SUA Protocol Modules for TTCN-3 Toolset with TITAN, Function Specification

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# Introduction

## Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Rev | Characteristics | Prepared |
| 2005-11-11 | PA1 | First draft version | ETHLAFA |
| 2005-11-14 | PA2 | Updated after inspection | ETHLAFA |

## How to Read this Document

This is the Function Specification for the set of SUA protocol modules. SUA protocol modules are developed for the TTCN-3 Toolset with TITAN. This document should be read together with the Product Revision Information [3].

## Scope

The purpose of this document is to specify the content of the SUA protocol modules.

## References

[1] <http://www.apps.ietf.org/rfc/rfc3868.html>  
Signalling Connection Control Part User Adaptation Layer (SUA)

[2] ETSI ES 201 873-1 v.3.1.1 (06/2005)  
The Testing and Test Control Notation version 3. Part 1: Core Language

[3] 109 21-CNL 113 478-1 Uen  
SUA Protocol Modules for TTCN-3 Toolset with TITAN, Product Revision Information

[4] 1/1553-CRL 113 200 Uen  
User Documentation for the TITAN TTCN-3 Test Executor

## Abbreviations

PDU Protocol Data Unit

SUA Signalling Connection Control Part User Adaptation Layer

TTCN-3 Testing and Test Control Notation version 3

## Terminology

TITAN TTCN-3 Test Executor (see [4]).

# General

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

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

# Functional Specification

## Protocol Version Implemented

This set of protocol modules implements protocol messages and constants of the SUA protocol (see [1]).

## Modifications/deviations Related to the Protocol Specification

### Implemented messages

All SUA message types of message classes 0, 2, 3, 4, 7, 8 and 9 as listed in chapter 3.1.2 of [1] will be implemented.

### Protocol Modifications/Deviations

None.

## Encoding/Decoding and Other Related Functions

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

Name Type of formal parameters Type of return value  
**f\_enc\_PDU\_SUA PDU\_SUA octetstring  
f\_dec\_PDU\_SUA octetstring PDU\_SUA**