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3GPP2 S.R0029

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Access Control Based on Call Type

Stage 1 Description

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Revision History

Version	Date	Remarks
1.0.0	Sept. 22, 2000	Initial release by TSG-S

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Appendix A (informative): Change History

1 Scope

This document defines requirements for the cdma2000 Air Interface to support Access Control based on Call Type (ACCT). ACCT provides the control of access attempt from mobile stations by service option or a set of service options.

Control for terminating calls to mobile stations are outside the scope of this feature description.

2 Abbreviations

For the purpose of this document, the following abbreviations apply:

ACCT	Access Control based on Call Type
AOC	Access Overload Class

3 Definitions Service origination

Service origination is defined as the process at a mobile station for sending the Origination Message and the Enhanced Origination Message described in C.S0005-A.

4 Assumptions

Multiple service options are provided in a mobile communication network.

5 General Description

Current specification (up to cdma2000 Release A) provides an overload control method using Access Overload Class. It can control access from mobile stations, typically during emergency or other overloaded conditions.

If both voice and data calls are operated in the same frequency band, and in case of problems in the packet network, without any problems in voice network, control for only packet call access from mobile stations may be required. The existing method applies control to all access type calls. The call, which does not need overload control, may be rejected. In order to avoid this sort of situation, access attempts should be individually controlled by call type basis.

6 Requirements

- (1) Access attempts should be individually controlled by Service Option basis (or grouped into operator defined set of Service Options).
- (2) Mobile stations that support ACCT shall not perform service origination for service options that are restricted by ACCT.
- (3) ACCT may be applied to Emergency Call Origination, depending upon regional requirements
- (4) ACCT may be activated by the serving network as required.
- (5) ACCT shall be activated on a per sector basis.
- (6) The mobile station shall be able to determine that ACCT has been cancelled or that the mobile station has moved into an area where ACCT is not activated.
- (7) ACCT shall be mandatory for the Release B mobile stations.
- (8) If ACCT and AOC are activated in the serving sector, the mobile station shall not perform service origination unless restrictions of both are satisfied.

7 Incorporating ACCT in Telecommunication wireless networks operations

7.1 Normal Procedures With Successful Outcome

7.1.1 Authorization

None identified.

7.1.2 De-authorization

None identified.

7.1.3 Registration

None identified.

7.1.4 De-registration

None identified.

7.1.5 Activation

None identified.

7.1.6 De-Activation

None identified.

7.1.7 Invocation

None identified.

7.2 Exception Procedures for Unsuccessful Outcome

None identified.

Appendix A (informative): Change History

Version	Date	Changed contents	Sections affected
0.0.1	June 6, 2000	Initial draft proposal	
0.0.2	July 11, 2000	Revised version	All
0.1.0	Aug. 22, 2000	Addition of Cover Page and Change History	Cover Page and Appendix A
0.1.1	Aug. 24, 2000	Modification of one key capability according to discussion in TSG-S WG1 meeting.	Section 5.1 Key Capabilities
0.2.0	Sept. 6 2000	Modifications according to discussion in TSG-S WG1 teleconference.	All