# ETSI EN 301 419-2 V5.1.1 (2000-04)

European Standard (Telecommunications series)

Digital cellular telecommunications system (Phase 2+); Attachment requirements for Global System for Mobile communications (GSM); High Speed Circuit Switched Data (HSCSD) Multislot Mobile Stations; Access (GSM 13.34 version 5.1.1 Release 1996)



Reference

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### ETSI EN 301 419-2 V5.1.1 (2000-04)

# Contents

Intelle	ectual Property Rights	4
Forew	vord	4
1	Scope	5
2	References	6
3	Abbreviations	6
4	General requirements	7
5	Requirements	7
Anne	x A (normative): The Requirement Table (RT)	14
A.1	Introduction to the RT	14
A.2	Format of the tables	14
A.3	References to EN 300 607-1 (GSM 11.10-1)	15
A.4 A.4.1 A.4.2	Notations used in the RT Status Notations Support Answer Notations	15 15 15
A.5 A.5.1 A.5.1. A.5.1. A.5.1. A.5.1. A.5.1. A.5.1. A.5.1. A.5.2 Anne	The Requirement Tables         Static Requirements, RT A.         1       Types of Mobile Stations         2       Mobile Station Features         3       Teleservices         4       Bearer Services         5       Supplementary Services         6       Bearer Capability Information         7       Additional Information         7       Additional Information         7       Additional Information         8       (informative):	16 16 16 17 17 17 17 17 17
Anne	x D (mormative): Document change mstory	
HISTO	у	

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# Foreword

This European Standard (Telecommunications series) has been produced by the Special Mobile Group (SMG).

The present document covers the High Speed Circuit Switched Data Multislot (HSCSD) requirements for terminal equipment for the Global System for Mobile communications (GSM) mobile services.

The present document contains the procedures and requirements for the approval testing of GSM terminal equipment implementing the HSCSD optional feature for access.

The requirements of TBR 19 [3] and/or TBR-31 [5], apply in addition to the present document, for HSCSD terminal equipment, Access.

For each test, supplementary information is provided, giving a justification why this item has been selected for regulatory testing, and a reference to the relevant article of the Terminal Directive [1].

The present document is based on EN 300 607-1 (GSM 11.10-1 version 5.5.0) [2].

The contents of the present document may be subject to continuing work within SMG and may change following formal SMG approval. Should SMG modify the contents of the present document it will then be re-submitted for formal approval procedures by ETSI with an identifying change of release date and an increase in version number as follows:

Version 5.x.y

where:

- 5 GSM Phase 2+ Release 1996.
- x the second digit is incremented for changes of substance, i.e. technical enhancements, corrections, updates, etc.;
- y the third digit is incremented when editorial only changes have been incorporated in the specification.

National transposition dates				
Date of adoption of this EN:	31 March 2000			
Date of latest announcement of this EN (doa):	30 June 2000			
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 December 2000			
Date of withdrawal of any conflicting National Standard (dow):	31 December 2000			

# 1 Scope

The present document specifies the technical requirements to be met by terminal equipment capable of connecting to a public telecommunications network and that support the GSM High Speed Circuit Switched Data Multislot (HSCSD) feature. These requirements apply to terminals for Phase 2+ of the public land mobile radio service, operating in the 900 MHz and 1800 MHz bands with a channel separation of 200 kHz, utilising constant envelope modulation and carrying traffic channels according to the Time Division Multiple Access (TDMA) principle.

The present document specifies the terminal equipment HSCSD requirements for the GSM 900 and the DCS 1800 versions of the Global System for Mobile communications (GSM).

The present document applies in addition to any regulatory requirements, eg. CTR 19/CTR 31, for HSCSD terminal equipment, Access.

For each test purpose and its corresponding conformance requirement, a reference is given to the test method in EN 300 607-1 (GSM 11.10-1) [2]. The requirements apply at the air interface and the Subscriber Identity Module - Mobile Equipment interface for the access requirements, which may be stimulated to perform the tests by additional equipment if necessary.

The measurement uncertainty is described in EN 300 607-1 (GSM 11.10-1) [2].

The present document covers the essential requirements of the Terminal Directive 98/13/EC [1] Articles 5d, 5e, 5f.

The Terminal Directive 98/13/EC [1] Articles 5a and 5b are covered by other directives, and, therefore, not by the present document.

In the present document, there are no Electromagnetic Compatibility technical requirements in terms of the Terminal Directive 98/18/EC [1], Article 5c.

NOTE 1: Technical Requirements for EMC performance and testing of the equipment are covered by the relevant standards applicable to the EMC Directive 89/336/EEC, annex A.

The present document specifies the HSCSD Terminal equipment additional requirements, Access.

EN 300 607-1 (GSM 11.10-1) [2] constitutes the conformance test suite for GSM. The verification of the conformance requirements in the present document is based on the tests described in this reference. The set of requirements in EN 300 607-1 (GSM 11.10-1) [2] and the set of requirements in the present document need not be identical.

All the requirements in the present document are specific to mobile stations supporting HSCSD.

An active accessory is covered by the present document if it modifies the terminal performance in an aspect which affects conformance to essential requirements.

NOTE 2: Only active devices are subject to the present document. Accessories may be tested with specific terminals, and either approved for use with those terminals only, or may possibly be approved for use with a wider range of terminals, depending on the nature and effect of the accessory.

# 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.
- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.
- For this Release 1996 document, references to GSM documents are for Release 1996 versions (version 5.x.y).
- [1] Directive 98/13/EC of the European Parliament and of the Council of 12 February 1998 relating to telecommunications terminal equipment and satellite earth station equipment, including the mutual recognition of their conformity.
- [2] EN 300 607-1 (GSM 11.10-1 version 5.5.0): "Digital cellular telecommunications system (Phase 2+); Mobile station conformity specifications".
- [3] TBR 19: "European digital cellular telecommunications system; Attachment requirements for Global System for Mobile communications (GSM) mobile stations; Access".
- [4] GSM 01.04 (ETR 350): "Digital cellular telecommunication system (Phase 2+); Abbreviations and acronyms"
- [5] TBR 31: "European digital cellular telecommunications system (Phase2); Attachment requirements for mobile stations in the DCS 1800 band and additional GSM 900 band; Access".
- [6] TBR 20: "European digital cellular telecommunications system (Phase 20; Attachment requirements for Global System for Mobile communications (GSM) mobile stations; Telephony".
- [7] TBR 32: "European digital cellular telecommunications system (Phase2); Attachment requirements for mobile stations in the DCS 1800 band and additional GSM 900 band; Telephony".

# 3 Abbreviations

For the purposes of the present document, the following additional abbreviations apply:

HSCSD	High Speed Circuit Switched Data
MO	Mobile Originated
MT	Mobile Terminated
Т	Transparent
NT	Non Transparent
AIUR	Air Interface User Rate
FNUR	Fixed Network User Rate

Additional GSM related abbreviations can be found in GSM 01.04 (ETR 350) [4].

# 4 General requirements

HSCSD terminals shall conform to:

- a) the requirements of TBR 19/TBR 31 according to the frequency band(s) implemented in the terminal; and
- b) the requirements of clause 5 of this standard; and
- c) the requirements in Annex A of this standard; and
- d) if the terminal implements speech services, the requirements of TBR 20/TBR 32 according to the frequency band(s) implemented in the terminal.

# 5 Requirements

The following table contains all requirements that are needed to meet the essential requirements as defined in the Terminal Directive [1]. A justification according to article 5 of the Terminal Directive is given by stating the relevant categories (c to f) together with a text supporting the justification.

The entries are defined as follows:

- "EN 300 607-1 Item" defines the item number of the conformance requirement and also the reference to EN 300 607-1 (GSM 11.10-1) [2]. This reference is a normative reference to a subclause of EN 300 607-1 (GSM 11.10-1) [2] containing the conformance requirement text, and references to the base standard.
- "Description" contains a short description of the requirement.
- "Justification" contains supplementary information to explain the justification of the requirement according to article 5 of the Terminal Directive [1].
- "TD Cat" defines the category according to article 5 of the Terminal Directive [1].
- "Test Cat" defines whether the requirement is covered by a "special test situation" (e.g. a manufacturer's declaration of some form). An "X" indicates a special test situation, whilst, a blank entry indicates conformity is by the test referred to by this standard.

EN 300 607-1 Item	Description	Justification	TD Cat	Test Cat
13.6	Transmitter - Frequency error and phase error in HSCSD multislot configuration	Non compliance in this area may cause interference to other spectrum users.	е	
13.7	Transmitter output power and burst timing in HSCSD multislot configurations	Non compliance in this area may cause interference to other spectrum users.	е	
13.8	Transmitter - Output RF spectrum in HSCSD multislot configuration	Non compliance in this area may cause interference to other spectrum users.	e	

#### **Table 1: Requirements and Justifications**

#### Table 1 (continued): Requirements and Justifications

EN 300 607-1 Description		Justification	TD Cat	Test
Item				Cat
14.2.8	Receiver / Reference sensitivity -	Non Compliance in this area may impair	f	Х
	full rate data channels in	establishment and the maintaining of the		
	multislot configuration	call.		

EN 300 607-1 Description Item		Justification	TD Cat	Test Cat
18.2	Temporary reception gaps in HSCSD multislot configurations	Non Compliance in this area may impair the holding of the connection.	f	

### Table 1 (continued): Requirements and Justifications

### Table 1 (continued): Requirements and Justifications

EN 300 607-1 Item	Description	Justification	TD Cat	Test Cat
21.5	Received signal measurements in HSCSD multislot configuration	Non compliance in this area may lead to ignore excessive values of RXLEV, under normal or extreme conditions.	e, f	

### Table 1 (continued): Requirements and Justifications

EN 300 607-1 Item	Description	Justification	TD Cat	Test Cat
22.2	Transmit power control timing and confirmation in HSCSD mutlislot configurations.	Spectrum efficiency.	E	

EN 300 607-1	Description	Justification	TD Cat	Test
Item				Cat
26.13.1.1.1	Multislot signalling / RR / Measurement / symmetric	This test case verifies that the MS does not report about cells which are suitable from a radio propagation point of view but which could not accommodate the MS for other reasons. The measurement reports that are sent by the MS are used by the network to determine whether a handover procedure should be performed and towards which cell it can be performed (Article 5f). For its measurements, the MS has to follow the indications broadcasted by the network in the SYSTEM INFORMATION messages.	f	
26.13.1.1.2	Multislot signalling / RR / Measurement / asymmetric	This test case verifies that the MS does not report about cells which are suitable from a radio propagation point of view but which could not accommodate the MS for other reasons. The measurement reports that are sent by the MS are used by the network to determine whether a handover procedure should be performed and towards which cell it can be performed (Article 5f). For its measurements, the MS has to follow the indications broadcasted by the network in the SYSTEM INFORMATION messages.	f	
26.13.1.1.3	Multislot signalling / RR / Measurement / asymmetric / Change of the reported subchannel	This test guarantees the reliability of measurement reports	e, f	
26.13.1.2.1	Multislot signalling / RR / Dedicated assignment / successful case	If the assignment procedure is not correctly implemented by the MS, connections can not be established (Article 5f). If the correct power level is not applied this harms the network (Article 5d).	d, f	
26.13.1.2.2	Multislot signalling / RR / Dedicated assignment / failure / general case	If the assignment failure procedure is not correctly implemented by the MS, that MS can not be able to re-establish the old link.	f	
26.13.1.3.1	Multislot signalling / RR / Handover / successful / active call / non-synchronized	If the handover procedure is not correctly implemented by the MS, it is impossible to switch a call in progress from one cell to another cell.	f	
26.13.1.3.2	Multislot signalling / RR / Handover / successful / call under establishment / non synchronized / resource upgrading	If the handover procedure is not correctly implemented by the MS, it is impossible to switch a call in progress from one cell to another cell.	f	
	і (	continued)	I	

Table 1	(continued)	: Rea	uirements	and	Justifications
					• aotimo ationo

26.13.1.3.3	Multislot signalling / RR / Handover / successful / active call / finely synchronized / resource downgrading	If the handover procedure is not correctly implemented by the MS, it is impossible to switch a call in progress from one cell to another cell.	f	
26.13.1.3.4	Multislot signalling / RR / Handover / successful / call under establishment / finely synchronized / relocation of channels	If the handover procedure is not correctly implemented by the MS, it is impossible to switch a call in progress from one cell to another cell.	f	
26.13.1.3.5	Multislot signalling / RR / Handover / successful / call under establishment / pre- synchronized / resource upgrading	If the handover procedure is not correctly implemented by the MS, it is impossible to switch a call in progress from one cell to another cell.	d, f	
26.13.1.4	Multislot signalling / RR / Test of the channel mode modify procedure	Non Compliance in this area may impair the modification / holding of the call.	f	
26.13.1.5	Multislot signalling / RR / Early classmark sending	Networks may systematically use this procedure and, if it is incorrectly implemented in the MS, the basic connection establishment procedure may systematically fail.	f	
26.13.2.1.1	Multislot signalling / CC / In-call functions / User initiated service level upgrade / successful	Non Compliance in this area may impair the modification / holding of the call.	f	
26.13.2.1.2	Multislot signalling / CC / In-call functions / User initiated service level downgrade / successful	Non Compliance in this area may impair the modification / holding of the call.	f	
26.13.2.1.3	Multislot signalling / CC / In-call functions / User initiated service level upgrade / Time-out of timer T323	Non Compliance in this area may impair the modification / holding of the call.	f	
26.13.2.1.4	Multislot signalling / CC / In-call functions / User initiated service level upgrade / modify reject	Non Compliance in this area may impair the modification / holding of the call.	f	
	(0	continued)		

Table 1 (continued): Requirements and Justifications

EN 300 607-1	Description	Justification	TD Cat	Test Cat
26.13.3.1	Multislot signalling / Structured procedures / MS originated call / early assignment / HSCSD / non- transparent	TP1: The establishment cause may be used as criterion for channel allocation: Rejection of random access with incorrect cause, rejection of random access for MOC when no TCH is free. If the tested function is incorrectly implemented in the MS, the establishment of mobile originating calls might fail or the network resources might be misused. TP2: This test purpose includes checking of the correct parameters, this is not included in 26.7.2.1. If the tested parameters are incorrectly used by the MS, the establishment of mobile originating calls might fail or the network resources might be misused or endangered. TP3: The test purpose completes the test purposes from 26.8.1.2.1 by use of an different preamble which reflects the normal sequence of operation during a MOC. Correct function of CC is not guaranteed independently from the preamble and configuration of lower (sub-) layers. If the tested functions are incorrectly implemented in the MS, the establishment of mobile originating calls might fail or the network resources might be misused or endangered. TP4 and TP5: The test purpose completes the test purposes from 26.8.1.2.1 by use of an different preamble which reflects the normal sequence of operation during a MOC. Correct function of CC is not guaranteed independently from the preamble and configuration of lower (sub-) layers. If the tested functions are incorrectly implemented in the MS, the etast purposes from 26.8.1.2.1 by use of an different preamble which reflects the normal sequence of operation during a MOC. Correct function of CC is not guaranteed independently from the preamble and configuration of lower (sub- )layers. If the tested functions are incorrectly implemented in the MS, the clearing of mobile originating calls might fail.	d, e, f	
	(c	continued)		

Table 1 (	continued	): Rea	uirements	and	Justifications
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EN 300 607-1 Item	Description	Justification	TD Cat	Test Cat				
26.13.3.2	Multislot signalling / Structured procedures / MS originated call / late assignment / HSCSD / non- transparent	TP1: The establishment cause may be used as criterion for channel allocation: Rejection of random access with incorrect cause, rejection of random access for MOC when no TCH is free. If the tested function is incorrectly implemented in the MS, the establishment of mobile originating calls might fail or the network resources might be misused. TP2: This test purpose includes checking of the correct parameters, this is not included in 26.7.2.1. If the tested parameters are incorrectly used by the MS, the establishment of mobile originating calls might fail or the network resources might be misused or endangered. TP3: The assignment procedure can be initiated by the network in any suitable MM and CC state, whatever the preamble be. This independence must be checked in some selected cases, especially in the actual situation of the test purpose which reflects the normal sequence of operation during a MOC with late assignment. If the tested functions are incorrectly implemented in the MS, the establishment of mobile originating calls using late assignment might fail or the network resources might be misused or endangered. TP4: The test purpose completes the test purposes from 26.8.1.2.1 by use of an different preamble which reflects the normal sequence of operation during a MOC with late assignment. Correct function of CC is not guaranteed independently from the preamble and configuration of lower (sub-)layers. If the tested functions are incorrectly implemented in the MS, the establishment of mobile originating calls using late assignment might fail or the network resources might be misused or endangered.	d, e, f					
26.13.3.3	Multislot signalling / Structured procedures / MS originated call / early assignment / HSCSD / Transparent	The test purposes relate to the normal sequence of protocol during an MTC. This sequence is not applied in tests of call control in 26.8. If any one or a series of these procedures are incorrectly implemented in the MS, the establishment and clearing of mobile terminating calls might fail or the network resources might be misused or endangered.	d, e, f					
	(continued)							

Table 1 (	(continued)	): Red	uirements	and	Justification	s
	, oomaaaa			ana	ouounounon	-

EN 300 607-1 Item	Description	Justification	TD Cat	Test Cat
26.13.3.4	Multislot signalling / Structured procedures / MS Terminated call / early assignment / HSCSD / non-transparent	The test purposes relate to the normal sequence of protocol during an MTC. This sequence is not applied in tests of call control in 26.8. If any one or a series of these procedures are incorrectly implemented in the MS, the establishment and clearing of mobile terminating calls might fail or the network resources might be misused or endangered.	d, e, f	
26.13.3.5	Multislot signalling / Structured procedures / MS Terminated call / early assignment / HSCSD / Transparent	The test purposes relate to the normal sequence of protocol during an MTC. This sequence is not applied in tests of call control in 26.8. If any one or a series of these procedures are incorrectly implemented in the MS, the establishment and clearing of mobile terminating calls might fail or the network resources might be misused or endangered.	d, e, f	

Table 1 (concluded): Requirements and Justifications

# Annex A (normative): The Requirement Table (RT)

# A.1 Introduction to the RT

This RT provides a summary of all the requirements of this standard. It shows the status of each EN-Requirement (EN-R), whether it is essential to implement in all circumstances, or whether the requirement is dependant on the manufacturer having chosen to support a particular optional service or functionality. In particular it enables the EN-Rs associated with a particular optional service or functionality to be grouped and identified.

The static requirements proform provides the means to capture the choices which the manufacturer has made in implementing the equipment.

The dynamic requirements proforma indicates the choices for which conformance is claimed for.

When completed in respect of a particular equipment the tables provide a means to undertake the static assessment of conformity with the standard, and to select the appropriate test cases to be used in dynamically testing the equipment.

References to items

For each possible item answer (answer in the support column) within the static requirements tables there exists a unique reference, used, for example, in the conditional expressions. It is defined as the table identifier, followed by a solidus character (/), followed by the item number in the table. If there is more than one support column in a table, the columns shall be discriminated by letters (a, b, etc.), respectively.

EXAMPLE 1: A.1/8 is the reference to the answer of item 8 in table A.1.

EXAMPLE 2: A.6/3b is the reference to the second answer (i.e. in the second support column) of item 3 in table A.6.

Prerequisite line

A prerequisite line takes the form: Prerequisite: <predicate>.

A prerequisite line after a clause or table title indicates that the whole clause or the whole table is not required to be completed if the predicate is FALSE.

# A.2 Format of the tables

The entries of the static requirement tables are defined as follows:

- In the "Item" column a local entry number for the requirement in the RT is given.
- In the "Description" column a short non-exhaustive description of the requirement is found.
- The "Ref." column references the corresponding clause of base standard or EN 300 607-1 (GSM 11.10-1) [2].
- In the "Status" column the status of the entry, as further detailed in the following clause, is indicated.
- The "Support" column is blank in the proforma, and shall be completed by the manufacturer in respect of each particular requirement to indicate the choices, which have been made in the implementation.
- The "Values allowed" column contains the values or the ranges of values allowed.
- The "Values supported" column shall be filled in by the supplier of the implementation. In this column, the values or the ranges of values supported by the implementation shall be indicated.
- The "Mnemonic" assigns a symbolic name to the static requirement.

The entries of the dynamic requirement tables are defined as follows:

- "EN 300 607-1 Item" defines the item number of the conformance requirement and also the reference to EN 300 607-1 (GSM 11.10-1) [2]. This reference is a normative reference to a section of EN 300 607-1 (GSM 11.10-1) [2] containing the conformance requirement text, and references to the base standard.
- In the "Description" column a short non-exhaustive description of the requirement is found.
- The "TD Cat" column the class of essential requirements is indicated. Essential requirements are classified according to article 5 of the EC Council Directive, 98/13/EC. Valid entries used in this RT are d, e and f, corresponding to respectively "protection of public networks", "effective use of frequency" and "interworking with public networks".
- In the "Status" column the status of the entry, as further detailed in the following clause, is indicated.
- The "Support" column is blank in the proforma, and shall be completed by the manufacturer in respect of each particular requirement to indicate the choices, for which conformance is claimed for.

# A.3 References to EN 300 607-1 (GSM 11.10-1)

The reference number in column "EN 300 607-1 Item" references subclauses in EN 300 607-1 (GSM 11.10-1) [2].

# A.4 Notations used in the RT

### A.4.1 Status Notations

The "Status" column shows the status of the entries as follows:

М	Mandatory, shall be implemented under all circumstances.
0	Optional, may be provided, but if provided shall be implemented in accordance with the requirements.
0. <n></n>	This status is used for mutually exclusive or selectable options among a set, in cases where it is mandatory to implement one or more options among a set. The integer $$ refers to a unique group of options within the RT. A footnote under the table in which it is used states explicitly what the requirement is for each numbered group.
C <n></n>	Conditional number <n>. Reference is made to a Boolean expression under the table with predicates of support answers, which will resolve to either "M", "X", "N", or "O.<n>" for a specific implementation. In all cases "ELSE Not Applicable" is implied, if an ELSE expression is omitted.</n></n>
N/A	Not applicable.
Х	Excluded or Prohibited.

### A.4.2 Support Answer Notations

The "support" column is reserved for completion in respect of a particular implementation. Entries may be:

- Yes (or Y or y) Indicating that the implementation claims to fully implement the EN-R in accordance with the specification. The entry of a "Yes" against an "X" status entry means the equipment does not conform to the standard.
- No (or N or n) Indicating that the implementation does not claim full support of the EN-R in accordance with the specification. The entry "No" against an "M" status entry means the equipment does not conform to the standard.

# A.5 The Requirement Tables

# A.5.1 Static Requirements, RT A

### A.5.1.1 Types of Mobile Stations

The supplier of the implementation shall state the support of the implementation for each of the questions concerning the types of a mobile station given in the tables below:

ltem	Type of Mobile Station	Ref.	Status	Support	Mnemonic
1	Standard GSM Band	GSM 02.06, 3.2.1	O.102		Type_GSM_P_Band
2	Extended GSM Band	GSM 02.06, 3.2.1	O.102		Type_GSM_E_Band
	(including standard Band)				
3	GSM Power Class 2	GSM 02.06, 4	C101		Type_GSM_Class2
4	GSM Power Class 3	GSM 02.06, 4	C101		Type_GSM_Class3
5	GSM Power Class 4	GSM 02.06, 4	0		Type_GSM_Class4
6	GSM Power Class 5	GSM 02.06, 4	0		Type_GSM_Class5
7	Small Mobile Station	GSM 05.05, 1.1	0		Type_SmallMS
8	HSCSD Multislot MS	GSM 02.06, 3.2.3	0		Type_Multislot
C101	IF A.1/7 THEN X ELSE O		Ty	pe_SmallMS	;
O.102	One of these items shall be	e supported			

### Table A.1: Types of GSM900 Mobile Stations

Comments:

Item	Type of Mobile Station	Ref.	Status	Support	Mnemonic		
1	DCS 1 800 Band.	GSM 02.06 3.2.1	М		Type_DCS_Band		
2	DCS Power Class 1.	GSM 02.06 4	O.101		Type_DCS_Class 1		
3	DCS Power Class 2.	GSM 02.06 4	O.101		Type_DCS_Class 2		
4	DCS Power Class 3.	GSM 02.06 4	O.101		Type_DCS_Class 3		
5	GSM 900 band supported, but not at the same time as DCS 1 800 band.	GSM 02.06 3.2.1	O.102		Type_MB_NonSimul		
6	GSM 900 band supported simultaneously with DCS 1 800 band.	GSM 02.06 3.2.1	O.102		Type_MB_Simul		
7	Small Mobile Station	GSM 05.05, 1.1	0		Type_SmallMS		
8	HSCSD Multislot MS	GSM 02.06, 3.2.3	0		Type_Multislot		
O.101 O.102	D.101One or more of these items shall be supported.D.102Zero or one of these items shall be supported.						

Comments:

### A.5.1.2 Mobile Station Features

Not used.

### A.5.1.3 Teleservices

Not used.

### A.5.1.4 Bearer Services

Not used.

### A.5.1.5 Supplementary Services

Not used.

### A.5.1.6 Bearer Capability Information

Not used

### A.5.1.7 Additional Information

Table A.25: Aditional Informa	ition
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Item	Additional Information	Ref.	Status	Support	Mnemonic
19	at least one MT circuit	GSM 04.08,	0		TSPC_MTsvc
	switched basic service.	5.3.4.2.2			
20	at least one MO circuit	GSM 04.08,	0		TSPC_MOsvc
	switched basic service.	5.3.4.2.1			
26	CC protocol for at least one	GSM 04.08, 5	0		TSPC_CC
	BC.				
50	Appl. Layer is always running.	GSM 11.10-1	0		TSPC_AddInfo_ApplAlwaysRun
		18.1			
72	14.4 k data mode	GSM 02.02 3,	0		TSPC_144Data
		GSM 07.01			
		Annex B,			

# A.5.2 Dynamic Requirements, RT B

### Table A.26: Dynamic Requirements

EN 300 607-1 Item	Description	TD Cat	Status	Supported
13.6	Transmitter - Frequency error and phase error in multislot configuration	е	C86	
13.7	Transmitter output power and burst timing in multislot configuration	е	C86	
13.8	Transmitter - Output RF spectrum in multislot configuration	е	C86	

#### Table A.26 (continued): Dynamic Requirements

EN 300 607-1 Item	Description	TD Cat	Status	Supported
14.2.8	Receiver / Reference sensitivity - full rate	f	C86	
	data channels in multislot configuration			

### Table A.26 (continued): Dynamic Requirements

EN 300 607-1 Item	Description	TD Cat	Status	Supported
18.2	Temporary reception gaps, multislot.	f	C90	

### Table A.26 (continued): Dynamic Requirements

EN 300 607-1 Item	Description	TD Cat	Status	Supported
21.5	Received signal measurements in HSCSD	e, f	C86	
	multislot configuration			

EN 300 607-1 Item	Description	TD Cat	Status	Supported
22.2	Transmit power control timing and	е	C86	
	confirmation in mutlislot configuration.			

### Table A.26 (continued): Dynamic Requirements

### Table A.26 (continued): Dynamic Requirements

EN 300 607-1 Item	Description	TD Cat	Status	Supported
26.13.1.1.1	Multislot signalling / RR / Measurement /	f	C87	
	symmetric			
26.13.1.1.2	Multislot signalling / RR / Measurement /	f	C87	
26 12 1 2 1	Asymmetric Multiplet signalling / PR / Dedicated	o f	C 96	
20.13.1.2.1	Multisiol Signalling / RR / Dedicated	e, i	000	
26 13 1 2 2	Multislot signalling / PR / Dedicated	f	C86	
20.13.1.2.2	assignment / failure / general case	1	000	
26 13 1 3 1	Multislot signalling / RR / Handover /	f	C87	
20.10.1.0.1	successful / active call / non-synchronized	1	007	
26 13 1 3 2	Multislot signalling / RR / Handover /	f	C87	
20110111012	successful / call under establishment / non	·	001	
	synchronized / resource upgrading			
26.13.1.3.3	Multislot signalling / RR / Handover /	f	C87	
	successful / active call / finely synchronized			
	/ resource downgrading			
26.13.1.3.4	Multislot signalling / RR / Handover /	f	C87	
	successful / call under establishment / finely			
	synchronized / relocation of channels			
26.13.1.3.5	Multislot signalling / RR /Handover /	d, f	C87	
	successful / call under establishment / pre-			
	synchronized / resource upgrading			
26.13.1.4	Multislot signalling / RR / Test of the channel	f	C87	
	mode modify procedure			
26.13.1.5	Multislot signalling / RR / Early classmark	f	C86	
	sending	-	-	
26.13.2.1.1	Multislot signalling / CC / In-call functions /	f	C87	
	User initiated service level upgrade /			
0040040	SUCCESSIU	4	007	
26.13.2.1.2	Multislot signalling / CC / In-call functions /	T	687	
26 13 2 1 3	Multislot signalling / CC / In-call functions /	f	C87	
20.13.2.1.3	User initiated service level upgrade / Time-	1	007	
	out of timer T323			
26.13.2.1.4	Multislot signalling / CC / In-call functions /	f	C87	
	User initiated service level upgrade / modify		•••	
	reject			
26.13.3.1	Multislot signalling / Structured procedures /	d, e, f	C88	
	MS originated call / early assignment /			
	HSCSD / non-transparent			
26.13.3.2	Multislot signalling / Structured procedures /	d, e, f	C88	
	MS originated call / late assignment /			
	HSCSD / non-transparent			
26.13.3.3	Multislot signalling / Structured procedures /	d, e, f	C88	
	MS originated call / early assignment /			
	HSCSD / Transparent			
26.13.3.4	Multislot signalling / Structured procedures /	d, e, f	C89	
	INIS Terminated call / early assignment /			
26 12 2 5	Multiclot signalling / Structured presedures /	dof	C00	
20.13.3.3	MS Terminated call / early assignment /	u, e, I	009	
	HSCSD / Transparent			
	noood / nanoparent			

In Table A.26 references to Table A.1 may point to either GSM 900 or DCS1800 configurations, for which two separate tables are provided in A.5.1.1.

Table A.26:	Dynamic	Requirements
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C86	If A.1/8 THEN M ELSE N/A	Type_Multislot
C87	IF A.1/8 AND A.25/26 THEN M ELSE N/A	Type_Multislot AND TSPC_CC
C88	IF A.1/8 AND A.25/20 THEN M ELSE N/A	Type_Multislot AND TSPC_MOsvc
C89	IF A.1/8 AND A.25/19 THEN M ELSE N/A	Type_Multislot AND TSPC_MTsvc
C90	IF A.1/8 AND NOT A.25/50 THEN M ELSE	Type_Multislot AND NOT
	N/A	TSPC_AddInfo_AppIAlwaysRun

# Annex B (informative): Document change history

SMG#	SPEC	CR	PHASE	VERS	NEW_VERS	SUBJECT
26	13.34				5.0.0	Specification approved by SMG#26
-	13.34			5.0.0	5.0.1	ETSI update for Public Enquiry
30	13.34	A001	R96	5.0.1	5.1.0	PICS TSPC_144Data added.
	13.34			5.1.0	5.1.1	Version update to 5.1.1 for Publication

# History

Document history					
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V5.0.2	January 1999	Vote	V 9911: 1999-01-12 to 1999-03-12		
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V5.1.0	December 1999	One-step Approval Procedure	OAP 200013: 1999-12-01 to 2000-03-31		
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