

OSS Nokalva ASN.1 Tools Support LTE

One of the latest wireless technology developments is the creation of Long Term Evolution (LTE) technical specifications by the 3rd Generation Partnership Project (3GPP). LTE is an evolution of the GSM/UMTS systems family, and specifies the next generation mobile broadband access system.

LTE, which uses OFDM (Orthogonal Frequency Division Multiplexing) and advanced antenna technologies such as MIMO (Multiple Input Multiple Output), is the next evolutionary step in the HSPA (High Speed Downlink Packet Access) technology path. LTE will enable downlink peak speeds of 326 Mbps and uplink peak speeds of 86 Mbps, both with 20 MHz of bandwidth. It also reduces latency to a 10-millisecond round trip between handsets and the base station.

LTE is emerging as the dominant next-generation broadband wireless technology supported by the world's largest mobile operators. A set of specifications for Long Term Evolution has been approved by the 3GPP. The 3GPP decided that LTE would be included in 3GPP Release 8, which is expected to be "frozen" by the end of 2008 or early 2009. First deployments of LTE are expected in 2010.

Three of the standard protocols in the LTE series are specified in ASN.1 (Abstract Syntax Notation One) – the E-UTRA Radio Resource Control (RRC) Protocolⁱ, the E-UTRAN S1 Application Protocolⁱⁱ, and the E-UTRAN X2 Application Protocolⁱⁱⁱ.

OSS Nokalva has extracted the ASN.1 specifications from these three protocol drafts, and input these into each of our four OSS ASN.1 compilers – the OSS ASN.1/C Compiler, the OSS ASN.1/C++ Compiler, the OSS ASN.1/C# Compiler, and the OSS ASN.1/Java Compiler. The ASN.1 specifications all compiled successfully using each of our four compilers.

OSS is committed to supporting the RRC, S1, and X2 ASN.1 specifications and helping customers to integrate and support LTE in their products. For more information please contact our sales staff at info@oss.com or +1-732-302-0750. Our toll free number is: 1-888-OSS-ASN1 (USA and Canada). With our world class software and 24 x 7 live technical support, you can develop and implement ASN.1 standards-based products with ease.

ⁱ 3GPP TS 36.331 V8.1.0 (2008-03)
Technical Specification
3rd Generation Partnership Project
Technical Specification Group Radio Access Network
Evolved Universal Terrestrial Radio Access (E-UTRA)
Radio Resource Control (RRC)
Protocol specification
(Release 8)

ⁱⁱ 3GPP TS 36.413 V8.1.0 (2008-03)
Technical Specification
3rd Generation Partnership Project
Technical Specification Group Radio Access Network
Evolved Universal Terrestrial Access Network (E-UTRAN)
S1 Application Protocol (S1AP)
(Release 8)

ⁱⁱⁱ 3GPP TS 36.423 V8.1.0 (2008-03)
Technical Specification
3rd Generation Partnership Project
Technical Specification Group Radio Access Network
Evolved Universal Terrestrial Radio Access Network (E-UTRAN)
X2 Application Protocol (X2AP)
(Release 8)