INTERNATIONAL TELECOMMUNICATION UNION

CCITT

I.255.5

THE INTERNATIONAL
TELEGRAPH AND TELEPHONE
CONSULTATIVE COMMITTEE

(08/92)

INTEGRATED SERVICES DIGITAL NETWORK (ISDN)

GENERAL STRUCTURE AND SERVICE CAPABILITIES

OUTGOING CALL BARRING

Recommendation I.255.5

Geneva, 1992

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 I.255.5 was prepared by Study Group I and was approved under the Resolution No. 2 procedure on the 4th of August 1992.

CCITT NOTE

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

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Recommendation I.255.5

OUTGOING CALL BARRING

(1992)

1 Definition

The supplementary service **Outgoing Call Barring** enables a user to bar calls which are originating from this user's access. However, this service does not restrict the reception of incoming calls.

The user may select between two main versions of this supplementary service:

— barring of all calls;

— barring of a special group of calls (e.g. national or international calls).

2 Description

2.1 *General description*

Outgoing Call Barring (OCB) service may be subscribed to for each basic service to which the user of the access subscribes, or collectively for all basic services to which the user subscribes.

For each of the basic services, the subscriber may request one of the versions as follows:

a) *General Outgoing Call Barring (GOCB)*

For one basic service all originating calls, except some special numbers (e.g. police, fire brigade) are barred.

Note — The service provider decides which numbers are not barred.

b) *Special Outgoing Call Barring (SOCB)*

For one basic service all originating calls, belonging to a special group of calls (e.g. national calls or international calls) are barred.

Note — The service provider may either offer a fixed set of barred numbers to all subscribers or an individual set of barred numbers may be agreed with each subscriber.

2.2 *Specific terminology*

No specific terminology identified.

2.3 *Qualifications on the applicability to telecommunication services*

No restrictions identified.

3 Procedures

3.1 *Provision/withdrawal*

OCB shall be provided after prearrangement with the service provider.

A codeword is allocated by the service provider for each basic service and each subscriber. Upon subscribers request, a unique codeword may be allocated for all basic services at the subscriber access.

Note — Different subscribers may obtain the same codeword independently.

It is possible to obtain several versions of OCB in parallel for one basic service.

3.2 *Normal procedures*

3.2.1 *Activation/deactivation/registration*

A user who has subscribed to OCB can use the activation procedure.

For the activation of one version of OCB for one basic service, the appropriate codeword has to be received by the local exchange of the subscriber.

When the user activates OCB the service provider will return notification of acceptance or rejection of the request (compare exceptional procedures, § 3.3.1.1, for possible causes of rejection).

For the deactivation of a previously activated OCB, the same codeword has to be received by the local exchange.

When the user deactivates OCB, the service provider will return notification of acceptance or rejection of this request (compare exceptional procedures, § 3.3.1.1, for possible causes of rejection).

3.2.2 *Invocation and operation*

When OCB is active, outgoing call attempts will be examined by the local exchange. They will be processed further in and beyond the local exchange, if they are within the limitations of the version of OCB that has been activated.

When a user attempts to set up a call to a destination which is barred by the OCB-version that is currently active, the call set-up will not be completed. The service provider may give a notification of the activation of OCB to the user.

3.3 *Exceptional procedures*

3.3.1 *Activation/deactivation/registration*

3.3.1.1 *Activation*

If the system cannot accept an activation request, the user should receive a notification that OCB activation was unsuccessful.

Possible causes are:

i) service not subscribed;

ii) insufficient information;

iii) unallocated codeword;

A certain number of activation attempts (e.g. 3) with an unallocated codeword should result in a temporary ignoration of further activation attempts (e.g. 30 minutes).

iv) service already activated.

In this case, treatment of consecutive attempts to activate OCB are a network provider option.

3.3.1.2 *Deactivation*

If the system cannot accept a deactivation request, the user should receive a notification that OCB deactivation was unsuccessful.

Possible causes are:

i) service not subscribed;

ii) insufficient information;

iii) unallocated codeword;

A certain number of deactivation attempts (e.g. 3) with an unallocated codeword should result in a temporary ignoration of further deactivation attempts (e.g. 30 minutes).

iv) service not activated.

In this case, treatment of consecutive attempts to deactivate OCB are a network provider option.

3.3.2 *Invocation and operation*

3.3.2.1 *Activation of a superior version of OCB*

In case of the activation of a superior version of OCB it is not necessary to deactivate the version which is currently active. It should be sufficient to insert the appropriate codeword for the superior version only.

3.3.2.2 *Activation of an inferior version of OCB*

In case of the activation of an inferior version of OCB it is not necessary to deactivate the version which is currently active. It should be sufficient to insert the appropriate codeword for the inferior version only.

3.4 *Alternate procedures*

None identified.

4 Network capabilities for charging

This Recommendation does not cover charging principles. Future Recommendations of the D-Series are expected to contain that information. It shall be possible to charge the customer accurately for this service.

5 Interworking requirements

No interworking requirements exist.

6 Interaction with other supplementary services

6.1 *Call Waiting*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.2 *Call Transfer*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.3 *Connected Line Identification Presentation*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.4 *Connected Line Identification Restriction*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.5 *Calling Line Identification Presentation*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.6 *Calling Line Identification Restriction*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.7 *Closed User Group*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.8 *Conference Calling*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.9 *Direct-Dialling-In*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.10 *Call diversion services*

6.10.1 *Call Forwarding Busy*

See § 6.10.3: Call Forwarding Unconditional.

6.10.2 *Call Forwarding No Reply*

See § 6.10.3: Call Forwarding Unconditional.

6.10.3 *Call Forwarding Unconditional*

When Call Forwarding Unconditional (CFU) has been activated prior to the activation of OCB, the calls are forwarded regardless of the limitations of the version of OCB that has been activated, i.e. in this case there exists no interaction between the two services.

After OCB has been activated, calls can only be forwarded to destinations which are within the limitations of the OCB version, that has been activated.

6.10.4 *Call Deflection*

After OCB has been activated, calls can only be deflected to destinations which are within the limitations of the OCB version, that has been activated.

6.11 *Line Hunting*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.12 *Three-Party Service*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.13 *User-to-User Signalling*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.14 *Multiple Subscriber Number*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.15 *Call Hold*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.16 *Advice of Charge*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.17 *Multi-level Precedence and Preemption*

No interaction — Multi-Level Precedence and Preemption (MLPP) does not override OCB restrictions.

6.18 *Priority*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.19 *Malicious Call Identification Service*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.20 *Outgoing Call Barring*

Not applicable.

6.21 *Reverse Charging*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.22 *Sub-addressing*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

7 Dynamic description

The dynamic description of this service is shown in Figure 1/I.255.5.

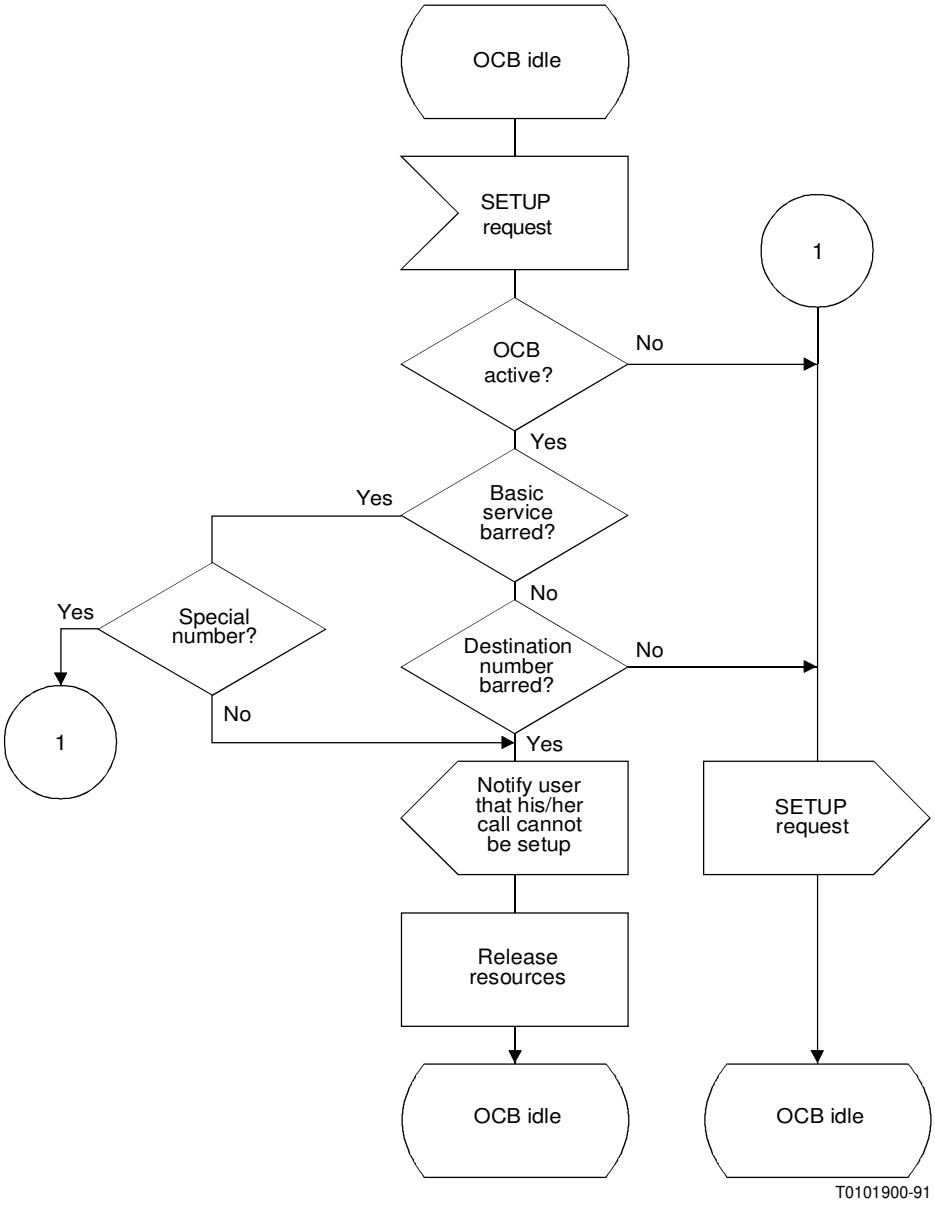

FIGURE 1/I.255.5

Overall SDL diagram of Outgoing Call Barring (OCB)