



SIS - Standardiseringskommissionen i Sverige

Handläggande organ

**ITS, Informationstekniska standardiseringen**

## SVENSK STANDARD SS 63 63 62

Fastställd

1993-02-17

Utgåva

1

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### **Europeiskt digitalt mobiltelesystem, GSM — Signaleringskrav för fysisk anslutning till Televerkets telefonnät — Signalförbindelsestyrningsdelen (SCCP)**

Anslutning till det allmänna telenätet har tidigare reglerats genom specifikationer från Televerket. Sedan den 1 juli 1992 sker reglering genom Telestyrelsen.

Telestyrelsens mandat och arbetssätt innebär hänvisning till internationell, europeisk och svensk standard.

Ett antal specifikationer från Televerket kommer därför att överföras till svensk standard.

I denna utgåva av standarden överförs televerksspecifikation 8211-A 306 oförändrad. I nästa utgåva kommer en granskning av det tekniska innehållet och en anpassning till redigeringsreglerna för svensk standard att ske.

### **European digital cellular telecommunica- tions system, GSM — Signalling requirements for physical connection to the telephone network of "Televerket" — Signalling Connection Control Part (SCCP)**

Connection to the public switched telephone network has formerly been regulated by specifications issued by "Televerket". Since July 1, 1992 "Telestyrelsen" is the Swedish regulating authority.

The mandate and way of working of "Telestyrelsen" implies references to International, European and Swedish standards.

Several specifications from "Televerket" will therefore be transferred to Swedish standards.

In this version of the standard the specification 8211-A 306 from "Televerket" is transferred unchanged. In the second version a review of the technical content and an adjustment to the editing rules for Swedish standards will be performed.





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Dokumentansvarig/Godkänd - Document responsible/Approved NsC <i>Anders Carl</i>			Datum - Date 1991-02-07	Rev A	File/Tillhör S1

**Signalling requirements for public land mobile networks according to the paneuropean digital system, GSM, connected to the public switched telephone network. CCITT signalling system no.7 Signalling Connection Control Part (SCCP)**

- 1 **ADOPTION DATE**
- 2 **SCOPE**
- 3 **OTHER RELATED STANDARD**
- 4 **GENERAL**
- 5 **SIGNALLING CONNECTION CONTROL PART (SCCP)**

**1 ADOPTION DATE**

This standard shall take effect 1991-03-01.

**2 SCOPE**

This standard covers requirements concerning signalling for public land mobile networks according to the paneuropean digital system, GSM, connected to the public switched telephone network (PSTN).

**3 OTHER RELATED STANDARDS**

See CCITT Recommendations Q.711-714, blue book.

**4 GENERAL**

The Signalling Connection Control Part (SCCP) shall be in accordance with CCITT Recommendations Q.711-Q.714, as defined in sections 5.1-5.4 below.



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The specification below specifies a minimum set of functions applicable for connectionless service. It is allowed to use an implementation that complies with the full Q.711-714 of the 1988 years CCITT recommendations (blue book). However the use of signalling connections in the interface requires bilateral agreements.

The requirements are a subset of Rec's Q.711-714, 1988 (blue book). In the following sections comments are given to each Recommendation. Each section is given the same number as the concerned section to which the comment refers in the relevant Recommendation.

## 5 SIGNALLING CONNECTION CONTROL PART (SCCP)

### 5.1 RECOMMENDATION Q.711: FUNCTIONAL DESCRIPTION OF THE SIGNALLING CONNECTION CONTROL PART

This recommendation has no normative status to the interface and therefore no comment is made.

### 5.2 RECOMMENDATION Q.712: DEFINITION OF FUNCTION OF SCCP MESSAGE

#### 1 Signalling connection control message

The following message applies

#### 1.20 Unitdata (UDT)

#### 2 SCCP parameters

The following parameters apply

#### 2.3 calling/called party address

#### 2.5 data

#### 2.10 protocol class

#### 3. Inclusion of fields in the messages

The only message that applies are Unitdata.



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### 5.3 RECOMMENDATION Q 713: SCCP FORMATS AND CODES

1. General  
Applicable
2. Coding of general parts  
Applicable
3. SCCP Parameters
  - 3.1 End of optional parameters  
Not applicable
  - 3.2 Destination local reference  
Not applicable
  - 3.3 Source local reference  
Not applicable
  - 3.4 Called party address
    - 3.4.1 Address indicator

bit 1 point code indicator:  
Is always set to 0

bit 2 SSN indicator:  
Is always set to 1

bit 3-6 Global title indicator:  
Is always set to 0100

bit 7 Routing indicator  
Is always set to 0

bit 8 Not used  
Is always set to 0

#### 3.4.2 Address

##### 3.4.2.1 Signalling point code

Not applicable.

##### 3.4.2.2 Sub-system number

Always included. The value is not recognized in the interface.



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### 3.4.2.3 Global title

The only global title format that applies is the one shown on figure 11/Q.713, Global title indicator 0 1 0 0.

#### 3.4.2.3.1 Global title indicator = 0 1 0 0 The following codes apply:

##### a) Translation type.

Is always coded 00000000

##### b) Numbering plan indicator

Two values apply.

0001 Telephony/ISDN numbering plan (Recommendations E.163 and E.164)

0111 ISDN/mobile numbering plan (Recommendation E.214)

##### c) Encoding scheme.

Two values apply

0001 BCD, odd number of digits

0010 BCD, even number of digits

##### a) Nature of address indicator

Two values apply:

0 0 0 0 0 1 1 National significant number

0 0 0 0 1 0 0 International number

##### b) Address information

The following address signals apply:

- 0000 digit 0
- 0001 digit 1
- 0010 digit 2
- 0011 digit 3
- 0100 digit 4
- 0101 digit 5
- 0110 digit 6
- 0111 digit 7
- 1000 digit 8
- 1001 digit 9
- 1010 - 1110 not used
- 1111 ST



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## 3.5 Calling party address

Applicable.

## 3.6 Protocol class

Bits 1-4

Two values apply

0000 Class 0

0001 Class 1

Bits 5-8

Is always set to 0000

## 3.7 Segmenting/reassembling

Not applicable.

## 3.8 Receive sequence number

Not applicable

## 3.9 Sequencing/segmenting

Not applicable

## 3.10 Credit

Not applicable

## 3.11 Release cause

Not applicable

## 3.12 Return cause

Not applicable

## 3.13 Reset cause

Not applicable

## 3.14 Error cause

Not applicable

## 3.15 Refusal cause

Not applicable.

## 3.16 Data

Applicable.



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#### 4. SCCP messages and codes

##### 4.1 General

Applicable

##### 4.2-4.9 Not applicable

##### 4.10 Unitdata message

Applicable

##### 4.11-4.17 Not applicable

#### 5. SCCP management messages and codes

Not applicable

### 5.4 SIGNALLING PROCEDURES Q.714

#### 1 Introduction

Applicable

##### 1.1.2 Protocol classes

Class 0 and class 1 are applicable.

##### 1.1.3 Signalling connections

Not applicable

##### 1.1.4 Compatibility and handling of unrecognized information

Applicable

#### 1.2 Overview of procedures for connection-oriented procedures

Not applicable

#### 1.3 Overview of procedures for connectionless procedures

Applicable

### 2 ADDRESSING AND ROUTING

#### 2.1 SCCP addressing

The paragraph, marked 1), concerning global title applies.

The paragraph, marked 2), concerning DPC+SSN does not apply.





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## 2.2 SCCP routing principles

Applicable

### 2.2.1 Receipt of SCCP messages transferred by MTP

The paragraph concerning SSN+GT, marked 3), applies

The paragraphs concerning Subsystem only, marked 1), and Global title only, marked 2) do not apply.

### 2.2.2 Messages from connection oriented or connection control to SCCP routing control

Paragraph GT+SSN, marked 4) applies.

Paragraph DPC, marked 1), DPC + (SSN or GT or both) marked 2), GT, marked 3) do not apply.

#### 2.2.2.1 DPC present

Not applicable

#### 2.2.2.2 Translation required

Applicable

## 2.3 SCCP routing

### 2.3.1 Receipt of SCCP messages transferred by the MTP

The paragraphs marked 1) and 2) do not apply. The parts of paragraph 3) which make references to connectionless service apply.

### 2.3.2 Messages from connection oriented or connection control to SCCP routing control

The paragraphs marked 1),2) and 3) do not apply. The parts of paragraph 4) which make references to connectionless service apply.

## 2.4 Routing failures

The indication of routing failure in the unitdata service message, Connection refused message, or Connection Release message do not apply.



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### 3 CONNECTION-ORIENTED PROCEDURES

Not applicable

### 4 Connectionless procedures

Applicable

#### 4.1 Message transfer

Applicable

#### 4.2 Message return

Not applicable

#### 4.3 Syntax error

Applicable

### 5. SCCP Management procedure

#### 5.2 Signalling Point status managment

Applicable

#### 5.3 Subsystem status managment

Not applicable