SNDCP (V7.0.0) Protocol Modules for TTCN-3 Toolset with TITAN, Function Specification

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How to Read This Document

This is the Function Specification for the set of SNDCP protocol modules. SNDCP protocol modules are developed for the TTCN-3 Toolset with TITAN.

Scope

The purpose of this document is to specify the content of the SNDCP protocol modules. Basic knowledge of TTCN-3 [2] and TITAN TTCN-3 Test Executor [3] is valuable when reading this document.

General

Protocol modules implement the message structures of the related protocol in a formalized way, using the standard specification language TTCN-3 . This allows defining of test data (templates) in the TTCN-3 language [2] and correctly encoding/decoding messages when executing test suites using the Titan TTCN-3 test environment [3].

Protocol modules are using Titan's RAW encoding attributes [4] and hence is usable with the Titan test toolset only.

Functional Specification

Protocol Version Implemented

This set of protocol modules implements protocol messages and constants of the SNDCP protocol - 3GPP TS 44.065 V7.0.0 (see [1]).

Modifications/Deviations Related to the Protocol Specification

Unimplemented Messages, Information Elements and Constants

None.

Protocol Modifications/Deviations

None.

Encoding/Decoding and Other Related Functions

This product also contains encoding/decoding functions which assure correct RAW encoding of messages when sent from Titan and correct RAW decoding of messages when received by Titan. Implemented encoding/decoding functions:

Name	Type of formal parameters	Type of return value
enc_PDU_SN	PDU_SN	octetstring
dec_PDU_SN	octetstring	PDU_SN

Terminology

No specific terminology is used.

Abbreviations

TTCN-3

Testing and Test Control Notation version 3

References

[1] 3GPP TS 44.065 V7.0.0 (2006-09)
3rd Generation Partnership Project:; Technical Specification Group Core Network; Digital cellular telecommunications system (Phase 2+); Mobile Station(MS) – Serving GPRS Support Node (SGSN); Subnetwork Dependent Convergence Protocol (SNSCP) (Release 7)

[2] ETSI ES 201 873-1 v.3.2.1 (2007-02)
The Testing and Test Control Notation version 3. Part 1: Core Language

[3] User Guide for the TITAN TTCN-3 Test Executor

[4] Programmer's Technical Reference for the TITAN TTCN-3 Test Executor