

ETSI TS 142 068 V14.0.0 (2017-04)



**Digital cellular telecommunications system (Phase 2+) (GSM);
Voice Group Call Service (VGCS);
Stage 1
(3GPP TS 42.068 version 14.0.0 Release 14)**



Reference

RTS/TSGS-0142068ve00

Keywords

GSM

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

Important notice

The present document can be downloaded from:

<http://www.etsi.org/standards-search>

The present document may be made available in electronic versions and/or in print. The content of any electronic and/or print versions of the present document shall not be modified without the prior written authorization of ETSI. In case of any existing or perceived difference in contents between such versions and/or in print, the only prevailing document is the print of the Portable Document Format (PDF) version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status.

Information on the current status of this and other ETSI documents is available at

<https://portal.etsi.org/TB/ETSIDeliverableStatus.aspx>

If you find errors in the present document, please send your comment to one of the following services:

<https://portal.etsi.org/People/CommiteeSupportStaff.aspx>

Copyright Notification

No part may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm except as authorized by written permission of ETSI.

The content of the PDF version shall not be modified without the written authorization of ETSI.

The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 2017.

All rights reserved.

DECT™, **PLUGTESTS™**, **UMTS™** and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members.

3GPP™ and **LTE™** are Trade Marks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

oneM2M logo is protected for the benefit of its Members

GSM® and the GSM logo are Trade Marks registered and owned by the GSM Association.

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "*Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards*", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<https://ipr.etsi.org>).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Foreword

This Technical Specification (TS) has been produced by ETSI 3rd Generation Partnership Project (3GPP).

The present document may refer to technical specifications or reports using their 3GPP identities, UMTS identities or GSM identities. These should be interpreted as being references to the corresponding ETSI deliverables.

The cross reference between GSM, UMTS, 3GPP and ETSI identities can be found under <http://webapp.etsi.org/key/queryform.asp>.

Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

Contents

Intellectual Property Rights	2
Foreword.....	2
Modal verbs terminology.....	2
Foreword.....	4
1 Scope	5
2 References	5
3 Definitions and abbreviations.....	6
3.1 Definitions	6
3.2 Abbreviations	7
4 Description	7
5 Normal operation with successful outcome	11
5.1 Provision	11
5.2 Withdrawal	11
5.3 Network related service configuration	11
5.3.1 Void	11
5.4 Normal operation for voice group call establishment.....	11
5.5 Charging requirements	12
5.6 Security requirements.....	12
6 Exceptional procedures or unsuccessful outcome	12
7 Interaction with other GSM services.....	13
7.1 Calling Line Identification Presentation (CLIP).....	13
7.2 Calling Line Identification Restriction (CLIR)	13
7.3 Connected Line Identification Presentation (COLP).....	13
7.4 Connected Line Identification Restriction (COLR)	13
7.5 Call Forwarding Unconditional (CFU).....	13
7.6 Call Forwarding on mobile subscriber Busy (CFB).....	13
7.7 Call Forwarding on No Reply (CFNRy)	13
7.8 Call Forwarding on mobile subscriber Not Reachable (CFNRc)	13
7.9 Call Waiting (CW)	14
7.10 Call Hold (HOLD).....	14
7.11 Multi-party Service (MPTY).....	14
7.12 Closed User Group (CUG)	14
7.13 Advice of Charge (AoC)	14
7.14 Barring of All Outgoing Calls (BAOC)	14
7.15 Barring of Outgoing International Calls (BOIC).....	14
7.16 Barring of Outgoing International Calls except those to the Home PLMN country (BOIC-exHC).....	15
7.17 Barring of All Incoming Calls (BAIC).....	15
7.18 Barring of Incoming Calls when Roaming outside the home PLMN country (BIC-Roam).....	15
7.19 Explicit Call Transfer (ECT)	15
7.20 Enhanced Multi-Level Precedence and Pre-emption service (eMLPP).....	15
7.21 Short Message Service (SMS).....	15
7.22 Operator Determined Barring (ODB).....	16
7.23 Completion of Calls to Busy Subscribers (CCBS).....	16
7.24 GPRS.....	16
8 Interworking considerations	16
Annex A (informative): Change History	17
History	19

Foreword

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

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

- x the first digit:
 - 1 presented to TSG for information;
 - 2 presented to TSG for approval;
 - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

1 Scope

The present document specifies the stage one description of the Voice Group Call Service (VGCS) which allows speech conversation of a predefined group of service subscribers in half duplex mode on the radio link taking into account multiple mobile service subscribers involved in the VGCS call per cell.

The VGCS is applicable to all mobile stations in a certain network and area which have the technical capability and the corresponding subscription, respectively, to participate in a VGCS call.

NOTE: It is not considered as requirement that normal GSM phase 2 mobile stations will be able to be used for this service.

The service is described from the service subscriber's and user's point of view; in particular:

- the procedure for normal operation with successful outcome;
- the action to be taken in exceptional circumstances;
- the interaction with other GSM services and features.

The present document does not deal with the Man-Machine Interface (MMI) requirements, but makes reference to the appropriate Global System for Mobile Communications (GSM) specifications.

The present document defines a teleservice of the digital cellular telecommunications system GSM. Any interaction with other services and/or networks not dealt with in clauses 7 or 8 are outside the scope of the present document.

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 TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 22.067: "enhanced Multi-Level Precedence and Pre-emption service (eMLPP); Stage 1".
- [3] 3GPP TS 32.005: "Telecommunications management; Charging management; 3G call and event data for the Circuit Switched (CS) domain".
- [4] 3GPP TS 43.020: "Security-related network functions".