

BSSAPP (V7.3.0) 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 BSSAPP protocol modules. BSSAPP protocol modules are developed for the TTCN-3 Toolset with TITAN.

Scope

The purpose of this document is to specify the content of the BSSAPP 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].

The protocol modules are using Titan's RAW encoding attributes [4] and hence they 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 BSSAPP protocol. The modules are based on 29.018 V7.3.0 (see [1]).

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
<code>enc_PDU_BSSApp</code>	PDU_BSSApp	octetstring
<code>dec_PDU_BSSApp</code>	octetstring	PDU_BSSApp

Terminology

No specific terminology is used.

Abbreviations

BSSAPP

Base Station System Application Part+ (BSSAP+)

TTCN-3

Testing and Test Control Notation version 3

References

[1] 3GPP TS 29.018 V7.3.0 (2006-12)

3rd Generation Partnership Project; Technical Specification Group Core Network; General Packet Radio Service (GPRS) Serving GPRS Support Node (SGSN) - Visitors Location Register (VLR) Gs interface layer 3 specification (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