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Mobility Management Application Protocol (MMAP) RCF –
RCF Operations

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for Telecommunications –

Mobility Management Application Protocol(MMAP)
RCF-RACF Operations

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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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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.

This standard was processed and approved for submittal to ANSI by Accredited Standards Committee on Telecommunications, T1. Committee approval of the standard does not necessarily imply that all committee members voted for its approval. At the time it approved this standard, the T1 Committee had the following members:

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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*¹⁾

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*¹⁾

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

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