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**RELEASE NOTE**

**Recommendation GSM 04.12**

Cell Broadcast Short Message Service Support  
on Mobile Radio Interface

Previously distributed version : 3.2.1 (Updated Release 1/90)  
New Released version February 92 : 3.2.1 (Release 92, Phase 1)

**1. Reason for changes**

No changes since the previously distributed version.



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## Foreword

This Interim European Telecommunication Standard (I-ETS) has been produced by the Special Mobile Group (SMG), a Technical Committee of the European Telecommunications Standards Institute (ETSI) and has been adopted having undergone the ETSI standards approval procedure.

This I-ETS describes the support of the Short Message Service Cell Broadcast (SMS-SCB) on the mobile radio interface within the European digital cellular telecommunications system (phase 1).

Reference is made within this I-ETS to the following technical specifications (NOTE 1):

GSM 02.03	Teleservices supported by a GSM PLMN.
GSM 03.41	Technical realization of Short Message Service Cell Broadcast.
GSM 04.04	MS-BSS layer 1 - general requirements.
GSM 05.02	Multiplexing and multiple access on the radio path.

The above specifications are normative.

NOTE 1: ETSI has constituted stable and consistent documents which give technical specifications for the implementation of the European digital cellular telecommunications system. Historically, these documents have been identified as "GSM recommendations".

Some of these recommendations may subsequently become Interim European Telecommunication Standards (I-ETSs) or European Telecommunication Standards (ETSs), whilst the others will be renamed ETSI-GSM Technical Specifications. These ETSI-GSM Technical Specifications are, for editorial reasons, still referred to as GSM recommendations in some current GSM documents.

The numbering and version control system used for ETSI-GSM Technical Specifications is the same as that used for GSM recommendations.

NOTE 2: Items in this draft indicated as not complete, or requiring further study or work, are not required for the Phase 1 implementation of the European digital cellular telecommunications system.

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ETSI/GSM

Recommendation: GSM 04.12  
Title: Short Message Service Cell Broadcast (SMSCB)  
Support on the Mobile Radio Interface  
Date: February 1992

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2. General description
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Original language: English

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1 Scope

This recommendation describes how the Short Message Service - Cell Broadcast (SMSCB) (Teleservice 23 as specified in GSM Rec 02.03) is supported over the mobile radio interface.

2. General Description

SMSCB is a service in which short messages may be broadcast from a PLMN to MS's. SMSCB messages come from different sources (e.g. traffic reports, weather reports). The source and subject of the message is identified by a message identifier in the SMSCB header. A sequence number in the SMSCB header enables the MS to determine when a new message of a given source is available. An MS can read the header and then decide whether or not to read the rest of the message.

SMSCB messages are not acknowledged by the MS. Reception of SMSCB by the MS is only possible in idle mode, and the service is designed so as to minimise the adverse impact on the operation of DRX in the MS. The geographical area over which each SMSCB message is transmitted is selected by the PLMN operator, by agreement with the provider of the information.

3. Message Format on BTS-MS Interface

3.1 General

The SMSCB message at the Application layer consists of an 88 octet block of information, as defined in Rec 03.41. The 88 octet block is segmented into four 22 octet blocks. A 1 octet header message type is added. The overall blocks are thus 23 octets in length.

The message is sent on the channel allocated as CBCH by GSM Rec 05.02. The timing of the messages is defined in GSM Rec 05.02.



3.2 Format convention

3.2.1 Numbering convention

The basic convention used in this recommendation is illustrated in fig 1. The bits are grouped into octets, the bits of an octet are shown horizontally and are numbered from 1 to 8. Multiple octets are shown vertically and are numbered from 1 to 23.

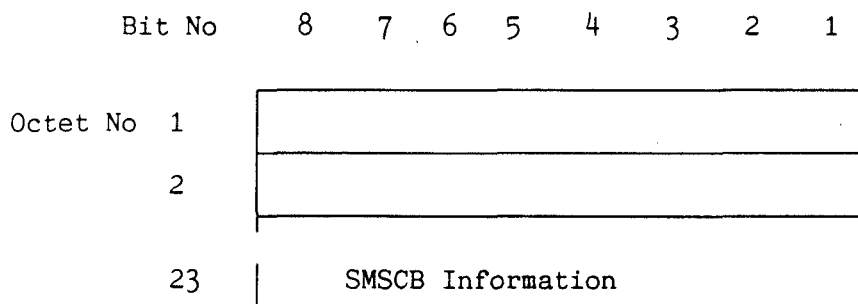


Figure 1/GSM 04.12 Format convention

3.2.2 Order of bit transmission

The message is sent on the CBCH as defined in Rec. GSM 05.02 using the coding defined for that channel.

The order of bit transmission is defined in Rec. GSM 04.04.

3.3 Message content

The 23 octet blocks are coded as follows:

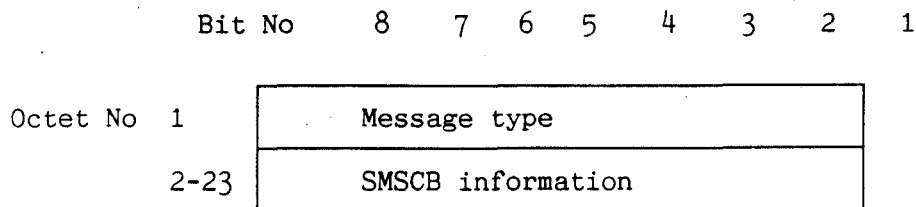


Figure 2/GSM 04.12 Message content

3.3.1 Message Type

The purpose of the Message Type is to identify the function of the message being sent. The message type is coded as shown in figur 3/GSM 04.12.

Bit No	8	7	6	5	4	3	2	1
Octet No 1	Spare		L P D	Spare		Sequence Number		
			0 1					

Bit No	4	3	2	1	
	0	0	0	0	first block
	0	0	0	1	second block
	0	0	1	0	third block
	0	0	1	1	fourth block
	1	1	1	1	Message does not contain valid SMSCB information

all other values are reserved

Table 1/GSM 04.12

3.3.2 SMSCB information

The SMSCB information coding is defined in Rec. GSM 03.41

<b>Document history</b>		
March 1992	First edition	