INTERNATIONAL TELECOMMUNICATION UNION

CCITT

THE INTERNATIONAL
TELEGRAPH AND TELEPHONE
CONSULTATIVE COMMITTEE

Q.785

SPECIFICATIONS
OF SIGNALLING SYSTEM No. 7

ISUP PROTOCOL TEST SPECIFICATION
FOR SUPPLEMENTARY SERVICES

Recommendation Q.785

Geneva, 1991

FOREWORD

The CCITT (the International Telegraph and Telephone Consultative Committee) is a permanent organ of the International Telecommunication Union (ITU). CCITT is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The Plenary Assembly of CCITT which meets every four years, establishes the topics for study and approves Recommendations prepared by its Study Groups. The approval of Recommendations by the members of CCITT between Plenary Assemblies is covered by the procedure laid down in CCITT Resolution No. 2 (Melbourne, 1988).

Recommendation Q.785 was prepared by Study Group XI and was approved under the Resolution No. 2 procedure on the 10th of September 1991.

_____

CCITT NOTE

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

Recommendation Q.785

ISUP PROTOCOL TEST SPECIFICATION
FOR SUPPLEMENTARY SERVICES

1   Introduction

This Recommendation contains a detailed set of tests for the supplementary services supported by Signalling System No. 7 Integrated Services Digital Network User Part (ISUP).

Details of the supplementary services supported by ISUP can be found in *Blue Book* (1988) Recommendation Q.730. It should be noted that this test Recommendation covers those services which can be regarded as stable and clearly specified in *Blue Book* (1988) Recommendation Q.730.

This Recommendation also covers supplementary services supported by Recommendation Q.767.

The basic rules for the test specification can be found in Recommendation Q.780.

2   Objective of the test specification

The objective of this test specification is to check that the ISUP protocol supported by a given implementation has the ability to correctly convey the necessary signalling information to support the supplementary services specified in *Blue Book* (1988) Recommendation Q.730 and Recommendation Q.767 (1991). Therefore this test list only covers areas of supplementary services where there is a direct impact on the ISUP protocol. However some call control functions are also verified, i.e. the transfer of speech/information is possible.

It should be noted that this test specification does not attempt to test the operation of the supplementary services (end-to-end function tests), as these tests are outside the scope of this test specification.

This test specification does not intend to provide exhaustive testing of Blue Book (1988) Recommendation Q.730 and Recommendation Q.767 (1991) supplementary services, but does intent to provide a reasonable level of confidence that the protocol required to support *Blue Book* (1988) Recommendation Q.730 and Recommendation Q.767 (1991) supplementary services has been implemented at a signalling point.

This test specification does not address interactions between supplementary services.

3   General principles of tests

The tests are described as "validation" tests or "validation" and "compatibility" tests. Each test description indicates in the field "type of test" whether the test is a "validation" (VAT) or a "validation" and "compatibility" (VAT & CPT) test. In addition to protocol testing, some call control functions are also checked, e.g. that the transfer of speech/information is possible.

The test specification assumes a tested MTP for compatibility tests.
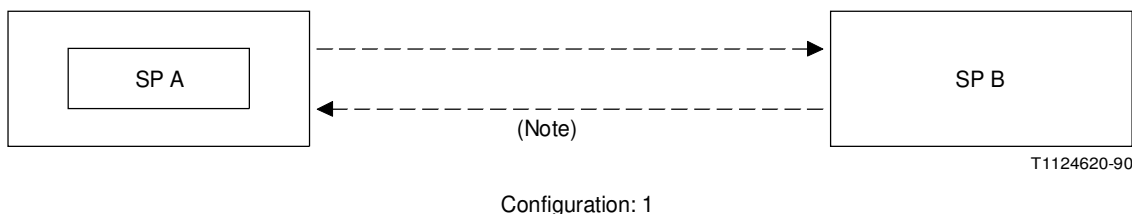

4   Test environment

4.1   *Signalling relation*

A stable signalling relation is required between "SP A" and "SP B" in order to carry out effective tests. In addition telephony circuits are required for some of the tests.

4.2 *Configuration*

Only one configuration is required for the performance of these tests. This is shown in Figure 1/Q.785.

Configuration: 1

Note – The arrows indicate a signalling relation, and any necessary telephone/data circuits.

FIGURE 1/Q.785

Test configuration for ISUP protocol tests for supplementary services

4.3 *Provision of stimulus at a signalling point*

This test specification requires the setting of various ISUP parameters at both the SP A (SP under test) and SP B. The setting of these parameters should be performed by an "appropriate stimulus" at the appropriate SP.

No attempt is made in this Recommendation to specify the form of the "appropriate stimulus", but instead the functional requirements are stated in general terms.

The stimulus should be capable of setting the appropriate fields, parameters, and indicators in the ISUP *Blue Book* (1988) Recommendation Q.763 in the correct manner to support the supplementary services of *Blue Book* (1988) Recommendation Q.730. This equally applies to the amendments made by Recommendation Q.767 (1991) to *Blue Book* (1988) Recommendation Q.763 and to the supplementary services as described in Recommendation Q.767 (1991).

It should be observed that depending on a number of factors the functions of the "appropriate stimulus" could be performed by various mechanisms. A number of possibilities are listed below :

The stimulus could be:

i)   an intrinsic part of a signalling point;

ii)   provided by a network connected to the signalling point;

iii)   provided by a "test box" connected to the signalling point;

iv)   provided by exchange data set at the signalling point;

v)   provided by user-network signalling.

This list is not intended to be exhaustive. The choice of stimulus is a matter for the Administration concerned and does not necessarily require bilateral agreement.

4.4 *Checking of correct reception of parameters at signalling point under test*

This test specification requires the checking of the correct reception of various ISUP parameters at SP A (SP under test).

No attempt is made in this Recommendation to specify how to perform this function, however depending on a number of factors the function of the "checking of receiving correctly of messages and parameters" could be performed by various mechanisms. A number of possibilities are listed below.

The check could be performed by:

i)   an intrinsic part of the SP A;

ii)   a network connected to SP A;

iii) a "test box" connected to SP A;

iv)   monitoring/printout at the SP A;

v)   monitoring of the messages and information elements at the user-network interface.

The list is not intended to be exhaustive. The choice of the method is a matter for Administration concerned and does not necessarily require bilateral agreement.

4.5   *Check table*

Many test scripts within the test specification include a check table. The check table lists specific indicators which must be checked.

The check table does not necessarily include all the parameters and indicators that should be carried within any message.

5   **ISUP protocol test list for supplementary services**

All tests may be validation tests. Tests marked "*" are compatibility tests. Tests marked "F.S" are for further study.

1   *User-to-User Signalling (UUS)*

    1.1   User-to-User Signalling service 1

        1.1.1   Implicit request

*   1.1.1.1.1   Successful – UUI in the forward message: sent

*   1.1.1.1.2   Successful – UUI in the forward message: received

*   1.1.1.2.1   Successful – UUI in the backward message: sent

*   1.1.1.2.2   Successful – UUI in the backward message: received

*   1.1.1.3.1   Unsuccessful – Explicit network rejection: sent

*   1.1.1.3.2   Unsuccessful – Explicit network rejection: received

        1.1.2   Explicit request – F.S

2   *Closed User Group (CUG)*

    2.1   Closed User Group (CUG) decentralized

*   2.1.1   CUG call with outgoing access allowed: sent

*   2.1.2   CUG call, with outgoing access allowed: received

*   2.1.3   CUG call, with outgoing access not allowed, to a network offering the CUG supplementary service: sent

*   2.1.4   CUG call, with outgoing access not allowed, to a network offering the CUG supplementary service: received

*   2.1.5   CUG call, with outgoing access not allowed, to a network not offering the CUG supplementary service: sent

*   2.1.6   CUG call, with outgoing access not allowed, to a network not offering the CUG supplementary service: received

*   2.1.7   CUG call, international interlock code included: sent

*   2.1.8   CUG call, international interlock code included: received

    2.2   Closed User Group (CUG) centralized

    For further study.

3 *Calling Line Identification (CLI)*

*   3.1.1 CLIP – network provided: sent

*   3.1.2 CLIP – network provided: received

*   3.2.1 CLIP – user provided: sent

*   3.2.2 CLIP – user provided: received

*   3.3.1 CLIR – network provided: sent

*   3.3.2 CLIR – network provided: received

*   3.4.1 CLIR – user provided: sent

*   3.4.2 CLIR – user provided: received

*   3.5.1 CLI – not available: sent

*   3.5.2 CLI – not available: received

*   3.6.1 CLI – not sent in IAM, available with INR/INF

*   3.6.2 CLI – not received in IAM, available with INR/INF

*   3.6.3 CLI – not sent in IAM, not available with INR/INF

*   3.6.4 CLI – not received in IAM, not available with INR/INF

        3.7.1 CLI – international address included: sent

        3.7.2 CLI – international address included: received

4 *Direct Dialling In*

The Direct Dialling In (DDI) service has no impact on the ISUP protocol. Therefore no test scripts are provided for this supplementary service.

5 *Call Forwarding*

Further study.

6 *Connected Line Identification (Col)*

Note – These tests are only applicable to White Book Recommendation Q.767.

*   6.1.1 COL – request: sent

*   6.1.2 COL – request: received

*   6.2.1 COLP – network provided: sent

*   6.2.2 COLP – network provided: received

*   6.3.1 COLP – user provided: sent

*   6.3.2 COLP – user provided: received

*   6.4.1 COLR – network provided: sent

*   6.4.2 COLR – network provided: received

*   6.5.1 COLR – user provided: sent

*   6.5.2 COLR – user provided: received

*   6.6.1 COL – not available: sent

*   6.6.2 COL – not available: received

        6.7.1 COL – international address included: sent

        6.7.2 COL – international address included: received

*   6.8.1 COL – received, but not requested

TEST NUMBER: 1.1.1.1.1

REFERENCE: Q.730, § 2.2.1.6; Q.767

TITLE: User-to-User Signalling service 1 – Implicit request

SUBTITLE: Successful – UUI in the forward messages: sent

PURPOSE: To verify that user-to-user information can be correctly sent in the forward call control messages

PRE-TEST CONDITIONS: Arrange the stimulus such that the IAM and REL generated at SP A contains a UUI parameter

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
    SP  A                                                   SP  B

               case a)
    IAM   (UUI)                    – – – – – – – – – –>
                                   <– – – – – – – – – –        ACM
                                   <– – – – – – – – – –        (CPG)
                                   <– – – – – – – – – –        ANM
    REL   (UUI)                    –– –– –– –– ––>
                                   <– – – – – – – – – –        RLC


               case b)
    IAM   (UUI)                    – – – – – – – – – –>
                                   <– – – – – – – – – –        CON
    REL   (UUI)                    – – – – – – – – – –>
                                   <– – – – – – – – – –        RLC
```

TEST DESCRIPTION

1.	Make a call from SP A to SP B.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS A UUI PARAMETER INCLUDED IN THE IAM BY SP A?
4.	CHECK B: WAS A UUI PARAMETER INCLUDED IN THE REL BY SP A?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM and *REL*

User-to-user Information parameter
Check that the parameter exists.

TEST NUMBER: 1.1.1.1.2

REFERENCE: Q.730, § 2.2.1.6; Q.767

TITLE: User-to-User Signalling service 1 – Implicit request

SUBTITLE: Successful – UUI in the forward messages: received

PURPOSE: To verify that user-to-user information can be correctly received in the forward call control messages

PRE-TEST CONDITIONS: Arrange the stimulus such that the IAM and REL generated at SP A contains a UUI parameter

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
   SP  A                                                    SP  B

                case a)
                                    <- - - - - - - - - -     IAM  (UUI)
   ACM                              - - - - - - - - - ->
   (CPG)                            - - - - - - - - - ->
   ANM                              - - - - - - - - - ->
                                    <- - - - - - - - - -     REL  (UUI)
   RLC                              - - - - - - - - - ->

                case b)
                                    <- - - - - - - - - -     IAM  (UUI)
   CON                              - - - - - - - - - ->
                                    <- - - - - - - - - -     REL  (UUI)
   RLC                              - - - - - - - - - ->
```

TEST DESCRIPTION

1.	Make a call from SP B to SP A.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS A UUI PARAMETER IN THE IAM CORRECTLY RECEIVED BY SP A?
4.	CHECK B: WAS A UUI PARAMETER IN THE REL CORRECTLY RECEIVED BY SP A?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM and *REL*

User-to-user Information parameter
Check that the parameter exists.

TEST NUMBER: 1.1.1.2.1

REFERENCE: Q.730, § 2.1.3; Q.767

TITLE: User-to-User Signalling service 1 – Implicit request

SUBTITLE: Successful – UUI in the backward messages: sent

PURPOSE: To verify that user-to-user information can be correctly sent in the backward call control messages

PRE-TEST CONDITIONS:
a) Arrange the stimulus such that the IAM generated at SP B contains a UUI parameter
b) Arrange the stimulus such that the backward messages generated at SP A contains a UUI parameter

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
  SP  A                                                      SP  B

              case a)
                                  <- - - - - - - - - - -      IAM  (UUI)
  ACM*(UUI)                       - - - - - - - - - ->    *:  UUI can be included in ACM
                                                             if received from accesss
  (CPG  (UUI))                    - - - - - - - - - ->
  ANM  (UUI)                      - - - - - - - - - ->
  REL  (UUI)                      - - - - - - - - - ->
                                  <- - - - - - - - - -        RLC
              case b)
                                  <- - - - - - - - - -        IAM  (UUI)
  CON  (UUI)                      - - - - - - - - - ->
  REL  (UUI)                      - - - - - - - - - ->
                                  <- - - - - - - - - -        RLC
```

TEST DESCRIPTION

1.	Make a call from SP B to SP A.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS A UUI PARAMETER IN THE IAM CORRECTLY RECEIVED BY SP A?
4.	CHECK B: WERE ANY UUI PARAMETERS INCLUDED IN THE BACKWARD MESSAGES BY SP A?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

ACM, CPG, ANM, CON and *REL*

User-to-user Information parameter
Check that the parameter exists.

TEST NUMBER: 1.1.1.2.2

REFERENCE: Q.730, § 2.1.3; Q.767

TITLE: User-to-User Signalling service 1 – Implicit request

SUBTITLE: Successful – UUI in the backward messages: received

PURPOSE: To verify that user-to-user information can be correctly received in the backward call control messages.

PRE-TEST CONDITIONS:

a)   Arrange the stimulus such that the IAM generated at SP A contains a UUI parameter.

b)   Arrange the stimulus such that the backward messages generated at SP B contains UUI parameter.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
 SP  A                                                      SP  B
    case a)

 IAM (UUI)              – – – – – – – – – – –>
                        <– – – – – – – – – –        ACM* (UUI)    *: UUI can be
                        <– – – – – – – – – –        (CPG (UUI))      included in  ACM
                        <– – – – – – – – – –        ANM (UUI)        if  received from
                         < – – – – – – – – –        REL (UUI)        access.
 RLC                    – – – – – – – – – –>
      case b)
 IAM (UUI)              – – – – – – – – – – –>
                        <– – – – – – – – – –                        CON (UUI)
                        <– – – – – – – – – –                        REL (UUI)
 RLC                    – – – – – – – – – –>
```

TEST DESCRIPTION

1.	Make a call from SP A to SP B.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS A UUI PARAMETER INCLUDED IN THE IAM BY SP A?
4.	CHECK B: WERE ANY UUI PARAMETERS INCLUDED IN THE BACKWARD MESSAGES CORRECTLY RECEIVED BY SP A?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

ACM, CPG, ANM, CON and *REL*

User-to-User Information parameter

Check that the parameter exists.

TEST NUMBER: 1.1.1.3.1

REFERENCE: Q.767

TITLE: User-to-User Signalling service 1 – Implicit request

SUBTITLE: Unsuccessful – Explicit network rejection: sent

PURPOSE: To verify that the UUS service 1 explicit network rejection can be correctly sent.

PRE-TEST CONDITIONS:

a)   Arrange the stimulus such that the IAM generated at SP B contains a UUI parameter.

b)   Arrange the data at SP A such that the requested UUS service 1 is rejected by the network.

CONFIGURATION: 1	TYPE OF TEST: VAT and CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
  SP  A                                                            SP  B
     case a)

                               <– – – – – – – – – –         IAM (UUI)
  ACM                          – – – – – – – – – –>
  (CPG)                        – – – – – – – – – –>
  ANM                          – – – – – – – – – –>
                               <– – – – – – – – – –                REL
  RLC                          – – – – – – – – – –>
     case b)
                               <– – – – – – – – – –         IAM (UUI)
  CON                          – – – – – – – – – –>
                               <– – – – – – – – – –                REL
  RLC                          – – – – – – – – – –>
```

TEST DESCRIPTION

1.	Make a call from SP B to SP A.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE USER-TO-USER INDICATORS PARAMETER INCLUDED IN THE ACM (CON) BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS SET CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: CONFIRM THAT A UUI PARAMETER WAS NOT INCLUDED IN THE BACKWARD MESSAGES BY SP A?
6.	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

ACM or *CON*

User-to-User Indicators parameter

– Type: 1 (response)

– Service 1: 00 (no information)

– Service 2: 00 (no information)

– Service 3: 00 (no information)

– Network discard indicator: 1 (UUI discarded by the network)

TEST NUMBER: 1.1.1.3.2		

REFERENCE: Q.767

TITLE: User-to-User Signalling service 1 – Implicit request

SUBTITLE: Unsuccessful – Explicit network rejection: received

PURPOSE: To verify that the UUS service 1 explicit network rejection can be correctly received.

PRE-TEST CONDITIONS::
a) Arrange the stimulus such that the IAM generated at SP A contains a UUI parameter.
b) Arrange the data at SP B such that the requested UUS service 1 is rejected by the network.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
SP  A                                                          SP  B
      case a)

IAM (UUI)               – – – – – – – – – –>
                        <– – – – – – – – – –                   ACM
                        <– – – – – – – – – –                   (CPG)
                        <– – – – – – – – – –                   ANM
REL                     – – – – – – – – – –>
                        <– – – – – – – – – –                   RLC
      case b)
IAM (UUI)               – – – – – – – – – –>
                        <– – – – – – – – – –                   CON
REL                     – – – – – – – – – –>
                        <– – – – – – – – – –                   RLC
```

TEST DESCRIPTION

1.	Make a call from SP A to SP B.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE USER-TO-USER INDICATORS PARAMETER RECEIVED IN THE ACM (CON) BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

ACM or *CON*

User-to-User Indicators parameter
– Type: 1:   1 (response)
– Service 1: 00 (no information)
– Service 2: 00 (no information)
– Service 3: 00 (no information)
– Network discard indicator: 1 (UUI discarded by the network)

TEST NUMBER: 2.1.1	

REFERENCE: Q.730, § 3; Q.767

TITLE: Closed User Group – Decentralized

SUBTITLE: CUG call with outgoing access allowed: sent

PURPOSE: To verify that the parameters necessary for a CUG call with outgoing access allowed can be correctly sent (even if the receiving network does not offer the CUG supplementary service).

PRE-TEST CONDITIONS: Arrange the stimulus such that the IAM generated at SP A contains the optional forward call indicators parameter field with the CUG call indicator set to "CUG call, outgoing access allowed", and the CUG interlock code parameter field.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
   SP  A                                                        SP  B

   IAM                     – – – – – – – – – –>
                           <– – – – – – – – – –               ACM
                           - - - - - - - - - - -              Ring tone
                           <– – – – – – – – – –               ANM
   Connectivity            – – – – – – – – –                  Connectivity
   REL                     – – – – – – – – – –>
                           <– – – – – – – – – –               RLC
```

TEST DESCRIPTION

1. Make a call from SP A to SP B.

2. Record the message sequence and parameters using a signal monitor.

3. CHECK A: WAS THE OPTIONAL FORWARD CALL INDICATOR PARAMETER INCLUDED IN THE IAM BY SP A?

4. CHECK B: WAS THE CUG INTERLOCK CODE PARAMETER INCLUDED IN THE IAM BY SP A?

5. CHECK C: WERE THE PARAMETER FIELDS SET CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?

6. CHECK D: WAS THE CONNECTION ESTABLISHED?

7. CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?

Note – This test is valid even if SP B belongs to a network which does not offer the CUG supplementary service.

CHECK TABLE

IAM

1) *Optional Forward Call Indicators parameter*
   CUG Call Indicator: 10 (CUG call, outgoing access allowed)

2) *Closed User Group Interlock Code parameter*
   CUG Interlock Code: interlock code included

TEST NUMBER: 2.1.2

REFERENCE: Q.730, § 3; Q.767

TITLE: Closed User Group – Decentralized

SUBTITLE: CUG call with outgoing access allowed: received

PURPOSE: To verify that the parameters necessary for a CUG call with outgoing access allowed can be correctly received (even if the receiving network does not offer the CUG supplementary service).

PRE-TEST CONDITIONS: Arrange the stimulus such that the IAM generated at SP B contains the optional forward call indicators parameter field with the CUG call indicator set to "CUG call, outgoing access allowed", and the CUG interlock code parameter field.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
    SP  A                                                         SP  B


                          <– – – – – – – – – –          IAM
        ACM               – – – – – – – – – –>
        Ring tone         - - - - - - - - - -
        ANM               – – – – – – – – – –>
        Connectivity      – – – – – – – – –          Connectivity
                          <– – – – – – – – – –          REL
        RLC               – – – – – – – – – –>
```

TEST DESCRIPTION

1. Make a call from SP B to SP A.

2. Record the message sequence and parameters using a signal monitor.

3. CHECK A: WAS THE OPTIONAL FORWARD CALL INDICATORS PARAMETER RECEIVED IN THE IAM BY SP A?

4. CHECK B: WAS THE CUG INTERLOCK CODE PARAMETER RECEIVED IN THE IAM BY SP A?

5. CHECK C: WERE THE PARAMETER FIELDS CORRECTLY RECEIVED AS INDICATED IN THE CHECK TABLE BELOW?

6. CHECK D: WAS THE CONNECTION ESTABLISHED?

7. CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?

Note – This test is valid even if SP A belongs to a network which does not offer the CUG supplementary service.

CHECK TABLE

IAM

1) *Optional Forward Call Indicators parameter*
    CUG Call Indicator: 10 (CUG call, outgoing access allowed)

2) *Closed User Group Interlock Code parameter*
    CUG Interlock Code: interlock code included

TEST NUMBER: 2.1.3	

REFERENCE: Q.730, § 3; Q.767

TITLE: Closed User Group – Decentralized

SUBTITLE: CUG call with outgoing access not allowed, to a network offering the CUG supplementary service: sent

PURPOSE: To verify that the parameters necessary for a CUG call with outgoing access not allowed can be correctly sent.

PRE-TEST CONDITIONS:

a) SP A and SP B should belong to networks which offer the CUG supplementary service.

b) Arrange the stimulus such that the IAM generated at SP A contains the Optional Forward Call Indicators parameter set to "CUG call outgoing access not allowed", and a CUG interlock code that is acceptable at SP B.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
     SP  A                                                          SP  B

     IAM              – – – – – – – – – –>
                      <– – – – – – – – – –                  ACM
                      - - - - - - - - - - -                 Ring tone
                      <– – – – – – – – – –                  ANM
     Connectivity     – – – – – – – – –                     Connectivity
     REL              – – – – – – – – – –>
                      <– – – – – – – – – –                  RLC
```

TEST DESCRIPTION

1.	Make a call from SP A to SP B.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE OPTIONAL FORWARD CALL INDICATORS PARAMETER INCLUDED IN THE IAM BY SP A?
4.	CHECK B: WAS THE CUG INTERLOCK CODE PARAMETER INCLUDED IN THE IAM BY SP A?
5.	CHECK C: WERE THE PARAMETER FIELDS SET CORRECTLY BY SP A AS INDICATED IN THE CHECK TABLE BELOW?
6.	CHECK D: WAS THE CONNECTION ESTABLISHED?
7.	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM

1) *Optional Forward Call Indicators parameter*
   CUG Call Indicator: 11 (CUG call, outgoing access allowed)

2) *Closed User Group Interlock Code parameter*
   CUG Interlock Code: interlock code included

TEST NUMBER: 2.1.4

REFERENCE: Q.730, § 3; Q.767

TITLE: Closed User Group – Decentralized

SUBTITLE: CUG call with outgoing access not allowed, to a network offering the CUG supplementary service: received

PURPOSE: To verify that the parameters necessary for a CUG call with outgoing access not allowed can be correctly received.

PRE-TEST CONDITIONS:

a) SP A and SP B should belong to networks which offer the CUG supplementary service.

b) Arrange the stimulus such that the IAM generated at SP B contains the Optional Forward Call Indicators parameter set to "CUG call outgoing access not allowed", and a CUG interlock code that is acceptable at SP A.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
        SP  A                                                    SP  B

                           <- - - - - - - - - -          IAM
        ACM                - - - - - - - - - ->
        Ring tone          - - - - - - - - - - -
        ANM                - - - - - - - - - ->
        Connectivity       - - - - - - - - - -          Connectivity
                           <- - - - - - - - - -          REL
        RLC                - - - - - - - - - ->
```

TEST DESCRIPTION

1.	Make a call from SP B to SP A.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE OPTIONAL FORWARD CALL INDICATORS PARAMETER RECEIVED IN THE IAM BY SP A?
4.	CHECK B: WAS THE CUG INTERLOCK CODE PARAMETER RECEIVED IN THE IAM BY SP A?
5.	CHECK C: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
6.	CHECK D: WAS THE CONNECTION ESTABLISHED?
7.	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM

1) *Optional Forward Call Indicators parameter*
    CUG Call Indicator: 11 (CUG call, outgoing access not allowed)

2) *Closed User Group Interlock Code parameter*
    CUG Interlock Code: interlock code included

TEST NUMBER: 2.1.5	

REFERENCE: Q.730, § 3; Q.767

TITLE: Closed User Group – Decentralized

SUBTITLE: CUG call with outgoing access not allowed, to a network not offering the CUG supplementary service: sent

PURPOSE: To verify that the parameters necessary for a CUG call with outgoing access not allowed can be correctly sent, to a network not offering the CUG service, and that a release can be accepted in response by SP A.

PRE-TEST CONDITIONS:

a) SP A should belong to a network which offers the CUG supplementary service.

b) SP B belongs to a network which does not offer the CUG service.

c) Arrange the stimulus such that the IAM generated at SP A contains the optional forward call indicators parameter field with the CUG call indicator set to "outgoing access not allowed", and the CUG interlock code parameter field.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
    SP  A                                                    SP  B

    IAM              – – – – – – – – – –>
                     <– – – – – – – – – –                    REL
    RLC              – – – – – – – – – –>
```

TEST DESCRIPTION

1. Make a call from SP A to SP B.

2. Record the message sequence and parameters using a signal monitor.

3. CHECK A: WAS THE OPTIONAL FORWARD CALL INDICATORS PARAMETER INCLUDED IN THE IAM BY SP A?

4. CHECK B: WAS THE CUG INTERLOCK CODE PARAMETER INCLUDED IN THE IAM BY SP A?

5. CHECK C: WERE THE PARAMETER FIELDS SET CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?

6. CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM

1) *Optional Forward Call Indicators parameter*
    CUG Call Indicator: 11 (CUG call, outgoing access not allowed)

2) *Closed User Group Interlock Code parameter*
    CUG Interlock Code: interlock code included

TEST NUMBER: 2.1.6

REFERENCE: Q.730, § 3; Q.767

TITLE: Closed User Group – Decentralized

SUBTITLE: CUG call with outgoing access not allowed, to a network not offering the CUG supplementary service: received

PURPOSE: To verify that the parameters necessary for a CUG call with outgoing access not allowed can be correctly received, by a network not offering the CUG service, and rejected with a release message.

PRE-TEST CONDITIONS:

a) SP B should belong to a network which offers the CUG supplementary service.

b) SP A belongs to a network which does not offer the CUG service.

c) Arrange the stimulus such that the IAM generated at SP B contains the optional forward call indicators parameter field with the CUG call indicator set to "outgoing access not allowed", and the CUG interlock code parameter field.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
    SP  A                                                        SP  B

                          <- - - - - - - - - -                   IAM
        REL               - - - - - - - - - ->
                          <- - - - - - - - - -                   RLC
```

TEST DESCRIPTION

1.	Make a call from SP B to SP A.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE OPTIONAL FORWARD CALL INDICATORS PARAMETER RECEIVED IN THE IAM BY SP A?
4.	CHECK B: WAS THE CUG INTERLOCK CODE PARAMETER RECEIVED IN THE IAM BY SP A?
5.	CHECK C: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
6.	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM

1) *Optional Forward Call Indicators parameter*
   CUG Call Indicator: 11 (CUG call, outgoing access not allowed)

2) *Closed User Group Interlock Code parameter*
   CUG Interlock Code: interlock code included

TEST NUMBER: 2.1.7	

REFERENCE: Q.730, § 3; Q.767

TITLE: Closed User Group – Decentralized

SUBTITLE: CUG call, international interlock code included: sent

PURPOSE: To verify that an international interlock code is included for a call that crosses the international interface.

PRE-TEST CONDITIONS:

a) SP A and SP B should belong to networks which offer the CUG supplementary service.

b) Arrange the stimulus such that the IAM generated at SP A contains the optional forward call indicators parameter field indicating a CUG call, and the CUG interlock code parameter indicating an international interlock code that is acceptable to SP B.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
        SP  A                                             SP  B

        IAM               – – – – – – – – – –>
                          <– – – – – – – – – –            ACM
                          - - - - - - - - - - -           Ring tone
                          <– – – – – – – – – –            ANM
                          – – – – – – – – –                Connectivity
        REL               – – – – – – – – – –>
                          <– – – – – – – – – –            RLC
```

TEST DESCRIPTION

1.	Make a call from SP A to SP B.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE CUG INTERLOCK CODE PARAMETER INCLUDED IN THE IAM BY SP A?
4.	CHECK C: WAS THE PARAMETER FIELD SET CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK D: WAS THE CONNECTION ESTABLISHED?
6.	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM

Closed User Group Interlock Code parameter

CUG Interlock Code: international interlock code included and coded as per Recommendation E.167

TEST NUMBER: 2.1.8

REFERENCE: Q.730, § 3; Q.767

TITLE: Closed User Group – Decentralized

SUBTITLE: CUG call, international interlock code included: received

PURPOSE: To verify that for an international CUG call, that an international interlock can be correctly received.

PRE-TEST CONDITIONS:

a) SP A and SP B should belong to networks which offer the CUG supplementary service.

b) Arrange the stimulus such that the IAM generated at SP B contains the optional forward call indicators parameter field indicating a CUG call, and the CUG interlock code parameter indicating an international interlock code that is acceptable to SP A.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
        SP  A                                              SP  B

                           <- - - - - - - - - - -          IAM
        ACM                - - - - - - - - - - ->
        Ring tone          - - - - - - - - - - -
        ANM                - - - - - - - - - - ->
        Connectivity       - - - - - - - - -              Connectivity
                           <- - - - - - - - - - -          REL
        RLC                - - - - - - - - - - ->
```

TEST DESCRIPTION

1. Make a call from SP B to SP A.

2. Record the message sequence and parameters using a signal monitor.

3. CHECK A: WAS THE CUG INTERLOCK CODE PARAMETER RECEIVED IN THE IAM BY SP A?

4. CHECK C: WAS THE PARAMETER FIELD RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?

5. CHECK D: WAS THE CONNECTION ESTABLISHED?

6. CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM

Closed User Group Interlock Code parameter

CUG Interlock Code: international interlock code included and coded as per Recommendation E.167

TEST NUMBER: 3.1.1
REFERENCE: Q.730, § 4.1.1.1; Q.767
TITLE: Calling Line Identification
SUBTITLE: CLIP – Network provided: sent
PURPOSE: To verify that CLIP (network provided) can be correctly sent in the Calling Party Number parameter.
PRE-TEST CONDITIONS: Arrange the stimulus such that the IAM generated at SP A contains a CLI-network provided, presentation allowed.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
    SP  A                                              SP  B

    IAM                    – – – – – – – – – –>
                           <– – – – – – – – – –            ACM
                           <– – – – – – – – – –            ANM
    REL                    – – – – – – – – – –>
                           <– – – – – – – – – –            RLC
```

TEST DESCRIPTION

1.	Make a call from SP A to SP B.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE CALLING PARTY NUMBER PARAMETER INCLUDED IN THE IAM BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS SET CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM

Calling Party Number parameter
– Presentation restriction indicator: 00 (presentation allowed)
– Screening indicator: 11 (network provided)

TEST NUMBER: 3.1.2

REFERENCE: Q.730, § 4.1.1.1; Q.767

TITLE: Calling Line Identification

SUBTITLE: CLIP — Network provided: received

PURPOSE: To verify that CLIP (network provided) can be correctly received in the Calling Party Number parameter.

PRE-TEST CONDITIONS: Arrange the stimulus such that the IAM generated at SP B contains a CLI-network provided, presentation allowed.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
    SP  A                                                          SP  B

                              <– – – – – – – – – –        IAM
       ACM                    – – – – – – – – – –>
       ANM                    – – – – – – – – – –>
                              <– – – – – – – – – –        REL
       RLC                    – – – – – – – – – –>
```

TEST DESCRIPTION

1.	Make a call from SP B to SP A.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE CALLING PARTY NUMBER PARAMETER RECEIVED IN THE IAM BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM

Calling Party Number parameter
— Presentation restriction indicator: 00 (presentation allowed)
— Screening indicator: 11 (network provided)

TEST NUMBER: 3.2.1	

REFERENCE: Q.730, § 4.1.1.1; Q.767

TITLE: Calling Line Identification

SUBTITLE: CLIP – User provided: sent

PURPOSE: To verify that CLIP (user provided) can be correctly sent in the Calling Party Number parameter.

PRE-TEST CONDITIONS: Arrange the stimulus such that the IAM generated at SP A contains a CLI-user provided, presentation allowed.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
    SP  A                                                    SP  B

    IAM                    – – – – – – – – – –>
                           <– – – – – – – – – –              ACM
                           <– – – – – – – – – –              ANM
    REL                    – – – – – – – – – –>
                           <– – – – – – – – – –              RLC
```

TEST DESCRIPTION

1.	Make a call from SP A to SP B.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE CALLING PARTY NUMBER PARAMETER INCLUDED IN THE IAM BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS SET CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM

Calling Party Number parameter
– Presentation restriction indicator: 00 (presentation allowed)
– Screening indicator: 01 (user provided, verified and passed)

TEST NUMBER: 3.2.2	

REFERENCE: Q.730, § 4.1.1.1; Q.767

TITLE: Calling Line Identification

SUBTITLE: CLIP – User provided: received

PURPOSE: To verify that CLIP (user provided) can be correctly received in the Calling Party Number parameter.

PRE-TEST CONDITIONS: Arrange the stimulus such that the IAM generated at SP B contains a CLI-user provided, presentation allowed.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
     SP  A                                                    SP  B

                           <- - - - - - - - - -              IAM
        ACM                - - - - - - - - - ->
        ANM                - - - - - - - - - ->
                           <- - - - - - - - - -              REL
        RLC                - - - - - - - - - ->
```

TEST DESCRIPTION

1.	Make a call from SP B to SP A.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE CALLING PARTY NUMBER PARAMETER RECEIVED IN THE IAM BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM

Calling Party Number parameter
– Presentation restriction indicator: 00 (presentation allowed)
– Screening indicator: 01 (user provided, verified and passed)

TEST NUMBER: 3.3.1	

REFERENCE: Q.730, § 4.2; Q.767

TITLE: Calling Line Identification

SUBTITLE: CLIP – Network provided: sent

PURPOSE: To verify that CLIR (network provided) can be correctly sent in the Calling Party Number parameter.

PRE-TEST CONDITIONS: Arrange the stimulus such that the IAM generated at SP A contains a CLI-network provided, presentation restricted.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
     SP  A                                                    SP  B

     IAM                    – – – – – – – – – –>
                            <– – – – – – – – – –               ACM
                            <– – – – – – – – – –               ANM
     REL                    – – – – – – – – – –>
                            <– – – – – – – – – –               RLC
```

TEST DESCRIPTION

1.	Make a call from SP A to SP B.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE CALLING PARTY NUMBER PARAMETER INCLUDED IN THE IAM BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS SET CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM

Calling Party Number parameter
– Presentation restriction indicator: 01 (presentation restricted)
– Screening indicator: 11 (network provided)

TEST NUMBER: 3.3.2
REFERENCE: Q.730, § 4.2; Q.767
TITLE: Calling Line Identification
SUBTITLE: CLIR – Network provided: received
PURPOSE: To verify that CLIR (network provided) can be correctly received in the Calling Party Number parameter.
PRE-TEST CONDITIONS: Arrange the stimulus such that the IAM generated at SP B contains a CLI-network provided, presentation restricted.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
    SP  A                                                    SP  B


                        <- - - - - - - - - -          IAM
    ACM                 - - - - - - - - - ->
    ANM                 - - - - - - - - - ->
                        <- - - - - - - - - -          REL
    RLC                 - - - - - - - - - ->
```

TEST DESCRIPTION

1.	Make a call from SP B to SP A.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE CALLING PARTY NUMBER PARAMETER RECEIVED IN THE IAM BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM

Calling Party Number parameter
– Presentation restriction indicator: 01 (presentation restricted)
– Screening indicator: 11 (network provided)

TEST NUMBER: 3.4.1
REFERENCE: Q.730, § 4.2; Q.767
TITLE: Calling Line Identification
SUBTITLE: CLIR – User provided: sent
PURPOSE: To verify that CLIR (user provided) can be correctly sent in the Calling Party Number parameter.
PRE-TEST CONDITIONS: Arrange the stimulus such that the IAM generated at SP A contains a CLI-user provided, presentation restricted.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
    SP  A                                               SP  B

    IAM              – – – – – – – – – –>
                     <– – – – – – – – – –                ACM
                     <– – – – – – – – – –                ANM
    REL              – – – – – – – – – –>
                     <– – – – – – – – – –                RLC
```

TEST DESCRIPTION

1.	Make a call from SP A to SP B.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE CALLING PARTY NUMBER PARAMETER INCLUDED IN THE IAM BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS SET CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM

Calling Party Number parameter
– Presentation restriction indicator: 01 (presentation restricted)
– Screening indicator: 01 (user provided, verified and passed)

TEST NUMBER: 3.4.2	
REFERENCE: Q.730, § 4.2; Q.767	
TITLE: Calling Line Identification	
SUBTITLE: CLIR – User provided: received	
PURPOSE: To verify that CLIR (user provided) can be correctly received in the Calling Party Number parameter.	
PRE-TEST CONDITIONS: Arrange the stimulus such that the IAM generated at SP B contains a CLI-user provided, presentation restricted.	

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
    SP  A                                                    SP  B

                         <– – – – – – – – – –            IAM
        ACM              – – – – – – – – – –>
        ANM              – – – – – – – – – –>
                         <– – – – – – – – – –            REL
        RLC              – – – – – – – – – –>
```

TEST DESCRIPTION

1.	Make a call from SP B to SP A.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE CALLING PARTY NUMBER PARAMETER RECEIVED IN THE IAM BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM

Calling Party Number parameter
– Presentation restriction indicator: 01 (presentation restricted)
– Screening indicator: 01 (user provided, verified and passed)

TEST NUMBER: 3.5.1
REFERENCE: Q.730, § 4.1.1.1 b)
TITLE: Calling Line Identification
SUBTITLE: CLI — Not available: sent
PURPOSE: To verify that a CLI (address not available) can be correctly sent in the Calling Party Number parameter.
PRE-TEST CONDITIONS: Arrange the stimulus such that the IAM generated at SP A contains a CLI address not available.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
        SP  A                                                    SP  B

        IAM            – – – – – – – – – –>
                       <– – – – – – – – – –                      ACM
                       <– – – – – – – – – –                      ANM
        REL            – – – – – – – – – –>
                       <– – – – – – – – – –                      RLC
```

TEST DESCRIPTION

1. Make a call from SP A to SP B.

2. Record the message sequence and parameters using a signal monitor.

3. CHECK A: WAS THE CALLING PARTY NUMBER PARAMETER INCLUDED IN THE IAM BY SP A?

4. CHECK B: WERE THE PARAMETER FIELDS SET CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?

5. CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM

Calling Party Number parameter
— Odd/even indicator: 0 (even number of address signals)
— Nature of address signals: 0000000 (spare)
— Numbering plan indicator: 000 (spare)
— Calling party number incomplete indicator: 0 (complete)
— Presentation restriction indicator: 10 (address not available)
— Screening indicator: 11 (network provided)
— Address signal: none

TEST NUMBER: 3.5.2

REFERENCE: Q.730, § 4.1.1.1 b)

TITLE: Calling Line Identification

SUBTITLE: CLI — Not available: received

PURPOSE: To verify that CLI (address not available) can be correctly received in the Calling Party Number parameter.

PRE-TEST CONDITIONS: Arrange the stimulus such that the IAM generated at SP B contains a CLI address not available.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
    SP  A                                              SP  B

                        <- - - - - - - - - -           IAM
    ACM                 - - - - - - - - - ->
    ANM                 - - - - - - - - - ->
                        <- - - - - - - - - -           REL
    RLC                 - - - - - - - - - ->
```

TEST DESCRIPTION

1.	Make a call from SP B to SP A.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE CALLING PARTY NUMBER PARAMETER RECEIVED IAM BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM

Calling Party Number parameter
— Odd/even indicator: 0 (even number of address digits)
— Nature of address signals: 0000000 (spare)
— Numbering plans indicator: 000 (spare)
— Calling party number incomplete indicator: 0 (complete)
— Presentation restriction indicator: 10 (address not available)
— Screening indicator: 11 (network provided)
— Address signal: none

TEST NUMBER: 3.6.1

REFERENCE: Q.730, § 4.1.1.2

TITLE: Calling Line Identification

SUBTITLE: CLI — Not sent in IAM, available with INR/INF.

PURPOSE: To verify that a CLI can be correctly sent in the INF message in response to an INR.

PRE-TEST CONDITIONS:
a) Arrange the stimulus such that the IAM generated at SP A doesn't contain a CLI parameter.
b) Arrange the stimulus such that the INR generated at SP B contains a request for the CLI.
c) Arrange the stimulus such that the INF generated at SP A contains a CLI parameter.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE DE SP: SP

EXPECTED MESSAGE SEQUENCE:

```
     SP  A                                              SP  B

     IAM              – – – – – – – – – –>
                      <– – – – – – – – – –              INR
     INF              – – – – – – – – – –>
                      <– – – – – – – – – –              ACM
                      <– – – – – – – – – –              ANM
     REL              – – – – – – – – – –>
                      <– – – – – – – – – –              RLC
```

TEST DESCRIPTION

1. Make a call from SP A to SP B.
2. Record the message sequence and parameters using a signal monitor.
3. CHECK A: WAS THE INFORMATION REQUEST INDICATORS PARAMETER RECEIVED IN THE INR BY SP A?
4. CHECK B: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5. CHECK C: WAS THE CALLING PARTY NUMBER PARAMETER INCLUDED IN THE INF BY SP A?
6. CHECK D: WERE THE PARAMETER FIELDS SET CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
7. CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

INR

Information Request Indicators parameter
   Calling party address request indicator: 1 (calling party address requested)

INF

1) *Information Indicators parameter*
   Calling party address response indicator: 11 (calling party address included)

2) *Calling Party Number parameter*
   Presentation restriction indicator: 00/01 (presentation allowed/restricted)
   Screening indicator: 11/01 (network provided/user provided)

TEST NUMBER: 3.6.2

REFERENCE: Q.730, § 4.1.1.2

TITLE: Calling Line Identification

SUBTITLE: CLI — Not received in IAM, available with INR/INF.

PURPOSE: To verify that a CLI can be requested in the INR message and correctly received in the INF message.

PRE-TEST CONDITIONS:
a)   Arrange the stimulus such that the IAM generated at SP B does not contain a CLI parameter.
b)   Arrange the stimulus such that the INR generated at SP A contains a request for the CLI.
c)   Arrange the stimulus such that the INF generated at SP B contains a CLI parameter.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE DE SP: SP

EXPECTED MESSAGE SEQUENCE:

```
    SP  A                                                       SP  B

                           <- - - - - - - - - - -               IAM
        INR                - - - - - - - - - ->
                           <- - - - - - - - - -                 INF
        ACM                - - - - - - - - - ->
        ANM                - - - - - - - - - ->
                           <- - - - - - - - - -                 REL
        RLC                - - - - - - - - - ->
```

TEST DESCRIPTION

1.   Make a call from SP B to SP A.
2.   Record the message sequence and parameters using a signal monitor.
3.   CHECK A: WAS THE INFORMATION REQUEST INDICATORS PARAMETER RECEIVED IN THE INR BY SP A?
4.   CHECK B: WERE THE PARAMETER FIELDS SET CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.   CHECK C: WAS THE CALLING PARTY NUMBER PARAMETER RECEIVED IN THE INF BY SP A?
6.   CHECK D: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
7.   CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

INR

Information Request Indicators parameter
   Calling party address request indicator: 1 (calling party address requested)

INF

1) *Information Indicators parameter*
   Calling party address response indicator: 11 (calling party address included)

2) *Calling Party Number parameter*
   Presentation restriction indicator: 00/01 (presentation allowed/restricted)
   Screening indicator: 11/01 (network provided/user provided)

TEST NUMBER: 3.6.3

REFERENCE: Q.730, § 4.1.1.2

TITLE: Calling Line Identification

SUBTITLE: CLI — Not sent in IAM, not available with INR/INF.

PURPOSE: To verify that an indication of calling party address not available can be sent in the INF message in response to an INR message.

PRE-TEST CONDITIONS:
a) Arrange the stimulus such that the IAM generated at SP A does not contain a CLI parameter.
b) Arrange the stimulus such that the INR generated at SP B contains a request for the CLI.
c) Arrange the stimulus such that the INF generated at SP A contains an indication that the calling party is not available.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE DE SP: SP

EXPECTED MESSAGE SEQUENCE:

```
    SP  A                                                      SP  B

    IAM               – – – – – – – – – –>
                      <– – – – – – – – – –                     INR
    INF               – – – – – – – – – –>
                      <– – – – – – – – – –                     ACM
                      <– – – – – – – – – –                     ANM
    REL               – – – – – – – – – –>
                      <– – – – – – – – – –                     RLC
```

TEST DESCRIPTION

1.	Make a call from SP A to SP B.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE INFORMATION REQUIRED INDICATORS PARAMETER RECEIVED IN THE INR BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WERE THE PARAMETER FIELDS SET CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
6.	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

INR

Information Request Indicators parameter
    Calling party address request indicator: 1 (calling party address requested)

INF

Information Indicators parameter
    Calling party response indicator: 01 (calling party address not available)

TEST NUMBER: 3.6.4

REFERENCE: Q.730, § 4.1.1.2

TITLE: Calling Line Identification

SUBTITLE: CLI — Not received in IAM, not available in INR/INF.

PURPOSE: To verify that an indication of calling party address not available can be correctly received in the INF message.

PRE-TEST CONDITIONS:
a) Arrange the stimulus such that the IAM generated at SP B does not contain a CLI parameter.
b) Arrange the stimulus such that the INR generated at SP A contains a request for the CLI.
c) Arrange the stimulus such that the INF generated at SP B contains an indication that the calling party address is not available.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE DE SP: SP

EXPECTED MESSAGE SEQUENCE:

```
        SP  A                                                        SP  B

                              <- - - - - - - - - -              IAM
            INR               - - - - - - - - - ->
                              <- - - - - - - - - -              INF
            ACM               - - - - - - - - - ->
            ANM               - - - - - - - - - ->
                              <- - - - - - - - - -              REL
            RLC               - - - - - - - - - ->
```

TEST DESCRIPTION

1.	Make a call from SP B to SP A.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE INFORMATION REQUEST INDICATORS PARAMETER INCLUDED IN THE INR BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS SET CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
6.	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

INR

Information Request Indicators parameter
    Calling party address request indicator: 1 (calling party address requested)

INF

Information Indicators parameter
    Calling party response indicator: 01 (calling party address not available)

TEST NUMBER: 3.7.1
REFERENCE: Q.767
TITLE: Calling Line Identification
SUBTITLE: CLI – International address included: sent
PURPOSE: To verify that a country code is included in the Calling Party Number parameter.
PRE-TEST CONDITIONS: Arrange the stimulus such that the IAM generated at SP A contains a CLI.

CONFIGURATION: 1	TYPE OF TEST: VAT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
    SP  A                                              SP  B

    IAM            – – – – – – – – – –>
                   <– – – – – – – – – –              ACM
                   <– – – – – – – – – –              ANM
    REL            – – – – – – – – – –>
                   <– – – – – – – – – –              RLC
```

TEST DESCRIPTION

1.	Make a call from SP A to SP B.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE CALLING PARTY NUMBER PARAMETER INCLUDED IN THE IAM BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS SET CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM

Calling Party Number parameter
– Nature of address signals: 0000100 (international number)
– Numbering plan indicator: 001 (Recommendation E.164/E.163)
– Address signal: CC + NDC + SN

TEST NUMBER: 3.7.2	

REFERENCE: Q.767	

TITLE: Calling Line Identification	

SUBTITLE: CLI — International address included: received	

PURPOSE: To verify that an international address can be correctly received in the Calling Party Number parameter.	

PRE-TEST CONDITIONS: Arrange the stimulus such that the IAM generated at SP B contains an international CLI.	

CONFIGURATION: 1	TYPE OF TEST: VAT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
    SP  A                                                    SP  B

                         <- - - - - - - - - -        IAM
    ACM                  - - - - - - - - - ->
    ANM                  - - - - - - - - - ->
                         <- - - - - - - - - -        REL
    RLC                  - - - - - - - - - ->
```

TEST DESCRIPTION

1. Make a call from SP B to SP A.

2. Record the message sequence and parameters using a signal monitor.

3. CHECK A: WAS THE CALLING PARTY NUMBER PARAMETER RECEIVED IN THE IAM BY SP A?

4. CHECK B: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?

5. CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM

Calling Party Number parameter
— Nature of address indicator: 0000100 (international number)
— Numbering plan indicator: 001 (Recommendation E.164/E.163)
— Address signal: CC + NDC + SN

TEST NUMBER: 6.1.1	

REFERENCE: Q.767

TITLE: Connected Line Identification

SUBTITLE: COL — Request: sent

PURPOSE: To verify that a request for COL can be correctly sent in the Optional Forward Call Indicators parameter.

PRE-TEST CONDITIONS: Arrange the stimulus such that the IAM generated at SP A contains the request for COL.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
    SP  A                                               SP  B

    IAM             – – – – – – – – – –>
                    <– – – – – – – – – –                 ACM
                    <– – – – – – – – – –                 ANM
    REL             – – – – – – – – – –>
                    <– – – – – – – – – –                 RLC
```

TEST DESCRIPTION

1. Make a call from SP A to SP B.

2. Record the message sequence and parameters using a signal monitor.

3. CHECK A: WAS THE OPTIONAL FORWARD CALL INDICATORS PARAMETER INCLUDED IN THE IAM BY SP A?

4. CHECK B: WERE THE PARAMETER FIELDS SET CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?

5. CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM

Optional Forward Call Indicators parameters
Connected line identity request indicator: 1 (requested)

TEST NUMBER: 6.1.2
REFERENCE: Q.767
TITLE: Connected Line Identification
SUBTITLE: COL — Request: received
PURPOSE: To verify that a request for COL can be correctly received in the Optional Forward Call Indicators parameter.
PRE-TEST CONDITIONS: Arrange the stimulus such that the IAM generated at SP B contains the request for COL.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
    SP  A                                                      SP  B

                        <- - - - - - - - - -          IAM
    ACM                 - - - - - - - - - ->
    ANM                 - - - - - - - - - ->
                        <- - - - - - - - - -          REL
    RLC                 - - - - - - - - - ->
```

TEST DESCRIPTION

1. Make a call from SP B to SP A.

2. Record the message sequence and parameters using a signal monitor.

3. CHECK A: WAS THE OPTIONAL FORWARD CALL INDICATORS PARAMETER RECEIVED IN THE IAM BY SP A?

4. CHECK B: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?

5. CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

IAM

Optional Forward Call Indicators parameters
Connected line identity request indicator: 1 (requested)

TEST NUMBER: 6.2.1

REFERENCE: Q.767

TITLE: Connected Line Identification

SUBTITLE: COLP — Network provided: sent

PURPOSE: To verify that a COLP (network provided) can be correctly sent in the Connected Number parameter.

PRE-TEST CONDITIONS:

a)   Arrange the stimulus such that the IAM generated at SP B contains the request for COL.

b)   Arrange the stimulus such that the ANM (CON) generated at SP A contains a COL — network provided, presentation allowed.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
   SP  A                                                        SP  B
      case a)

                           <- - - - - - - - - - -               IAM
   ACM                     - - - - - - - - - ->
   ANM                     - - - - - - - - - ->
                           <- - - - - - - - - -                 REL
   RLC                      - - - - - - - - ->
      case b)
                           <- - - - - - - - - -                 IAM
   CON                     - - - - - - - - - ->
                           <- - - - - - - - - -                 REL
   RLC                     - - - - - - - - - ->
```

TEST DESCRIPTION

1.	Make a call from SP B to SP A.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE CONNECTED NUMBER PARAMETER INCLUDED IN THE ANM (CON) BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS SET CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

ANM or *CON*

Connected Number parameter
—   Presentation restriction indicator: 00 (presentation allowed)
—   Screening indicator: 11 (network provided)

TEST NUMBER: 6.2.2

REFERENCE: Q.767

TITLE: Connected Line Identification

SUBTITLE: COLP — Network provided: received

PURPOSE: To verify that a COLP (network provided) can be correctly received in the Connected Number parameter.

PRE-TEST CONDITIONS:

a) Arrange the stimulus such that the IAM generated at SP A contains the request for COL.

b) Arrange the stimulus such that the ANM (CON) generated at SP B contains a COL — network provided, presentation allowed.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
SP A                                                          SP B
    case a)

IAM                      – – – – – – – – – –>
                         <– – – – – – – – – –                ACM
                         <– – – – – – – – – –                ANM
REL                      – – – – – – – – – –>
                         <– – – – – – – – – –                RLC
    case b)
IAM                      – – – – – – – – – –>
                         <– – – – – – – – – –                CON
REL                      – – – – – – – – – –>
                         <– – – – – – – – – –                RLC
```

TEST DESCRIPTION

1.	Make a call from SP A to SP B.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE CONNECTED NUMBER PARAMETER RECEIVED IN THE ANM (CON) BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

ANM or *CON*

Connected Number parameter
— Presentation restriction indicator: 00 (presentation allowed)
— Screening indicator: 11 (network provided)

TEST NUMBER: 6.3.1
REFERENCE: Q.767
TITLE: Connected Line Identification
SUBTITLE: COLP — User provided: sent
PURPOSE: To verify that a COLP (user provided) can be correctly sent in the Connected Number parameter.
PRE-TEST CONDITIONS: a)   Arrange the stimulus such that the IAM generated at SP B contains the request for COL.   b)   Arrange the stimulus such that the ANM (CON) generated at SP A contains a COL — user provided, presentation allowed.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
SP  A                                                      SP  B
   case a)

                         <- - - - - - - - - -              IAM
ACM                      - - - - - - - - - - ->
ANM                      - - - - - - - - - - ->
                         <- - - - - - - - - -              REL
RLC                      - - - - - - - - - - ->
   case b)
                         <- - - - - - - - - -              IAM
CON                      - - - - - - - - - - ->
                         <- - - - - - - - - -              REL
RLC                      - - - - - - - - - - ->
```

TEST DESCRIPTION

1.	Make a call from SP B to SP A.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE CONNECTED NUMBER PARAMETER INCLUDED IN THE ANM (CON) BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS SET CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

ANM or *CON*

Connected Number parameter
—   Presentation restriction indicator: 00 (presentation allowed)
—   Screening indicator: 01 (user provided, verified and passed)

TEST NUMBER: 6.3.2	

REFERENCE: Q.767

TITLE: Connected Line Identification

SUBTITLE: COLP — User provided: received

PURPOSE: To verify that a COLP (user provided) can be correctly received in the Connected Number parameter.

PRE-TEST CONDITIONS:

a) Arrange the stimulus such that the IAM generated at SP A contains the request for COL.

b) Arrange the stimulus such that the ANM (CON) generated at SP B contains a COL — user provided, presentation allowed.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
SP A                                                         SP B
   case a)

IAM              – – – – – – – – – –>
                 <– – – – – – – – – –                        ACM
                 <– – – – – – – – – –                        ANM
REL              – – – – – – – – – –>
                 <– – – – – – – – – –                        RLC
       case b)
IAM              – – – – – – – – – –>
                 <– – – – – – – – – –                        CON
REL              – – – – – – – – – –>
                 <– – – – – – – – – –                        RLC
```

TEST DESCRIPTION

1.	Make a call from SP A to SP B.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE CONNECTED NUMBER PARAMETER RECEIVED IN THE ANM (CON) BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

ANM or *CON*

Connected Number parameter
— Presentation restriction indicator: 00 (presentation allowed)
— Screening indicator: 01 (user provided, verified and passed)

TEST NUMBER: 6.4.1	

REFERENCE: Q.767

TITLE: Connected Line Identification

SUBTITLE: COLR — Network provided: sent

PURPOSE: To verify that a COLR (network provided) can be correctly sent in the Connected Number parameter.

PRE-TEST CONDITIONS:

a)   Arrange the stimulus such that the IAM generated at SP B contains the request for COL.

b)   Arrange the stimulus such that the ANM (CON) generated at SP A contains a COL — network provided, presentation restricted.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
SP  A                                                        SP  B
   case a)

                          <- - - - - - - - - -               IAM
ACM                       - - - - - - - - - - ->
ANM                       - - - - - - - - - - ->
                          <- - - - - - - - - -               REL
RLC                       - - - - - - - - - - ->
   case b)
                          <- - - - - - - - - -               IAM
CON                       - - - - - - - - - - ->
                          <- - - - - - - - - -               REL
RLC                       - - - - - - - - - - ->
```

TEST DESCRIPTION

1.   Make a call from SP B to SP A.

2.   Record the message sequence and parameters using a signal monitor.

3.   CHECK A: WAS THE CONNECTED NUMBER PARAMETER INCLUDED IN THE ANM (CON) BY SP A?

4.   CHECK B: WERE THE PARAMETER FIELDS SET CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?

5.   CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

ANM or *CON*

Connected Number parameter
—   Presentation restriction indicator: 01 (presentation allowed)
—   Screening indicator: 11 (network provided)

TEST NUMBER: 6.4.2

REFERENCE: Q.767

TITLE: Connected Line Identification

SUBTITLE: COLR — Network provided: received

PURPOSE: To verify that a COLR (network provided) can be correctly received in the Connected Number parameter.

PRE-TEST CONDITIONS:

a)   Arrange the stimulus such that the IAM generated at SP A contains the request for COL.

b)   Arrange the stimulus such that the ANM (CON) generated at SP B contains a COL — network provided, presentation restricted.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
SP  A                                                        SP  B
    case a)

IAM                          – – – – – – – – – – –>
                             <– – – – – – – – – – –            ACM
                             <– – – – – – – – – – –            ANM
REL                          – – – – – – – – – – –>
                             <– – – – – – – – – –              RLC
        case b)
IAM                          – – – – – – – – – – –>
                             <– – – – – – – – – –              CON
REL                          – – – – – – – – – – –>
                             <– – – – – – – – – –              RLC
```

TEST DESCRIPTION

1.	Make a call from SP A to SP B.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE CONNECTED NUMBER PARAMETER RECEIVED IN THE ANM (CON) BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

ANM or *CON*

Connected Number parameter
—   Presentation restriction indicator: 01 (presentation restricted)
—   Screening indicator: 11 (network provided)

TEST NUMBER: 6.5.1

REFERENCE: Q.767

TITLE: Connected Line Identification

SUBTITLE: COLR — User provided: sent

PURPOSE: To verify that a COLR (user provided) can be correctly sent in the Connected Number parameter.

PRE-TEST CONDITIONS:

a) Arrange the stimulus such that the IAM generated at SP B contains the request for COL.

b) Arrange the stimulus such that the ANM (CON) generated at SP A contains a COL — user provided, presentation restricted.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
SP  A                                                        SP  B
   case a)

                     <-- -- -- -- -- -- --                   IAM
ACM                  -- -- -- -- -- -- -->
ANM                  -- -- -- -- -- -- -->
                     <-- -- -- -- -- --                      REL
RLC                  -- -- -- -- -- -- -->
   case b)
                     <-- -- -- -- -- --                      IAM
CON                  -- -- -- -- -- -- -->
                     <-- -- -- -- -- --                      REL
RLC                  -- -- -- -- -- -- -->
```

TEST DESCRIPTION

1.	Make a call from SP B to SP A.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE CONNECTED NUMBER PARAMETER INCLUDED IN THE ANM (CON) BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS SET CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

ANM or *CON*

Connected Number parameter
— Presentation restriction indicator: 01 (presentation restricted)
— Screening indicator: 01 (user provided, verified and passed)

TEST NUMBER: 6.5.2

REFERENCE: Q.767

TITLE: Connected Line Identification

SUBTITLE: COLR — User provided: received

PURPOSE: To verify that a COLR (user provided) can be correctly received in the Connected Number parameter.

PRE-TEST CONDITIONS:

a) Arrange the stimulus such that the IAM generated at SP A contains the request for COL.

b) Arrange the stimulus such that the ANM (CON) generated at SP B contains a COL — user provided, presentation restricted.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
SP  A                                                        SP  B
   case a)

IAM                    – – – – – – – – – –>
                       <– – – – – – – – – –                 ACM
                       <– – – – – – – – – –                 ANM
REL                    – – – – – – – – – –>
                       <– – – – – – – – – –                 RLC
   case b)
IAM                    – – – – – – – – – –>
                       <– – – – – – – – – –                 CON
REL                    – – – – – – – – – –>
                       <– – – – – – – – – –                 RLC
```

TEST DESCRIPTION

1. Make a call from SP A to SP B.

2. Record the message sequence and parameters using a signal monitor.

3. CHECK A: WAS THE CONNECTED NUMBER PARAMETER IN THE ANM (CON) BY SP A?

4. CHECK B: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?

5. CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

ANM or *CON*

Connected Number parameter
— Presentation restriction indicator: 01 (presentation restricted)
— Screening indicator: 01 (user provided, verified and passed)

TEST NUMBER: 6.6.1	

REFERENCE: Q.767

TITLE: Connected Line Identification

SUBTITLE: COL — Not available: sent

PURPOSE: To verify that a COL (address not available) can be correctly sent in the Connected Number parameter.

PRE-TEST CONDITIONS: Arrange the stimulus such that the ANM (CON) generated at SP A contains a COL — address not available.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
SP  A                                                           SP  B
    case a)
                             <– – – – – – – – – –                IAM
ACM                          – – – – – – – – – –>
ANM                          – – – – – – – – – –>
                             <– – – – – – – – – –                REL
RLC                          – – – – – – – – – –>
    case b)
                             <– – – – – – – – – –                IAM
CON                          – – – – – – – – – –>
                             <– – – – – – – – – –                REL
RLC                          – – – – – – – – – –>
```

TEST DESCRIPTION

1.	Make a call from SP B to SP A.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE CONNECTED NUMBER PARAMETER INCLUDED IN THE ANM (CON) BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

ANM or *CON*

Connected Number parameter
— Odd/even indicator: 0 (even number of address digits)
— Nature of address indication: 0000000 (spare)
— Numbering plan indicator: 000 (spare)
— Connected number incomplete indicator: 0 (complete)
— Presentation restriction indicator: 10 (address not available)
— Screening indicator: 11 (network provided)
— Address signal: none

TEST NUMBER: 6.6.2

REFERENCE: Q.767

TITLE: Connected Line Identification

SUBTITLE: COL — Not available: received

PURPOSE: To verify that a COL (address not available) can be correctly received in the Connected Number parameter.

PRE-TEST CONDITIONS: Arrange the stimulus such that the ANM (CON) generated at SP B contains a COL — address not available.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
SP  A                                                          SP  B
   case a)

IAM              – – – – – – – – – –>
                 <– – – – – – – – – –                          ACM
                 <– – – – – – – – – –                          ANM
REL              – – – – – – – – – –>
                 <– – – – – – – – – –                          RLC
   case b)
IAM              – – – – – – – – – –>
                 <– – – – – – – – – –                          CON
REL              – – – – – – – – – –>
                 <– – – – – – – – – –                          RLC
```

TEST DESCRIPTION

1.	Make a call from SP A to SP B.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE CONNECTED PARTY NUMBER PARAMETER RECEIVED IN THE ANM (CON) RECEIVED BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

ANM or *CON*

Connected Number parameter
— Odd/even indicator: 0 (even number of address signals)
— Nature of address indicator: 0000000 (spare)
— Numbering plan indicator: 000 (spare)
— Connected number incomplete indicator: 0 (complete)
— Presentation restriction indicator: 10 (address not available)
— Screening indicator: 11 (network provided)
— Address signal: none

TEST NUMBER: 6.7.1

REFERENCE: Q.767

TITLE: Connected Line Identification

SUBTITLE: COL — International address included: sent

PURPOSE: To verify that a country code is added to the national number and sent in the Connected Number parameter.

PRE-TEST CONDITIONS: Arrange the stimulus such that the ANM (CON) generated at SP A contains a COL.

CONFIGURATION: 1	TYPE OF TEST: VAT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
SP  A                                                              SP  B
   case a)

                        <- - - - - - - - - -         IAM
   ACM                  - - - - - - - - - ->
   ANM                  - - - - - - - - - ->
                        <- - - - - - - - - -         REL
   RLC                  - - - - - - - - - ->
       case b)
                        <- - - - - - - - - -         IAM
   CON                  - - - - - - - - - ->
                        <- - - - - - - - - -         REL
   RLC                  - - - - - - - - - ->
```

TEST DESCRIPTION

1.	Make a call from SP B to SP A.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE CONNECTED NUMBER PARAMETER INCLUDED IN THE ANM (CON) BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

ANM or *CON*

Connected Number parameter
— Nature of address indicator: 0000100 (international number)
— Numbering plan indicator: 001 (Recommendation E.164/E.163)
— Address signal: CC + NDC + SN

TEST NUMBER: 6.7.2

REFERENCE: Q.767

TITLE: Connected Line Identification

SUBTITLE: COL — International address included: received

PURPOSE: To verify that an international address can be correctly received in the Connected Number parameter.

PRE-TEST CONDITIONS: Arrange the stimulus such that the ANM (CON) generated at SP B contains a COL.

CONFIGURATION: 1	TYPE OF TEST: VAT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
SP  A                                                          SP  B
   case a)

IAM                     – – – – – – – – – –>
                        <– – – – – – – – – –                   ACM
                        <– – – – – – – – – –                   ANM
REL                     – – – – – – – – – –>
                        <– – – – – – – – – –                   RLC
   case b)
IAM                     – – – – – – – – – –>
                        <– – – – – – – – – –                   CON
REL                     – – – – – – – – – –>
                        <– – – – – – – – – –                   RLC
```

TEST DESCRIPTION

1.	Make a call from SP A to SP B.
2.	Record the message sequence and parameters using a signal monitor.
3.	CHECK A: WAS THE CONNECTED NUMBER PARAMETER RECEIVED IN THE ANM (CON) BY SP A?
4.	CHECK B: WERE THE PARAMETER FIELDS RECEIVED CORRECTLY AS INDICATED IN THE CHECK TABLE BELOW?
5.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?

CHECK TABLE

ANM or *CON*

Connected Number parameter
— Nature of address indicator: 10000100 (international number)
— Number plan indicator: 001 (Recommendation E.164/E.163)
— Address signal: CC + NDC + SN

TEST NUMBER: 6.8.1

REFERENCE: Q.767

TITLE: Connected Line Identification

SUBTITLE: COL received, but not requested

PURPOSE: To verify that if a COL is received when it was not requested the call is not rejected.

PRE-TEST CONDITIONS:

a) Arrange the stimulus such that the IAM generated at SP A does not contain a request for COL.

b) Arrange the stimulus such that the ANM (CON) generated at SP B contains a COL.

CONFIGURATION: 1	TYPE OF TEST: VAT & CPT	TYPE OF SP: SP

EXPECTED MESSAGE SEQUENCE:

```
SP  A                                                              SP  B
   case a)

IAM                         – – – – – – – – – –>
                            <– – – – – – – – – –                   ACM
                            <– – – – – – – – – –                   ANM
REL                         – – – – – – – – – –>
                            <– – – – – – – – – –                   RLC
      case b)
IAM                         – – – – – – – – – –>
                            <– – – – – – – – – –                   CON
   REL                      – – – – – – – – – –>
                            <– – – – – – – – – –                   RLC
```

TEST DESCRIPTION

1.	Make a call from SP A to SP B.
2.	Record the message sequence and parameters using a signal monitor.
3.	The calling party should clear the call.
4.	CHECK A: WAS THE CONNECTED NUMBER PARAMETER RECEIVED IN THE ANM (CON) BY SP A?
5.	CHECK B: DID THE CALL COMPLETE?
6.	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?