

## TTplugin LTE RRC/S1/X2

## Application of 3GPP Test Cases for the Radio Resource Control Protocol (RRC)

TTplugin LTE RRC/S1/X2 is a codec that provides ASN.1 encoding and decoding to a TTCN-3 test system, based on the latest versions of the 3GPP ASN.1 definitions of the protocols.

3GPP's Long Term Evolution (LTE) project was initiated with the aim to bring enhancements to the Universal Terrestrial Radio Access Network (UTRAN) as well as to improve the existing 3GPP radio access architecture. Achieving a mature stadium, this new generation access technology standard named E-UTRAN will be extremely flexible, able to use a number of predefined channel bandwidths between 1.5 and 20 MHz which can be used more efficiently depending on the needed throughput.

Part of this work, mainly covered by the Radio Access Network (RAN) group, are the standards S1AP and X2AP. X2AP supports the functions of X2 interface by the radio network layer signalling procedures of the control plane between eNBs in E-UTRAN, whereas the S1 Application Protocol (S1AP) describes the functions defined by E-UTRAN radio network layer signalling protocol for the S1 interface.

## Features & Highlights

- Full 3GPP standard compliant:
  - TS 36.331 V8.5.0 (2009-03), TS 36.413 V8.5.1 (2009-03), TS 36.423 V8.5.0 (2009-03)
- Application of 3GPP test cases for the Radio Resource Control Protocol (RRC) between UE and E-UTRAN
- Ready to use no additional coding efforts
- Freely combinable with additional test access (TTplugins)
- Free of charge for users of TTworkbench with TTplugin ASN.1 and ASN.1 Codec Factory option

