

## THE INTUITIVE RADIO ACCESS NETWORK MESSAGES EDITOR



**SPEEDS UP YOUR INTEGRATION AND VALIDATION PROCESSES WITH THE LEADING EDITOR FOR LTE *RRC*, *S1AP*, *X2AP* AND UMTS *RRC*, *NBAP*, *RANAP*...**

### VISUAL INTERFACE – VISUALIZE ASN.1 LTE AND UMTS DATA

#### EASY AND POWERFUL

- Simple and fast message decoding/encoding.
- Comfortable tree view to browse the message.
- Click to get detailed values information.

#### HIGH EDITING CAPABILITIES

- Create, edit, find/replace and filter any ASN.1 values.
- Immediate error detection and encoding on modification.
- Copy/paste of data in XML or hexadecimal format.

### 3GPP LTE/UMTS CONFORMANCE – ASN.1 STANDARDS

#### LTE STANDARDS

- 3GPP LTE standards included: RRC, S1AP, X2AP, LPP, M2AP and M3AP.

#### UMTS STANDARDS

- 3GPP UMTS standards included: HNBAP, NBAP, PCAP, RANAP, RNSAP, RRC, RUA, SABP.

### SAVE TIME – SPEED UP INTEGRATION AND VALIDATION

#### INPUT FACILITIES

- Decode binary and hexadecimal files.

#### OUTPUT FACILITIES

- Encode values in binary and hexadecimal format.
- Export decoded values to XML in a click.

#### AUTOMATIC DATA CREATION

- Mass generation for a quick creation of several values in a short time.

#### TARGET APPLICATIONS

Radio Access Network  
RNC, NodeB, eNodeB, Femtocell

User Equipment, Mobile phone  
applications...

#### About Marben

A leading provider of key software solutions for next generation service-driven networks.

#### More than 25 years of experience

Delivers interoperable, robust and efficient signaling, routing and AAA solutions to accelerate the delivery of network services.

#### Marben Customers

Alcatel-Lucent, Ciena, Cisco, Ericsson, Fujitsu, HP, Nortel, NEC, Nokia Siemens Networks, Tellabs, Verizon, ...

Affiliate of  
**NE Technologies, Inc.**

## TECHNICAL OVERVIEW

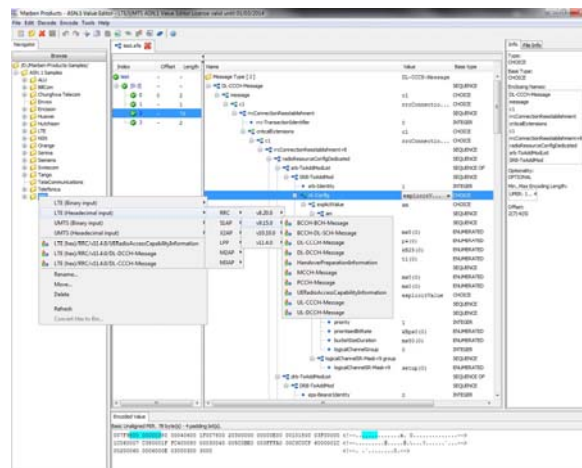
**MARBEN LTE/UMTS Editor** eases your application and test developments based on ASN.1 LTE and UMTS standards. All ASN.1 LTE and UMTS data can be displayed and modified easily.

### USER-FRIENDLY DISPLAY

ASN.1 values are displayed in a comfortable tree view. New fields and values can be added to an existing value or file. Various information about types and values are displayed such as type, constraints, optionality, encoding length and bit offsets. Open types can easily be defined. Live encoding result is displayed during modification.

### IMMEDIATE ERROR DETECTION

MARBEN LTE/UMTS Editor provides an immediate validation of any modification with regards to the LTE or UMTS ASN.1 types and associated constraints. Fixing errors is easy thanks to the displayed information.



### ASN.1 DECODE/ENCODE

To decode values just choose the appropriate LTE or UMTS standards. The decoded values are then displayed in the main view using a tree representation. Errors found during decoding are displayed in red.

To encode a value, you simply choose the output format. The encoding result is then stored in a file and displayed in the "Encoded Value" view at the bottom of the window.

### FAST MESSAGE CREATION WITH OPTIONAL AUTOMATIC INITIALIZATION

Select the standard and version of the message that you want to create.

The automatic value creation option automatically initializes mandatory fields during creation. In addition, optional fields and extensions can automatically be created and the number of elements in a SEQUENCE OF or SET OF type can be specified.

### EXPORT TO XML

The decoded or created messages can be exported to XML for an easy reading and post processing.

### RADIO ACCESS NETWORK LTE AND UMTS 3GPP STANDARDS SUPPORTED

MARBEN LTE/UMTS Editor includes all 3GPP ASN.1 standards dedicated to LTE and UMTS Radio Access Networks.

## CONTACTS

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## CONFORMANCE

ITU-T Recommendations **X.680, X.681, X.682, X.683, X.691, X.693.**

W3C Recommendations, XML schema (part 1 & 2),  
Extensible Markup Language XML 1.0 Second edition.

## RELATED OFFERS

**MARBEN ASNSDK TCE** a powerful and easy development kit allowing to integrate into your application a very fast encoding and decoding facilities for LTE and UMTS ASN.1 and much more.

Our ASN.1 experts deliver you the best of Consulting, Training and Custom services.

[www.marben-products.com](http://www.marben-products.com)

## SYSTEM REQUIREMENTS

Windows, Linux.

Oracle Java Runtime Environment.