This signalling capability illustrates the information flows necessary to remove a party without associated bearers from an established registered call. The serving node of the party being removed has a record of this registered call. The call and bearer transition diagram for removal of a party requested by the call initiating party is shown in Figure 9-9. Upon the completion of the functional entity action, the serving node associated with party B2 retains the registered call association as there exist further parties served by this node.

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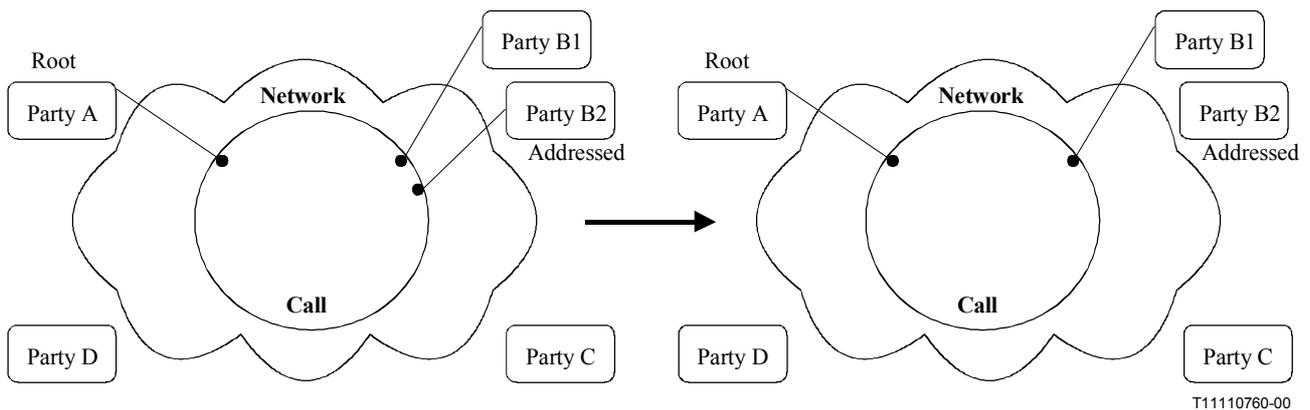
**Figure 9-9 – Call and bearer transition diagram for removal of a party
requested by the call initiating party – Multiple parties attached to
the registered call at joining party's serving node**

The information flows are illustrated in Figure 9-10.

NOTE – This signalling capability is independent of the screening option selected; the only requirement is that the call initiating party has knowledge of party B2.
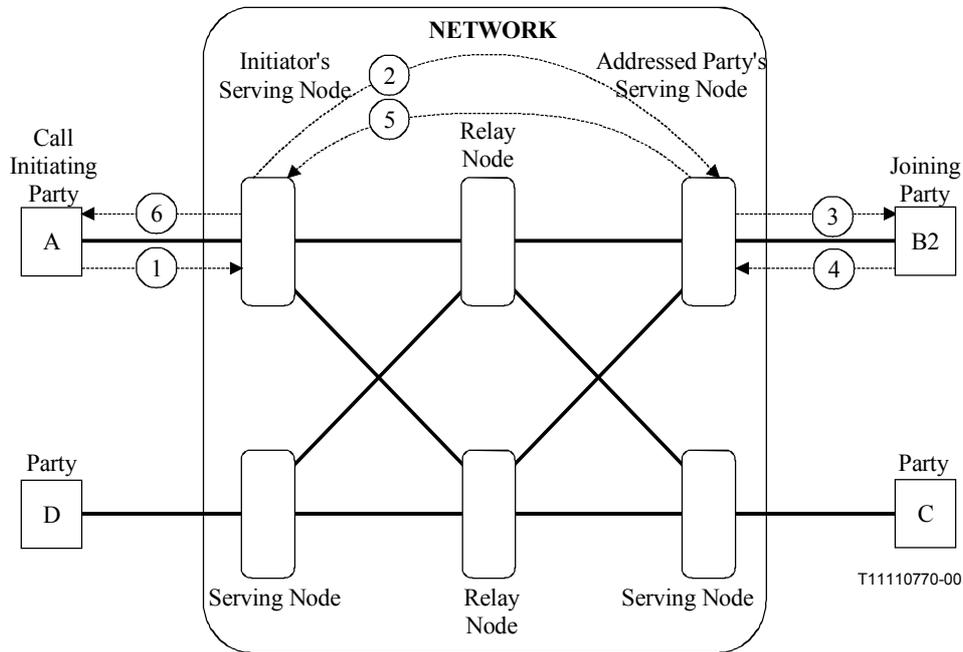
**Figure 9-10 – Call initiating party request to remove a party –
Multiple parties attached to the registered call at joining party's serving node**

---

1   Release-Party-from-Call.ready   Call Initiating Party A to Serving Node A

Resource information	**Call information**	**Bearer information**
(None)	**Registered call ID**	(None)
	Call control segment ID	
	Addressed party information	
	[Call PEP "B2" ID]	

Initiation of information flow: The call initiating party requests that a party be removed from a registered call.

Processing upon receipt: When the above information flow arrives at the initiator's serving node, the serving node forwards this request to the serving node associated with party B2 (information flow 2).

---

2   Release-Party-from-Call.ready   Serving Node A to Serving Node B

Resource information	**Call information**	**Bearer information**
(None)	**Registered call ID**	(None)
	Call control segment ID	
	Direct Call association (SN(A):ref.a - SN(B):ref.b) ID,	
	Addressed party information	
	[Call PEP "B2" ID]	

Processing upon receipt: When the serving node B receives the information flow, it determines that party B2 is attached to the registered call. It therefore must remove the call. The party is released from the call (information flow 3).

3	Release-Call.ready			Serving Node B to Party B2

Resource information	**Call information**	**Bearer information**
(None)	Registered call ID	(None)
	Call control segment ID	
	Addressed party information	
	[Call PEP "B2" ID]	

Processing upon receipt: When party B2 receives this flow, it clears the registered call. It then issues information flow 4 towards its serving node.

4	Release-Call.commit			Party B2 to Serving Node B

Resource information	**Call information**	**Bearer information**
(None)	Registered call ID	(None)
	Call control segment ID	
	Remote party information	
	[Call PEP "B2" ID]	

Processing upon receipt: When the information flow is received by the serving node B, it determines that this is not the last party associated with the registered call. It then issues information flows 5 towards the initiator's serving node.

5	Release-Party-from-Call.commit			Serving Node B to Serving Node A

Resource information	**Call information**	**Bearer information**
(None)	Registered call ID	(None)
	Call control segment ID	
	Direct Call association (SN(A):ref.a - SN(B):ref.b) ID,	
	Remote party information	
	[Call PEP "B2" ID]	

Processing upon receipt: When the initiator's serving node receives this information flow, it is aware that the specified party has been removed from the registered call. It notifies the call initiating party that party B2 has been removed (information flow 6).

6	Release-Party-from-Call.commit			Serving Node A to Call Initiating Party A

Resource information	**Call information**	**Bearer information**
(None)	Registered call ID	(None)
	Call control segment ID	
	Remote party information	
	[Call PEP "B2" ID]	

Processing upon receipt: When the call initiating party receives this flow, it notes that party B2 has been removed from the call.

9.3.2 Removal of a party requested by call initiating party (single party attached to registered call at joining party's serving node)

– Registered call with initiator screening.
– Registered call network screening with initiator notification.
– Registered call network screening without initiator notification.

This signalling capability illustrates the information flows necessary to remove a party from an established registered call. The serving node of the party being removed has a record of this registered call. The call and bearer transition diagram for removal of a party requested by the call initiating party is shown in Figure 9-11. Upon the completion of the functional entity action, the serving node associated with party B does not retain the registered call association as there exist no further parties served by this node.
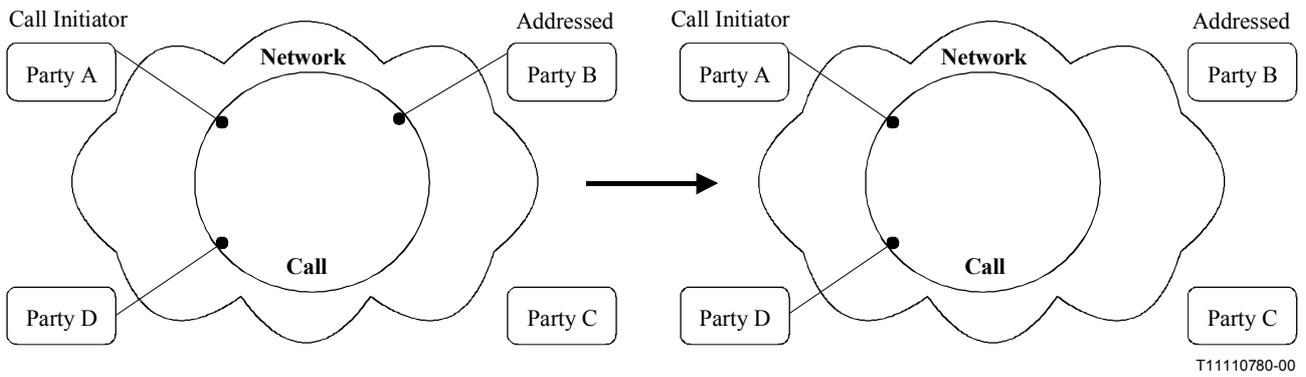
**Figure 9-11 – Call and bearer transition diagram for removal of a party requested
by the call initiating party – Single party attached to the registered call at
joining party's serving node and any intermediate relay node**

The information flows are illustrated in Figure 9-12.

NOTE – This signalling capability is independent of the screening option selected; the only requirement is that the call initiating party has knowledge of party B.

**Figure 9-12 – Call initiating party request to remove a party – Single party
attached to the registered call at joining party's serving node**

1	Release-Party-from-Call.ready		Call Initiating Party A to Serving Node A

Resource information	**Call information**	**Bearer information**
(None)	**Registered call ID**	(None)
	Call control segment ID	
	Addressed party information	
	[Call PEP "B" ID]	

Initiation of information flow: The call initiating party requests that a party be removed from a registered call.

Processing upon receipt: When the above information flow arrives at the initiator's serving node, the serving node forwards this request to the serving node associated with party B (information flow 2).

2	Release-Party-from-Call.ready		Serving Node A to Serving Node B

Resource information	**Call information**	**Bearer information**
(None)	**Registered call ID**	(None)
	Call control segment ID	
	Direct Call association (SN(A):ref.a - SN(B):ref.b) ID,	
	Addressed party information	
	[Call PEP "B" ID]	

Processing upon receipt: When the serving node B receives the information flow, it determines that party B is associated with the registered call. It therefore must remove the call. The party is released from the call (information flow 3).

3	Release-Call.ready		Serving Node B to Party B

Resource information	**Call information**	**Bearer information**
(None)	**Registered call ID**	(None)
	Call control segment ID	
	Addressed party information	
	[Call PEP "B" ID]	

Processing upon receipt: When party B receives this flow, it clears the registered call. It then issues information flow 4 towards its serving node.

4	Release-Call.commit		Party B to Serving Node B

Resource information	**Call information**	**Bearer information**
(None)	**Registered call ID**	(None)
	Call control segment ID	
	Remote party information	
	[Call PEP "B" ID]	

Processing upon receipt: When the information flow is received by the serving node B, it determines that this is the last party associated with the registered call. It then issues information flow 5 towards the initiator's serving node.

5	Release-Party-from-Call.commit		Serving Node B to Serving Node A

Resource information	**Call information**	**Bearer information**
(None)	**Registered call ID**	(None)
	Call control segment ID	
	Direct Call association (SN(A):ref.a - SN(B):ref.b) ID,	
	Remote party information	
	[Call PEP "B" ID]	

Processing upon receipt: When the initiator's serving node receives this information flow, it is aware that the specified party has been removed from the registered call. The serving node records that the registered call no longer exists in serving node B. It also notifies the call initiating party that party B has been removed (information flow 6).

<u>Resource information</u>	<u>Call information</u>	<u>Bearer information</u>
(None)	Registered call ID	(None)
	Call control segment ID	
	Remote party information	
	[Call PEP "B" ID]	

Processing upon receipt: When the call initiating party receives this flow, it notes that party B has been removed from the call.

9.3.3   Removal of a party requested by call initiating party (last party attached to registered call)

–   Registered call with initiator screening.

–   Registered call network screening with initiator notification.

–   Registered call network screening without initiator notification.

This signalling capability illustrates the information flows necessary to remove a party from an established registered call. The serving node of the party being removed has a record of this registered call. The call and bearer transition diagram for removal of party requested by call initiating party is shown in Figure 9-13. Upon the completion of the functional entity action, the serving node associated with party B does not retain the registered call association as there exist no further parties served by this node. In addition, if the registered call is not configured such that the call initiating party maintains its call relationship towards the initiator's serving node even in the absence of any other parties from the call, the complete registered call is released.
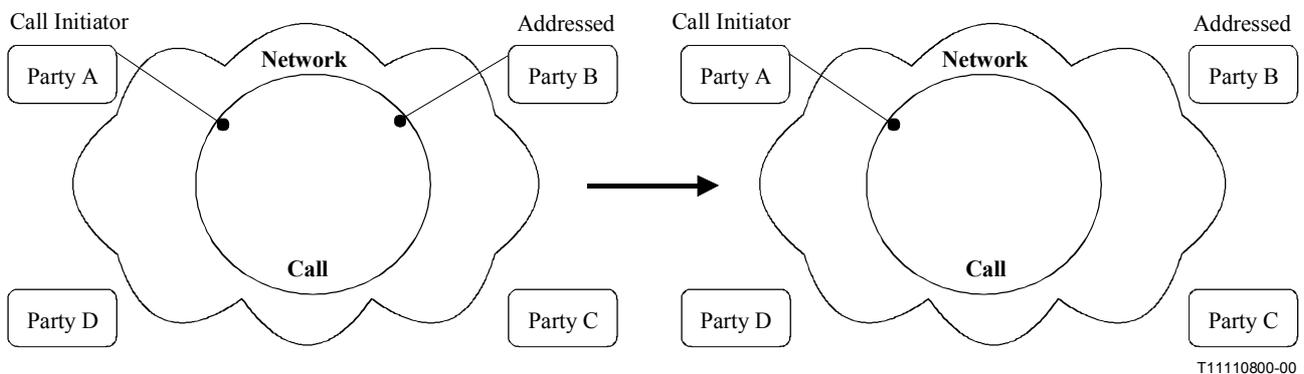
Figure 9-13 – Call and bearer transition diagram for removal of a party requested by the call initiating party – Last party attached to registered call and registered call retained

The information flows are illustrated in Figure 9-14.

NOTE – This signalling capability is independent of the screening option selected; the only requirement is that the call initiating party has knowledge of party B2.
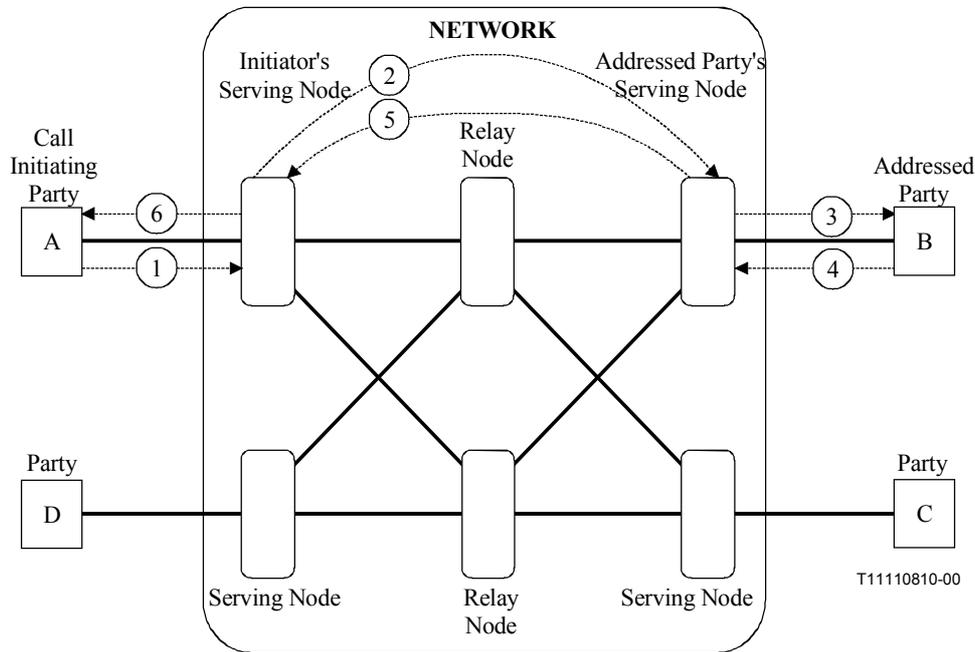
**Figure 9-14 – Call initiating party request to remove a party –
Last party attached to registered call**

1	**Release-Party-from-Call.ready**	**Call Initiating Party A to Serving Node A**

Resource information	**Call information**	**Bearer information**
(None)	**Registered call ID**	(None)
	Call control segment ID	
	Addressed party information	
	[Call PEP "B" ID]	

Initiation of information flow: The call initiating party requests that a party be removed from a registered call.

Processing upon receipt: When the above information flow arrives at the initiator's serving node, the serving node forwards this request to the serving node associated with party B (information flow 2).

2	**Release-Party-from-Call.ready**	**Serving Node A to Serving Node B**

Resource information	**Call information**	**Bearer information**
(None)	**Registered call ID**	(None)
	Call control segment ID	
	Direct Call association (SN(A):ref.a - SN(B):ref.b) ID	
	Addressed party information	
	[Call PEP "B" ID]	

Processing upon receipt: When the serving node B receives the information flow, it determines that party B is associated with the registered call. It therefore must remove the call. The party is released from the call (information flow 3).

3   Release-Call.ready   Serving Node B to Party B

Resource information	**Call information**	**Bearer information**
(None)	Registered call ID	(None)
	Call control segment ID	
	Addressed party information	
	[Call PEP "B" ID]	

Processing upon receipt: When party B receives this flow, it clears the registered call. It then issues information flow 4 towards its serving node.

4   Release-Call.commit   Party B to Serving Node B

Resource information	**Call information**	**Bearer information**
(None)	Registered call ID	(None)
	Call control segment ID	
	Remote party information	
	[Call PEP "B" ID]	

Processing upon receipt: When the information flow is received by serving node B, it determines that this is the last party associated with the registered call. It then issues information flow 5 towards the initiator's serving node.

5   Release-Party-from-Call.commit   Serving Node B to Serving Node A

Resource information	**Call information**	**Bearer information**
(None)	Registered call ID	(None)
	Call control segment ID	
	Direct Call association (SN(A):ref.a - SN(B):ref.b) ID	
	Remote party information	
	[Call PEP "B" ID]	

Processing upon receipt: When the initiator's serving node receives this information flow, it is aware that the specified party has been removed from the registered call. It notifies the call initiating party that party B has been removed (information flow 6).

6   Release-Party-from-Call.commit   Serving Node A to Call Initiating Party A

Resource information	**Call information**	**Bearer information**
(None)	Registered call ID	(None)
	Call control segment ID	
	Remote party information	
	[Call PEP "B" ID]	

Processing upon receipt: When the call initiating party receives this flow, it notes that party B has been removed from the call.

The initiator's serving node also notes that it has no other serving nodes or relay nodes attached and, therefore, the last party has been detached. If the registered call between the call initiating party A and its serving node A is to be retained (similar as after the information flows described in 9.1.1), the information flows for this signalling capability terminate here. Otherwise, if the registered call is configured such that the call initiating party does not maintain its call relationship towards the initiator's serving node in the absence of any other parties from the call, the complete registered call is released towards the call initiating party with information flow 7. Otherwise, the information flow 7 is not issued. The call and bearer transition diagram for the release of the complete registered call is shown in Figure 9-15.
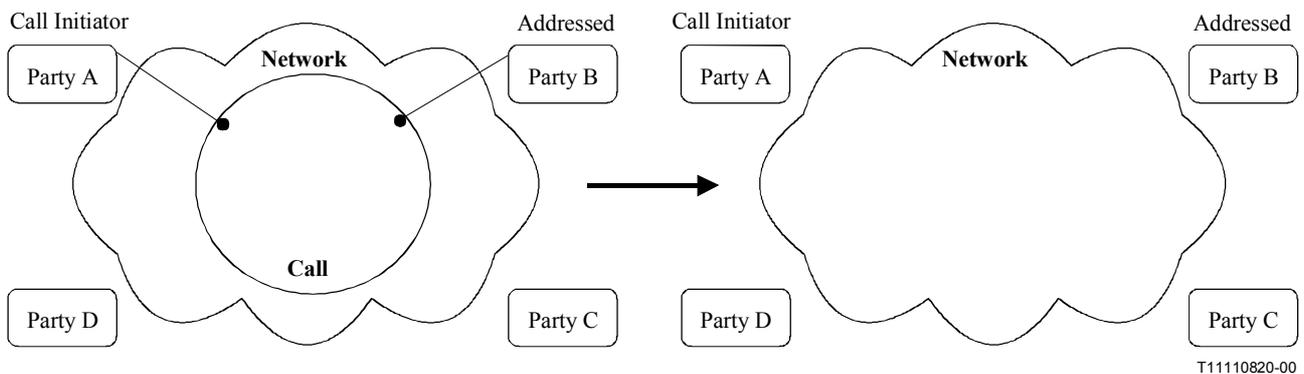
**Figure 9-15 – Call and bearer transition diagram for removal of party
requested by the call initiating party – Last party attached to
the registered call and registered call release**

7 Release-Call.ready		Serving Node A to Call Initiating Party A
Resource information	**Call information**	**Bearer information**
(None)	**Registered call ID** **Call control segment ID**	(None)

Initiation of information flow: Processing upon receipt of information flow 5 and the registered call between the call initiating party A and its serving node is not to be retained.

Processing upon receipt: When the call initiating party receives this information flow, it notes that it has no longer any parties attached. Therefore, the registered call is released. It issues the commit information flow 8 towards its serving node.

8 Release-Call.commit		Call Initiating Party A to Serving Node A
Resource information	**Call information**	**Bearer information**
(None)	**Registered call ID** **Call control segment ID**	(None)

Processing upon receipt: The initiator's serving node releases all knowledge about the registered call.

9.4   Party Requests to be Released from the Registered Call

The following subclause describes the functional entity actions associated with the release of a party from a registered call.

NOTE – If the registered call is of the type "network screening without initiator notification", the call initiating party, in general, has no knowledge about the attached parties and, hence, will not have to be informed about the release. On the other hand, the call initiating party may have attached its own parties in addition to parties that joined themselves; parties attached by the call initiating party are known to it in all cases and release by the party itself needs to be notified to the call initiating party. In order to inform the call initiating party appropriately even in case of a "network screening without initiator notification", the party's serving node must remember whether the party attached itself or whether the call initiating party initiated the attachment.

9.4.1   Party release request (multiple parties attached to registered call at joining party's serving node)

–   Registered call with initiator screening.

–   Registered call network screening with initiator notification.

–   Registered call network screening without initiator notification.

This signalling capability illustrates the information flows necessary for a party to remove itself from an established registered call. The serving node of the party being removed has a record of this registered call. The call and bearer transition diagram for a party release request is shown in Figure 9-16. Upon the completion of the functional entity action, the serving node associated with party B retains the registered call association as there exist further parties served by this node.
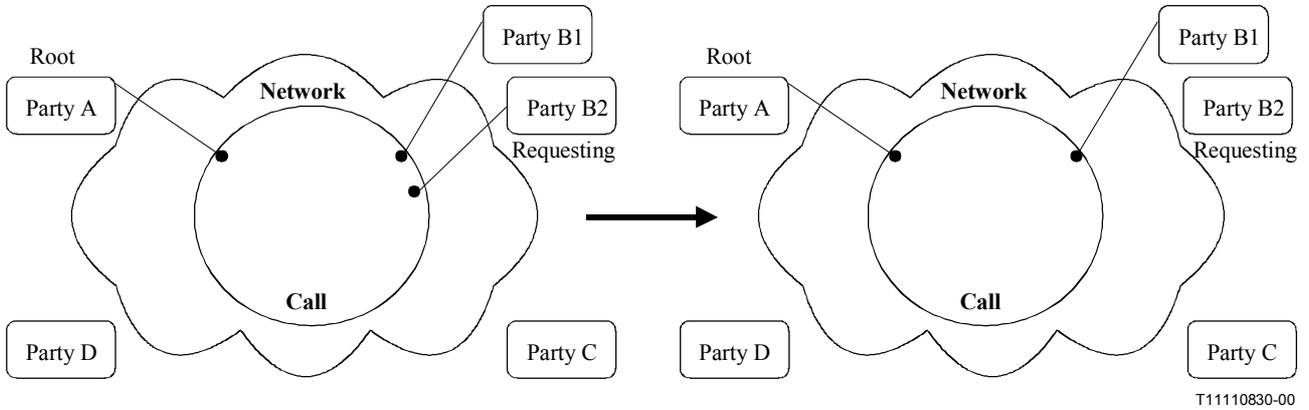
Figure 9-16 – Call and bearer transition diagram for party release request –
Multiple parties attached at joining party's serving node

The information flows are illustrated in Figure 9-17.
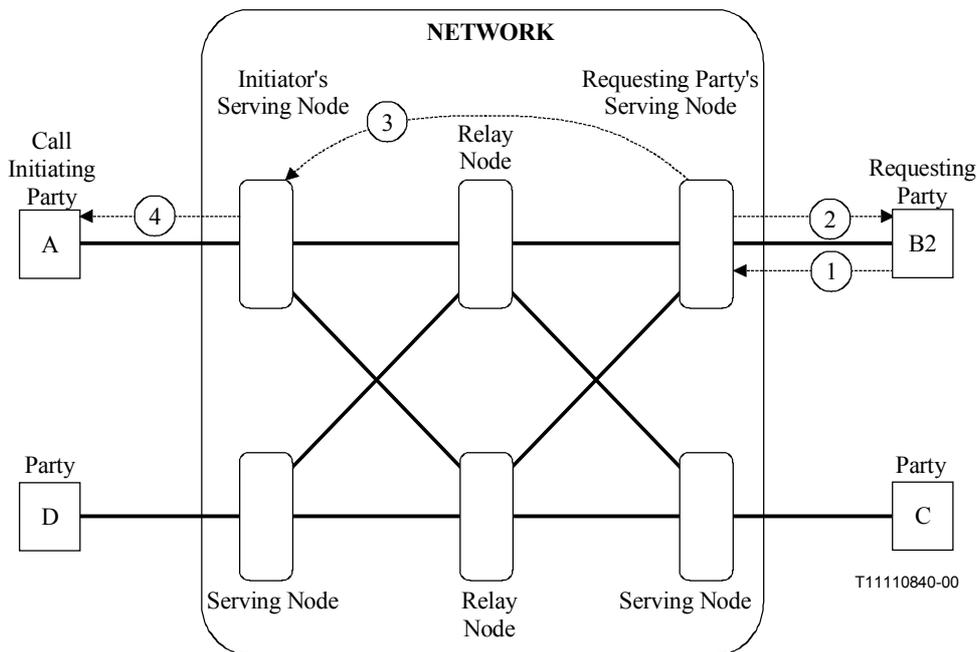
Figure 9-17 – Party release request – Multiple parties attached
to the registered call at joining party's serving node

1	Release-Party-from-Call.ready		Requesting Party B to Serving Node B
Resource information	**Call information**		**Bearer information**
(None)	**Registered call ID**		(None)
	Call control segment ID		
	Requesting party information		
	[Call PEP "B2" ID]		

Initiation of information flow: The party requests to be removed from a registered call.

Processing upon receipt: When serving node B receives the information flow, it determines that party B2 is associated with the registered call. It therefore must remove the call. The party is released from the call (information flow 2). It also determines that this was not the last party associated with the registered call.

If the registered call is of the type "initiator screening" or "network screening with initiator notification", information flow 3 towards the initiator's serving node is issued. On the other hand, if the registered call is of the type "network screening without initiator notification" and serving node B noted that the party initiated the joining itself, which has not been notified towards the call initiating party, information flow 3 is not issued.

2	Release-Party-from-Call.commit		Serving Node B to Requesting Party B
Resource information	**Call information**		**Bearer information**
(None)	**Registered call ID**		(None)
	Call control segment ID		

Processing upon receipt: When party B2 receives this information flow, it clears the registered call.

3	Notify-Party-Change.indication		Serving Node B to Serving Node A
Resource information	**Call information**		**Bearer information**
(None)	**Registered call ID**		(None)
	Call control segment ID		
	Direct Call association (SN(A):ref.a - SN(B):ref.b) ID,		
	Removed party information		
	[Call PEP "B2" ID]		

Initiation of information flow: Processing upon receipt of information flow 1 and serving node B decided to inform the call initiating party.

Processing upon receipt: When the initiator's serving node receives this information flow, it is aware that the specified party has been removed from the registered call. It notifies the call initiating party that party B2 has been removed (information flow 4).

4	Notify-Party-Change.indication		Serving Node A to Call Initiating Party A
Resource information	**Call information**		**Bearer information**
(None)	**Registered call ID**		(None)
	Call control segment ID		
	Removed party information		
	[Call PEP "B2" ID]		

Processing upon receipt: When the call initiating party receives this flow, it notes that party B2 has been removed from the call.

NOTE – If the call initiating party did not retained knowledge about this party in the registered call, the information flow is ignored.

9.4.2 Party release request (single party attached to registered call at joining party's serving node)

– Registered call with initiator screening

– Registered call network screening with initiator notification

– Registered call network screening without initiator notification

This signalling capability illustrates the information flows necessary for a party to remove itself from an established registered call. The serving node of the party being removed has a record of this registered call. The call and bearer transition diagram for this party release request is shown in Figure 9-18. Upon the completion of the functional entity action, the serving node associated with party B does not retain the registered call association as there exist no further parties served by this node.
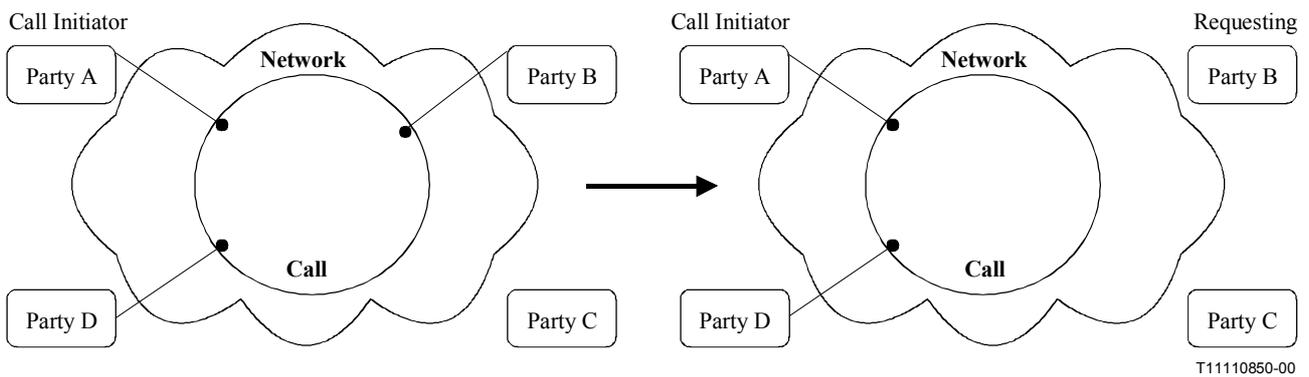
**Figure 9-18 – Call and bearer transition diagram for party release request –
Single party attached to the registered call at joining party's serving node
and any intermediate relay node**

The information flows are illustrated in Figure 9-19.
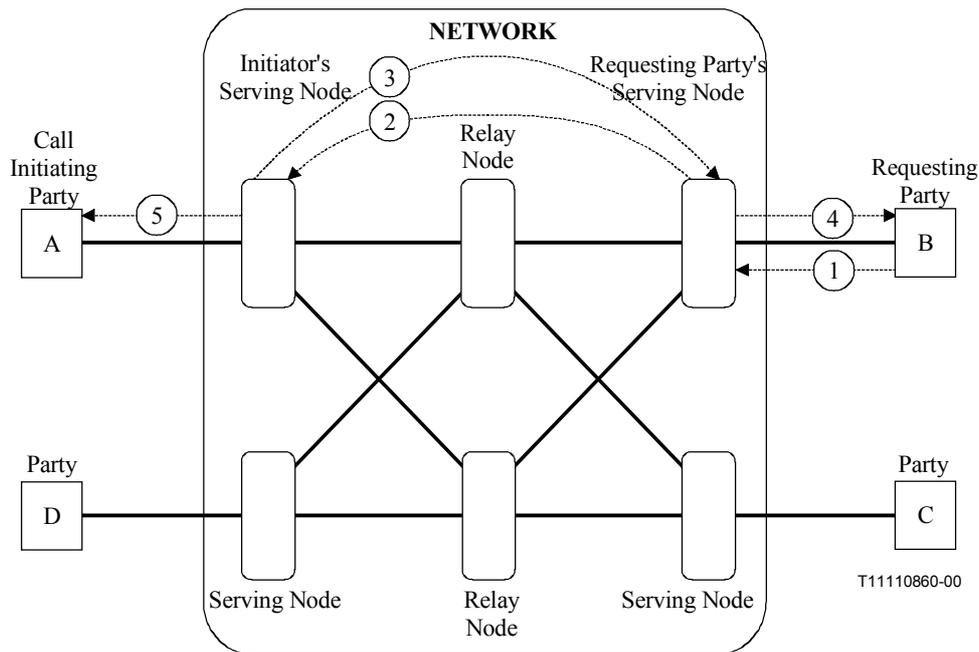
**Figure 9-19 – Party release request – Single party attached
to the registered call at joining party's serving node**

1	**Release-Party-from-Call.ready**	**Requesting Party B to Serving Node B**

Resource information	**Call information**	**Bearer information**
(None)	Registered call ID	(None)
	Call control segment ID	
	Requesting party information	
	[Call PEP "B" ID]	

Initiation of information flow: The party requests to be removed from a registered call.

Processing upon receipt: When serving node B receives the information flow, it determines that party B is associated with the registered call. It therefore must remove the call. The party is released from the call (information flow 2). It also determines that this was the last party associated with the registered call.

Regardless whether the registered call is of the type "initiator screening" or "network screening with initiator notification", information flow 3 towards the initiator's serving node is issued.

2	**Release-Party-from-Call.commit**	**Serving Node B to Requesting Party B**

Resource information	**Call information**	**Bearer information**
(None)	Registered call ID	(None)
	Call control segment ID	

Processing upon receipt: When party B receives this information flow, it clears the registered call.

3	Release-Party-from-Call.ready		Serving Node B to Serving Node A
Resource information	**Call information**		**Bearer information**
(None)	**Registered call ID**		(None)
	Call control segment ID		
	Direct Call association (SN(A):ref.a - SN(B):ref.b) ID,		
	Removed party information		
	[Call PEP "B" ID]		

Initiation of information flow: Processing upon receipt of information flow 1

Processing upon receipt: When the initiator's serving node receives this information flow, it is aware that the serving node B no longer retains a record of the registered call and that the specified party has been removed from the registered call. If the registered call is of the type "network screening with initiator notification" or when the initiator's serving node detects that the call initiating party has knowledge about party B, the call initiating party is notified that party B has been removed (information flow 5).

4	Release-Party-from-Call.commit		Serving Node A to Serving Node B
Resource information	**Call information**		**Bearer information**
(None)	**Registered call ID**		(None)
	Call control segment ID		
	Removed party information		
	[Call PEP "B" ID]		

Processing upon receipt: The serving node B releases all knowledge about the registered call.

5	Notify-Party-Change.indication		Serving Node A to Call Initiating Party A
Resource information	**Call information**		**Bearer information**
(None)	**Registered call ID**		(None)
	Call control segment ID		
	Removed party information		
	[Call PEP "B" ID]		

Initiation of information flow: Processing upon receipt of information flow 3 and the initiator's serving node decided to inform the call initiating party.

Processing upon receipt: When the call initiating party receives this flow, it notes that party B has been removed from the call.

NOTE – If the call initiating party did not retained knowledge about this party in the registered call, the information flow is ignored.

9.4.3 Party release request (last party attached to registered call)

– Registered call with initiator screening.

– Registered call network screening with initiator notification.

– Registered call network screening without initiator notification.

This signalling capability illustrates the information flows necessary for a party to remove itself from an established registered call. The serving node of the party being removed has a record of this registered call. The call and bearer transition diagram for this party release request is shown in Figure 9-20. Upon the completion of the functional entity action, the serving node associated with party B does not retain the registered call association as there exist no further parties served by this node. In addition, if the registered call is not configured such that the call initiating party maintains its call relationship towards the initiator's serving node even in the absence of any parties from the call, the complete registered call is released.

If the registered call is not released, the information flows are the same as in 9.4.2, otherwise, the information flows in this subclause apply.
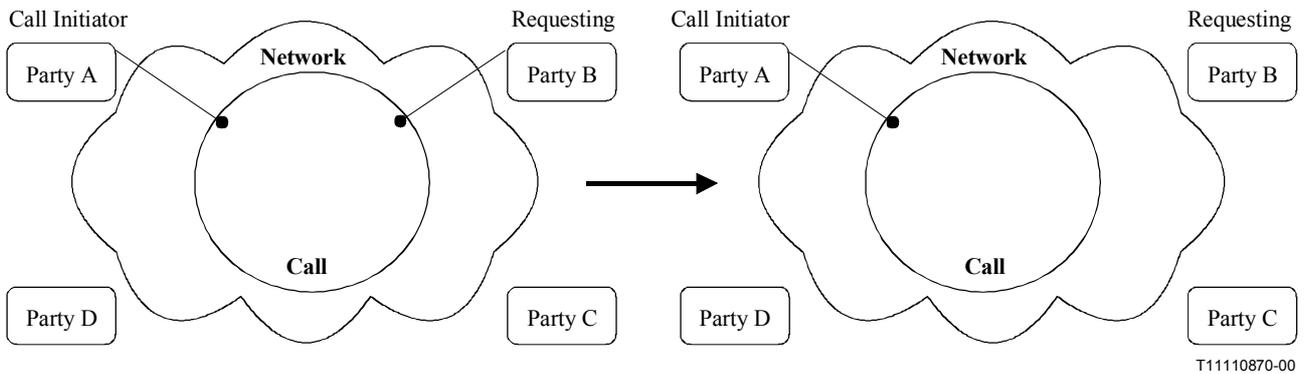
**Figure 9-20 – Call and bearer transition diagram for party release request –
Last party other than call initiating party attached to the registered
call and registered call retained**

The information flows are illustrated in Figure 9-21.
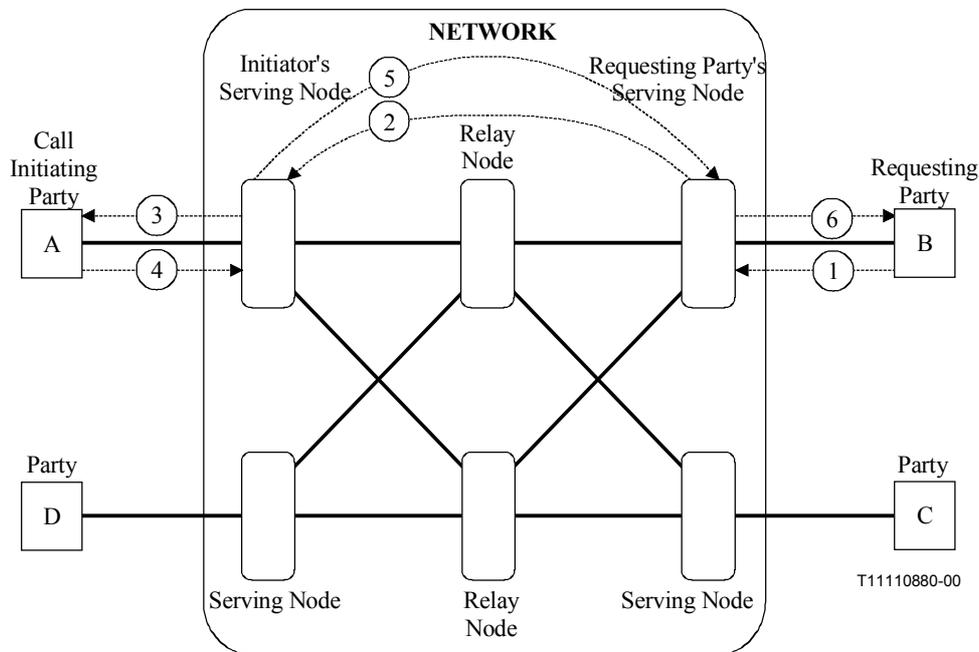
**Figure 9-21 – Party release request – Last party other than
call initiating party attached to registered call**

1	**Release-Party-from-Call.ready**		**Requesting Party B to Serving Node B**

Resource information	**Call information**	**Bearer information**
(None)	Registered call ID	(None)
	Call control segment ID	
	Requesting party information	
	[Call PEP "B" ID]	

Initiation of information flow: The party requests to be removed from a registered call.

Processing upon receipt: When serving node B receives the information flow, it determines that party B is associated with the registered call. It therefore must remove the call. The party is released from the call (information flow 2). It also determines that this is the last party associated with the registered call. It then issues information flows 3 towards the initiator's serving node.

2	Release-Party-from-Call.commit		Serving Node B to Requesting Party B
Resource information	**Call information**		**Bearer information**
(None)	Registered call ID		(None)
	Call control segment ID		

Processing upon receipt: When party B receives this information flow, it clears the registered call.

3	Release-Party-from-Call.ready		Serving Node B to Serving Node A
Resource information	**Call information**		**Bearer information**
(None)	Registered call ID		(None)
	Call control segment ID		
	Direct Call association (SN(A):ref.a - SN(B):ref.b) ID,		
	Removed party information		
	[Call PEP "B" ID]		

Initiation of information flow: Processing upon receipt of information flow 1.

Processing upon receipt: When the initiator's serving node receives this information flow, it is aware that the serving node B no longer retains a record of the registered call and that the specified party has been removed from the registered call. The initiator's serving node also notes that it has no other serving nodes or relay nodes attached and, therefore, the last party has been detached. If the registered call is configured such that the call initiating party does not maintain its call relationship towards the initiator's serving node in the absence of any parties from call, the call is released towards the call initiating party with information flow 5.

On the other hand, if the registered call is of the type "network screening with initiator notification" or when the initiator's serving node detects that the call initiating party has knowledge about party B, the call initiating party is notified that party B has been removed (information flow 5 in 9.4.2).

Otherwise, information flow 5 is not issued.

4	Release-Party-from-Call.commit		Serving Node A to Serving Node B
Resource information	**Call information**		**Bearer information**
(None)	Registered call ID		(None)
	Call control segment ID		
	Removed party information		
	[Call PEP "B" ID]		

Processing upon receipt: The serving node B releases all knowledge about the registered call.

If the registered call between the call initiating party A and its serving node A is to be retained (similar as after the information flows described in 9.1.1), the information flows for this signalling capability terminate here. Otherwise, if the registered call is configured such that the call initiating party does not maintain its call relationship towards the initiator's serving node in the absence of any other parties from the call, the complete registered call is released. The call and bearer transition diagram for the release of the complete registered call is shown in Figure 9-22.

**Figure 9-22 – Call and bearer transition diagram for removal of party requested
by call initiating party – Last party other than call initiating party
attached to registered call and registered call release**

5	Release-Call.ready		Serving Node A to Call Initiating Party A
Resource information	**Call information**		**Bearer information**
(None)	Registered call ID		(None)
	Call control segment ID		

Initiation of information flow: Processing upon receipt of information flow 3 and the registered call between the call initiating party A and its serving node is not to be retained.

Processing upon receipt: When the call initiating party receives this information flow, it notes that it has no longer any parties attached. Therefore, the registered call is released. It issues the commit information flow 6 towards its serving node.

6	Release-Call.commit		Call Initiating Party A to Serving Node A
Resource information	**Call information**		**Bearer information**
(None)	Registered call ID		(None)
	Call control segment ID		

Processing upon receipt: The initiator's serving node releases all knowledge about the registered call.

9.5 Registered Call Release by Call Initiating Party

The following subclause describes the functional entity actions associated with the release of all registered call by the call initiating party.

9.5.1 Call Initiating Party Requests to Terminate Registered Call (with no associated parties)

– Registered call with initiator screening.

– Registered call network screening with initiator notification.

– Registered call network screening without initiator notification.

This signalling capability illustrates the information flows necessary for a call initiating party to remove itself from an established registered call. No other serving node exists that has a record of this registered call. The call and bearer transition diagram for call initiating party release request is shown in Figure 9-23. Upon the completion of the functional entity action, the complete registered call has been removed.
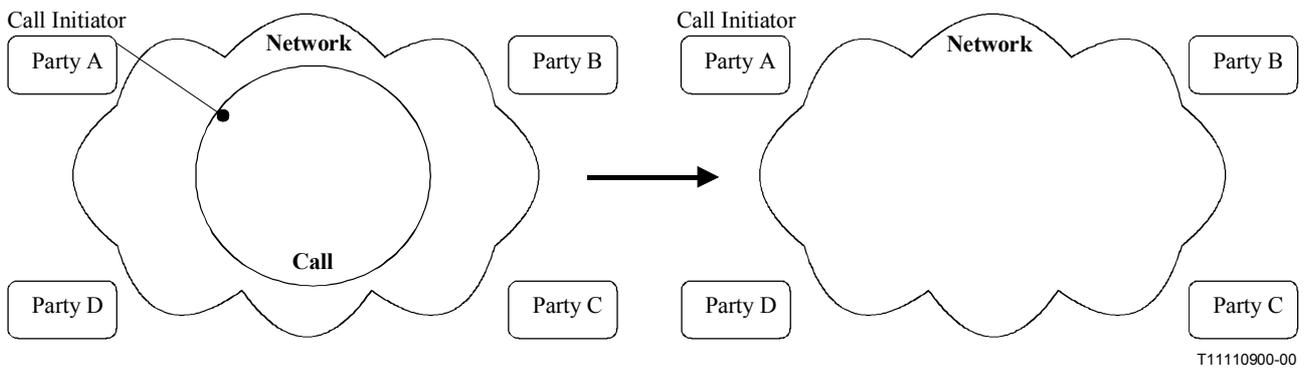
**Figure 9-23 – Call and bearer transition diagram for call initiating party call release request –
No parties other than call initiating party attached to registered call**

The information flows are illustrated in Figure 9-24.

**Figure 9-24 – Call initiating party release request – No parties
other than call initiating party attached to registered call**

1	**Release-Call.ready**		**Call Initiating Party A to Serving Node A**

Resource information	**Call information**	**Bearer information**
(None)	Registered call ID	(None)
	Call control segment ID	
	Requesting party information	
	[Call PEP "A" ID]	

Initiation of information flow: The call initiating party requests the release of a registered call.

Processing upon receipt: When the initiator's serving node receives the information flow, it removes the call and all further knowledge about the registered call, i.e. the Registered Call Instant. It further determines that party A is the only remaining party in the registered call and no further actions except issuing information flow 2 are required.

Resource information	**Call information**	**Bearer information**
(None)	Registered call ID Call control segment ID	(None)

Processing upon receipt: When this information flow arrives at Party A, the requesting party knows that the requested composite action has been completed.

9.5.2   Call Initiating Party Requests to Terminate Registered Call (with several other serving nodes associated with the registered call)

–   Registered call with initiator screening.

–   Registered call network screening with initiator notification.

–   Registered call network screening without initiator notification.

This signalling capability illustrates the information flows necessary for a call initiating party to remove itself from an established registered call. One or more serving nodes exist with attached parties as well as a record of this registered call. The call and bearer transition diagram for call initiating party release request is shown in Figure 9-25. Upon the completion of the functional entity action, the complete registered call has been removed.

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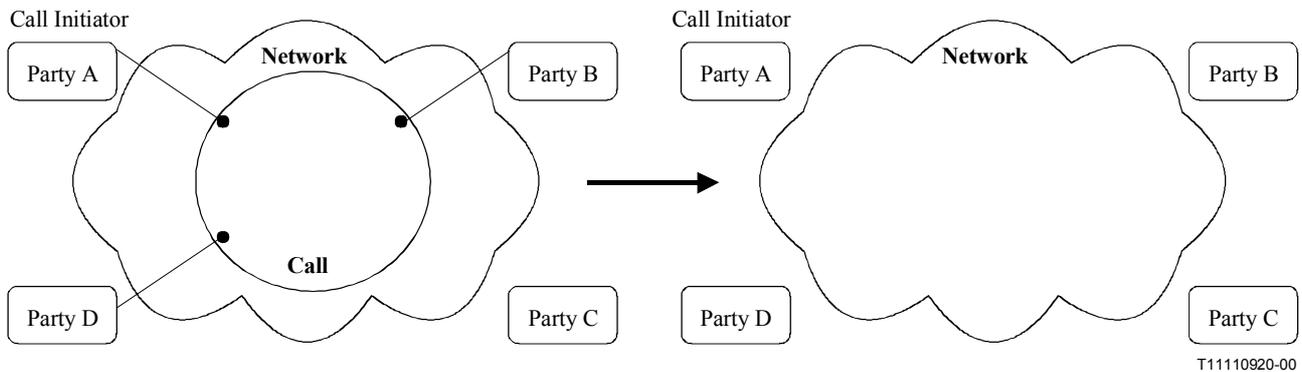
**Figure 9-25 – Call and bearer transition diagram for call initiating party
release request – One or more parties attached to registered call**

The information flows are illustrated in Figure 9-26.
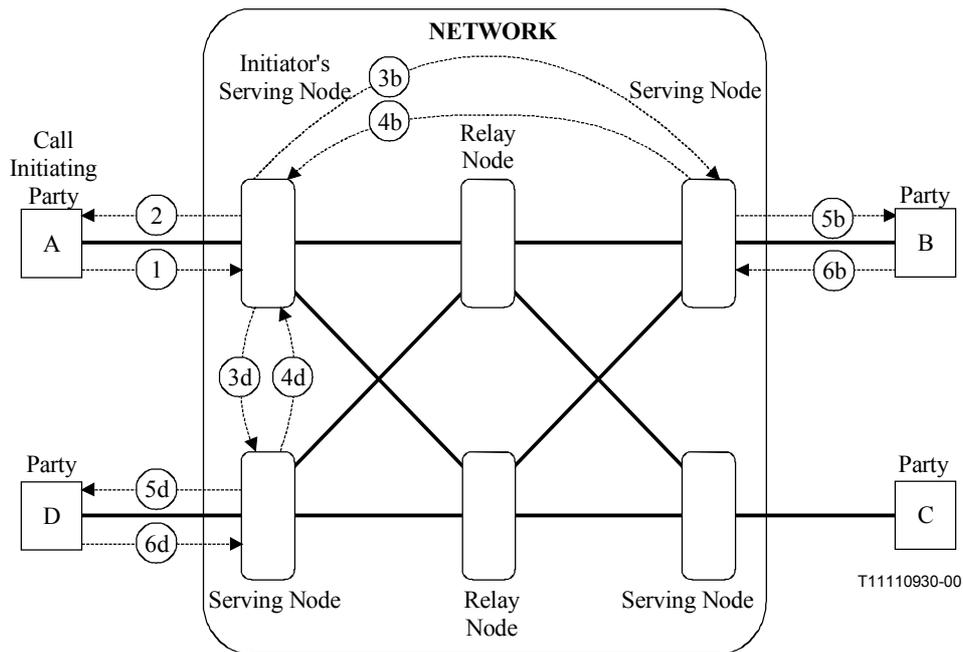
**Figure 9-26 – Call initiating party release request –
One or more parties attached to registered call**

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1   **Release-Call.ready**   **Call Initiating Party A to Serving Node A**

Resource information	**Call information**	**Bearer information**
(None)	Registered call ID	(None)
	Call control segment ID	
	Requesting party information	
	[Call PEP "A" ID]	

Initiation of information flow: The call initiating party requests the release of a registered call.

Processing upon receipt: When the initiator's serving node receives the information flow, it issues information flow 2 towards the call initiating party A and information flow 3 towards all serving nodes.

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2   **Release-Call.commit**   **Serving Node A to Call Initiating Party A**

Resource information	**Call information**	**Bearer information**
(None)	Registered **call ID**	(None)
	Call control segment ID	

Processing upon receipt: When this information flow arrives at the call initiating Party A, the requesting party knows that the requested composite action has been completed.

| 3b | Release-Call.ready | Serving Node A to Serving Node B |
| 3d | Release-Call.ready | Serving Node A to Serving Node D |

Resource information	Call information	Bearer information
(None)	**Registered call ID**	(None)
	Call control segment ID	
	Direct Call association (SN(A):ref.a - SN(B):ref.b) ID,	
	Requesting party information	
	[Call PEP "A" ID]	

NOTE – In the information flow 3d towards serving node D, the value of the "Direct Call association" is (SN(A):ref.a – SN(D):ref.d) ID.

Initiation of information flow: Processing upon receipt of information flow 1

Processing upon receipt: When the joining party's serving node receives the information flow, it issues information flow 4 towards the initiator's serving node and information flow 5 towards all known attached parties.

| 4b | Release-Call.commit | Serving Node B to Serving Node A |
| 4d | Release-Call.commit | Serving Node D to Serving Node A |

Resource information	Call information	Bearer information
(None)	**Registered call ID**	(None)
	Call control segment ID	

Enabling condition: This entity action is only performed upon receipt of all information flows 4 (if multiple information flows 3 to several serving nodes have been sent).

Processing upon receipt: When this information flow arrives at the initiator's serving node, it removes the call and all further knowledge about the registered call, i.e. the Registered Call Instant.

| 5b | Release-Call.ready | Serving Node B to Party B |
| 5d | Release-Call.ready | Serving Node D to Party D |

Resource information	Call information	Bearer information
(None)	**Registered call ID**	(None)
	Call control segment ID	
	Addressed party information	
	[Call PEP "B" ID]	

Processing upon receipt: When party B receives this flow, it will clear the registered call. It then issues information flow 6 towards the serving node.

| 6b | Release-Call.commit | Party B to Serving Node B |
| 6d | Release-Call.commit | Party D to Serving Node D |

Resource information	Call information	Bearer information
(None)	**Registered call ID**	(None)
	Call control segment ID	

Enabling condition: This entity action is only performed upon receipt of all information flows 6 (if multiple information flows 5 to several parties have been sent).

Processing upon receipt: When the information flow is received by the joining party's serving node, it removes the call and all further knowledge about the registered call.

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