

SPECIAL MOBILE GROUP

GSM/UMTS 01.00

March 1998

Version 5.2.0

Source: ETSI PT SMG

Reference: SMG working

procedures

Working Procedures for SMG and PT SMG; Part 1; Standards Management

European Telecommunications Standards Institute

PT SMG

Postal address: 06921 Sophia Antipolis Cedex - FRANCE

Office address: Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE

Tel.: +33 4 92 94 43 22 - Fax: +33 4 93 65 28 17



ETSI PT SMG 1998.

No rights reserved.

Any part may be reproduced except as prohibited by written proscription. The rights for reproduction extend to all media in which the information may be embodied.

Microsoft Corporation

Exhibit 1030-00001

Contents

Introduction	5
1 Scope	5
2 Definitions and Abbreviations.....	5
3 General responsibilities of PT SMG	5
4 Development cycle of a GSM or UMTS Technical Specification	5
4.1 GSM specific aspects	5
4.2 Specification handling both applicable to UMTS and GSM.....	7
4.2.1 Introduction of a new Technical Specification	7
4.2 Version numbering.....	7
4.2.1 General	7
4.2.2 Numbering system and significance of digits	7
4.2.3 Responsibility for incrementing version numbers.....	8
4.3 Handling of changes to approved Technical Specifications	8
4.3.1 Change Requests	8
4.3.2 Change Request forms	8
4.3.3 Contents of Change Requests.....	9
4.3.4 Handling of the Change Requests	9
4.3.4.1 In the STC responsible for the TS	9
4.3.4.2 In the TC	10
4.4 Updating and release of new versions of the specifications.....	11
4.4.1 New TS	11
4.4.2 Draft preliminary ETS (Draft prETS) for PE.....	11
4.4.3 Final draft preliminary ETS (Final draft prETS) for Vote	11
4.4.4 ETS for Publication.....	12
4.4.5 Draft preliminary ETS (Draft prETS) for UAP.....	12
4.4.6 Draft Amendment for UAP.....	12
4.5 Availability and distribution of UMTS and GSM specifications.....	12
4.5.1 Hard copies of specifications (paper form)	12
4.5.2 Soft copies of specifications (electronic form).....	13
5 GSM Phase 2+.....	13
5.1 Creation of a Work Item	13
5.2 Type of Work Items	14
5.3 Start and continuation of the work and responsibilities	14
5.4 Realisation of Work Items	14
5.4.1 Planning and categorisation of the deliverables (and control thereof)	14
5.4.2 Choice of deliverables.....	15
5.4.2.1 Completely new specification.....	15
5.4.2.2 Amendments to existing specifications	15
5.4.2.3 Delta Specifications	15
5.4.3 Contents of deliverables	15
5.4.3.1 Service Requirements	15
5.4.3.2 Technical realisation specifications	16
5.4.3.3 Mobile Station Test Specifications:.....	16
5.4.3.4 Base Station Test Specifications:.....	16
5.5 Closing of Work Items.....	16
6 Management documents and tools	16
6.1 Status List(s)	16
6.2 GSM Phase 2+ Status List (Advancement control document).....	17
6.3 Change Request data bases	17

6.4 Mailing lists data bases.....	17
6.5 Electronic tools used/preferred.....	17
7 Interaction with ETSI Work Programme.....	17
Annex 1 Status List (extract).....	22
Annex 3 Specification cover sheets.....	26
Annex 4 CR forms.....	33
Annex 4 Phase 2+ Work Item description sheet.....	39
Annex 5 ETSI Work Programme work item sheets	41
History	44

Introduction

In order to ensure correctness of the UMTS and GSM technical specifications, ETSs and ETRs, and consistency throughout the standard it is necessary to have clear, manageable and efficient mechanisms to handle version control, change control, document updating, distribution and management.

Also, the fact that the GSM specifications are implemented by industry almost in parallel with the writing of them requires strict and fast procedures for handling of changes to the specifications.

The GSM Phase 1 standard is considered as completed although there is an occasional need to correct the specifications, but then mainly related to the Type Approval related specifications.

The Phase 2 standard is ically completed as well, and only corrections will be made in future to the Phase 2 specifications, once they have reached ETS/ETR status.

The first Phase 2+ specifications were created at SMG#16. They will continue to be updated with the evolution of Phase 2+.

It is very important that the changes that are brought into the standard, in the past, at present and in the future, are well documented and controlled, so that technical consistency and backwards traceability are ensured.

For the UMTS and GSM standard, the STCs together with PT SMG are responsible for the technical content and consistency of the specifications whilst PT SMG alone is responsible for the proper management of the entire GSM/SMG documentation, including specifications, meeting documents, administrative information and information exchange with other bodies inside and outside of ETSI.

This document is primarily targeted to new members of the 'SMG community', be it PT SMG members or (S)TC delegates, to assist them in quickly acquiring an understanding of the various 'rules and procedures' applied in SMG and its STCs. But also, the document should serve as a reference for all the involved people, making sure that the organisational and administrative part of the standardisation work is well understood and similarly applied throughout all the working groups.

1 Scope

This document outlines the procedures and rules [to be] used by TC SMG and PT SMG in relation to document management, i.e. handling of specifications, updating procedures, CR procedures, version control mechanisms, specifications status information, mailing lists, etc. It complements the 'ETSI rule book'. This document does not stipulate the details of the internal working of the STCs. From TC SMG's point of view, a task and responsibility is given to an STC (or a Task Force) directly answering to the TC. In practice, the work/task may be carried out in a subgroup of the STC/TF.

Some parts of the document are relevant for PT SMG only.

The body text of the document is as brief as possible.

2 Definitions and Abbreviations

In this document, the generic term Technical Specification (TS), or simply Specification, is used for both types of normal GSM deliverables, i.e. Technical Specifications (TS) and Technical Reports (TR). A distinction between the two is done only where relevant.

SMG is supported by the project team(s) for GSM and by the project team(s) for UMTS. The ETSI numbers of project teams may change in time, therefore they are not used here. When no confusion arises, the term PT SMG addresses any of them. When a distinction is to be made, the terms PT GSM and PT UMTS are used.

3 General responsibilities of PT SMG

PT SMG is responsible for the project management of SMG. This includes editorship and management of specifications once they have been approved by SMG. It also includes preparation of and support for the meetings of SMG and its sug-groups, in descending priority

TC > STC > {STC WP/ Task Force} > {other group, e.g. ad hoc group}.

It furthermore includes liaison to other standardisation bodies and relevant groups and institutions, in particular

- ITU groups in case of UMTS
- GSM MoU groups in case of GSM
- T1P1 in case of GSM.

4 Development cycle of a GSM or UMTS Technical Specification

This section describes the general procedures and events involved in, and related to, the lifetime of a GSM or UMTS specification.

Definitions

Specification, major version, platform, version: The GSM standard (the UMTS standard) consists of *specifications*. One specification may have several *major versions*. One major version may have several *versions*. One or more specifications, each in a defined major version, can be linked to build a *platform*. Example: The specification GSM 05.05 has major versions 3, 4, 5. Version 3.1.0 is a version of GSM 05.05.

4.1 GSM specific aspects

GSM specifications will be further developed in packages.

- ◇ For the time being, there is one package every year, the core specifications to be frozen typically in the last SMG plenary meeting of the year, the testing specifications and operations & maintenance specifications to be frozen 2 SMG plenary meetings later.
- ◇ The specifications of a frozen package identify clearly
 - which functions belong to the package, i.e. are completely specified in the package (so that they are can be implemented), and
 - which requirements are applicable in the package (both to mobile and network).

These are called the functions and requirements of the package.

- ◇ As soon as possible, specifications are re-organised such that any new version of a specification contains the complete specification of all earlier phase2/2+ packages. This is achieved by provision of "hooks" in the core specifications and by identifying in GSM 10.01 the functions and requirements of each frozen package.
 - ◇ From that time on, a new package is simply frozen by approval of the new version of the "master tables".
- Creation of a major version of a specification is decided by SMG. A major version of a specification may have one of the following status:

(1)	pre-stable draftVersion	"draft x.y of Vn.0.0"
(2)	pre-stable, under change control	Vx.y.z
(3)	stable	Vx.y.z
(4)	frozen	Vx.y.z
(5)	closed.	Vx.y.z

Transitions from one status to the other are top down. When a major version of a specification reaches status (2), (3), (4) or (5), all lower major versions of that specification should be frozen or closed.

Actions within one status:

- (1) out of scope of this paper
- (2) any change requests
- (3) change requests for correction, clarification, editorial CRs, introduction of new options as defined in section 6; in justified cases, introduction of new requirements from a certain date on.
- (4) essential error corrections
- (5) no CRs possible.

A specification in status (2) stays under change control of the STC as long as SMG doesn't decide otherwise.

This means: Application of the whole Change Request regime, but the STC approving the CR. The status to be under change control of the STC has to be clearly identified in the specification. All STC approved CRs are available on the ETSI server and SMG CD-ROM.

Specifications with status (1) and (2) are not published by ETSI. They are however available to SMG experts, on the ETSI server and the SMG CD-ROM. Specifications with status (3) are published by ETSI on decision of SMG and ETSI. Specifications with status (4) and (5) are published by ETSI unless otherwise decided by SMG and ETSI. The status as a published specification has to be clearly identified in the specification.

The life cycle of a new Phase 2+ GSM Technical Specification, which is described in detail in the following sections, can be summarised as follows:

1. Identification of the need for a [new] specification,
2. Allocation of specification number (i.e. GSM xx.xx),
3. Development of the draft specification(s) in the STCs and Working Groups,
4. Decision of the responsible STC to put the draft specification under STC Change Control (it thereby becomes version 5.0.0 but remains under STC change control),
5. Further development of the specification under STC change control.
6. Approval of a possibly later version of the specification by SMG, typically on proposal of the STC.
7. Publication of the approved specification by ETSI in the deliverable type decided by SMG,
8. Initiation of SMG Change Control. Publication of the resulting specification by ETSI in the deliverable type decided by SMG
9. On decision of the responsible STC, a new draft major version is created (it becomes version "Draft 1.0 of version 6.0.0").
10. Decision of the responsible STC to put the new draft major version under STC Change Control
11. etc. as in 5.,6.,7.,8.

SMG may decide to change the ETSI deliverable type of a specificaliton(then it may have to undergo the Public Enquiry/Voting procedures or the OAP procedure).

A phase 2+ specification (with version 5.0.0) may also be created by approval of a phase 2+ CR to a phase 2 specification. The further life cycle of the phase 2+ specification is as described above.

Evidently, each of the above steps includes a number of sub-steps and procedures (formal as well as non-formal). These are described in the rest of this document.

4.2 Specification handling both applicable to UMTS and GSM

4.2.1 Introduction of a new Technical Specification

The decision to modify the list of Technical Specifications (by creation or deletion) can be done only in TC SMG. The need for a new Technical Specification can be identified by the experts in the STCs, by PT SMG or directly in TC SMG. It may be the product of a plain new work item or a complement to existing specifications (gap-filler or restructuration). PT SMG assigns a number (xx.xx) to the proposed specification. For a new specification, the proposal should contain:

- title/subject
- the (prime) responsible STC or task force
- the rapporteur(s)
- the corresponding phase 2+ work item(s) (see clause 5.1)
- a (preliminary) scope.

The responsible STC presents the proposal to create the specification to TC SMG for approval.

The (prime) responsible STC Task Force is then responsible for the internal consistency of the document, for the consistency with other documents under the responsibility of the group and to the extent possible also for the consistency with documents of the other STCs. The choice of responsible STC/TF is made by TC SMG, and is not necessarily the group issuing the proposal in the first place.

Once the concept is approved and the above is accomplished, the work on the Technical Specification commences/continues within the STC. The editor/rapporteur is responsible for the TS, but all STC members are expected to contribute to the work.

At a later stage, at TC approval at the latest, PT SMG takes over the editor ship and documentation responsibility of the Technical Specification, but the rapporteur stays on (or is replaced by a new one) as co-editor and technical responsible.

4.2 Version numbering

4.2.1 General

To keep track of the progress of the work, version numbers are used [within TC SMG] that indicate the status of standard development and thus serve as i) a reference for industry and operators in system supply and ii) a document management and control tool.

4.2.2 Numbering system and significance of digits

A three numbers version numbering system is used where each number represents a certain stage in the preparation of the document or the degree of difference to other previous versions of the document:

First number:

- | | |
|---|---|
| 0.x.y | First thoughts, skeleton of the future standard (-60 % complete) (Note 1). |
| 1.x.y | Preliminary draft within STC (30-80 % complete). (Note 1, 3) |
| 2.x.y | Final draft within STC (70- % complete). (Note 2, 3) |
| 3.x.y | UMTS Specification under STC change control. |
| 3.x.y | TC SMG Approved GSM Phase 1 Specification. |
| 4.x.y | TC SMG Approved (Phase 2). |
| 5.x.y | Under STC change control or SMG approved(Phase 2+). The specification has a clear identification whether it is SMG approved or not and whether and how it is published by ETSI. |
| Draft x.y of 6.0.0: Draft of new major version of a specification for which a major version 5 exists. | |
| 6.x.y | Under STC change control or SMG approved(Phase 2+). The specification has a clear identification whether it is SMG approved or not and whether and how it is published by ETSI. |

Note 1: TC SMG should be presented version 1.0.0 for information, and possible comments and further guidance.

Note 2: When the STC consider the version 1.x.y as ready for TC SMG approval, they request PT SMG to raise the version to 2.0.0. If SMG approves the specification immediately, the version is raised to 3.0.0 (UMTS) or 3.0.0 (GSM phase 1) or 4.0.0 (GSM Phase 2) or 5.0.0 (GSM Phase 2+). Hence, in some cases versions 1.x.y, 2.0.0 and 3/4/5.0.0 might actually be the same document (but with different status). At the time being, new GSM Phase 1 or Phase 2 specifications are no more created. Normally, the STC will put a specification

under STC change control (so that it has already major version 5 before presentation for SMG approval)

Note 3: Versions starting with 0, 1 and 2 are updated within the STC by the rapporteur assisted by PT SMG without any formal approval of the changes at TC level and without any formal Change Request procedures being used.

Second and Third number:

The second and third number are used to indicate revisions, updates, corrections and new releases of the specification. Their usage has the same significance within each first number range. **The third number is incremented when editorial only changes have been incorporated in the specification. The second number is incremented for all other types of changes, i.e. technical enhancements, corrections, updates, etc.**

If the second number is incremented, the third number is set to '0'. Likewise, if the first number is incremented, the second and third ones are set to '0'.

A change of second number can only result from modifications agreed in the STC (or TC) whilst the third number could result from modifications done by PT SMG or the rapporteur outside the STC.

4.2.3 Responsibility for incrementing version numbers

For version numbers starting on 0, 1 and 2 and staying in that range, the STC is responsible for the updating of the first and second number (hence no substantial changes to the document should be done without STC agreement). PT SMG is responsible for keeping track of the version numbers and to give guidance to the rapporteur(s) and the STC.

The transition from version 2.x.y to 3.0.0 or 4.0.0 or 5.0.0 or 6.0.0 is decided by SMG, on recommendations from the responsible STC. For TC approved specifications (i.e. versions 3.x.y, 4.x.y, and 5.x.y), SMG is responsible for allocating new version numbers when needed. In practice, PT SMG allocates new version numbers simultaneously to the approval of Change Requests/Amendment Requests (see clause 4.3.4.2), according to the formula outlined in clause 4.2.2 above. These new version numbers are normally announced, via a document from PT SMG, towards the end of that very same meeting at which the CRs were approved. Also, in addition to information on those specifications that have been subject to changes during an SMG meeting, PT SMG also documents at every SMG meeting the status of approved specifications, this status containing among other things all the necessary information about the present version numbers plus some recent history (appr. 2 years) for each Technical Specification (see clause 6.1 and Annex 1).

4.3 Handling of changes to approved Technical Specifications

Modifications to specifications with version number 3.0.0 or higher can only be decided by SMG, on the basis of Change Requests (CR). These CRs, described in the following sections, shall in principle be presented to the TC only after having been scrutinised by the STC responsible for the concerned specification.

4.3.1 Change Requests

Whenever an error or an inconsistency is discovered or when a new feature is proposed to be included, a Change Request is produced, normally by the one discovering the error but in consultation with the rapporteur and/or with PT SMG.

4.3.2 Change Request forms

To ensure an appropriate and consistent way of presenting and documenting Change Requests, there exist standardised front covers (forms) for CRs as well as rules on how to accurately identify the modified parts of the specification.

The purpose of the CR form itself is to provide the relevant management information of the proposed changes, e.g. such as

- Target specification with its version number,
- Source of the CR,
- Reason for the proposed change and consequences if not accepted,
- Category of proposed change (i.e. correction, change request corresponding to an earlier phase change request, addition of feature, functional modification of feature, or editorial modification),
- Cross-phase compatibility aspects.

As the degree of acceptability for modifications differs between Phase 1, Phase 2, and Phase 2+, the CRs differ on the allowed/possible Categories: Phase 1 CRs, Phase 2 CRs, and CRs to a specification belonging to a frozen package can only be essential corrections whilst Phase 2+ CRs to the current package can also fall into any other of the categories quoted above.

Annex 4 contains the CR form for Phase 1, 2 and 2+, and a guidance of how to fill them in. These forms and the way to fill them in have to be used by those proposing changes.

4.3.3 Contents of Change Requests

Although the CR form shall indicate the details of change, each CR shall have attached the pages of the specification that are affected by the CR, using the latest version approved by SMG. These pages shall have the proposed modifications clearly marked, by means of the wordprocessor's "revision mode", i.e. new proposed text should be double underlined and proposed deletions should be, and a bar in the margin.

In case there are more than one independent CR to the same part of the specification, neither of them should contain the proposed modifications from the other(s), however any potential interaction between the modifications should of course be resolved before presentation.

4.3.4 Handling of the Change Requests

4.3.4.1 In the STC responsible for the TS

Entry to the STC:

A proposed CR should be brought to the relevant STC in charge of the Technical Specification concerned and discussed there, before presentation to SMG. If possible it should be distributed, by the source, a.s.a.p and prior to the coming STC meeting to at least the rapporteur (if not the source) and PT SMG but preferably to as many 'key delegates' as possible, for the purpose of shortening discussions in STC meetings and to try at an as early stage as possible to come to a widely acceptable solution.

When the relevant STC decides to submit a CR to SMG for approval, the CR is categorized as strategic or non-strategic by the STC chairperson in agreement with the STC.

To ease the work of the STC and of PT SMG, a proposed CR should be presented in a form suitable for STC approval and direct forwarding to SMG. If a CR is not immediately accepted it is the responsibility of the originator to update the CR taking into account comments and other guidelines from the STC, including change of reference version if needed, and to re-present it to the STC.

Note: It is also highly important that the originator of the CR provides PT SMG with an electronic copy (Word for Windows 6.x or Word for DOS 5.x) since the contents is supposed to be incorporated into the specification, by PT SMG, and re-typing of CRs is clearly a waste of resources and a possible source of errors.

CR identification:

A CR can have different revisions: rev. 0, 1, 2, and so on. Revision 0 of a CR is the not revised CR. A given revision of a CR is applicable to a certain version of a specification. The CR identifies, to which specification, which version of the specification and which phase it applies. A given revision of a CR is uniquely defined by

- the specification it belongs to (e.g. 05.05)
- an alphanumeric string (the CR-number) and
- the revision number (default, i.e. the value if no number is given, is 0).

Different revisions of the same CR shall not apply to versions of a specification that belong to different phases; they may apply to different versions of a specification in the same phase.

Each CR is allocated an identifier by the relevant PT SMG member. A CR can have different revisions, rev.1, rev.2, and so on. The identifier is either a letter followed by a 3 digit number or a 3 digit number:

- CRs to phase 1 specifications (version 3.x.y) are identified by a 3 digit number, e.g.123, possibly followed by the revision.
- If a CR applies to a phase 2 or phase 2+ specification, it is identified by a letter followed by 3 digits; actually the letter has to be an "A". (For some phase 2+ CRs, due to historical reasons, the first letter is a "B".)

The uniqueness is on a per specification basis, but Phase independent, i.e. CR No 001 [may] exist for each specification but only once (i.e. not CR No 001 for Phase 1 and CR 001 for Phase 2 for the same specification number). CR No A001 [may] exist for each specification but only once (e.g., not CR No A001 for Phase 2 and CR A001 for Phase 2+ for the same specification number).

The complete identification of a CR including revision is given in BNF as
CR <specification number> [A] <digit> <digit> <digit> [rev. <number>]

Example: CR 05.02-A002 rev.2.

The CR identifier may be allocated prior, during or after the STC meeting at which it is discussed but before submission to SMG. Even though different STCs have different working routines it is beneficial and thus recommended that CR numbers are allocated no later than at STC approval.

CR numbers are unique and shall never be reused, not even numbers used for [early] rejected CRs.

Impact on other specifications and Joint CRs:

If the contents of the CR is such that isolated it makes the whole set of approved Specifications inconsistent, corresponding CRs must also be considered and produced. This shall preferably be carried out by the originator of the CR (and his colleagues in other STCs) in advance. PT SMG is co-responsible for identifying and communicating cross-STC impacts.

In principle, a CR shall not be forwarded to TC SMG unless the potential impact on other specifications have been thoroughly examined and concluded, either resulting in a 'No impact' statement or in a full and consistent

set of corresponding CRs to all affected specifications. Such set of CRs are normally combined in one single document, by PT SMG, before submission to SMG and called 'Joint CR' (see Annex 7.3).

If some of the corresponding CRs are to be considered by other STCs then PT SMG is responsible for monitoring the result in the STCs and to submit the full set, when available, to SMG. This might mean that in some cases the STC approved CRs are not presented to the immediately following TC meeting due to outstanding CRs from other STCs.

Other "consequential" CRs, needed for reasons other than direct consistency, may be drafted, presented and agreed independently. This covers typically additions to Test specifications and O&M specifications. It should be noted though that if a CR causes an inconsistency with an existing/approved test or O&M specification, the corresponding CRs must be presented together with the core specification CR.

4.3.4.2 In the TC

Entry to TC SMG:

If the STC has agreed to a CR it is forwarded to the following TC SMG meeting for formal approval. It is the responsibility of PT SMG to make sure that STC agreed CRs are made available to the SMG meeting, and that they are properly formatted, numbered and consistent. Likewise, it's the responsibility of PT SMG to ensure that Joint CRs are complete and put together before submission to SMG.

Non-strategic CRs are submitted to SMG for approval without presentation; strategic CRs are submitted to SMG for approval with presentation.

PT SMG is responsible for making available to [the beginning of] SMG meetings a summary list of all CRs presented to that meeting. This list is then updated during the meeting and represented at the end of the meeting including the result of each and every CR.

Note 1: This list is an outprint from the CR database held by PT SMG, see below.

Decisions on CRs, and result:

SMG considers and concludes on each strategic CR independently, except for Joint CRs which are handled and concluded together, and the verdicts could be as follows:

<u>Verdict</u>	<u>Meaning</u>
Approved:	Contents to be incorporated in the specification.
Postponed:	Concept of CR seems acceptable in principle but further refinements are necessary. CR is sent back to the STC for revision and possible re-submission at a later SMG meeting.
Rejected:	CR not acceptable in any sense. If further discussions on the subject should take place that shall be done on the basis of different documents and approaches.

Non-strategic CRs are automatically accepted at the end of the meeting if no TC delegate requested discussion of the CR during the TC meeting. If at least one delegate requests discussion of a non-strategic CR during the TC meeting, the CR is presented to the meeting and further treated as a strategic CR.

If there is at least one Approved CR to a given specification, a new version number of the specification is allocated (see clause 4.2.3), and PT SMG will produce and issue a new version of the specification after the SMG meeting.

Control and notification of CR decisions:

- PT SMG makes available the list of non-strategic CRs before the meeting to all heads of delegation.
- Towards the end of each TC SMG meeting, PT SMG issues lists containing the detailed result of the CRs presented at the meeting, including information about the consequential new version numbers of the concerned specifications. These lists form an annex to the meeting report (and hence are part of a permanent document). These lists, being the evidence of which specifications have changed and how, are important management tools for both SMG delegates and PT SMG since it always takes some time before the new versions of the specifications as such can be compiled and released.

Databases:

PT SMG holds databases (Microsoft Access) with all CRs in which all relevant STC and TC information is collected and from which the lists at meetings are compiled. These databases are made available on the ETSI server (smg_p directory); they are also available during meetings to those who wish to have them for their own management/administrative reasons, however the only formal and valid compilations of the SMG results are the lists presented as annexes of the meeting report.

4.4 Updating and release of new versions of the specifications

After SMG approval of one or more CRs, PT SMG produces a new version of the specification (with the version number incremented according to above). This new version may be embodied in one of the following different document forms:

- New version of the TS
- New ETS for Public Enquiry (PE)
- New version of ETS for Vote
- New version of ETS for Publication
- New version of ETS for Unified Approvals Procedure (UAP)
- Amendment (update pages instead of complete new version) for UAP
- New version of ETR for Publication

Which one of the above that is chosen depends on

- whether PE/voting/UAP is felt necessary by SMG and
- at which state the specification is/was before being subjected to CRs.

Rules and details on this subject are fairly straight forward and can be found in ETSI working procedures, but a number of specifics need to be outlined, as below.

4.4.1 New TS

A TS is the first formal appearance of a specification and the form in which it stays all the way up to the point where SMG decides that it is to be sent out for Public Enquiry, at which stage it is converted to a Draft preliminary ETS (see below).

Also, as the Public Enquiry takes between 4-5 months, an SMG meeting may take place during that period which may approve CRs to the specification, which would result in a new version of the TS (in parallel to the temporarily unchangeable Draft prETS being out for PE). Typically, the modifications causing that new version of the TS are also provided and considered as comments to the PE, and will hence upgrade the Draft prETS to the same state as the TS at the end of the PE (after which the TS "disappears" again).

Annex 6.1 contain an example front sheet.

4.4.2 Draft preliminary ETS (Draft prETS) for PE

When SMG decides a TS to be sent out for Public Enquiry, this document form is chosen. The Technical Specification is thus converted into an ETS type of document, and an ETS number is allocated. For the GSM Phase 2 specifications, a range of ETS numbers has been reserved; 300 500 to 300 650, and the numbers are taken sequentially from that series by PT SMG and the Technical Editor (jointly).

At this stage (at the latest), in addition to SMG-agreed changes, a number of formal information is added to the specification, such as

- Formal front sheet (provided to PT SMG by the SMG Technical Editor from ETSI,
- Foreword (provided to PT SMG by the SMG Technical Editor from ETSI),
- New headers; **Page x**
 Draft prETS 300 nnn: <month> <year> (UMTS ab.cd version 3.x.y)",
- or
- **Page x**
 Draft prETS 300 nnn: <month> <year> (GSM ab.cd version 5.x.y)",
- History box (provided to PT SMG by the SMG Technical Editor from the ETSI Secretariat),
- and potentially some other refinements of the text (proposed by the Technical Editor).

After having been prepared by the PT SMG member according to the above, the specification is put in a 'Quality Review' loop between the SMG Technical Editor in the ETSI Secretariat and PT SMG during which further editorial refinements/corrections may be carried out before the specification is actually sent to PE and made available to e.g. SMG delegates.

The PE period is 4-5 months and the exact dates are stated in the History Box at the end of the specification and are also included in the 'GSM/DCS Status List' provided at SMG meetings.

Even though comments to the specifications can/should be routed via the National Standards Organisations (NSO) to ETSI as formal comments to the PE, SMG delegations are highly recommended to also forward any comments they may have in form of CRs to the relevant STC, not least for the purpose of ensuring a proper examination and to avoid unnecessary delays.

Annex 6.2 contain an example front sheet.

4.4.3 Final draft preliminary ETS (Final draft prETS) for Vote

After the PE period is over, the comments received in ETSI from the National Standards Organisation are given to the relevant STC (normally via PT SMG). The STC shall then consider all comments and provide a summary of the resolution result on each one of them, normally in the STC Status Report to SMG.

The resolution results as such are either in the form of a CR or a justified and documented "Not accepted".

The CRs resulting of the PE are treated no different than other "ordinary" CRs in SMG, and the end result will be a new version of the specification with a number of CRs incorporated (and a number of CRs rejected).

The new version of this specification can thus be considered as a TC approved post-PE version and hence be submitted for the Voting procedure. Again, the formal/administrative information is changed, i.e. updated front sheet, foreword, page headers, history box and potentially some other refinements of the text.

Again, after having been prepared by the PT SMG member according to the above, the specification is put in a 'Quality Review' loop between the SMG Technical Editor in the ETSI Secretariat and PT SMG during which further editorial refinements/corrections may be carried out before the specification is actually sent to Vote and made available to e.g. SMG delegates.

The Vote period is 2-3 months and the exact dates are stated in the History Box at the end of the specification and are also included in the 'GSM/DCS Status List' provided at SMG meetings.

The NSOs cannot make technical comments during Vote, merely give an 'Accepted' or 'Not accepted' verdict.

4.4.4 ETS for Publication

When the Voting period is over, and if the specifications was accepted by the NSOs, the specifications is published. Prior to publication however, some editorial updates need to be done. This can be done either by PT SMG or by the Technical Editor in consultation with PT SMG. SMG need not be involved since there are no technical changes whatsoever. The modifications are thus limited to the formal/administrative parts, i.e. updated front sheet, foreword, page headers, history box and potentially some other refinements of the text.:

Generally, these "modifications" causes PT SMG to increment the last digit in the version number, which in that case is included in the 'GSM/DCS Status List' provided to SMG meetings.

4.4.5 Draft preliminary ETS (Draft prETS) for UAP

If a specification has already reached formal ETS status (i.e. post-Publication), and if SMG approves further modifications to it (in the form of CRs), the specification needs to be sent out again, as a 2nd (or 3rd or 4th,... Edition) for a formal adoption procedure. At this stage, since the concept of the specification already has been adopted, a combined PE/Vote is used, the Unified Approvals Procedure.

The specification is prepared in the same way as for Public Enquiry (thus see clause 4.4.2) (obviously with the exception that 'UAP' instead of 'PE' is used in the Foreword and the History box, and that the front sheet will state "nth' Edition").

The UAP period is 4-5 months and the exact dates are stated in the History Box at the end of the specification and are also included in the 'GSM/DCS Status List' provided at SMG meetings.

The NSOs cannot make technical comments during UAP, merely give an 'Accepted' or 'Not accepted' verdict.

Note: If SMG exceptionally should approve any CR to the specification during the UAP, a new UAP will be initiated in exactly the same way but with an Edition number n+1. This will in principle (but not officially) cancel the Edition being out on UAP and hence as far as users of the specifications are concerned, the newly initiated UAP holds the latest official version.

Annex 6.2 contain an example front sheet.

4.4.6 Draft Amendment for UAP

Exceptionally, and in principle only for very minor changes or for very thick documents, an Amendment (update pages/text) is produced instead of a complete new version.

This [draft] Amendment is generally produced by the Technical Editor on the basis of the SMG approved AR, and in consultation with PT SMG. In principle, the Amendment contains only a list of detailed changes (like a 'short form CR') and some text that indicates which version of the specification the Amendment applies to (and the resulting version).

The complete new version of the specification is not necessarily produced in those cases (other than on the PT SMG members PC) but if produced it should be used internally only (SMG STCs/PT SMG) and for the purpose of producing new future CRs. Hence, it is to be noted that the Amendment case is merely a convenient way of presenting (or rather not presenting!) the new version of the specification. The latest version is always what has been agreed in SMG, regardless of whether the entire specification is printed/distributed or not.

Note: The electronic copies that are made available to SMG delegates are thus composed of the previous version and the Amendment, e.g. GSM 09.02 version 4.10.0 is provided as GSM 09.02 v 4.9.1 plus Draft Amendment 1 (in a directory named 09.02 version 4.10.0).

Annex 6.3 contains an example of a [draft] Amendment.

4.5 Availability and distribution of UMTS and GSM specifications

4.5.1 Hard copies of specifications (paper form)

Specifications that have not reached approval status (i.e. prior to version 5.0.0) are in principle available to STC delegates only, and at STC meetings only. PT SMG, or the rapporteur/editor, may make them available on a need basis to other people as well.

Similarly, specifications that have reached TC approval status (i.e. version 4.0.0 or higher) but not prETS status (i.e. not yet sent to PE) are available to (S)TC delegates only, and at (S)TC meetings only. Also, PT SMG (and at the discretion of PT SMG) makes them available on a need basis to other people as well.

- Note 1: Phase 1 TSs are also made available through the ETSI Publications Office (Fax: +33 93 95 81 33).
- Note 2: Previously, Phase 2 TSs were also made available through the ETSI Publications office, but since the base Phase 2 standard has reached ETS/ETR status, only specifications that have reached PE status are made available therefrom.

Specifications that have reached prETS status (i.e. initiation of PE) are made available through the ETSI Publications Office (Fax: +33 93 95 81 33) to anybody (ETSI member or not). PT SMG may also, exceptionally, make available paper copies of the specification to (S)TC delegates at meetings.

- Note 3: The ETSI Publications Office offer various forms of subscriptions to GSM specifications, with which automatic updating service or automatic update notification service can be obtained. Refer to ETSI for more information.
- Note 4: (S)TC Chairpersons receive automatically the specifications (and updates thereof) for which they are responsible, from ETSI.

4.5.2 Soft copies of specifications (electronic form)

As is the case for hard copies, specifications that have not reached approval status (i.e. prior to version 5.0.0) are in principle available to STC delegates only, and at STC meetings only. PT SMG, or the rapporteur/editor, may make them available on a need basis to other people as well.

Specifications that have reached TC approval status (i.e. version 4.0.0 or higher), including all later stages (PE, Vote, Published, etc) are made available at (S)TC meetings by PT SMG, normally on a self service PC in the meeting secretariat. These electronic versions are not official ETSI released and primarily intended for the purpose of delegates' work in the (S)TCs. Other utilisation of the softcopies is at the responsibility (and risk) of the delegates themselves.

- Note 1: Refer to ETSI for rights and restrictions on the usage of electronic versions of ETSI specifications.
- Note 2: In case of discrepancy between the distributed paper version and the electronic copy, the paper version supersedes.

5 GSM Phase 2+

For project management purposes, the work is itemised in Phase 2+ Work Items (WI), which are documented, developed and handled as described in this section.

Since the scope of the base Phase 2 standard is completed, all future modifications/enhancements to the standard are handled as Phase 2+ WIs, whilst pure corrections to the phase 2 standard are still performed using the change request procedures and ETS/ETR procedures described above.

The possible modifications of the Phase 2+ Standard are basically of two different natures:

- Error corrections; Modifications which correct overlooked errors or inconsistencies in the specifications. By nature, equipment need to be compliant with the correction in order to be compliant with GSM. It has to be verified in each case whether the same corrections are also necessary in the Phase 2 standard, and if yes, they have to be elaborated.
- Enhancements; Modifications that enhance the system, e.g. by new services or features, or by improving performance or decreasing costs. These modifications are in principle optional, and equipment not implementing them are still compliant with GSM. It may however be decided that certain enhancements are mandatory but equipment implemented prior to such decisions cannot be removed from the market and thus backward compatibility is [always] required.

Modifications of the correction category are ongoing maintenance tasks and are handled with direct CRs and thus not by means of Work Items.

- Ed. Note: PT SMG proposed a "Correction of Phase 2" Work Item to SMG#13, but that was turned down on the basis that ARs with Cat. "F" and without WI reference would do!

Modifications of the enhancement category must be handled within the concept of Work Items as described in the sections below. Note that prior agreement of SMG is needed before any substantial work is launched.

5.1 Creation of a Work Item

When an enhancement of the standard is considered desirable a delegate/delegation can make a proposal by submitting a Work Item Description sheet to SMG, or if the sequence of meetings allow, to the relevant STC. In general, for new services, features or functions, SMG1 is the relevant STC. For pure performance enhancements, SMG2, 3, 4 or 9 are the relevant STCs (the test specifications groups, SMG7 and 8, are normally not to be approached with new WIs). If directly submitted to an STC, the STC may choose to briefly study and refine the WI sheet before passing it on to SMG for adoption, or pass it directly without discussion. In either case, no substantial work shall commence prior to SMG approval of the Work Item.

The new standard WI description sheet contained in Annex 5 shall be used.

SMG will not approve a WI unless the WI description sheet has been properly filled in.

Once SMG has approved the WI, it is included in the WI List and the WI Description sheet is included in the WID compilation. Both these actions are carried out by PT SMG.

Secondly, the effects of the WI in terms of initial work distribution and responsibilities to the STC must be identified and allocated. Also, one or more rapporteurs have to be identified for the initial tasks, typically one for the service aspects and one for the system requirements. This should preferably be done prior to submission to SMG, but in the worst case during the following STC meetings. This information is also included in the Phase 2+ Status List managed by PT SMG. During the lifetime of the WI, additional responsibilities as well as output documents and corresponding rapporteurs can be identified. Similarly, this information is then included in the status list.

5.2 Type of Work Items

Modifications of the standard could in principle be of two different types:

- New services/features/functions that in general affects several specifications and several STCs;
- Pure [technical] enhancements that affects a small number of specifications and STCs only (generally only one).

Of these, modifications of the latter type can be submitted to the (S)TC directly as a Change Request without prior presentation/agreement of a WI Description sheet. Such CRs shall instead refer to the pseudo Work Item 'Technical Enhancements'. For the other type of modifications, the following sections apply.

5.3 Start and continuation of the work and responsibilities

Once all the administrative and management information above are in place, the actual work on the Work Item can start/continue. The first things that need to be done (as stated in clause 5.1 above) is to identify the tasks related to the WI and allocate those to the STCs (or others).

In most cases the tasks from a WI can be split immediately in the following areas:

- Service requirements
- System/Architectural requirements and implications
- Protocol specifications

Service requirements:

The responsibility of the service requirements can usually be allocated immediately at the creation/adoption of the WI. In most cases, this task is allocated to SMG1. Occasionally other groups may be given responsibility for the service requirements. This might be another STC or a Task Force. In any case, however, it should be a single group and one that reports directly to SMG.

System/Architectural requirements and implications:

Also, the responsibility for system/architectural requirements should be allocated immediately, even though the implications and requirements normally will be seen only after the study on service/system requirements have been initiated. The responsibility for the system/architectural requirements must be given to a single body to guarantee the consistency of the adopted solution. Also here, this body can be a STC or a Task Force, but it must be a group reporting to SMG.

However, the choice of group should not [pre-]determine the technical choices and in many cases, the responsibility for system and architectural requirement study needs a widening of the competency and a readiness to look to technical aspects not part of the main scope of the chosen group/STC. This can be obtained either by drawing the attraction of the suitable experts (e.g., by setting special meetings or clear meeting dates) or by the organisation of joint meetings.

The overall consistency of the system architecture must be maintained along with the numerous modifications due to various work items. This responsibility is allocated to SMG3 which for this purpose ensures the co-ordination of the development of general architecture concepts and their applications to individual Work Items, and should thus also draw attention and expertise from other STCs as well.

Protocol specifications:

The responsibility for the elaboration of the protocol specifications can in most cases not be allocated at the early stages since it depends on the technical implementation choices and hence on the results of the study of the service/system requirements as well as on the architectural conclusions.

The identification of new protocols to be specified and/or existing protocols to enhance will be derived from the system/architectural requirements. In general, modifications of existing protocols are done by the STC in charge of the protocol in question, whilst the responsibility for development of new protocols is allocated by SMG based on proposals from the system/architectural study group.. Then, whether the actual work is done in the STC itself or in an ad hoc subgroup thereof is at the discretion of that STC.

5.4 Realisation of Work Items

5.4.1 Planning and categorisation of the deliverables (and control thereof)

Planning:

An initial time plan must be set up at an early point, preferably right after SMG approval of the Work Item and by the responsible STC(s) based on proposal from the originator of the WI and further guidance from SMG. This time plan is used as a basis to attribute priorities by the involved STCs and groups. As a basis, the time plan should include at least the following points (in front of SMG):

1. Presentation for principle agreement of the service requirements;
2. Presentation for principle agreement of the architectural/system implications and requirements;
3. Presentation for information of the drafts of all needed deliverables,
4. Presentation for approval of all needed deliverables;
5. Sending to PE (or UAP) of all needed deliverables.

The time plane includes realistically achievable dates for each step and should be part of the Phase 2+ Status List (a further elaborated one), maintained by PT 12, and updated when needed.

Note: Effectively, the official ETSI Work Programme includes similar milestones however there is a need for an SMG internal and SMG/PT SMG controlled management document.

The Phase 2+ Status List contains also information/lists about existing and planned permanent and semi-permanent documents related to the WI, e.g. future specifications as well as interim/temporary requirements "specifications", including the responsible STC/group, the rapporteur, the state of the docs, expected completion dates, etc.

Categorisation:

Before the substantial work on a Work Item starts, the WI shall be examined in the light of its technical and commercial dependency with respect to the existing specifications as well as with respect to other Work Items. Aspects that must be considered and settled at an early stage are:

- Required versus acceptable timescales;
- Whether the WI has an impact on Mobile Stations or not;
- Whether the WI has an architectural impact or not;
- To which degree the WI needs to be standardise (and hence how much can be left "open", to speed up the work);
- Whether the WI can be technically and/or commercially combined/grouped with other WIs;
-

Unless the above aspects are sorted out in the beginning of (or prior to) the work, the risk of getting inefficient and non-optimal specifications increases and the SMG/MoU control of the work becomes difficult and unmanageable.

These aspects are also to be contained in the Phase 2+ Status List.

An extract of the Ph2+ Status List is given in Annex 5.

5.4.2 Choice of deliverables

The WI will be realised as new Phase 2+ specifications and/or amendments to existing specifications; the exact structure lies with the individual STCs and SMG. Typically, a new Supplementary Service is likely to result in at least three completely new specifications (Stages 1, 2 and 3) but also cause amendments to the major protocol specifications (like GSM 04.08 and 09.02).

5.4.2.1 Completely new specification

If a new specification is chosen, the procedures outlined in clause 4 above applies.

5.4.2.2 Amendments to existing specifications

When an existing phase 2 or phase 2+ specification has to be amended,

- if a phase 2 version of the specification exists but if a phase 2+ version of the specification does not exist, the amendments are developed as phase 2+ CRs to the last approved phase 2 version. At approval by SMG the resulting version will be the phase 2+ specification with version number 5.0.0.
- if a phase 2+ version of the specification exists, the amendments are developed as CRs to the last approved phase 2+ version. At approval by SMG the resulting version will be the phase 2+ specification with version number 5.x.y as described in 4.2.2.

The phase 2+ specifications have to be downward compatible in the following sense: A mobile station conforming to phase 2 (including the corrections identified) also conforms to the phase 2+ specifications. This has to be guaranteed by identification of the (possibly dated) options allowed for a mobile station.

5.4.2.3 Delta Specifications

In phase 2+ specifications, Delta specifications should be integrated into the parent specifications.

5.4.3 Contents of deliverables

5.4.3.1 Service Requirements

This task, allocated and controlled according to above clauses, consists in describing in details the aim of the work item, as seen by those for which a service is provided, e.g. end users, operators, service providers, etc.

Apart from the general rules on how to write specifications, certain 'standardised' ways of producing service requirements specifications are established in SMG(1), but as most new types of service differ in nature and structure from each other, no detailed rules are written.

In many cases it is preferred that prior to the actual service requirements specification being produced, an initial combined service and system/architectural requirements and considerations document is produced, involving both service oriented and implementation expertise. In particular when an ad hoc Task Force is charged with performing a study on a certain WI/aspect such a starting point document is produced and then used as a basis for the STCs when carrying out the detailed work on service requirements/descriptions and technical realisation specifications. Such setting-the-basis document are generally given TC-TR status and a GSM 01.xx or 02.xx number, and are kept for some time after the actual work on the detailed specifications has progressed to a mature level (mainly for the purpose of easing the understanding and to shorten the interaction and negotiation period between service requirements and system/architectural and technical restrictions).

Such 'setting-the-basis' document can also be used to describe the project management of a work item (to collect all prepared but not yet approved CRs related to the WI in question and so on).

5.4.3.2 Technical realisation specifications

This covers both the overall architectural and interface specific detailed specifications. The architectural implications and requirements need to be identified at a very early stage, both for the purpose of knowing which parts of the standard (and hence of the GSM system) are affected by a WI, but also for the purpose of supporting the identification of cross-WI similarities (and hence more overall efficient solutions).

The overall co-ordination of the architectural/system requirements is with a single group as stated above, whilst the ensuing detailed protocol definitions and specifications may be distributed over several groups (according to their scope).

The architectural considerations should, when materialised in GSM specifications, be integrated in the GSM 03.xx series as appropriate, hence the structure of writing and the level of technical contents/details should follow the phase 1/2 approach.

The way of writing the protocol specifications should follow to an as large extent possible the Phase 1/2 approach (for several reasons, among them the fact that Phase 2+ is amending/enhancing the phase 2 protocol specifications not replacing them).

Note: By tradition, e.g. GSM Supplementary Services are divided into Stage 1, 2 and 3 but this split does not fit in general the Phase 2+ Work Items nor with the structure of the specifications and should hence be used very scarcely.

5.4.3.3 Mobile Station Test Specifications:

CRs to phase 2 specifications (implementing corrections) may have impact on the phase 2 MS test specifications and phase 2 MS type approval. The corresponding CRs to 11.10 and the TBRs have to be approved by GSM before ETSI publishing the new documents implementing the CRs.

5.4.3.4 Base Station Test Specifications:

Similar to MS test specifications, the BSS test specifications are by nature produced with a certain delay after the corresponding core specifications.

5.5 Closing of Work Items

When all necessary modifications for a given Work Item (or group of Work Items) are completed all over the scope of the GSM Standard, and all the corresponding new specifications and Change Requests have been Approved and Released by SMG,

, and the material have been included in the set of GSM Technical Specifications, then the Work Item is officially closed and all the related information, temporary and permanent, are removed from the Phase 2+ management documentation and typically archived by PT SMG.

The maintenance of the result of the Work Item is from there handled as any other Phase 2+ [part of] specification.

6 Management documents and tools

This clause summarises and lists the various permanent or semi-permanent documents (and means of documenting) the 'rules and procedures' outlined in the sections above.

All these documents/tools are within the responsibilities of PT SMG but are available to SMG delegates in one or another forms.

All data bases are in Microsoft Access format unless otherwise stated.

6.1 Status List(s)

This/these data base(s) contain information about all UMTS and GSM specifications, in terms of UMTS/GSM number, ETS number, title, latest SMG approved version, version on official procedure (may differ from latest version), two year history on version numbers, rapporteur name and company, and some other details.

It is permanently updated by PT SMG according to evolution of the specifications and is made available at each SMG meeting (giving the info up to but not including that meeting). Occasionally, it is made available to STCs in between SMG meetings and then with updated information as of the last SMG meeting.

See Annex 4 for an extract.

6.2 GSM Phase 2+ Status List (Advancement control document)

This data base contain similar information as the GSM/DCS Status List but more adapted to the development status of Phase 2+ Work Items (once approved and released, Ph2+ WIs are transferred to the GSM/DCS Status List).

Essentially, it contains information about WI name, identified future specifications, identified specifications to be Amended, supplementary/temporary documentation, expected/planned completion dates and intermediary milestones, and other management information.

It is permanently updated by PT SMG according to evolution of the Work Items and is made available at each SMG meeting (giving the info up to but not including that meeting). Occasionally, it is made available to STCs in between SMG meetings and then with updated information as of the last SMG meeting.

When a Work Item is completed, it will remain as an entry in this data base and marked 'Completed at SMG#xx', whilst the resulting specifications will be transferred to the GSM/DCS Status List.

See Annex 5 for an extract.

6.3 Change Request data bases

Each PT SMG member manages data base(s) with information about all CRs to specifications under the responsibility of "his" STC(s). All these data bases [must] have the same structure. Before an SMG plenary, the data bases are merged and become the data bases of all CRs before the plenary. These data bases are updated to become the data bases of CRs after the plenary, which is available on the ETSI server. Then these data bases are split to become the new PT members' data bases again.

The data bases contain status and management information about the CRs such as the information from the CR cover sheet (see section 4.3.2 or Annex 7), STC result, TC result and release information.

Relevant extract of the CR data bases are made available by PT SMG at the beginning of SMG meetings (CRs presented to SMG) as well as at the end of those meetings (Result of CRs presented to SMG; an annex to the meeting report).

6.4 Mailing lists data bases

PT SMG is responsible for management of the entire SMG 'members' data base. This contains information of all delegates in SMG and its STC and their current status, i.e. delegates, Contact persons, participants in STCx plus all the co-ordinates of them.

Apart from being used by PT SMG to keep accurate and complete information about which delegates are where and when and so on, it is also used to provide e.g. chairpersons or meeting hosts with up to date mailing lists, fax lists, address labels, etc. for their efficient distribution purposes.

The data base is permanently updated and on the basis that delegates send update information to PT SMG.

6.5 Electronic tools used/preferred

For the various types of documents and parts of documents in the GSM standard, a minimum variety of wordprocessors etc should be used. The following lists those tools to be used for documents:

Type	Tool(s)	Comments
Text	Microsoft Word for Windows 6.x, Microsoft Word for DOS 5.x	Word for Windows is preferred for new documents. Conversion of "old" Word for DOS documents is gradually being done by PT SMG and its Technical Editor.
Graphics	Micrografix Designer	
SDL, MSC,	Telelogic SDT	Rapporteurs can obtain, as a loan, this software from ETSI
TTCN	Telelogic ITEX (not yet finally decided),	[maybe] rapporteurs can obtain, as a loan, this software from ETSI
Databases	Microsoft Access (or Ashton Tate DBaseIV)	

7 Interaction with ETSI Work Programme

The official ETSI Work Programme (EWP) has as its base documents Work Item Sheets (not to be confused with the GSM Phase 2+ Work Item Description sheets). The EWP is used as a basis for ETSI planning, priorities, work load monitoring, monitoring of adoption procedures (PE, UAP, Vote, etc), Project Team resource allocation and others. Hence, SMG as all other TCs need to assure that SMG related information is fed into the EWP and kept up to date. Normally, TCs have an appointed Programme Reporting Officer (PRO) and SMG has assigned this task to PT SMG.

There should exist a Work Item in the EWP for each GSM specification, as well as for each Amendment (or new Edition) of these. In general, the EWP reference for the GSM documents follow the standard form, i.e. AB/C-DEFGH, where the letters have the following meaning (extract only):

A:	Deliverable class:	D=Original document R=Revision of existing document
B:	Deliverable type:	E=ETS TR=ETR TBR=TBR M=Miscellaneous
C:	Technical Committee code:	SMG=SMG
D:	Sub Technical Committee code:	01=SMG1 02=SMG2 etc
E:	'serial number':	xxxx=GSM specification number
F:	phase indicator (in SMG only):	absent=GSM Phase 1 P=GSM Phase 2 Q=GSM Phase 2+ U=UMTS
G:	revision indicator:	absent=first edition R=first amendment/new edition R2=second amendment/new edition etc
H:	part number:	1=part 1 in a multipart standard 2=part 2 in a multipart standard etc

For example, the original Phase 2 GSM 03.45 has EWP reference DE/SMG-040345P, whilst the first Amendment to it would have the EWP reference RE/SMG-040345PR. Similarly, the TTCN part of GSM 11.10 (ETS 300 607-3) has the EWP reference DE/SMG-071110P-3.

This EWP reference is the backbone in the ETSI Standard Monitoring database and used for multiple purposes (like as stated above). It is also visible on the cover sheet of each specification.

For more information, refer to the ETSI documentation on EWP and the 'PRO handbook'.

To keep the EWP up to date, PT SMG liaises with the PMC department of ETSI Secretariat. In real terms, PT SMG shall communicate to PMC information about every new (expected) revision of an existing specification as well as about every new Phase 2+ Work Item and its expected new specifications. Also, whenever a major milestone target date has changed, this shall also be communicated to PMC. For revisions (expected or effectuated), this is done by means of the CR lists (and/or databases) whilst for new specifications (or WIs) this is done by means of a filled-in EWP Work Item Sheet. For details, see the 'PRO handbook' and other ETSI documentation. The EWP sheets (entry and result) are attached in Annex 9 to this document.

ANNEXES

Annex 1	Status List (extract)
Annex 2	Phase 2+ Status List (extract)
Annex 3	Specification cover sheets
Annex 4	CR-Form
Annex 5	GSM Phase 2+ Work Item description sheet
Annex 6	ETSI Work Programme work item sheets

Annex 1 Status List (extract)

Annex 1 Phase 2+ Status List (extract)

Annex 3 Specification cover sheets

Examples.

Contents:

A6.1 GTS (GSM Technical Specification)

A6.2 Draft prETS (for PE) - GSM

A6.3 Draft Amendment (for UAP)

A6.4 Draft prETS (for PE) - UMTS

GSM TECHNICAL SPECIFICATION

GSM xx.xx

Month 199x

Version 5.1.0

Source: ETSI TC-SMG

ICS: 33.060.50

Reference: TS/SMG-0xxxxxQ

Key words: Digital cellular telecommunications system, Global System for Mobile communications (GSM)



GLOBAL SYSTEM FOR
MOBILE COMMUNICATIONS

Digital cellular telecommunications system (Phase 2+); Title (GSM xx.xx)

ETSI

European Telecommunications Standards Institute

ETSI Secretariat

Postal address: F-06921 Sophia Antipolis CEDEX - FRANCE

Office address: 650 Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE

X.400: c=fr, a=atlas, p=etsi, s=secretariat - **Internet:** secretariat@etsi.fr

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

Copyright Notification: No part may be reproduced except as authorized by written permission. The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 1995. All rights reserved.

Microsoft Corporation

Exhibit 1030-00027

EUROPEAN TELECOMMUNICATION STANDARD

DRAFT
pr ETS 300 535
May 1995
Second Edition

Source: ETSI TC-SMG

Reference: RE/SMG-030322P

UDC: 621.396.21

Key words: European digital cellular telecommunications system, Global System for Mobile communications (GSM)

European digital cellular telecommunications system (Phase 2); Functions related to Mobile Station (MS) in idle mode (GSM 03.22)

ETSI

European Telecommunications Standards Institute

ETSI Secretariat

Postal address: 06921 Sophia Antipolis Cedex - FRANCE

Office address: Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE

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

© European Telecommunications Standards Institute 1995.
All rights reserved.

No part may be reproduced except as authorised by written permission. The copyright and the foregoing restriction on reproduction extend to all media in which the information may be embodied.

Microsoft Corporation

Exhibit 1030-00029

AMENDMENT

ETS 300 535
pr A1
October 1995

Source: ETSI TC-SMG

Reference: RE/SMG-030322PR

UDC: 621.396.21

Key words: European digital cellular telecommunications system, Global System for Mobile communications (GSM)

**This draft amendment A1, if approved, will modify
the European Telecommunication Standard ETS 300 535 (May 1995)**

European digital cellular telecommunications system (Phase 2); Functions related to Mobile Station (MS) in idle mode (GSM 03.22)

ETSI

European Telecommunications Standards Institute

ETSI Secretariat

Postal address: 06921 Sophia Antipolis Cedex - FRANCE

Office address: Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE

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

© European Telecommunications Standards Institute 1995.
All rights reserved.

No part may be reproduced except as authorised by written permission. The copyright and the foregoing restriction on reproduction extend to all media in which the information may be embodied.

Microsoft Corporation

Exhibit 1030-00031

Annex 4 CR forms

This annex shows the new Change Request form. Note that the CR numbers will be as follows:

- Phase 1 CR: just 3 digits. (The same for a phase 2 CR to a specification which is not yet a ETS/ETR).
Example: "CR 11.10-989".
- Phase 2 CR: "A" followed by 3 digits (provided the specification is an ETS/ETR). Example: "CR 04.08-A032".
- Phase 2+ CR: "A" followed by 3 digits. Example: "CR 03.69-A002". (For historical reasons, there are some phase 2+ CRs with an identification "B" followed by 3 digits.)

CHANGE REQUEST No.			
Technical Specification GSM		version	
Status at SMG []:	Approved []	Rejected []	Postponed []

Phase 1: [] Phase 2: [] Phase 2+: [] Work item:

Other phase(s) affected: [] If yes, linked CR(s):

Proposed change affects: SIM [] ME [] Network []

Source:Date:Subject:

Category:

F - Correction	[]
A - Corresponds to a Phase 2 correction	[]
B - Addition of Feature	[]
C - Functional modification of Feature	[]
D - Editorial modification	[]

Reason for change:Sections affected, and additional explanation of details of change (if needed):Attached revised pages:

Page(s):

If other core Specifications are affected, necessary (and attached) Joint CRs:

Affects (possibly):	MS Test Specifications []	BSS Test Specifications []	O&M Specifications []
Attached CRs?:			
Cross Phase Compatibility:			
Change affects operation of:	Phase 1 MS in Phase 2(+) NW []	Phase 2(+) MS in Phase 1 NW [] CR to 09.90 attached:	
Change affects operation of:	Phase 1 SIM in Phase 2(+) ME [] CR to 09.91 attached:	Phase 2(+) SIM in Phase 1 ME [] CR to 09.91 attached:	

Other comments:

Page 37

GSM/UMTS 01.00 version 5.2.0: March 1998

Guidelines to the CR form:

Microsoft Corporation

Exhibit 1030-00037

Item on CR form	Meaning	Comment, Guidance
<i>TS GSM, version</i>	GSM spec number and its three digit version number	Always use latest version of the phase intended (1, 2, 2+). Refer to GSM/DCS Status List or PT SMG for information.
<i>CR No.[, Rev No.]</i>	Sequential number on a per specifications basis. Revision number where relevant.	CR number allocated by PT SMG. Rev number allocated by PT SMG or source of revised CR (when requested by TC/STC).
<i>Phase 1/Phase 2/ Phase 2+, Work item</i>	Phase applicability of CR. Name of applicable Work Item (only Phase 2+)	Originator of CR to be thorough in finding out as to whether the CR is applicable to one phase only, or to more. In the latter case, for each affected phase, a CR is to be provided.
<i>Status at SMG</i>	SMG verdict of CR	Designated by SMG at SMG meetings.
<i>Other phases affected, linked CR(s)</i>	Whether a similar CR s necessary to specifications of other phase(s). If yes, identification of the CR(s)	In most cases, a phase 2 CR will require an associated phase 2+ CR (cf. Category A below). But other dependencies may also exist.
<i>Affects</i>	Affected part(s) of GSM system	Originator of CR to be thorough in finding out the impact of the CR. Notably used as classifier for equipment manufacturer.
<i>Source/Date</i>	Source/Date of CR	Changed from original source/date to WP or TF or STC name (and date) once agreed in that group.
<i>Subject</i>	Identification of the issue of the CR	Originator to fill in a clear identification, in short form.
<i>Category</i>	Nature of modification	'F' = a correction to the standard
		'A' = CR to Ph2+ corresponding to a CR to phase 2 (which is necessarily a correction).
		'B' = New feature to be included (Ph2+ only)
		'C' = Technical modification of non-Phase 1/2 feature (Ph2+ only)
		'D' = non-technical correction of text or layout.
<i>Reason for change</i>	Justification and technical argument for the CR, and technical and/or commercial negative consequences if not accepted.	The originator should fill in a factual and exhaustive explanation of why the CR is needed and can't be avoided. For Phase 2+ CRs of cat B or C this information is optional, as the justification exist per definition in the WI.
<i>Sections affected.....</i>	Summary of the elements and sections modified by the CR	Generally, it is enough to list the sections that are affected by the CR, but if possible also a brief summary of the elements/details is desired.
<i>Attached revised pages</i>	A list of the pages that are affected and attached to the CR	All pages of the standard that are affected by the CR should be attached (and marked with revision marks). Optionally, if it adds clarity and readability, additional not affected pages may be attached. All attached pages should be listed.
<i>If other core spec. are affected.Joint CRs.</i>	Identification of other GSM specifications that are affected by this modification, and of the CRs to those.	The originator (and the STC) shall make sure that all affected specifications are identified, and that the corresponding CRs to those specifications are prepared, before submission to SMG. The full set of CRs is collected in a so called 'Joint CR'.
<i>Affects (possibly)</i>	Identification of impact on Test and O&M specifications	The originator should indicate, to the best of his knowledge, whether existing Tests or O&M specs are affected, or if the modifications in the CR should also be reflected by additional Test or O&M specifications.
<i>Cross phase compatibility</i>	Identification of potential problems with cross phase (Phase 1 ⇔ Phase 2/2+) compatibility.	In principle, a CR that causes cross phase compatibility problems should not be accepted. If unavoidable, for good reasons, an accompanying CR to GSM 09.90/91 shall be produced at the same time.
<i>Other comments</i>	Additional information that may be helpful for the handling of the CR.	

Annex 4 Phase 2+ Work Item description sheet1. *<Work Item name>*2. **Justification***<text>*3. **Service Aspects***<text>*4. **MMI-Aspects***<text>*5. **Charging Aspects***<text>*6. **Security Aspects***<text>*7. **Impacts (preliminary information for guidance)**

Affects:	SIM	ME	NW	Others
Yes				
No				
Don't know				

*<supplementary text>*8. **Expected Output and Timescales (preliminary information for guidance)**

Document	Yes	No	Date for TC approval (Qx of Year y)	Comments, List of specs, List of CRs, etc
Report				
New Specifications				
ARs to existing specifications				
Others				

*<supplementary text>*9. **Others**

Proposed Rapporteur: _____

<text>

ETSI WORK PROGRAMME - NEW WORK ITEM

Work Item Reference ** / — — <small>① ② ③ ④ ⑤ ⑥</small>	← see below for notes
Creation date: / /	① Classification: original draft D, revision R, (none) -	
② (selected automatically by ETSI Secretariat according to deliverable type)		

Approval procedure: (for standards only)NAP..... ☐ (default)UAP..... ☐ AUAP ☐transform (I-ETS to ETS) ☐

③ Technical Committee name

④ STC no. - two digits (00 = direct responsibility of TC)

PT id:**Bon de Cmde:**

⑤ serial number - unique within STC; normally three or four digits

⑥ part number (multipart items only)

Deliverable typeETS..... ☐ I-ETS ☐TBR..... ☐ETR..... ☐ TC-TR ☐ TCR-TR ☐EN(V)..... ☐ ISP ☐ FS..... ☐TS ☐other..... ☐ (specify)none ☐ (Miscellaneous Item)**Project**

project(s)

subproject(s)

Rapporteur

surname

forename.....

organization.....

address.....

.....

phone

fax

E-mail

Title:

introductory element (subject area):

main element:

complementary element:

(e.g. part number & subtitle)

Scope & field of application:

.....

.....

.....

continue on separate sheet if necessary

Keywords:

(current list of KEYWORDS in use available from Secretariat)

Reference documents:**TC remarks:**

Schedule	Milestone	Target date	achieved?
All Work Items:	1 Start of work	/ /	<input type="checkbox"/>
Deliverables:	2 Completion of Table of Contents and detailed Scope text	/ /	<input type="checkbox"/>
	6 Completion of first complete draft	/ /	<input type="checkbox"/>
	7 STC approval	/ /	<input type="checkbox"/>
	8 TC approval	/ /	<input type="checkbox"/>
	8 A Receipt at ETSI Secretariat	/ /	<input type="checkbox"/>
Miscellaneous Items:	2 (optional) specify:	/ /	<input type="checkbox"/>
	3 (optional) specify:	/ /	<input type="checkbox"/>
	12 Completion	/ /	<input type="checkbox"/>

D930081B.WFW 13/10/14 JMM

Work Item ReferenceR ①	TR/ ②	SMG ③	01 ④	0104 ⑤ — ⑥	← see below for notes
Creation date: 01/04/90	① Classification: original draft D, revision R, (none) -			If a "revision item", indicate the ETSI no. & edition of the preceding version: ETR 100 ed 1			
② (selected automatically by ETSI Secretariat according to deliverable type) ③ Technical Committee name ④ STC no. - two digits (00 = direct responsibility of TC)				⑤ serial number - unique within STC; normally three or four digits ⑥ part number (multipart items only)			
Approval procedure: (for standards only) NAP <input type="checkbox"/> (default) UAP <input type="checkbox"/> AUAP <input type="checkbox"/> transform (I-ETS to ETS) <input type="checkbox"/>							
Deliverable type ETS <input type="checkbox"/> I-ETS <input type="checkbox"/> TBR <input type="checkbox"/> ETR <input type="checkbox"/> TC-TR <input type="checkbox"/> TCR-TR <input type="checkbox"/> EN(V) <input type="checkbox"/> ISP <input type="checkbox"/> FS <input type="checkbox"/> TS <input type="checkbox"/> other <input type="checkbox"/> (specify) none <input type="checkbox"/> (Miscellaneous Item)		Project project(s) GSM subproject(s)		Rapporteur surname Wurffel forename Emmanuelle organization Telivoda mobile address Casino royale Cannes .FR phone +33 92 94 42 66 fax +33 93 65 28 17 E-mail Wurffel@etsi.fr			
Title: introductory element (subject area): Digital cellular telecommunication system (Phase 2)..... main element: Abbreviations and acronyms..... complementary element: (GSM 01.04)..... (e.g. part number & subtitle)							
Scope & field of application: This ETR provides the abbreviations and acronyms to be used throughout the GSM specifications. Continue on separate sheet if necessary							
Keywords: GSM (current list of KEYWORDS in use available from Secretariat)							
Reference documents:							
TC remarks:							
Schedule	Milestone	Target date	achieved?				
All Work Items:	1 Start of work	01/04/1995	<input type="checkbox"/>				
Deliverables:	2 Completion of Table of Contents and detailed Scope text	01/05/1995	<input type="checkbox"/>				
	6 Completion of first complete draft	01/06/1995	<input type="checkbox"/>				
	7 STC approval	01/07/1995	<input type="checkbox"/>				
	8 TC approval	01/08/1995	<input type="checkbox"/>				
	8 A Receipt at ETSI Secretariat	01/09/1995	<input type="checkbox"/>				
Miscellaneous Items:	2 (optional) specify:	/ /	<input type="checkbox"/>				
	3 (optional) specify:	/ /	<input type="checkbox"/>				
	12 Completion	/ /	<input type="checkbox"/>				

History

Status of GSM/UMTS 01.00		
May 1995	Version 0.0.0	First draft for PT SMG internal review.
May 1995	Version 1.0.0	PT SMG reviewed draft for "external" review (those who explicitly expressed interest).
June 1995	Version 1.1.0	SMG3 Chairman's comments included (partly), plus some more PT SMG internal comments. Proposed new CR forms included for comments. For SMG Steering Group review.
June 1995	Version 2.0.0	Some minor modifications. For SMG information/approval.
July 1995	Version 4.0.0	SMG approved
February 1996	Version 5.0.0	CR 01.00-A001 approved by SMG#17 (Tdoc SMG 10/96)
June 1996	Version 5.1.0	CR 01.00-A002, CR 01.00-A003, CR 01.00-A004 approved by SMG#19 (Tdoc SMG 453/96)
March 1998	Version 5.2.0	CR 01.00-A005 approved by SMG#25 (Tdoc SMG 453/96)