

3GPP2 X.S0004-500-E
Version 1.0.0
Date: March 2004



3RD GENERATION
PARTNERSHIP
PROJECT 2
"3GPP2"

Introduction to Signaling Protocols

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Revision History

Revision	Initial Publication	Date
Rev. 0	Initial Publication	March 2004

PART 500

1 MAP PROTOCOL ARCHITECTURE

The following figure provides a high-level view of the MAP Protocol Architecture.

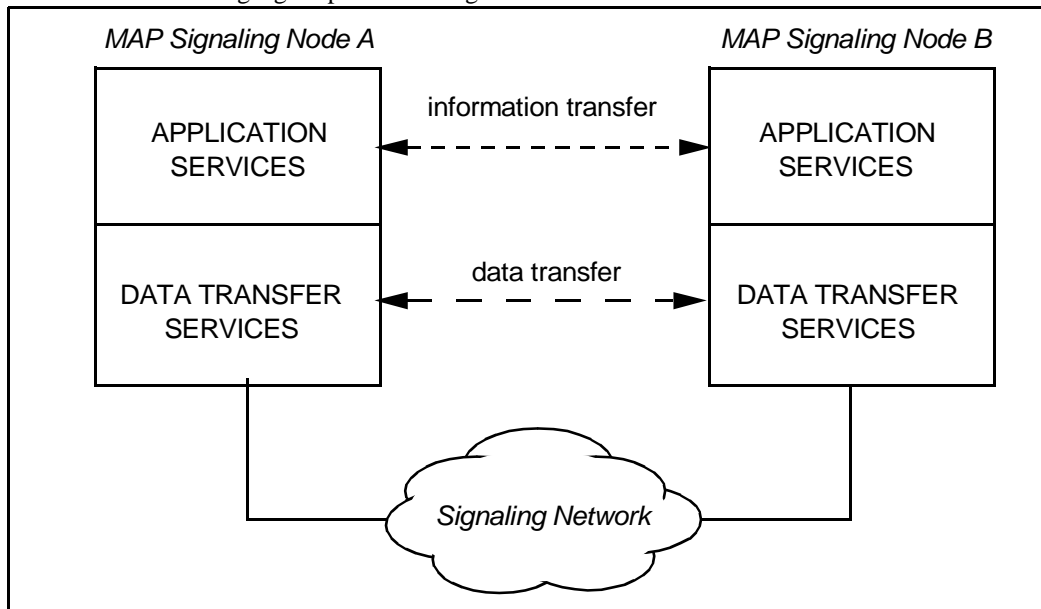


Figure 1 MAP Protocol Architecture

The fundamental division within the architecture is between *data transfer services* and *application services*. Application services deal with the transfer of *information*, with its associated syntax and semantics. Data transfer services simply move octets between MAP functional entities via a signaling network.

In terms of the Open Systems Interconnection (OSI) Reference Model, defined in the *ITU X.200* series of recommendations, Application Services encompass the Application, Presentation, Session, and Transport layers. Data Transfer Services cover the Network, Data Link, and Physical layers of the model (see Figure 2).

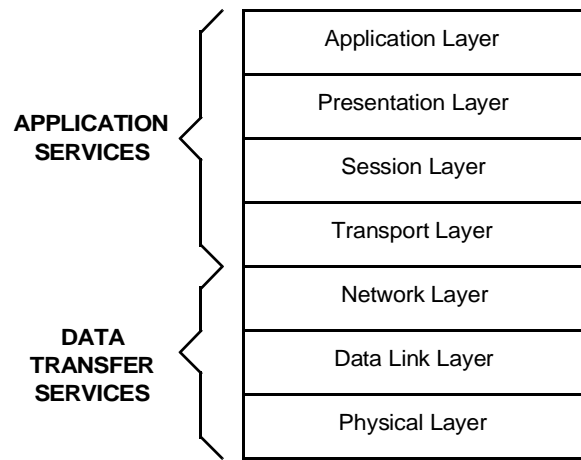


Figure 2 OSI Reference Model Relationship

This Standard specifies a single set of Application Services (see Figure 3) comprised of the *ANSI* Transaction Capabilities specified in *ANSI T1.114*, along with *TIA-41* application-specific services called the Mobile Application Part (MAP). These services are defined in *TIA-41-520-E* including the qualifications, limitations and exceptions on the use of *ANSI T1.114* in this Standard.

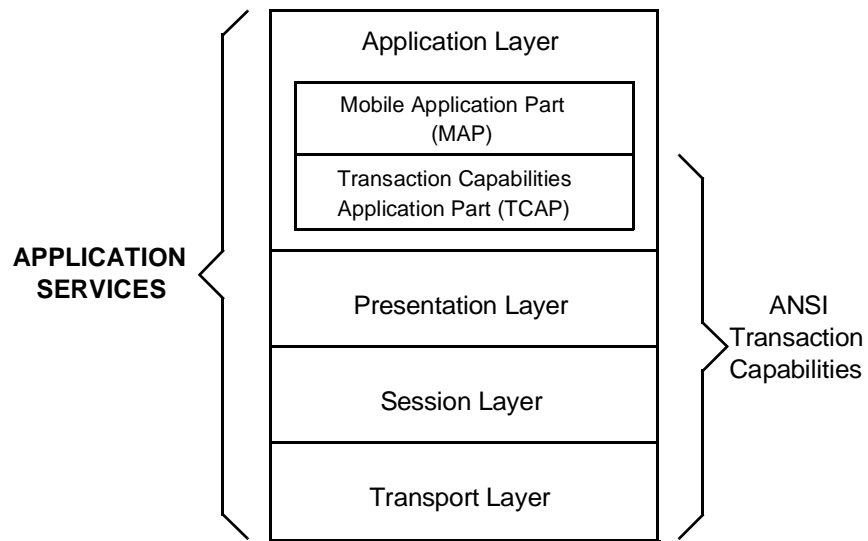


Figure 3 Application Services

A choice of two sets of Data Transfer Services is allowed in this Standard.

One set is based on the X.25 data communications standard (see Figure 4). The relevant X.25 standards, as well as the qualifications, limitations and exceptions on the use of these standards in *TIA-41*, are specified in *TIA-41-510-E*.

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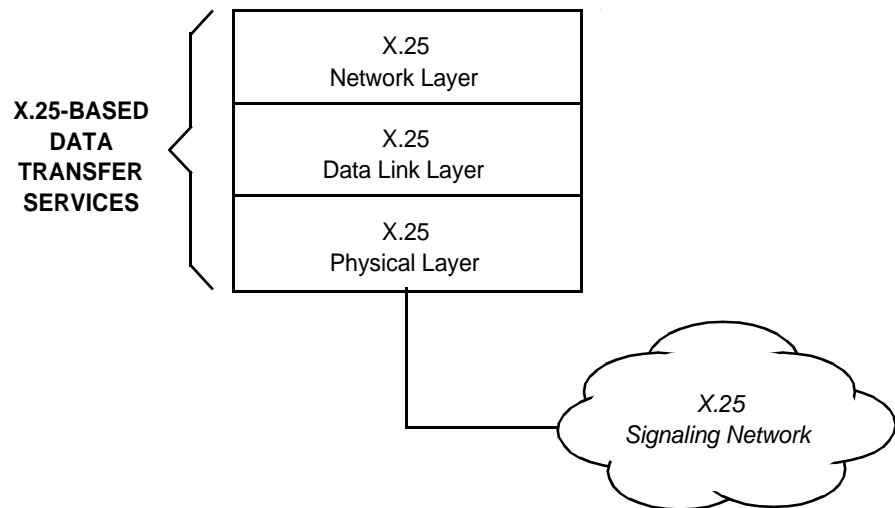


Figure 4 X.25-based Data Transfer Services

The other set is SS7-based and is comprised of the SS7 Signaling Connection Control Part (SCCP) plus Message Transfer Part (MTP) (see Figure 5).

The qualifications, limitations and exceptions on the use of these standards in *TIA-41* are specified in TIA-41-511-E for ANSI and TIA-41-512-E for ITU-T.

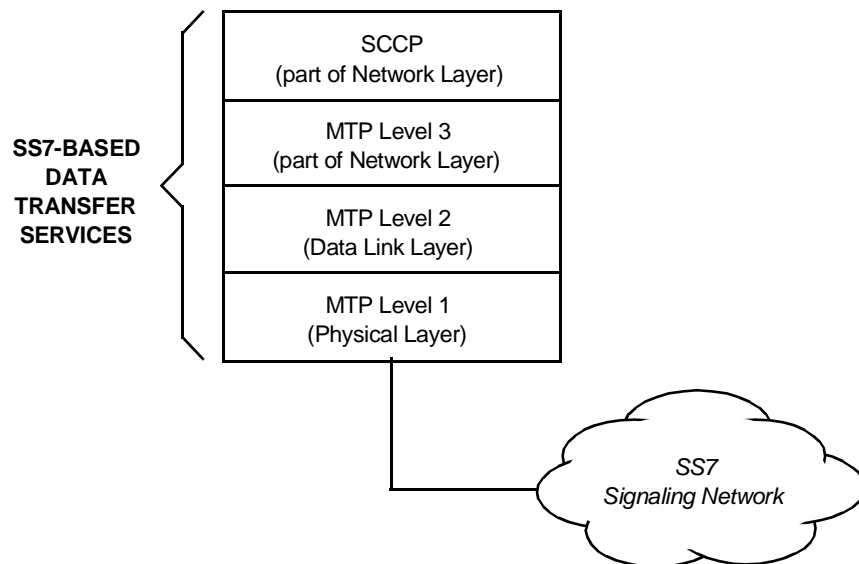


Figure 5 SS7-based Data Transfer Services

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