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Mobility Management Application Protocol (MMAP) RCF –  
RACF Operations

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American National Standard  
for Telecommunications –

# Mobility Management Application Protocol(MMAP) RCF-RACF Operations

Secretariat

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Approved December 9, 1996

**American National Standards Institute, Inc.**

## **Abstract**

This standard provides an application layer protocol for the exchange of information between peer applications running in a radio system and other network elements (e.g., mobility management platforms, switching systems, and other radio systems). The basic provisions of the protocol provide the semantics and syntax for operations necessary to support the mobility aspects of telecommunication services and call control in a wireless environment.

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## Contents

|                                                | Page      |
|------------------------------------------------|-----------|
| Foreword .....                                 | xiii      |
| <b>1</b> Scope, purpose, and application ..... | <b>1</b>  |
| 1.1 Scope .....                                | 1         |
| 1.2 Purpose .....                              | 1         |
| 1.3 Application .....                          | 1         |
| <b>2</b> Normative references .....            | <b>1</b>  |
| <b>3</b> Definitions and acronyms.....         | <b>2</b>  |
| <b>4</b> Overview.....                         | <b>5</b>  |
| 4.1 Document structure .....                   | 5         |
| 4.2 Functional architecture .....              | 5         |
| <b>5</b> Protocol architecture .....           | <b>6</b>  |
| 5.1 Mapping to SCCP.....                       | 6         |
| 5.2 Mapping to X.25.....                       | 6         |
| 5.3 Mapping to TCAP.....                       | 7         |
| <b>6</b> Operations descriptions .....         | <b>13</b> |
| 6.1 Common operations descriptions .....       | 15        |
| 6.1.1 Call processing operations.....          | 15        |
| 6.1.1.1 Assignment complete.....               | 15        |
| 6.1.1.2 Assignment failure .....               | 15        |
| 6.1.1.3 Assignment request .....               | 15        |
| 6.1.1.4 Call indication.....                   | 16        |
| 6.1.1.5 Clear command .....                    | 17        |
| 6.1.1.6 Clear complete .....                   | 17        |
| 6.1.1.7 Clear request.....                     | 18        |
| 6.1.1.8 CM service request.....                | 18        |
| 6.1.1.9 Complete layer 3 information .....     | 19        |
| 6.1.1.10 Feature status request.....           | 19        |
| 6.1.1.11 Feature status response .....         | 20        |
| 6.1.1.12 Flash with information.....           | 20        |
| 6.1.1.13 Paging request .....                  | 21        |
| 6.1.1.14 Paging response.....                  | 21        |
| 6.1.1.15 Privacy mode command.....             | 21        |
| 6.1.1.16 Privacy mode complete.....            | 22        |
| 6.1.2 Mobility management operations.....      | 23        |

|                                                     | Page |
|-----------------------------------------------------|------|
| 6.1.2.1 Authentication reject .....                 | 23   |
| 6.1.2.2 Authentication request .....                | 23   |
| 6.1.2.3 Authentication response .....               | 23   |
| 6.1.2.4 Base station (RCF) challenge .....          | 23   |
| 6.1.2.5 Base station (RCF) challenge response ..... | 24   |
| 6.1.2.6 Location updating accept .....              | 24   |
| 6.1.2.7 Location updating reject.....               | 24   |
| 6.1.2.8 Location updating request.....              | 25   |
| 6.1.2.9 Parameter update confirm.....               | 25   |
| 6.1.2.10 Parameter update request.....              | 25   |
| 6.1.2.11 SSD update request.....                    | 25   |
| 6.1.2.12 SSD update response .....                  | 26   |
| 6.1.2.13 Status request .....                       | 26   |
| 6.1.2.14 Status response.....                       | 26   |
| 6.1.3 Radio resource management operations .....    | 27   |
| 6.1.3.1 Handoff command .....                       | 27   |
| 6.1.3.2 Handoff commenced.....                      | 28   |
| 6.1.3.3 Handoff complete .....                      | 28   |
| 6.1.3.4 Handoff failure.....                        | 28   |
| 6.1.3.5 Handoff performed.....                      | 29   |
| 6.1.3.6 Handoff request.....                        | 29   |
| 6.1.3.7 Handoff request acknowledge .....           | 29   |
| 6.1.3.8 Handoff required.....                       | 30   |
| 6.1.3.9 Handoff required reject .....               | 30   |
| 6.1.4 Facility management operations.....           | 31   |
| 6.1.4.1 Block.....                                  | 31   |
| 6.1.4.2 Block acknowledge .....                     | 31   |
| 6.1.4.3 Reset .....                                 | 32   |
| 6.1.4.4 Reset acknowledge .....                     | 32   |
| 6.1.4.5 Reset circuit .....                         | 32   |
| 6.1.4.6 Reset circuit acknowledge .....             | 33   |
| 6.1.4.7 Unblock.....                                | 33   |
| 6.1.4.8 Unblock acknowledge .....                   | 34   |
| 6.2 CDMA operations descriptions.....               | 35   |
| 6.2.1 Common operations .....                       | 35   |

|                                                        | Page |
|--------------------------------------------------------|------|
| 6.2.2 CDMA specific operations.....                    | 37   |
| 6.2.2.1 Call processing operations.....                | 37   |
| 6.2.2.1.1 Feature notification.....                    | 37   |
| 6.2.2.1.2 Feature notification acknowledge.....        | 37   |
| 6.2.2.2 Radio resource management operations.....      | 38   |
| 6.2.2.2.1 Soft handoff drop source.....                | 38   |
| 6.2.2.2.2 Soft handoff drop target.....                | 38   |
| 6.3 CCT operations descriptions.....                   | 39   |
| 6.3.1 Common operations.....                           | 39   |
| 6.3.2 CCT specific operations.....                     | 41   |
| 6.3.2.1 Mobility management operations.....            | 41   |
| 6.3.2.1.1 Identity request.....                        | 41   |
| 6.3.2.1.2 Identity response.....                       | 42   |
| 6.3.2.1.3 IMSI detach indication.....                  | 43   |
| 6.3.2.1.4 TMSI reallocation command.....               | 44   |
| 6.3.2.1.5 TMSI reallocation complete.....              | 45   |
| 6.3.2.2 Radio resource management operations.....      | 46   |
| 6.3.2.2.1 Terminating handoff complete.....            | 46   |
| 6.3.2.2.2 Terminating handoff proceed.....             | 47   |
| 6.3.2.2.3 Terminating handoff request.....             | 48   |
| 6.3.2.2.4 Terminating handoff request acknowledge..... | 49   |
| 6.3.2.2.5 Terminating handoff request reject.....      | 50   |
| 6.4 PACS operations descriptions.....                  | 51   |
| 6.4.1 Common operations.....                           | 51   |
| 6.4.2 PACS specific operations.....                    | 51   |
| 6.4.2.1 ALT_AUTH_ACK.....                              | 51   |
| 6.4.2.2 ALT_AUTH_REQ.....                              | 52   |
| 6.4.2.3 ALT_COMP.....                                  | 53   |
| 6.4.2.4 ALT_DENY.....                                  | 54   |
| 6.4.2.5 ALT_RDY.....                                   | 55   |
| 6.4.2.6 AUTH_REQ_A.....                                | 56   |
| 6.4.2.6.1 ALERT_ACK.....                               | 57   |
| 6.4.2.6.2 CALL_REQ.....                                | 57   |
| 6.4.2.6.3 CALL_REQ_EMER.....                           | 58   |
| 6.4.2.6.4 TERM_REG_REQ.....                            | 58   |

|                                            | Page |
|--------------------------------------------|------|
| 6.4.2.7 AUTH_REQ_B .....                   | 59   |
| 6.4.2.8 CALL_WAIT_IND .....                | 60   |
| 6.4.2.9 COUNT_UPDATE_ACK .....             | 61   |
| 6.4.2.10 COUNT_UPDATE_REQ .....            | 62   |
| 6.4.2.11 EMER_CALL_REQ .....               | 63   |
| 6.4.2.12 MULTI-PARTY_CALL_REQ .....        | 64   |
| 6.4.2.13 NET_CHAL_REQ .....                | 65   |
| 6.4.2.14 NET_CHAL_RESP .....               | 66   |
| 6.4.2.15 P_ALERT .....                     | 67   |
| 6.4.2.16 P_CONNECT .....                   | 68   |
| 6.4.2.17 P_DISC .....                      | 69   |
| 6.4.2.18 P_INFO .....                      | 70   |
| 6.4.2.19 P_RELEASE .....                   | 71   |
| 6.4.2.20 P_REL_COM .....                   | 72   |
| 6.4.2.21 RCID_ASSIGN .....                 | 73   |
| 6.4.2.22 SSD_UPDATE_REQ .....              | 74   |
| 6.4.2.23 SSD_UPDATE_RESP .....             | 75   |
| 6.4.2.24 TERM_REG_ACK .....                | 76   |
| 6.4.2.25 UNQ_CHAL_REQ .....                | 77   |
| 6.4.2.26 UNQ_CHAL_RESP .....               | 78   |
| 6.5 TDMA operations descriptions .....     | 79   |
| 6.5.1 Common operations .....              | 79   |
| 6.5.2 TDMA specific operations .....       | 80   |
| 6.6 PCS1900 operations descriptions .....  | 81   |
| 6.6.1 Mobility management operations ..... | 81   |
| 6.6.1.1 Abort .....                        | 81   |
| 6.6.1.2 Authentication reject .....        | 81   |
| 6.6.1.3 Authentication request .....       | 81   |
| 6.6.1.4 Authentication response .....      | 81   |
| 6.6.1.5 CM service abort .....             | 82   |
| 6.6.1.6 CM service accept .....            | 82   |
| 6.6.1.7 CM service reject .....            | 82   |
| 6.6.1.8 CM service request .....           | 82   |
| 6.6.1.9 CM reestablishment request .....   | 83   |
| 6.6.1.10 Identity request .....            | 83   |

|                                                  | Page |
|--------------------------------------------------|------|
| 6.6.1.11 Identity response .....                 | 83   |
| 6.6.1.12 IMSI detach indication .....            | 83   |
| 6.6.1.13 Location updating accept .....          | 83   |
| 6.6.1.14 Location updating reject .....          | 84   |
| 6.6.1.15 Location updating request .....         | 84   |
| 6.6.1.16 MM status .....                         | 84   |
| 6.6.1.17 TMSI reallocation command .....         | 84   |
| 6.6.1.18 TMSI reallocation complete .....        | 84   |
| 6.6.2 Radio resource management operations ..... | 85   |
| 6.6.2.1 Assignment complete .....                | 85   |
| 6.6.2.2 Assignment failure .....                 | 85   |
| 6.6.2.3 Assignment request .....                 | 85   |
| 6.6.2.4 Cipher mode command .....                | 85   |
| 6.6.2.5 Cipher mode complete .....               | 86   |
| 6.6.2.6 Cipher mode reject .....                 | 86   |
| 6.6.2.7 Classmark request .....                  | 86   |
| 6.6.2.8 Classmark update .....                   | 86   |
| 6.6.2.9 Clear command .....                      | 86   |
| 6.6.2.10 Clear complete .....                    | 87   |
| 6.6.2.11 Clear request .....                     | 87   |
| 6.6.2.12 Complete layer 3 information .....      | 87   |
| 6.6.2.13 Handover candidate enquire .....        | 87   |
| 6.6.2.14 Handover candidate response .....       | 88   |
| 6.6.2.15 Handover command .....                  | 88   |
| 6.6.2.16 Handover complete .....                 | 88   |
| 6.6.2.17 Handover detect .....                   | 88   |
| 6.6.2.18 Handover failure .....                  | 89   |
| 6.6.2.19 Handover performed .....                | 89   |
| 6.6.2.20 Handover request .....                  | 89   |
| 6.6.2.21 Handover request acknowledge .....      | 89   |
| 6.6.2.22 Handover required .....                 | 90   |
| 6.6.2.23 Handover required reject .....          | 90   |
| 6.6.2.24 Paging .....                            | 90   |
| 6.6.2.25 Queueing indication .....               | 90   |
| 6.6.2.26 RACF invoke trace .....                 | 90   |

|                                                  | Page      |
|--------------------------------------------------|-----------|
| 6.6.2.27 Resource indication .....               | 91        |
| 6.6.2.28 Resource request .....                  | 91        |
| 6.6.2.29 SAPI 'n' reject.....                    | 91        |
| 6.6.2.30 Send info for outgoing call .....       | 91        |
| <b>7 Messages, parameters, and timers .....</b>  | <b>92</b> |
| 7.1 Common operations .....                      | 92        |
| 7.1.1 Message definitions.....                   | 92        |
| 7.1.1.1 Call processing message formats.....     | 92        |
| 7.1.1.1.1 Assignment complete.....               | 92        |
| 7.1.1.1.2 Assignment failure .....               | 93        |
| 7.1.1.1.3 Assignment request .....               | 93        |
| 7.1.1.1.4 Call indication.....                   | 94        |
| 7.1.1.1.5 Clear command .....                    | 94        |
| 7.1.1.1.6 Clear complete .....                   | 94        |
| 7.1.1.1.7 Clear request.....                     | 95        |
| 7.1.1.1.8 CM service request.....                | 96        |
| 7.1.1.1.9 Complete layer 3 information .....     | 97        |
| 7.1.1.1.10 Feature status request.....           | 97        |
| 7.1.1.1.11 Feature status response .....         | 97        |
| 7.1.1.1.12 Flash with information .....          | 97        |
| 7.1.1.1.13 Paging request .....                  | 97        |
| 7.1.1.1.14 Paging response.....                  | 98        |
| 7.1.1.1.15 Privacy mode command.....             | 99        |
| 7.1.1.1.16 Privacy mode complete .....           | 99        |
| 7.1.1.2 Mobility management message formats..... | 99        |
| 7.1.1.2.1 Authentication reject .....            | 99        |
| 7.1.1.2.2 Authentication request .....           | 99        |
| 7.1.1.2.3 Authentication response.....           | 99        |
| 7.1.1.2.4 Base station challenge.....            | 99        |
| 7.1.1.2.5 Base station challenge response.....   | 99        |
| 7.1.1.2.6 Location updating accept .....         | 99        |
| 7.1.1.2.7 Location updating reject.....          | 99        |
| 7.1.1.2.8 Location updating request.....         | 99        |
| 7.1.1.2.9 Parameter update confirm.....          | 99        |
| 7.1.1.2.10 Parameter update request.....         | 99        |

|                                                         | Page |
|---------------------------------------------------------|------|
| 7.1.1.2.11 SSD update request.....                      | 99   |
| 7.1.1.2.12 SSD update response .....                    | 99   |
| 7.1.1.2.13 Status request .....                         | 99   |
| 7.1.1.2.14 Status response.....                         | 99   |
| 7.1.1.3 Radio resource management message formats ..... | 100  |
| 7.1.1.3.1 Handoff command.....                          | 100  |
| 7.1.1.3.2 Handoff commenced .....                       | 101  |
| 7.1.1.3.3 Handoff complete.....                         | 101  |
| 7.1.1.3.4 Handoff failure .....                         | 101  |
| 7.1.1.3.5 Handoff performed .....                       | 101  |
| 7.1.1.3.6 Handoff request .....                         | 102  |
| 7.1.1.3.7 Handoff request acknowledge .....             | 103  |
| 7.1.1.3.8 Handoff required .....                        | 104  |
| 7.1.1.3.9 Handoff required reject .....                 | 105  |
| 7.1.1.4 Facility management message formats.....        | 106  |
| 7.1.1.4.1 Block .....                                   | 106  |
| 7.1.1.4.2 Block acknowledge .....                       | 106  |
| 7.1.1.4.3 Reset.....                                    | 106  |
| 7.1.1.4.4 Reset acknowledge.....                        | 106  |
| 7.1.1.4.5 Reset circuit .....                           | 106  |
| 7.1.1.4.6 Reset circuit acknowledge.....                | 107  |
| 7.1.1.4.7 Unblock .....                                 | 107  |
| 7.1.1.4.8 Unblock acknowledge .....                     | 107  |
| 7.1.2 Parameter definitions.....                        | 108  |
| 7.1.2.1 Call reference .....                            | 108  |
| 7.1.2.2 Call reference list.....                        | 108  |
| 7.1.2.3 Connect time .....                              | 108  |
| 7.1.2.4 Disconnect time .....                           | 108  |
| 7.1.2.5 Feature ID .....                                | 109  |
| 7.1.2.6 Feature Status .....                            | 109  |
| 7.1.2.7 Message type .....                              | 110  |
| 7.1.2.8 Mobile identity .....                           | 110  |
| 7.1.2.9 Neighbor configuration.....                     | 111  |
| 7.1.2.10 NID.....                                       | 111  |
| 7.1.2.11 Pilot increment.....                           | 111  |

|                                                         | Page |
|---------------------------------------------------------|------|
| 7.1.2.12 RACF address .....                             | 111  |
| 7.1.2.13 Setup time .....                               | 114  |
| 7.1.3 Information element identifiers .....             | 114  |
| 7.1.4 Timer definitions .....                           | 114  |
| 7.2 CDMA operations .....                               | 115  |
| 7.2.1 Message definitions .....                         | 115  |
| 7.2.1.1 Call processing message formats.....            | 115  |
| 7.2.1.1.1 Feature notification .....                    | 115  |
| 7.2.1.1.2 Feature notification acknowledge .....        | 115  |
| 7.2.1.2 Mobility management message formats.....        | 115  |
| 7.2.1.3 Radio resource management message formats ..... | 116  |
| 7.2.1.3.1 Soft handoff drop source .....                | 116  |
| 7.2.1.3.2 Soft handoff drop target .....                | 117  |
| 7.2.1.4 Facility management message formats.....        | 117  |
| 7.2.2 Parameter definitions.....                        | 117  |
| 7.2.3 Timer definitions .....                           | 117  |
| 7.3 CCT operations .....                                | 118  |
| 7.3.1 Message definitions .....                         | 118  |
| 7.3.1.1 Call processing message formats.....            | 118  |
| 7.3.1.2 Mobility management message formats.....        | 118  |
| 7.3.1.2.1 Identity request.....                         | 118  |
| 7.3.1.2.2 Identity response .....                       | 118  |
| 7.3.1.2.3 IMSI detach indication.....                   | 118  |
| 7.3.1.2.4 TMSI reallocation command .....               | 118  |
| 7.3.1.2.5 TMSI reallocation complete .....              | 118  |
| 7.3.1.3 Radio resource management message formats ..... | 119  |
| 7.3.1.3.1 Terminating handoff complete .....            | 119  |
| 7.3.1.3.2 Terminating handoff proceed.....              | 119  |
| 7.3.1.3.3 Terminating handoff request.....              | 119  |
| 7.3.1.3.4 Terminating handoff request acknowledge.....  | 119  |
| 7.3.1.3.5 Terminating handoff request reject .....      | 119  |
| 7.3.1.4 Facility management message formats.....        | 119  |
| 7.3.2 Parameter definitions.....                        | 119  |
| 7.3.2.1 Identity type.....                              | 120  |
| 7.3.2.2 RCF address .....                               | 120  |

|                                     | Page |
|-------------------------------------|------|
| 7.3.3 Timer definitions .....       | 120  |
| 7.4 PACS operations .....           | 121  |
| 7.4.1 Message definitions .....     | 121  |
| 7.4.1.1 ALT_AUTH_ACK .....          | 121  |
| 7.4.1.2 ALT_AUTH_REQ .....          | 121  |
| 7.4.1.3 ALT_COMP .....              | 121  |
| 7.4.1.4 ALT_DENY .....              | 122  |
| 7.4.1.5 ALT_RDY .....               | 122  |
| 7.4.1.6 AUTH_REQ_A .....            | 122  |
| 7.4.1.6.1 ALERT_ACK .....           | 123  |
| 7.4.1.6.2 CALL_REQ .....            | 123  |
| 7.4.1.6.3 CALL_REQ_EMER .....       | 123  |
| 7.4.1.6.4 TERM_REG_REQ .....        | 124  |
| 7.4.1.7 AUTH_REQ_B .....            | 124  |
| 7.4.1.8 CALL_WAIT_IND .....         | 124  |
| 7.4.1.9 COUNT_UPDATE_ACK .....      | 125  |
| 7.4.1.10 COUNT_UPDATE_REQ .....     | 125  |
| 7.4.1.11 EMER_CALL_REQ .....        | 125  |
| 7.4.1.12 MULTI-PARTY_CALL_REQ ..... | 126  |
| 7.4.1.13 NET_CHAL_REQ .....         | 126  |
| 7.4.1.14 NET_CHAL_RESP .....        | 126  |
| 7.4.1.15 P_ALERT .....              | 127  |
| 7.4.1.16 P_CONNECT .....            | 127  |
| 7.4.1.17 P_DISC .....               | 127  |
| 7.4.1.18 P_INFO .....               | 128  |
| 7.4.1.19 P_RELEASE .....            | 128  |
| 7.4.1.20 P_REL_COM .....            | 128  |
| 7.4.1.21 RCID_ASSIGN .....          | 129  |
| 7.4.1.22 SSD_UPDATE_REQ .....       | 129  |
| 7.4.1.23 SSD_UPDATE_RESP .....      | 130  |
| 7.4.1.24 TERM_REG_ACK .....         | 130  |
| 7.4.1.25 UNQ_CHAL_REQ .....         | 130  |
| 7.4.1.26 UNQ_CHAL_RESP .....        | 131  |
| 7.4.2 Parameter definitions .....   | 132  |
| 7.4.2.1 Correlation ID .....        | 132  |

|                                                         | Page |
|---------------------------------------------------------|------|
| 7.4.2.2 Directory number .....                          | 132  |
| 7.4.2.3 Group identifier .....                          | 132  |
| 7.4.2.4 Message type .....                              | 132  |
| 7.4.2.5 Mini profile.....                               | 133  |
| 7.4.2.6 Session key .....                               | 134  |
| 7.4.3 Information element identifiers .....             | 135  |
| 7.5 TDMA operations.....                                | 136  |
| 7.5.1 Message definitions .....                         | 136  |
| 7.5.1.1 Call processing message formats.....            | 136  |
| 7.5.1.2 Mobility management message formats.....        | 136  |
| 7.5.1.3 Radio resource management message formats ..... | 136  |
| 7.5.1.4 Facility management message formats.....        | 136  |
| 7.5.2 Parameter definitions.....                        | 136  |
| 7.5.3 Timer definitions .....                           | 136  |
| 7.6 PCS1900 operations.....                             | 136  |
| 7.6.1 Message definitions .....                         | 136  |
| 7.6.1.1 Mobility management message formats.....        | 136  |
| 7.6.1.1.1 Abort .....                                   | 136  |
| 7.6.1.1.2 Authentication reject .....                   | 136  |
| 7.6.1.1.3 Authentication request .....                  | 136  |
| 7.6.1.1.4 Authentication response.....                  | 136  |
| 7.6.1.1.5 CM service abort.....                         | 136  |
| 7.6.1.1.6 CM service accept .....                       | 136  |
| 7.6.1.1.7 CM service reject.....                        | 136  |
| 7.6.1.1.8 CM service request.....                       | 137  |
| 7.6.1.1.9 CM reestablishment request.....               | 137  |
| 7.6.1.1.10 Identity request .....                       | 137  |
| 7.6.1.1.11 Identity response .....                      | 137  |
| 7.6.1.1.12 IMSI detach indication.....                  | 137  |
| 7.6.1.1.13 Location updating accept .....               | 137  |
| 7.6.1.1.14 Location updating reject.....                | 137  |
| 7.6.1.1.15 Location updating request .....              | 137  |
| 7.6.1.1.16 MM status.....                               | 138  |
| 7.6.1.1.17 TMSI reallocation command .....              | 138  |
| 7.6.1.1.18 TMSI reallocation complete .....             | 138  |

|                                                         | Page |
|---------------------------------------------------------|------|
| 7.6.1.2 Radio resource management message formats ..... | 138  |
| 7.6.1.2.1 Assignment complete .....                     | 138  |
| 7.6.1.2.2 Assignment failure .....                      | 138  |
| 7.6.1.2.3 Assignment request .....                      | 138  |
| 7.6.1.2.4 Cipher mode command .....                     | 138  |
| 7.6.1.2.5 Cipher mode complete .....                    | 138  |
| 7.6.1.2.6 Cipher mode reject .....                      | 138  |
| 7.6.1.2.7 Classmark request .....                       | 138  |
| 7.6.1.2.8 Classmark update .....                        | 138  |
| 7.6.1.2.9 Clear command .....                           | 138  |
| 7.6.1.2.10 Clear complete .....                         | 138  |
| 7.6.1.2.11 Clear request .....                          | 138  |
| 7.6.1.2.12 Complete layer 3 information .....           | 138  |
| 7.6.1.2.13 Handover candidate enquire .....             | 138  |
| 7.6.1.2.14 Handover candidate response .....            | 138  |
| 7.6.1.2.15 Handover command .....                       | 139  |
| 7.6.1.2.16 Handover complete .....                      | 139  |
| 7.6.1.2.17 Handover detect .....                        | 139  |
| 7.6.1.2.18 Handover failure .....                       | 139  |
| 7.6.1.2.19 Handover performed .....                     | 139  |
| 7.6.1.2.20 Handover request .....                       | 139  |
| 7.6.1.2.21 Handover request acknowledge .....           | 139  |
| 7.6.1.2.22 Handover required .....                      | 139  |
| 7.6.1.2.23 Handover required reject .....               | 139  |
| 7.6.1.2.24 Paging .....                                 | 139  |
| 7.6.1.2.25 Queueing indication .....                    | 139  |
| 7.6.1.2.26 RACF invoke trace .....                      | 139  |
| 7.6.1.2.27 Resource indication .....                    | 139  |
| 7.6.1.2.28 Resource request .....                       | 139  |
| 7.6.1.2.29 SAPI 'n' reject .....                        | 139  |
| 7.6.1.2.30 Send info for outgoing call .....            | 140  |
| 7.6.2 Parameter definitions .....                       | 140  |
| 7.6.2.1 PCS1900 interface DN .....                      | 140  |

**Figures**

|   |                                    |   |
|---|------------------------------------|---|
| 1 | Functional model .....             | 5 |
| 2 | Protocol architecture (SCCP) ..... | 6 |
| 3 | Protocol architecture (X.25) ..... | 6 |
| 4 | Protocol architecture (TCAP) ..... | 7 |

**Tables**

|    |                                                                                                 |     |
|----|-------------------------------------------------------------------------------------------------|-----|
| 1  | Mapping of CDMA, TDMA, and CCT RCF-RACF Operations<br>to TCAP Component and Package Types ..... | 8   |
| 2  | Mapping of PACS RCF-RACF Operations to TCAP<br>Component and Package Types .....                | 11  |
| 3  | Feature ID values .....                                                                         | 109 |
| 4  | Feature status values .....                                                                     | 109 |
| 5  | Message type values .....                                                                       | 110 |
| 6  | Mobile identity type values .....                                                               | 110 |
| 7  | Address type values .....                                                                       | 112 |
| 8  | Generic address indicator values .....                                                          | 112 |
| 9  | Numbering plan values .....                                                                     | 113 |
| 10 | Encoding scheme values .....                                                                    | 114 |
| 11 | Information element identifier values .....                                                     | 114 |
| 12 | Identity type values .....                                                                      | 120 |
| 13 | PACS message type values .....                                                                  | 133 |
| 14 | PACS information element identifier values .....                                                | 135 |

**Annexes**

|   |                                               |     |
|---|-----------------------------------------------|-----|
| A | Signaling flows for CDMA, TDMA, and CCT ..... | 141 |
| B | Signaling flows for PACS .....                | 211 |
| C | Physical scenarios .....                      | 237 |
| D | Handoff connections .....                     | 241 |
| E | Bibliography .....                            | 243 |

**Foreword** (This foreword is not part of American National Standard T1.659-1996.)

Subcommittee T1S1 began addressing PCS requirements in ad-hoc committees in 1993. In response to the industry's desire to have a standard solution for support of PCS mobility, T1S1 established the Mobility Management Application Protocol subworking group in 1994 with a charter to create a stage 3 protocol for supporting the mobility management requirements of the radio systems defined by T1P1 and TIA over the T1P1 "C" and "D" interface and the TIA "A" interface.

The focus of this document is the RCF-RACF functional interface. A companion document focusing on the RACF-SCF interface is *American National Standard for Telecommunications – Mobility Management Application Protocol (MMAP)*, ANSI T1.651-1996.

This standard has five annexes. All are informative and are not considered part of this standard; that is, these annexes do not include requirements for the specifications, but provide information about the specifications.

Suggestions for improvement of this standard will be welcome. They should be sent to the T1 Secretariat, c/o Alliance for Telecommunications Industry Solutions, 1200 G Street, NW, Suite 500, Washington, DC 20005.

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American National Standard  
for Telecommunications –

# Mobility Management Application Protocol (MMAP) RCF-RACF Operations

## 1 Scope, purpose, and application

### 1.1 Scope

The Mobility Management Application Protocol (MMAP) is a communication protocol between a radio system and other network elements (e.g., mobility management platforms, switching systems, and other radio systems). The scope of the radio systems supported are the wireless Personal Communications Services (PCS) radio systems defined by T1 and T1A. The scope of the information and operations is the support of personal and terminal mobility in a wireless environment and includes functionality such as registration, location updating, authentication, roaming, handover, and billing.

In addition, the scope of the protocol includes the exchange of information and invocation of operations as necessary to support the mobility aspects of telecommunication services (e.g., call waiting) and call control (e.g., call origination, call termination, call clearing) in a wireless environment.

### 1.2 Purpose

The purpose of MMAP is to provide a mechanism for the exchange of information between radio systems and other network elements to support personal and terminal mobility in a wireless environment. MMAP messages are defined to be independent of the air interface protocol. However, where necessary, air interface specific messages are also included.

### 1.3 Application

The MMAP is applicable to the interfaces between PCS radio systems and other network elements such as the interfaces defined by the “A” Interface in T1A and the “C” and “D” interface in T1.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this American National Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this American National Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

ANSI J-STD-007-1996, *Telecommunications – Air interface specification for 1.8 to 2.0 GHz frequency hopping time division multiple access (TDMA) for personal communication services*<sup>1)</sup>

ANSI J-STD-008-1996, *Telecommunications – Personal station-base station compatibility requirements for 1.8 to 2.0 GHz code division multiple access (CDMA) personal communication systems*<sup>1)</sup>

ANSI J-STD-011-1996, *Telecommunications – PCS IS-136 based air interface compatibility 1900 MHz standard*<sup>1)</sup>

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<sup>1)</sup> These standards are currently in production. Contact the secretariat for more recent information.