

# ETSI TS 101 530 V8.7.1 (2004-05)

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*Technical Specification*

**Digital cellular telecommunications system (Phase 2+);  
Location Services (LCS);  
Base Station System Application Part  
LCS Extension (BSSAP-LE)  
(3GPP TS 09.31 version 8.7.1 Release 1999)**

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Reference

RTS/TSGG-020931v871

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Keywords

GSM

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## Foreword

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## Foreword

This Technical Specification has been produced by the 3<sup>rd</sup> Generation Partnership Project (3GPP).

The present document defines the coding of information in an extension of the Base Station System Application Part (BSSAP) that is needed to support location services on interfaces based on use of BSSAP.

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# 1 Scope

The present document specifies procedures and information coding that are needed to define and support the BSSAP LCS Extension (BSSAP-LE). The BSSAP-LE message set is applicable to the following GSM interfaces defined in 3GPP TS 03.71:

Lb interface (BSC-SMLC).

Ls interface (MSC-SMLC).

Lp interface (SMLC-SMLC).

The present document defines message formats and encoding for BSSAP-LE and the particular subsets of it that are applicable to each of the above interfaces. The present document also defines the support for BSSAP-LE message transfer on each of these interfaces using CCITT and ANSI versions of SS7 MTP and SCCP. Additional requirements for the above interfaces that are applicable to BSSAP-LE are also defined – e.g. usage of BSSAP (as defined in 3GPP TS 04.08 and 08.08) on the Lb interface.

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# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] 3GPP TS 01.04: "Abbreviations and acronyms".
- [1a] 3GPP TS 23.032: "Universal Geographical Area Description (GAD)".
- [2] 3GPP TS 03.71: "Location Services (LCS); (Functional description) - Stage 2"
- [3] 3GPP TS 04.08: "Mobile radio interface layer 3 specification".
- [4] 3GPP TS 04.31: "Location Services (LCS); Mobile Station (MS) – Serving Mobile Location Center (SMLC); Radio Resource LCS Protocol (RRLP)."
- [5] 3GPP TS 04.71: "Mobile radio interface layer 3 Location Services (LCS) specification".
- [6] 3GPP TS 08.06: "Signaling transport specification mechanism for the Base Station Subsystem – Mobile-services Switching Centre (BSS - MSC) interface".
- [7] 3GPP TS 08.08: "Mobile-services Switching Centre – Base Station System (MSC-BSS) interface; Layer 3 specification"
- [8] 3GPP TS 08.31: "Location Services (LCS); Serving Mobile Location Center (SMLC) – Serving Mobile Location Center (SMLC); SMLC Peer Protocol (SMLCPP)."
- [9] 3GPP TS 08.71: "Location Services (LCS); Serving Mobile Location Center – Base Station Subsystem (SMLC-BSS) interface Layer 3 specification."
- [10] 3GPP TS 09.02: "Mobile Application Part (MAP) specification".
- [11] CCITT Recommendation Q.702: "Specifications of Signalling System No. 7 - Signalling data link".