T1179160-96/d033

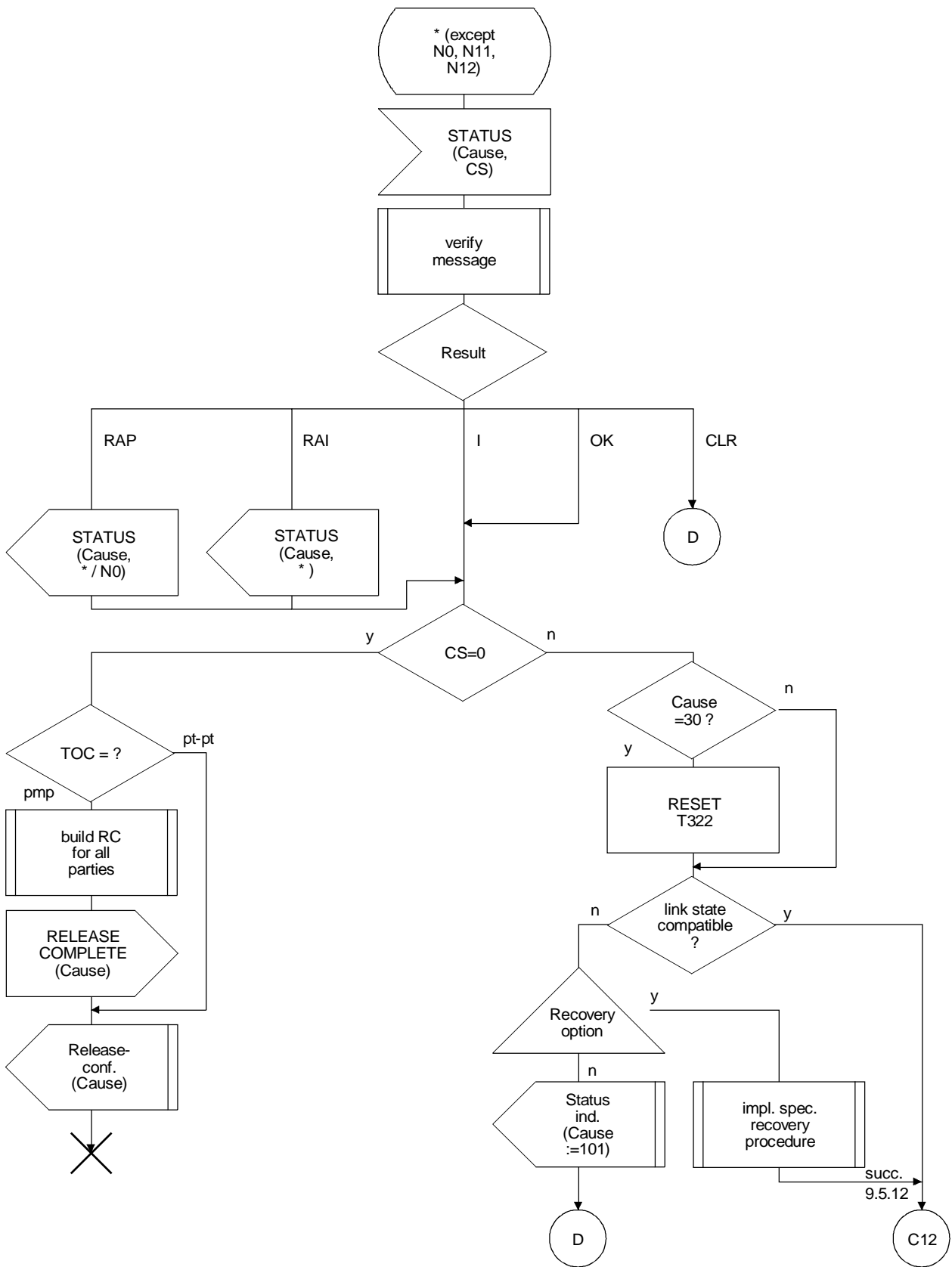**Process Call-Control-N**

(Sheet 32 of 39)

Process Call-Control-N

(Sheet 33 of 39)

T1173230-95/d035

Process Call-Control-N

(Sheet 34 of 39)

*
(except N0)

Timeout
T322

Timeout:=
Timeout+1

NT = Number of
STATUS ENQUIRY
transmissions,
implementation
dependent value > = 1

Timeout=NT

yes

D

n

STATUS
ENQUIRY
(#)

SET
(NOW+t322,
T322)

SE

(Status
Enquiry)

Timeout:= 0
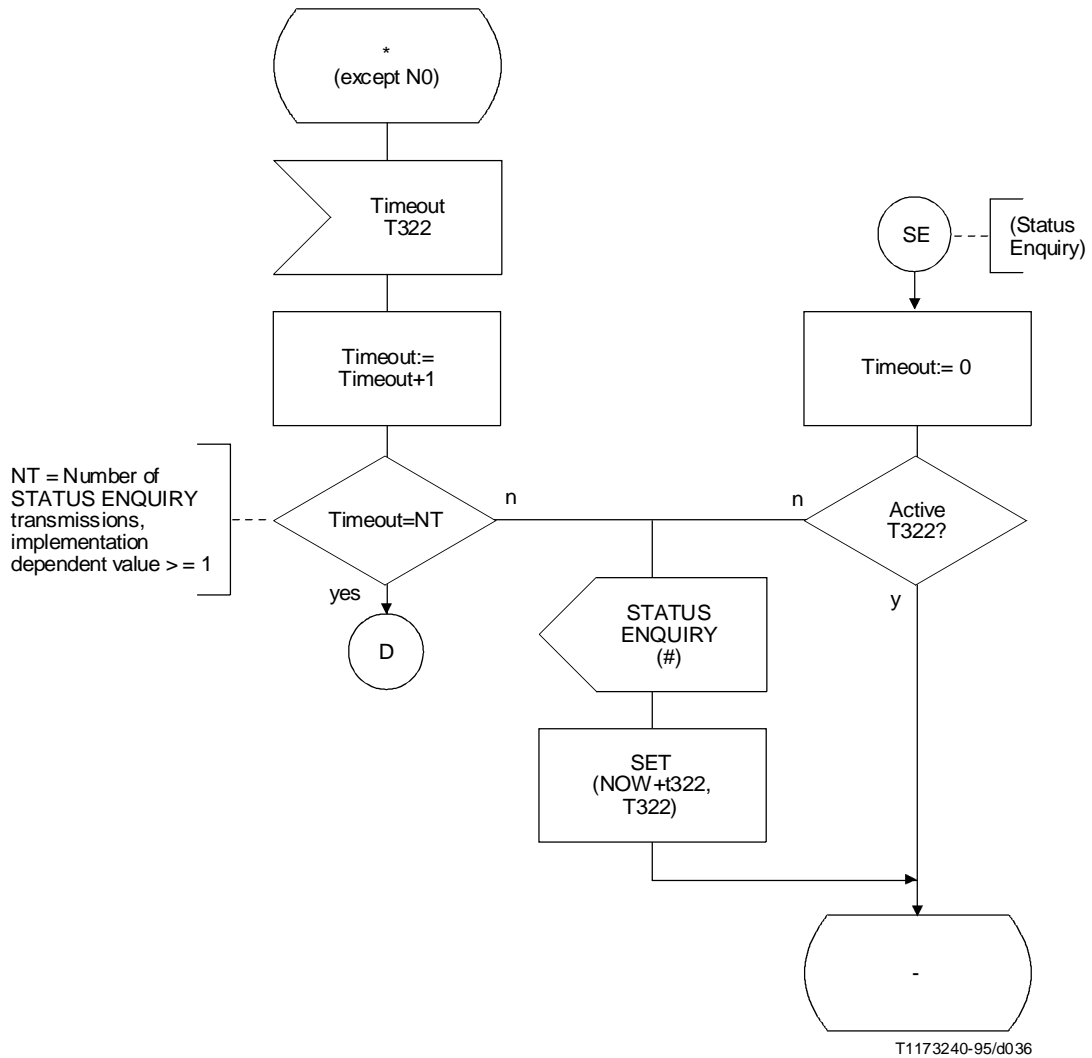
n

Active
T322?

y

-

T1173240-95/d036
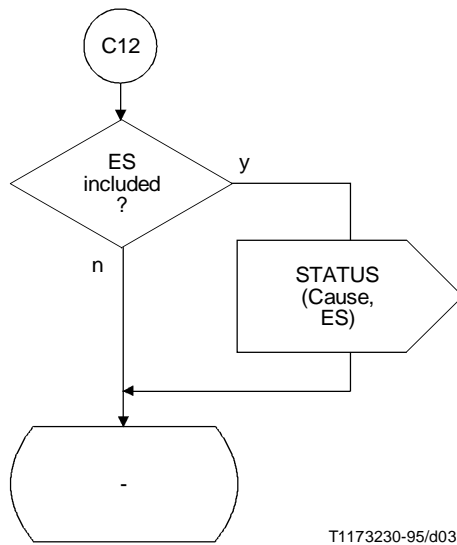
Process Call-Control-N

(Sheet 35 of 39)

Process Call-Control-N

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```
      *                              N11, N12
   (except
    N10)

   Link-                            Link-
   Release-                         Establish-
   Ind.                             ind.

                                       -
     TOC = ?      pt-pt            (no state
                                    change)
      pmp

   build RC                        N1, N3, N4, N6,
   for all                          N7, N8, N9
   parties

   RELEASE                         Link-
   COMPLETE                        Establish-
   (Cause #27)                     ind.

                          no                        yes
   Release-                         SE option
   conf.                            supported
   (Cause #27)

                                       -
                                   (no state          SE
                                    change)
                                              T1179180-96/d038
```

Process Call-Control-N

(Sheet 37 of 39)

N1 - Call
Initiated

Alerting
req. (#)

Setup-
resp. (#)

pt-pt TOC = ?

pt-pt TOC = ?

pmp
Alerting-
req. (#)

pmp
Setup-
resp. (#)

ALERTING
(#)

CONNECT
(#)

N4 - Call
Delivered

N10 -
Active
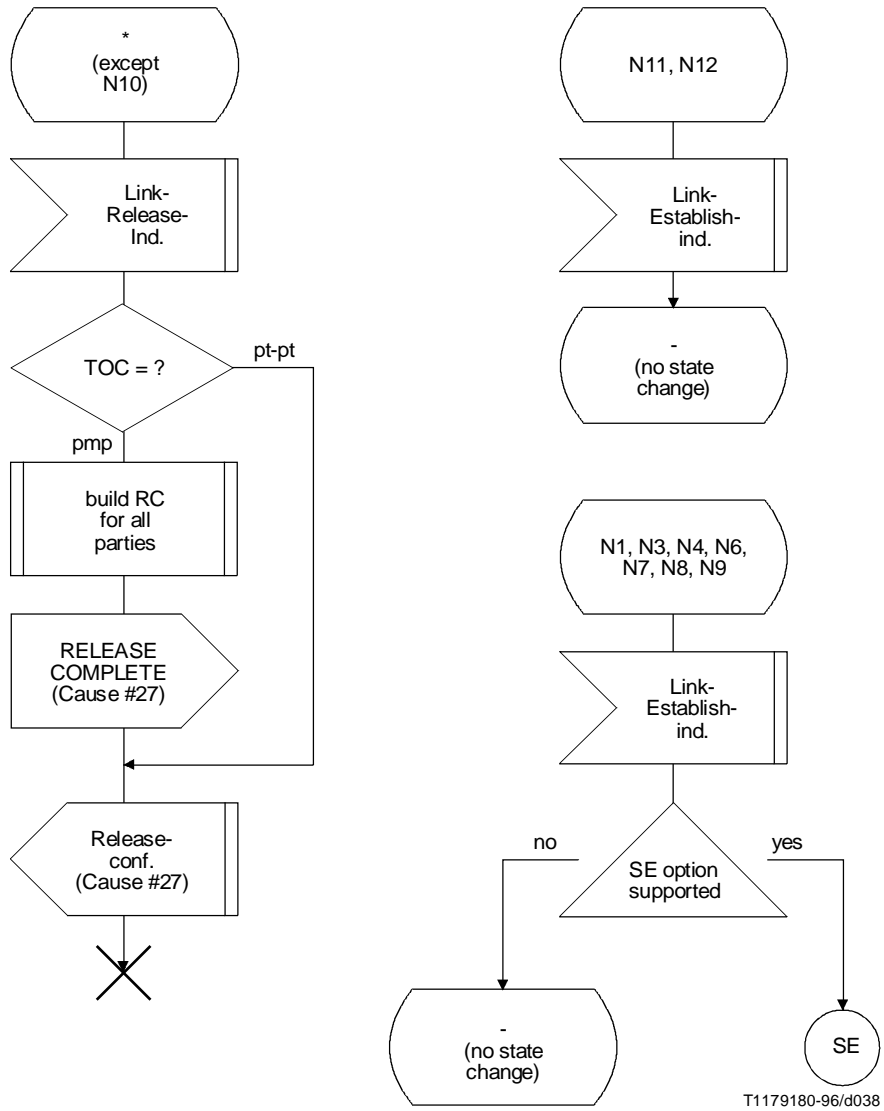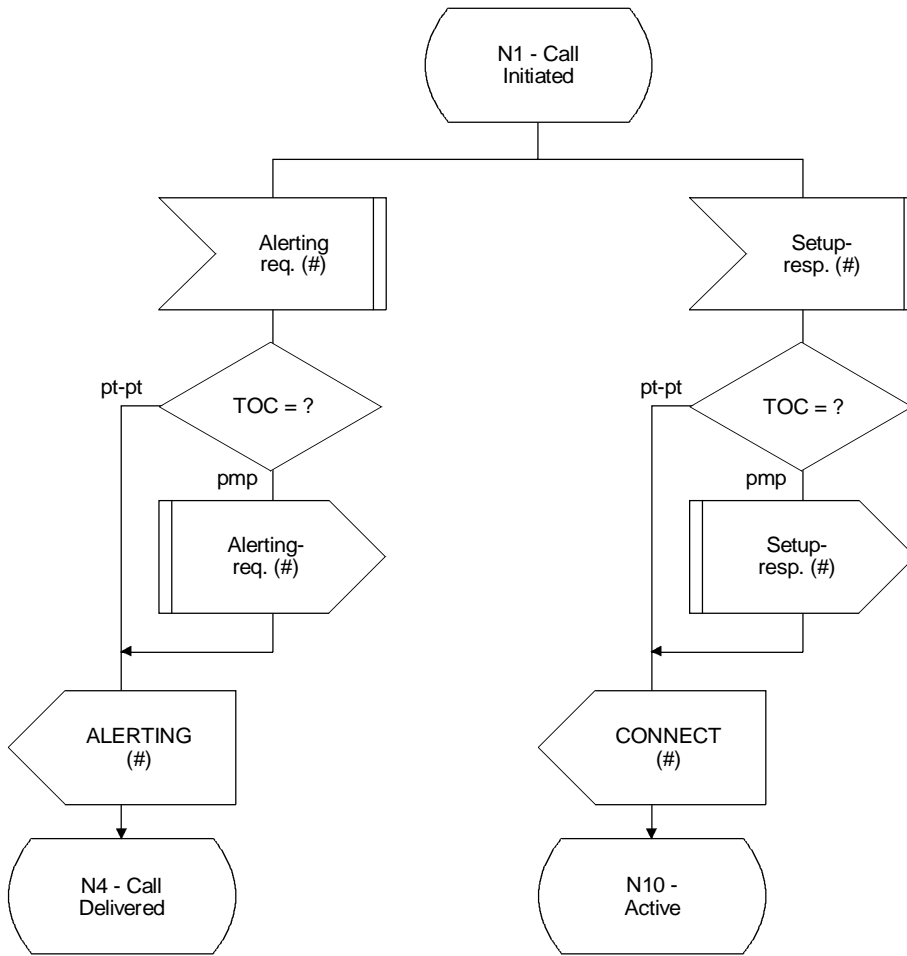
T1173270-95/d039

Process Call-Control-N

(Sheet 38 of 39)

Additional Procedures related to Interworking

T1173280-95/d040

(see Annex A/Q.2931, process
Q.2931-N, pages 20-31 of (31)

Process Call-Control-N

(Sheet 39 of 39)

F.1.5   PROCESS Reset-Start-N

For the process Reset-Start-N, the SDL description of Annex A/Q.2931 remains valid without the need for technical changes.

F.1.6   PROCESS Reset-Response-N

For the process Reset-Response-N, the SDL description of Annex A/Q.2931 remains valid without the need for technical changes.

F.1.7   Process Party-Control-N: Overview State-Event-Diagram (does not include Timer Expires)

[Numbers show sheet no. (sheet 1of 13); empty fields show events not described/applicable.]

| State Event (5.7)	PN0	PN1	PN2	PN3	PN4	PN5	PN6	PN7
(from CC-N:)								
Setup-req.	3							
Alerting-req.			6					
Setup-resp.			6	7				
Setup-compl.-req.		4			7			
Release-req.		11	11	11	11	10	11	11
Release-resp.		11	11	11	11	11	11	11
SETUP	3	11	11	11	11	11	11	11
ALERTING		5	11	11	11	11	11	11
RELEASE		11	11	11	11	10	11	11
RELEASE COMP.		11	11	11	11	11	11	11
STATUS	13	12	12	12	12	10	12	12
STATUS ENQUIRY	13	12	12	12	12	12	12	12
Add Party req.	3							
Add Party Ack. req.			6	7				
Add Party Rej. req.			6					
Party Alerting req.			6					
Drop Party req.		8		8	8			8
DP Ack. req.							9	
Party St. Enq. req.		12	12	12	12	12	12	12
ADD PARTY	3	11	6	11	11	11	11	11
ADD PARTY ACK.		4	11	11	7	11	11	11
ADD PARTY REJ.		4	11	11	11	10	11	11
PARTY ALERTING		5	11	11	11	11	11	11
DROP PARTY		9	9	9	9	10	9	9
DP ACK.		8	8	8	8	8	8	8

Process Call-Control-N

(Sheet 1 of 13)
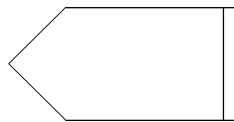
Process Call-Control-N – Legend

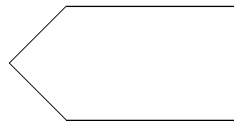See Recommendation Q.2931, SDL Key; in addition:
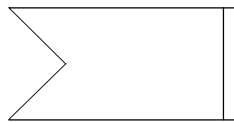
signals from Call-Control-N related to primitives
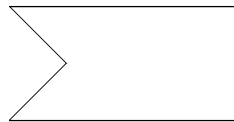
signals from Call-Control-N related to messages

signals to Call-Control-N related to primitives
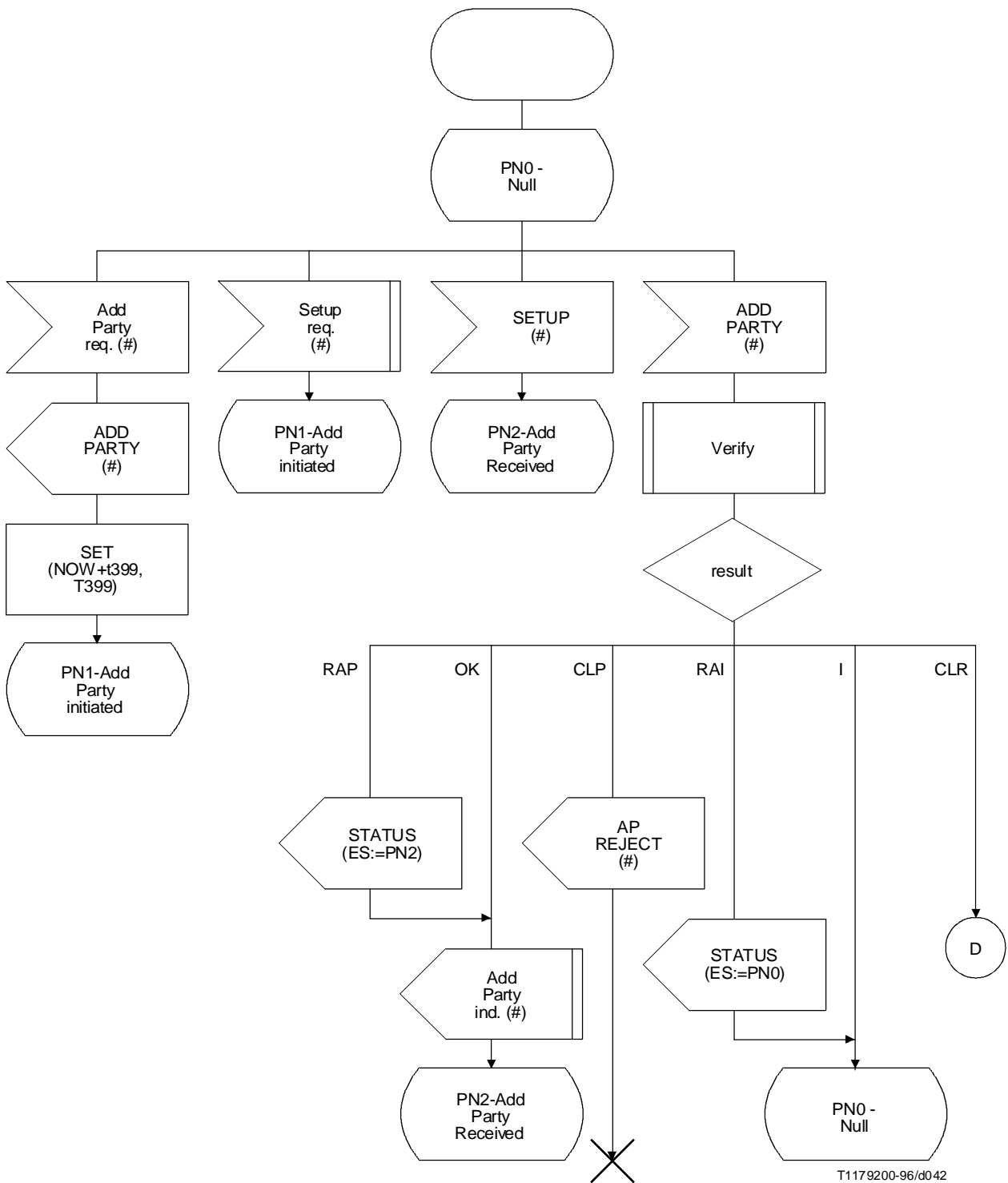
signals to Call-Control-N related to messages

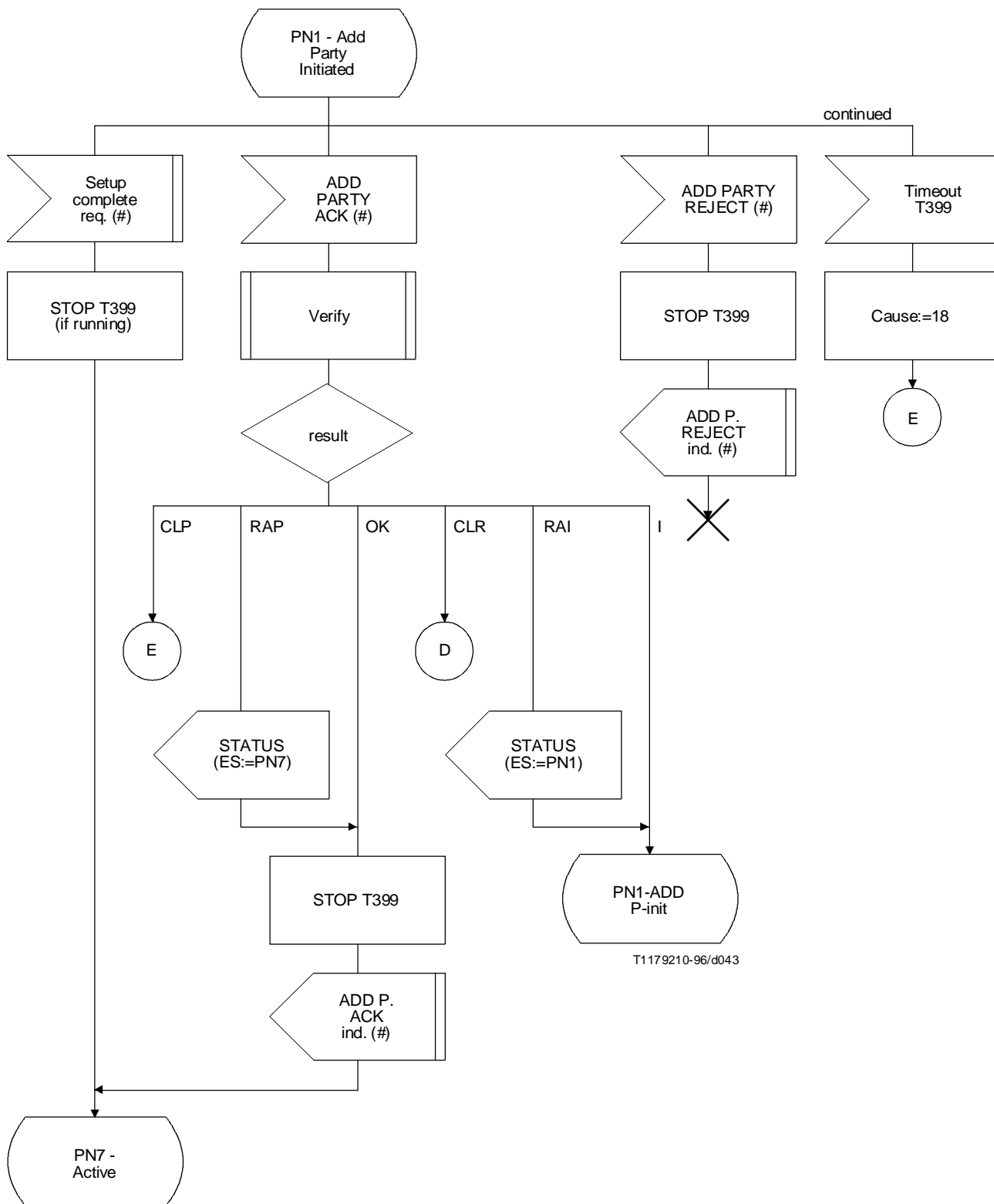This symbol is used to indicate the end of a process.

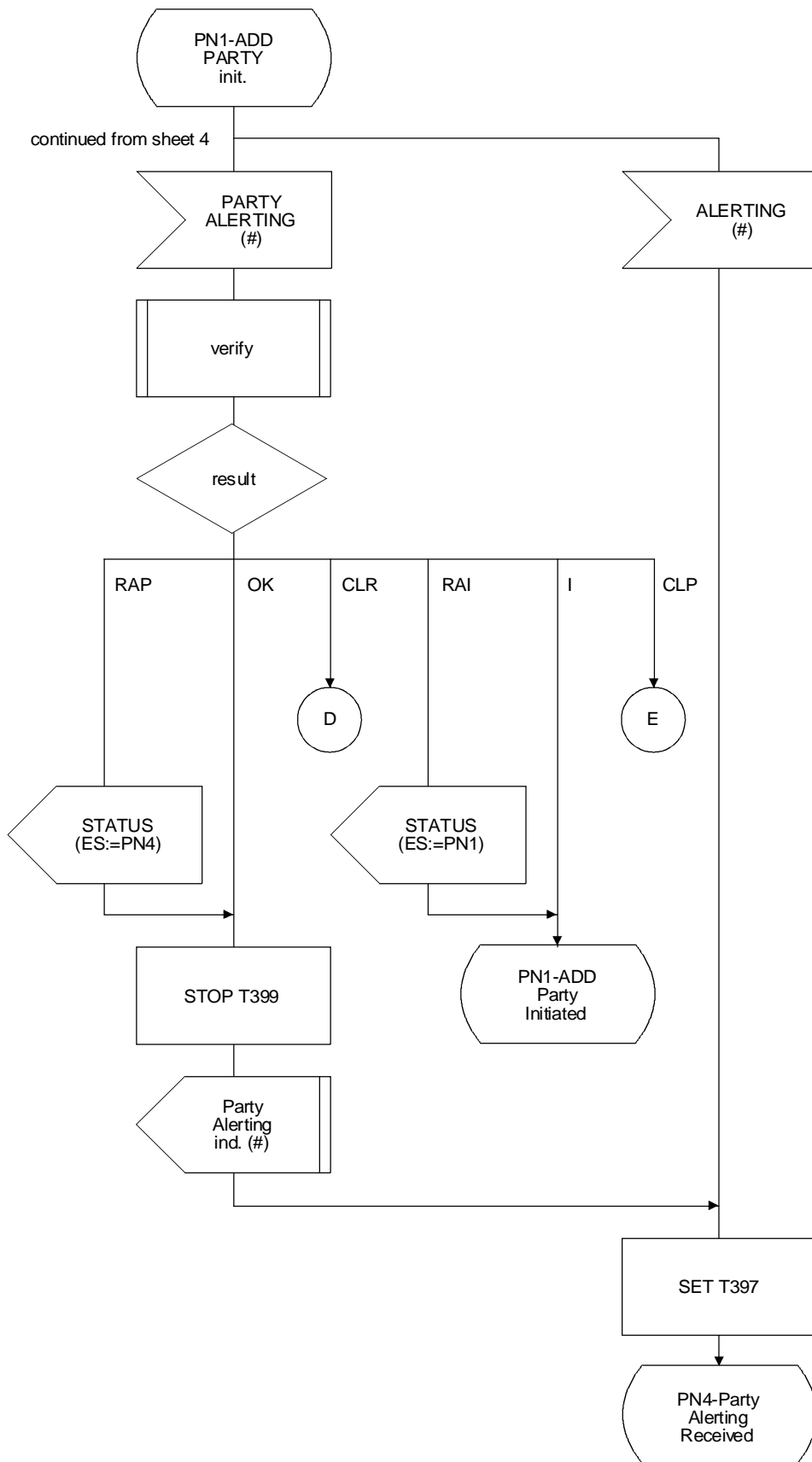T1179190-96/d041

Process Party-Control-N

(Sheet 2 of 13)

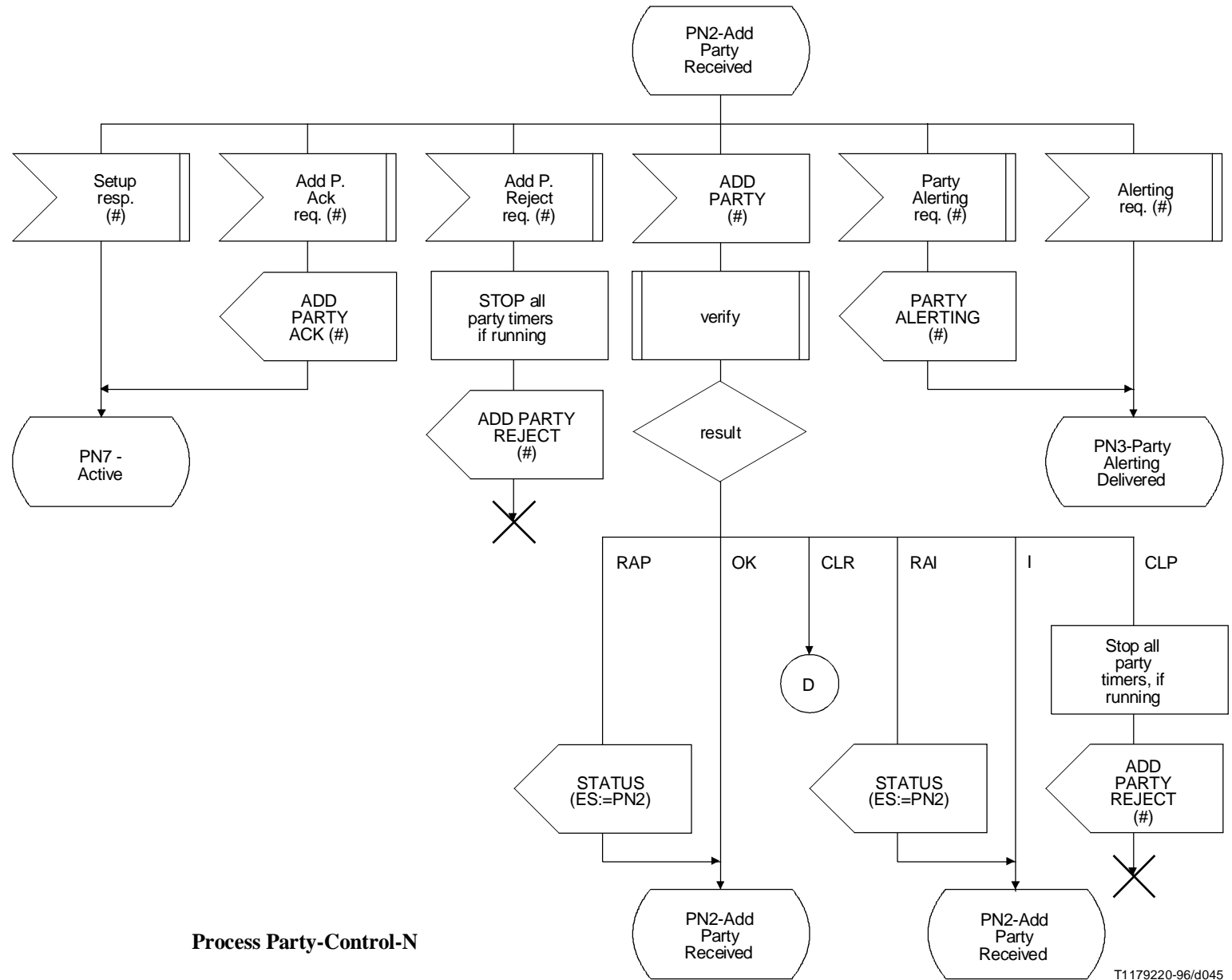**Process Party-Control-N**

(Sheet 3 of 13)

Process Party-Control-N

(Sheet 4 of 13)

Process Party-Control-N

(Sheet 5 of 13)

T1173320-95/d044

PN2-Add
Party
Received

| Setup resp. (#) | Add P. Ack req. (#) | Add P. Reject req. (#) | ADD PARTY (#) | Party Alerting req. (#) | Alerting req. (#) |

ADD
PARTY
ACK (#)

STOP all
party timers
if running

verify

PARTY
ALERTING
(#)

PN7 -
Active

ADD PARTY
REJECT
(#)

result

PN3-Party
Alerting
Delivered

✕

RAP   OK   CLR   RAI   I   CLP

D

Stop all
party
timers, if
running

STATUS
(ES:=PN2)

STATUS
(ES:=PN2)

ADD
PARTY
REJECT
(#)

✕

PN2-Add
Party
Received

PN2-Add
Party
Received

Process Party-Control-N

T1179220-96/d045

Process Party-Control-N

(Sheet 7 of 13)

Process Party-Control-N

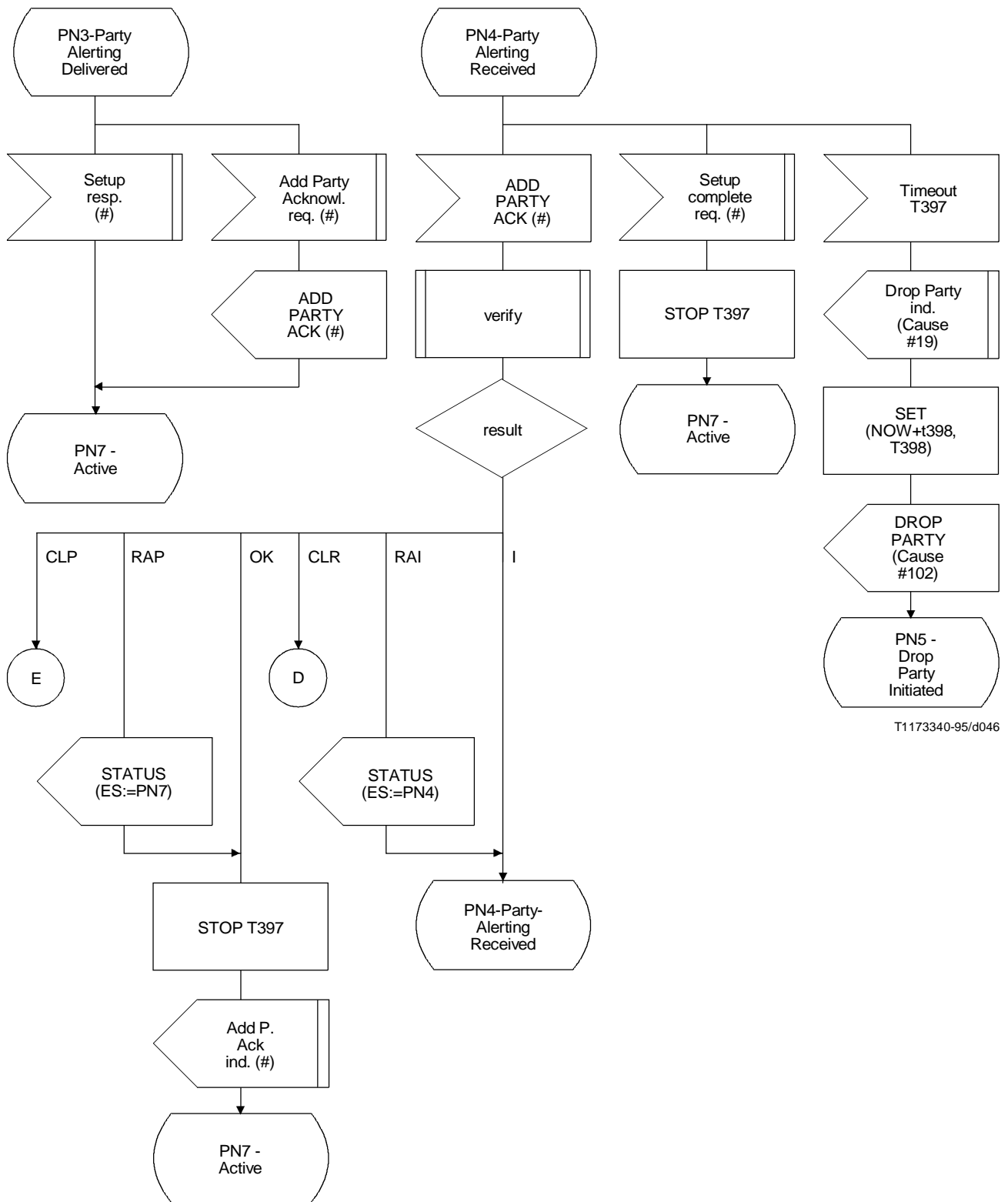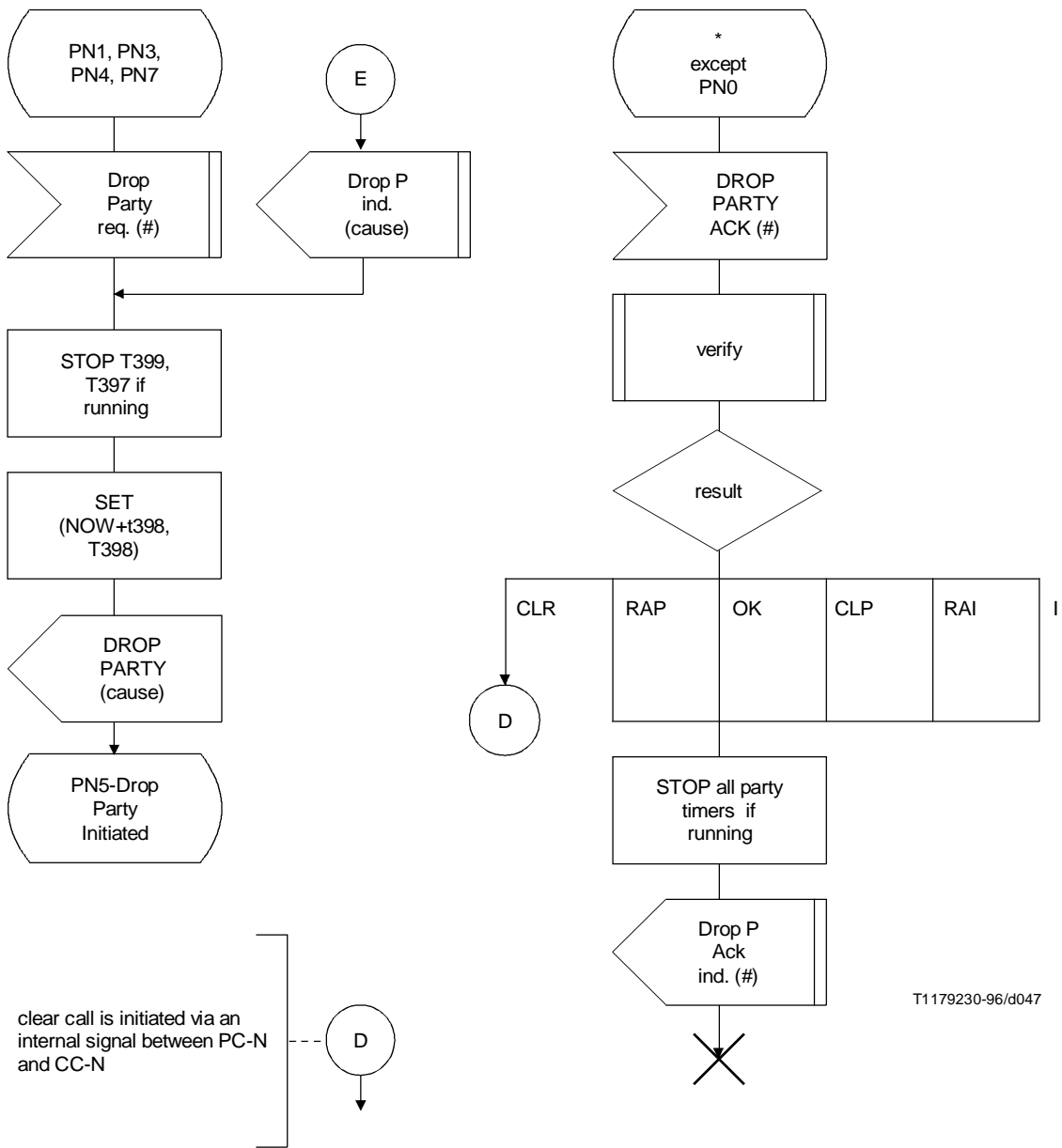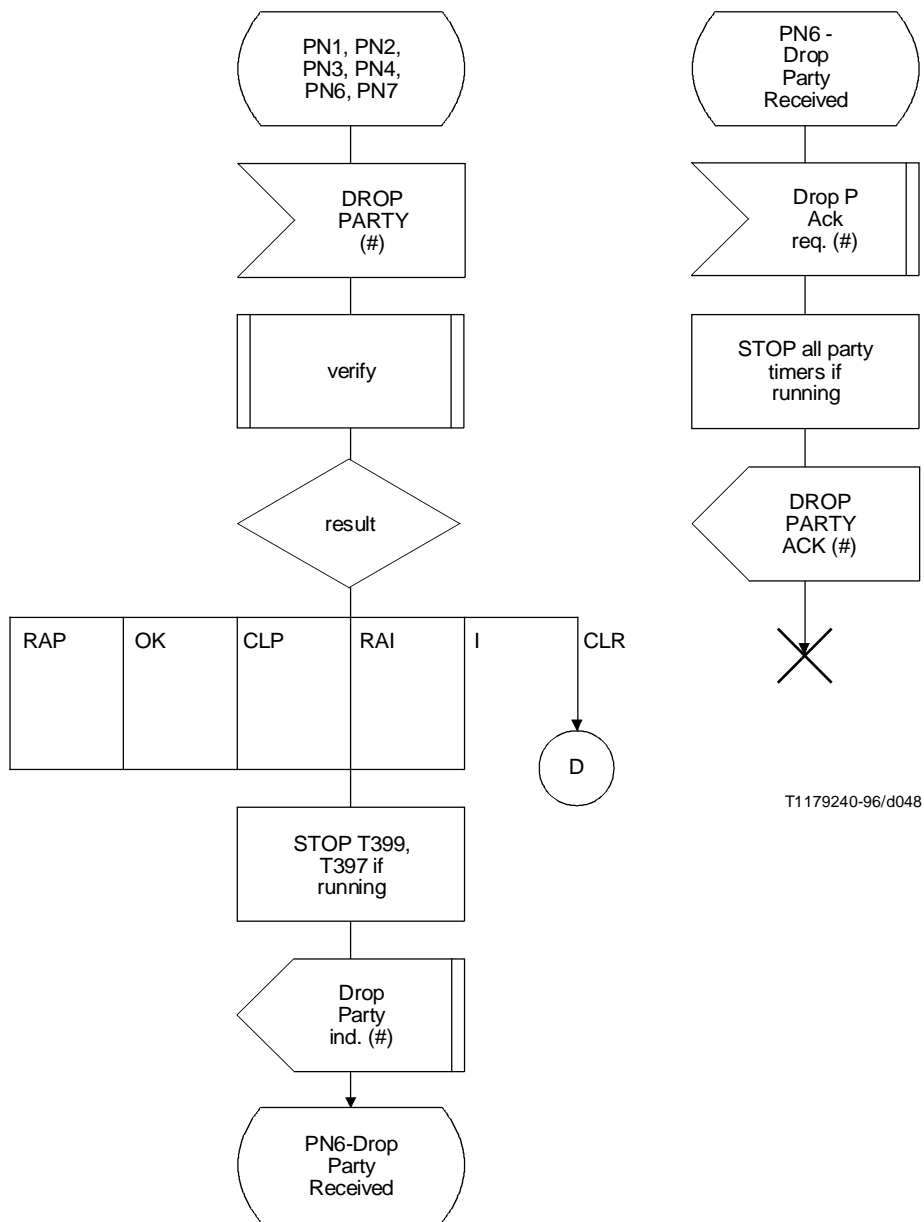(Sheet 8 of 13)

Process Party-Control-N

(Sheet 9 of 13)
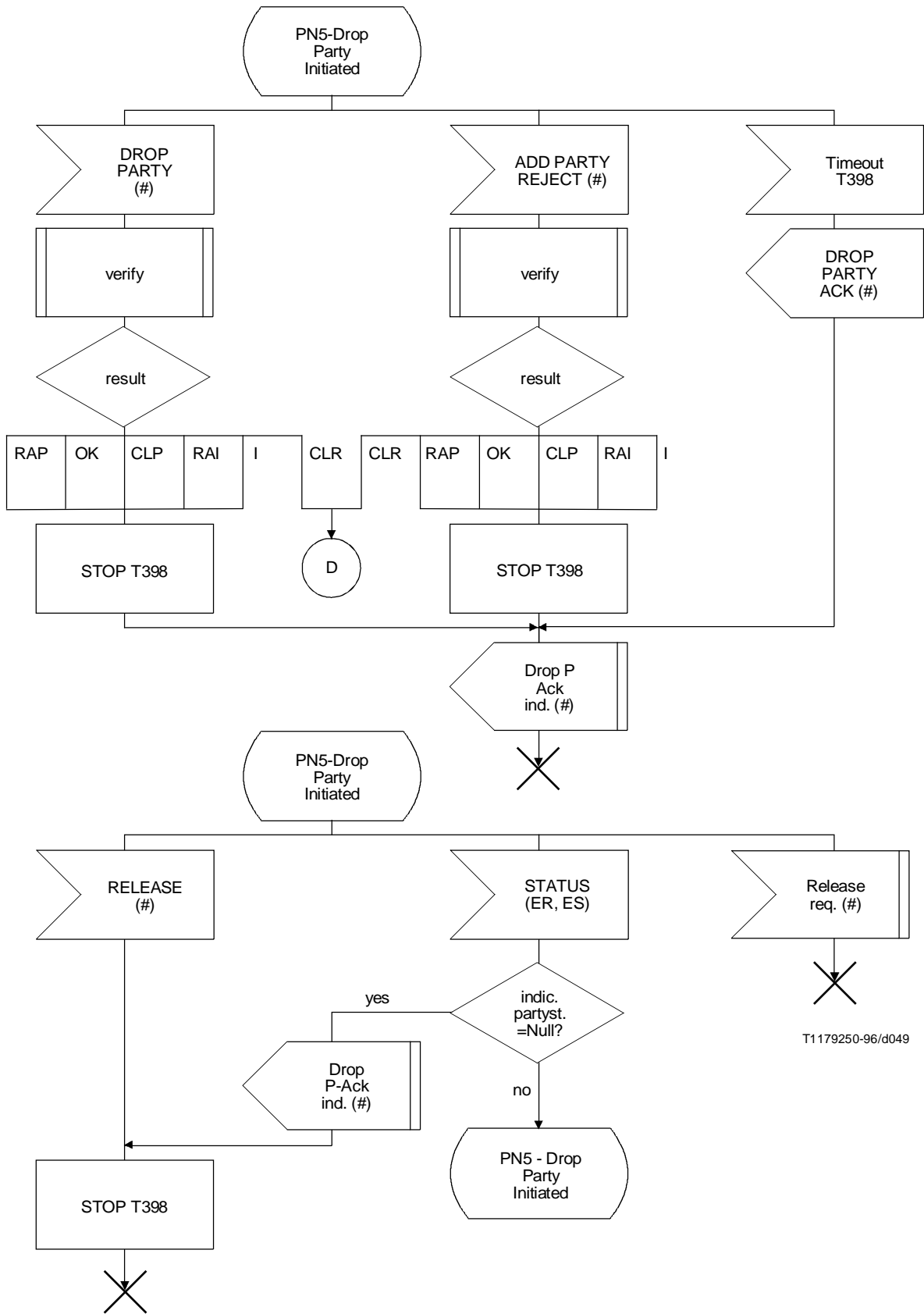
Process Party-Control-N

(Sheet 10 of 13)
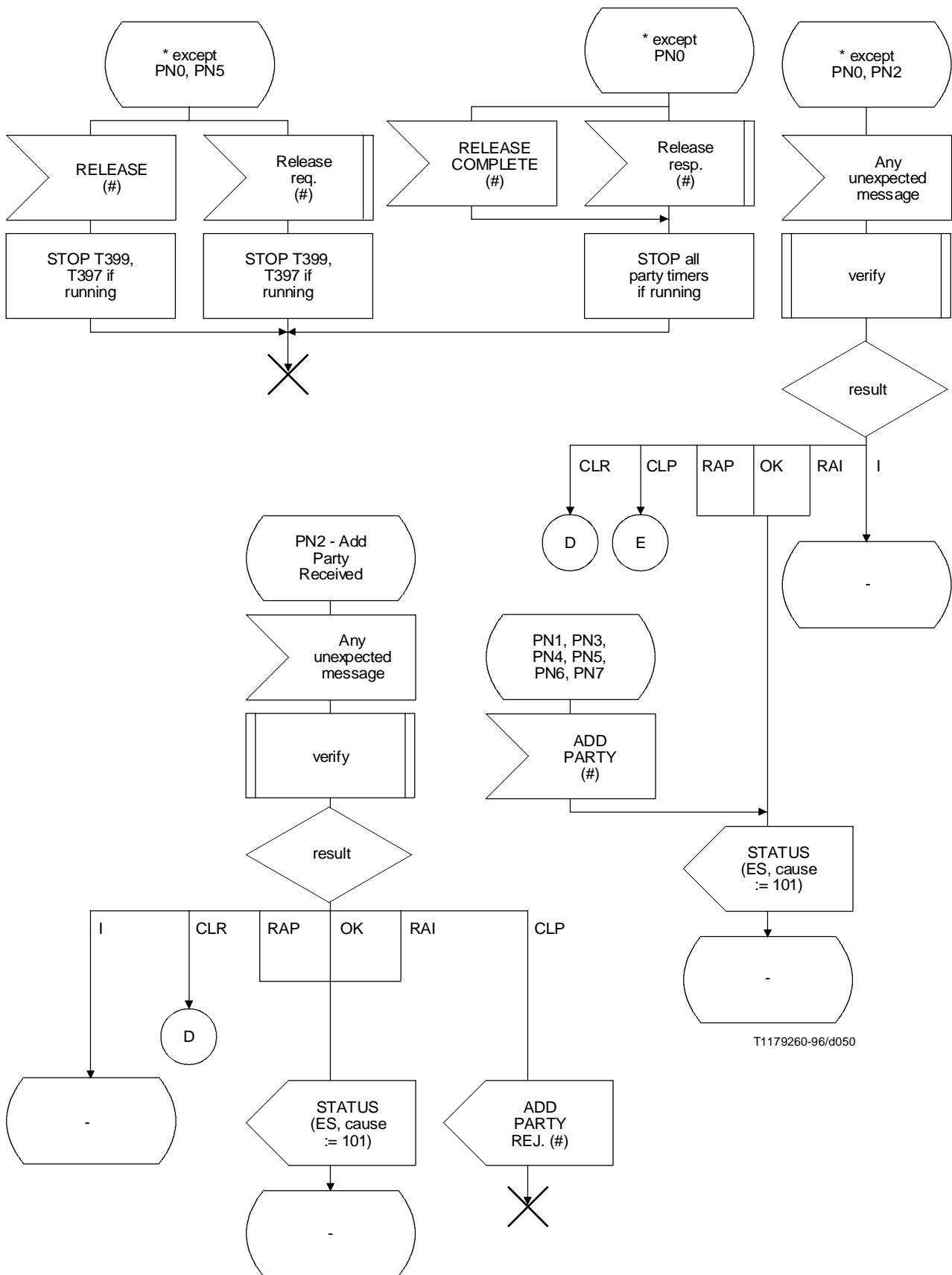
Process Party-Control-N

(Sheet 11 of 13)
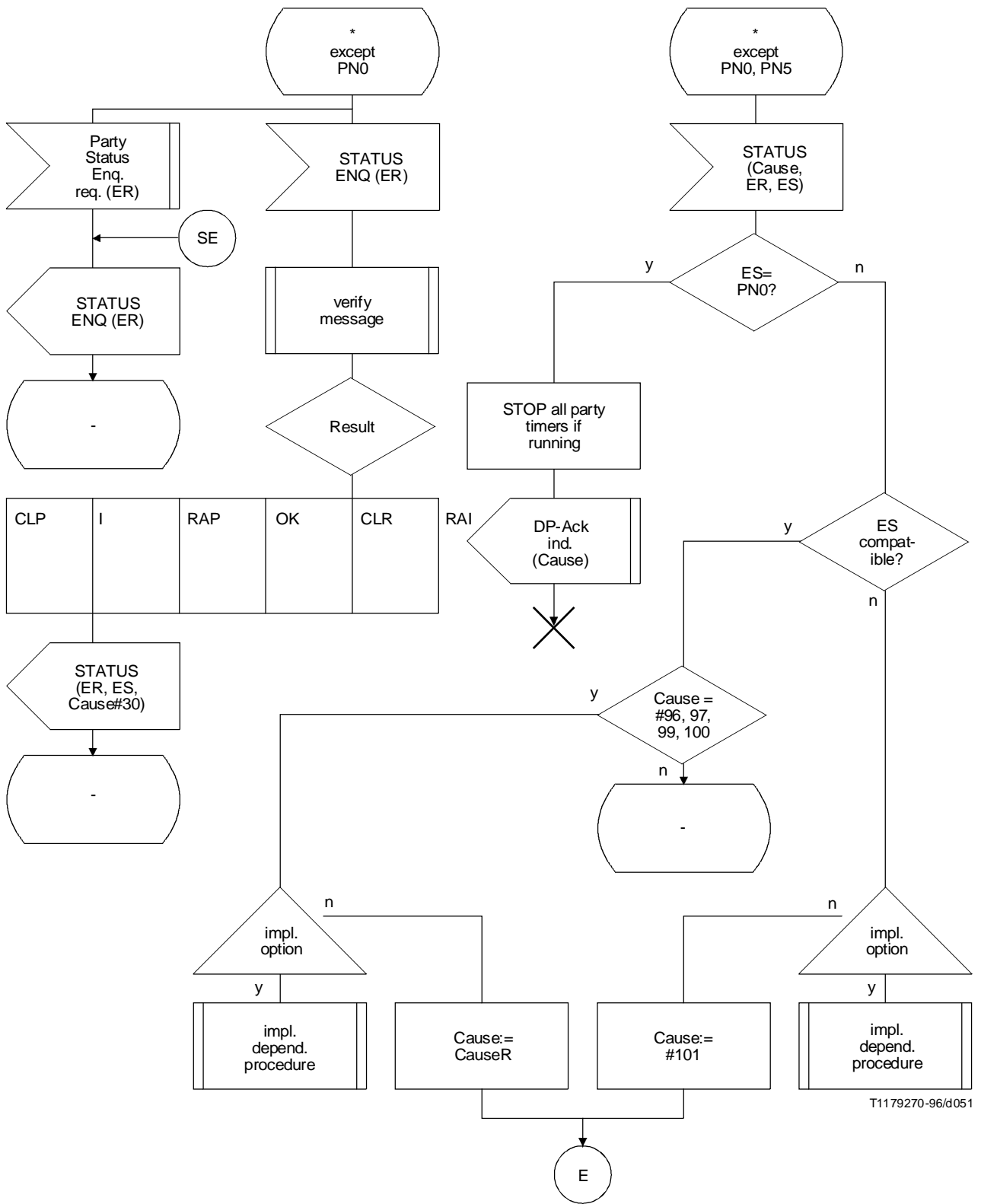
Process Party-Control-N

(Sheet 12 of 13)

PN0 -
Null

STATUS
ENQ (ER)

verify
message

Result

CLP	I	RAP	OK	CLR	RAI

Cause:=
#30

STATUS
(ER,
ES=PN0,
Cause)

STATUS
(Cause,
ER, ES)

ES=
PN0?

y

n

Cause:=
#101

DROP PARTY
ACKNOWL.
(Cause, #)

T1179280-96/d052
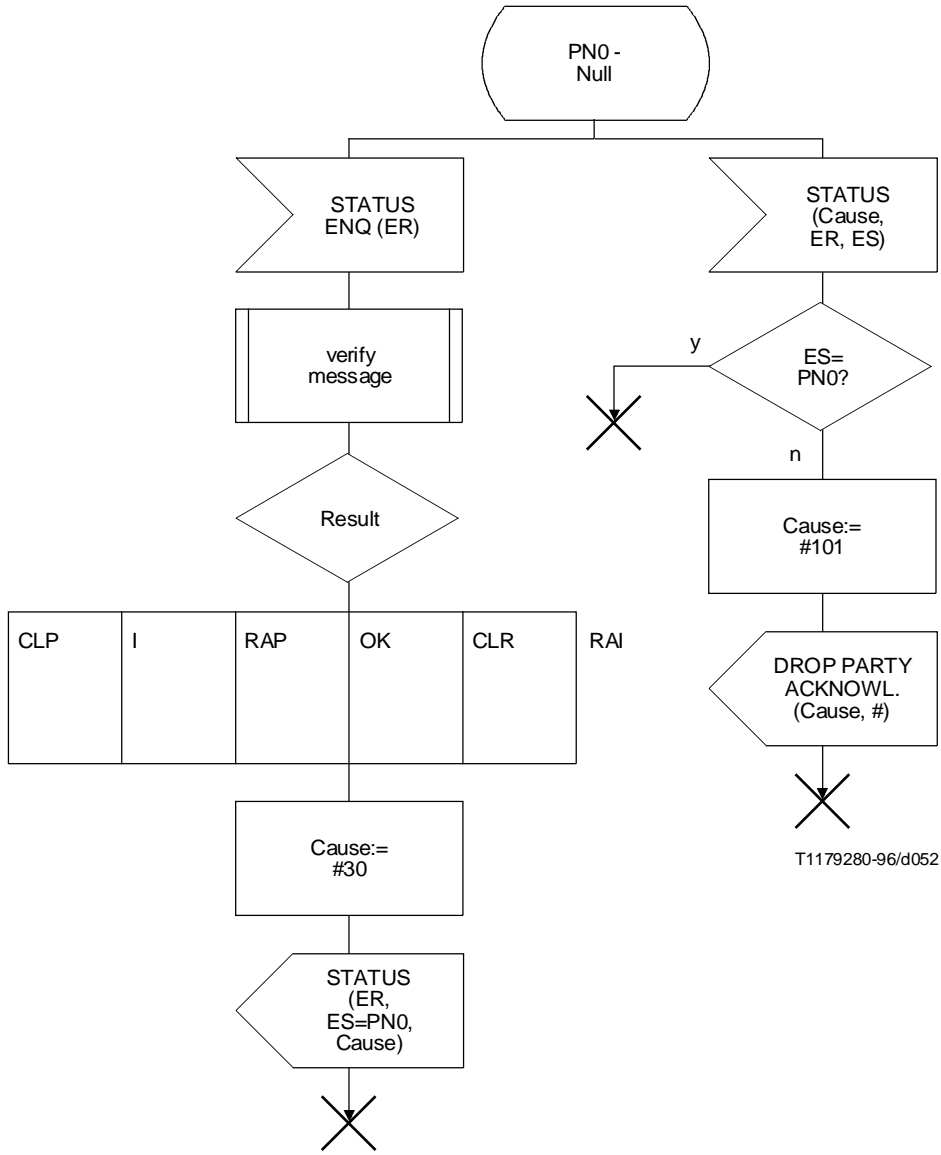
Process Party-Control-N

(Sheet 13 of 13)

F.2   SYSTEM Q.2971 User Side

F.2.1   SYSTEM DIAGRAM – User Side


```
[PrimList-1]              From -AP
[PrimList-2]              To-AP
                                            Q.2971-U
[PrimList-3]              From -SAAL
[PrimList-4]              To-SAAL
                                            T1179290-96/d053
```
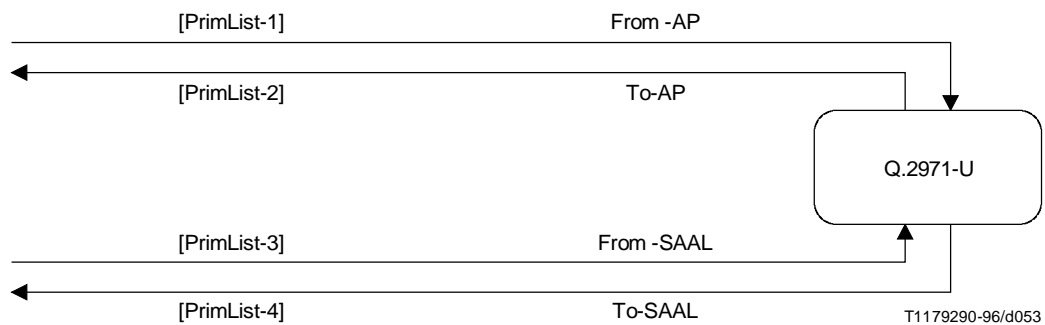
AP   Application Process

Prim list   List of Primitives
                (see Coord-U process)


```
BLOCK Q.2971-U  - User Side

                                      CCtoPC      Party-Control-U
                                                  (0, P)
                                      PCtoCC

                        CDtoCC        Call-Control-U
                                      (0, N)
                        CCtoCD        incl. Party-Coord.

From-AP

To-AP
                        CDtoRS        Reset-Start-U
              Co-ord-U                (1, 1)
              (1, 1)    RStoCD

From-SAAL

To-SAAL
                        CDtoRR        Reset-
                                      Response-U
                        RRtoCD        (1, 1)
```

T1173420-95/d054
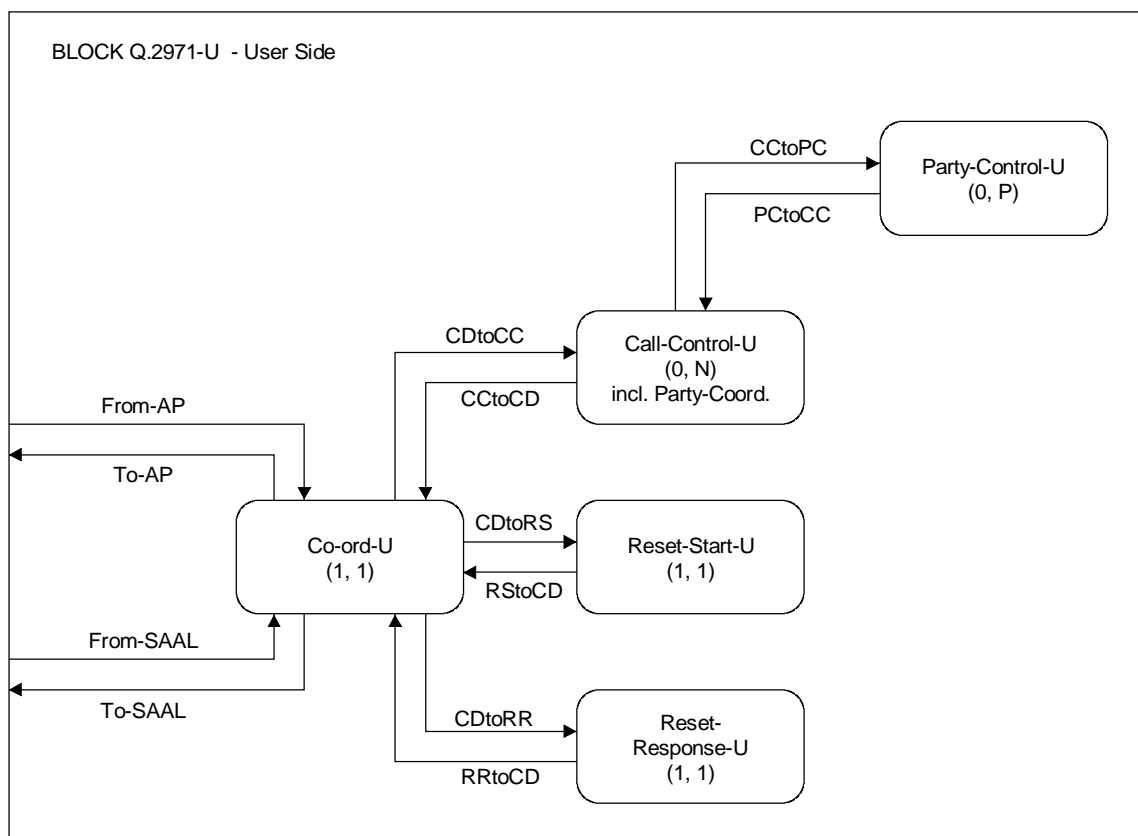
AP   Application Process
CC   Call Control
CD   Co-ord Process
PC   Party Control
RR   Reset-Response
RS   Reset-Start

BLOCK Q.2971-U - User Side
Lists of Primitives and Signals

[SigList-7] → Party-Control-U (0, P)
[SigList-8]

[SigList-1] → Call-Control-U (0, N) incl. Party-Coord.
[SigList-2]

From-AP [PrimList-1]

To-AP [PrimList-2]

Co-ord-U (1, 1)

[SigList-3] → Reset-Start-U (1, 1)
[SigList-4]

From-SAAL [PrimList-3]

To-SAAL [PrimList-4]

[SigList-5] → Reset-Response-U (1, 1)
[SigList-6]
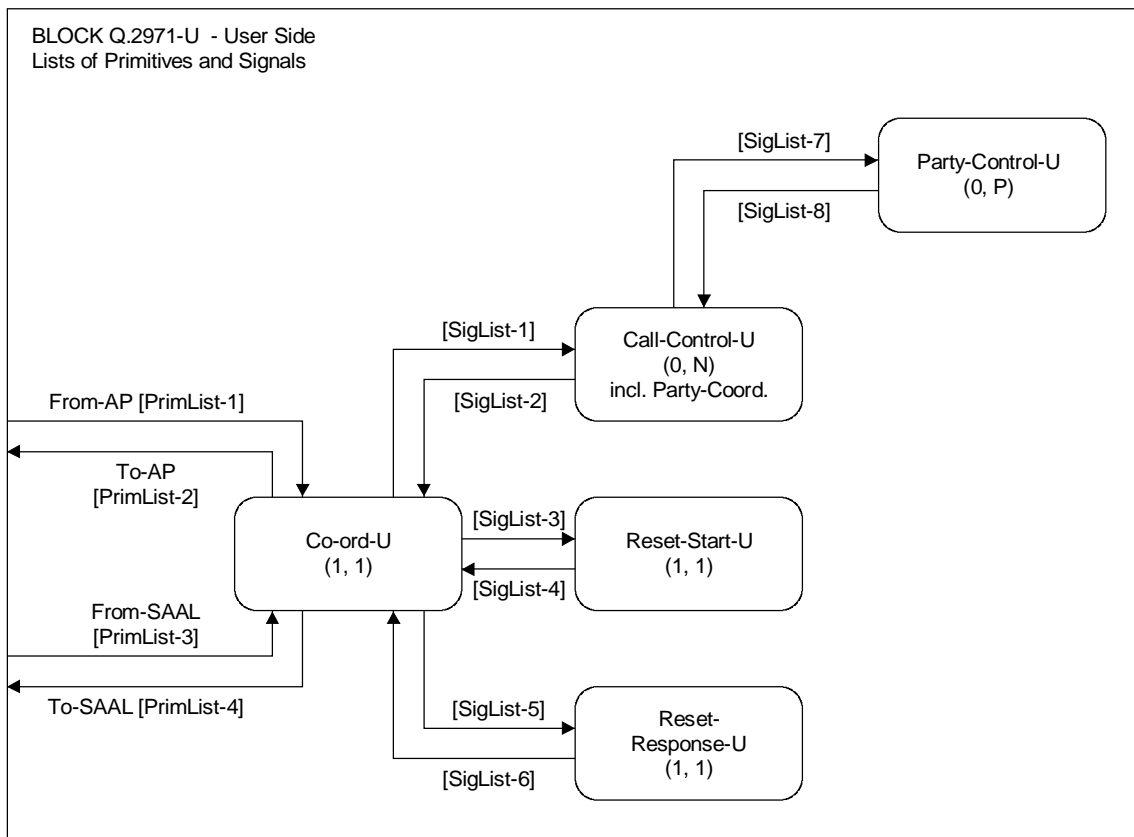
T1173430-95/d055

AP   Application Process
PrimList   List of Primitives
SigList   List of Signals

F.2.2 Symbols and abbreviations definitiv

F.2.2.1 Acronyms

See Annex A/Q.2931 and Annex J/Q.2931.

Additional Acronyms:

AP:=   – Application Process (in case of process)
        – Add Party (in case of messages and signals)

CS:=   Call State

CLP:=   Clear Party

CLR:=   Clear Call

ER:=   Endpoint Reference

ES:=   Endpoint State (=Party State)

I:=   Ignore

n:=   no

PC:=   Party Control

pmp:=   point-to-multipoint

pt-pt:= point-to-point

RAI:=   Report Status and Ignore

RAP:=   Report Status and Proceed

RC:=   RELEASE COMPLETE

SE:=   Status Enquiry

TOC:=   Type of Call/Connection

y:=   yes

F.2.2.2   List of processes

Co-ord-U	=	Coordination function for all DSS 2 calls and for the Reset-Start-U and Reset-Response-U processes.
Call-Control-U	=	Process that performs the call/connection-specific signalling functions, and the coordination function for the party-control-U processes of a call/connection.
Reset-Start-U	=	Process that starts the RESTART procedure on the user side.
Reset-Response-U	=	Process that responds to a RESTART message on the user side.
Party-Control-U	=	Process that performs the party-specific signalling functions of a party within a call/connection.

F.2.2.3   Lists of states

F.2.2.3.1   Co-ord-U

–   CU0 – AAL Connection Released

–   CU1 – AAL Awaiting Establish

–   CU2 – AAL Awaiting Release

–   CU3 – AAL Connection Established

F.2.2.3.2   Call-Control-U

See clause 2/Q.2931.

F.2.2.3.3   Reset-Start-U

–   Rest-U0 – Null

–   Rest-U1 – Restart Request

F.2.2.3.4   Reset-Response-U

–   Rest-U0 – Null

–   Rest-U2 – Restart

F.2.2.3.5   Party-Control-U

–   PU0 – Null

–   PU1 – Add Party Initiated

–   PU2 – Add Party Received

–   PU3 – Party Alerting Delivered

–   PU4 – Party Alerting Received

–   PU5 – Drop Party Initiated

–   PU6 – Drop Party Received

–   PU7 – Active

F.2.2.4   Lists of primitives

F.2.2.4.1   [PrimList-1] (from AP to Co-ord-U)

See Annex A/Q.2931, in addition:

- Add Party req.
- Add Party Acknowledge req.
- Add Party Reject req.
- Party Alerting req.
- Drop Party req.
- Drop Party Acknowledge req.
- Status Enquiry req.

F.2.2.4.2   [PrimList-2] (from Co-ord-U to AP)

See Annex A/Q.2931, in addition:

- Add Party ind.
- Add Party Acknowledge ind.
- Add Party Reject ind.
- Party Alerting ind.
- Drop Party ind.
- Drop Party Acknowledge ind.
- Party Status ind.

F.2.2.4.3   [PrimList-3] (from S-AAL to Co-ord-U)

See Annex A/Q.2931.

F.2.2.4.4   [PrimList-4] (from Co-ord-U to S-AAL)

See Annex A/Q.2931.

F.2.2.5   Lists of signals

F.2.2.5.1   [SigList-1] (from Co-ord-U to Call-Control-U)

See Annex A/Q.2931, in addition:

- Party-related signals corresponding to primitives listed in F.2.2.4.1 above.
- Additional party-related messages:
    - ADD PARTY
    - ADD PARTY ACKNOWLEDGE
    - ADD PARTY REJECT
    - PARTY ALERTING
    - DROP PARTY
    - DROP PARTY ACKNOWLEDGE

F.2.2.5.2   [SigList-2] (from Call-Control-U to Co-ord-U)

See Annex A/Q.2931, in addition:

- Party-related signals corresponding to primitives listed in F.2.2.4.2 above.
- Additional party-related messages as in F.2.2.5.1 above.