

# TTplugin LTE\_NAS

## NAS Protocol Codec Plugin for 3GPP LTE Test Suites

TTplugin LTE NAS is a codec that provides Non-Access-Stratum (NAS) types encoding and decoding to a TTCN-3 test system, based on the latest versions of the 3GPP NAS types definitions of the protocols.

The NAS is a set of protocols in the Evolved Packet System (EPS). This set has two protocols: EPS Mobility Management (EMM) and EPS Session Management (ESM).

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 state, 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.

### Features & Benefits

- Based on the latest versions of the 3GPP NAS types definitions provided in the 3GPP Abstract Test Suites defined in TS 34.123-3, TS 36.521-3 and TS 37.571-3
- Support of diverse specifications as
  - 3GPP TS 23.038, 3GPP TS 23.040
  - 3GPP TS 24.004, 3GPP TS 24.007, 3GPP TS 24.008, 3GPP TS 24.080, 3GPP TS 24.301
  - 3GPP TS 25.322, 3GPP TS 25.323
  - 3GPP TS 29.002
  - 3GPP TS 34.109, 3GPP TS 34.229
  - 3GPP TS 36.331, 3GPP TS 36.509
  - 3GPP TS 44.060
  - 3GPP TS 45.002 etc.
- Ready to use - no additional coding efforts
- Freely combinable with additional test access (TTplugins)

