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Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); Explicit Call Transfer (ECT) supplementary service; Stage 2

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Contents

Foreword

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1 Scope

The present document gives the stage 2 description of the call transfer supplementary services.

Only one call transfer supplementary service has been defined, this is the Explicit Call Transfer (ECT) supplementary service, and is described in the present document.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 21.905: "3G Vocabulary".

[2] 3GPP TS 23.083: "Call Waiting (CW) and Call Hold (HOLD) supplementary services - Stage 2".

[3] 3GPP TS 24.008: "Mobile Radio Interface Layer 3 specification; Core Network Protocols - Stage 3".

[4] EN 300 368: "Integrated Services Digital network (ISDN); Explicit Call Transfer (ECT) supplementary service; Functional capabilities and information flows".

[5] EN 300 356-14: "Integrated Services Digital network (ISDN); Signalling System No. 7; ISDN User Part (ISUP) version 3 for the international interface; Part 14: Explicit Call Transfer (ECT) supplementary service ".

[6] 3GPP TS 23.011: "Technical realization of Supplementary Services".

[7] 3GPP TS 23.018: "Basic Call Handling".

3 Definitions and abbreviations

3.1 Definitions

First call: One of the subscriber A calls (answered).

Notification Indicator (NI): Indicates to each remote party in which state of the other remote party ECT was performed (active, alerting).

Redirection Number (Rdn): Includes the presentation indicator and the directory number of the other remote party.

Second call: The other subscriber A call (answered or alerting).

Subscriber A (PARTY A): The served mobile subscriber - the one who has subscribed to, and invokes the ECT Supplementary Service.

Subscriber B (PARTY B): The other party in the subscriber A first call.

Subscriber C (PARTY C): The other party in the subscriber A second call.

Subscriber D (PARTY D): The forwarded-to party when the call is forwarded by the subscriber C.

Transferred call: The resulting call after successful explicit call transfer between B and C.

3.2 Abbreviations

In addition to those below, abbreviations used in the present document are listed in 3GPP TR 21.905 [1].

ECT:	Explicit Call Transfer supplementary service
LI:	Line Identity
NI:	Notification Indicator
Rdn:	Redirection number
RdnB:	Redirection number of party B
RdnD:	Redirection number of party D

4 Explicit Call Transfer (ECT)

4.1 Functions

The following function has been identified for the explicit call transfer service:

MAF027

Explicit Call Transfer related authorizations examination

The ability of a PLMN component to determine the authorizations relating to explicit call transfer. See figure 1.

Location: VLR

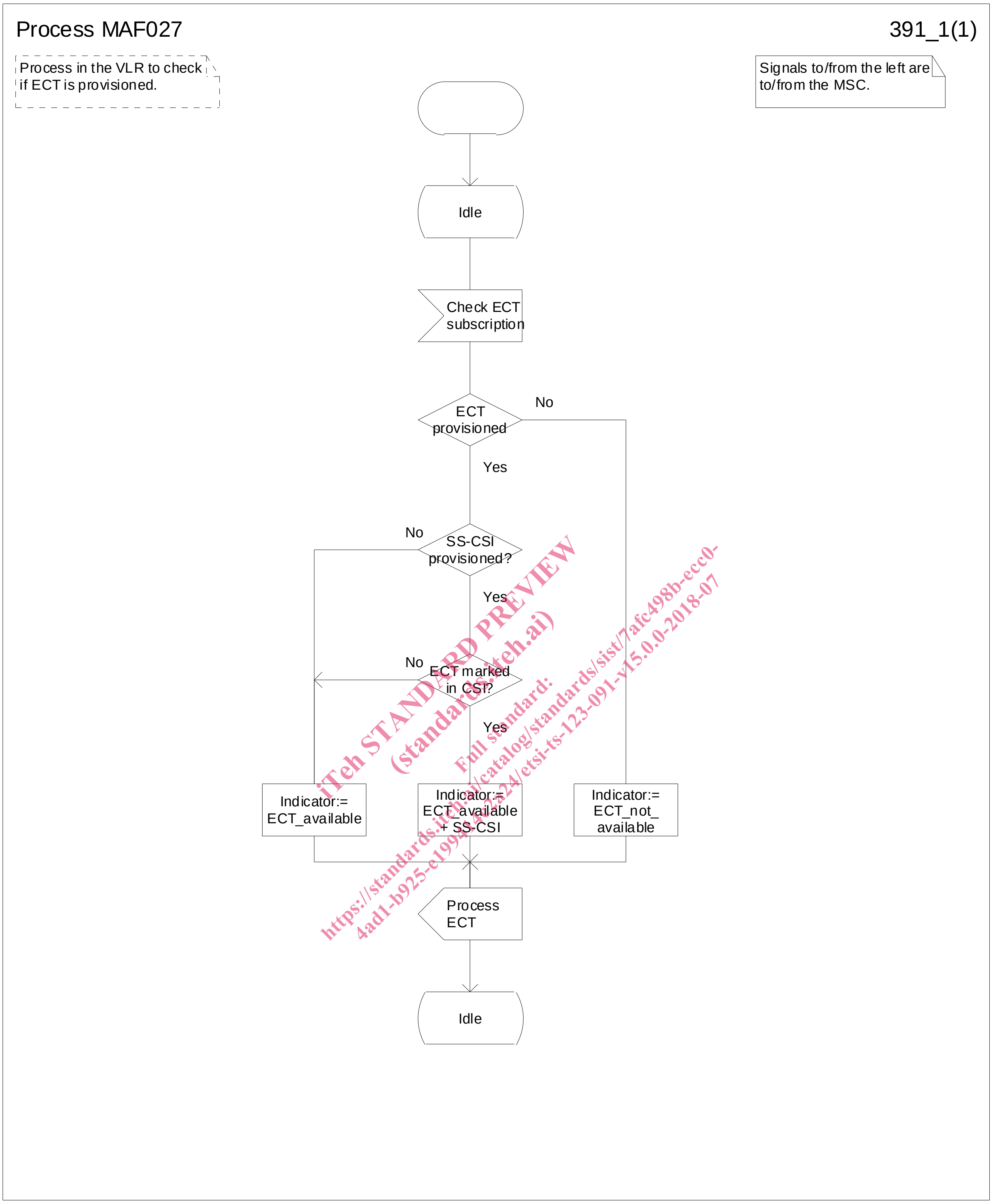

Figure 1: Explicit Call Transfer related authorizations examination (VLR)

4.2 SDL diagrams and information flows

4.2.1 General description

The procedures Handle_ECT_Active and Handle_ECT_Alerting show the behaviour of the service as perceived by the served mobile subscriber and by any of the other parties involved in the transfer. These procedures and the macro Check_ECT show the actions to be taken by the network and the information provided by the network to the users.

The following states for the invocation of the ECT supplementary service are defined:

a) First Call (Active, Held), Second Call (Active, Idle);

b) First Call (Active, Held), Second Call (Call Delivered, Idle).

NOTE: The call state "call delivered" means that an ALERTING message has been sent to the MS, but no ANSWER Message (ANM) has been received.

In the information flows it is assumed that the served subscriber is a mobile subscriber and that the other parties are mobile or fixed subscribers.

Party A is the subscriber controlling the Explicit Call Transfer Call (served mobile subscriber). Party B is the first remote party called. Party C is the second remote party called.

The served party is disconnected by the generic disconnect/release procedure after a successful transfer request. The connection of the remote parties in a new call (transferred call) is located in the served subscriber's MSC.

The information flows in figures 4 and 7 show the unsuccessful case (i.e. the check in the VLR or in the MSC fails).

The information flows in figures 5 and 8 show the successful case.

4.2.2 ECT (both calls answered)

The SDL for the procedure Handle_ECT_Active (Explicit Call Transfer - both calls have been answered) is shown in figure 2.

The checks of whether Explicit Call Transfer is barred or not are shown in figure 3.

The corresponding information flows are given in figure 4 and figure 5.

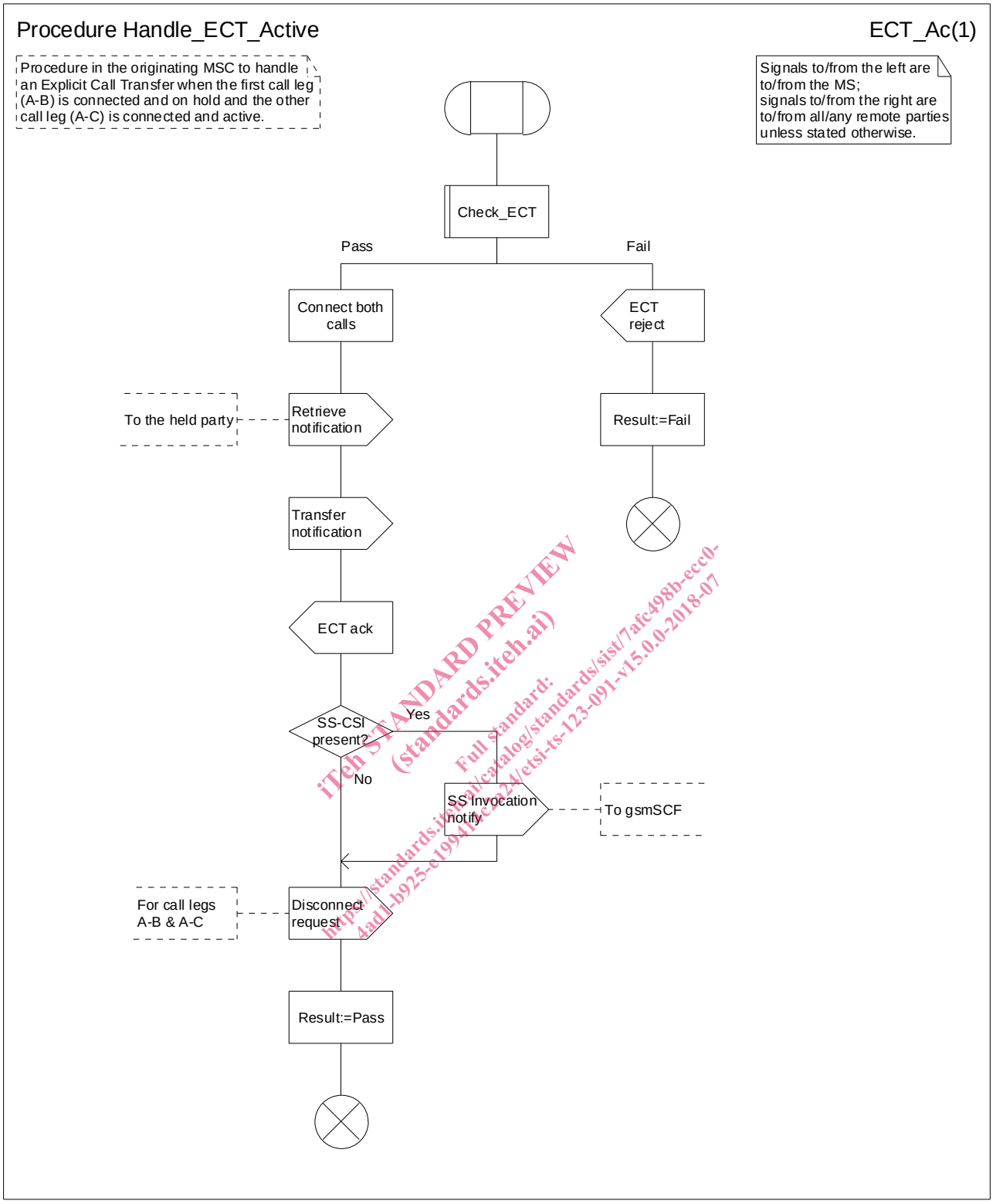

Figure 2: Procedure Handle_ECT_Active