

Source: TSG-CN

Title: Liaison statement to TSG-GERAN, TSG-RAN & TSG-T on CR categories

TSG-CN have discussed the attached CR to TR 21.900, which is intended to clarify the use of CR categories. They have decided that the CR provides a useful improvement to the clause of 21.900 which deals with the handling of CRs, and endorse it for presentation to TSG-SA.

TSG-GERAN, TSG-RAN and TSG-T are asked to review the CR and to endorse it so that it can be presented to TSG-SA with the support of all of them.

4.6.2 Change Request forms

To ensure an appropriate and consistent way of presenting and documenting Change Requests, there exist standardized 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 release 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 not yet frozen major versions of specifications and frozen major versions of specifications, the CRs differ on the allowed/possible Categories:

- CRs to a frozen major version of a specification can only be essential corrections;
- CRs to a not yet frozen major version of a specification can also fall into any other of the categories quoted ~~above~~below.

Table 4A: Categories of Change Requests

| Category | Meaning | Remarks |
|----------|---|--|
| A | Corresponds to a correction to an earlier Release | <u>May be used only if a category F CR has been approved for an earlier release. "Earlier release" means either an earlier major version of the same 3GPP specification or a major version of the equivalent GSM specification from which the 3GPP specification was created. If a change to an earlier release affects a section which has a counterpart in a later release, then the corresponding category A CR to the later version(s) shall be presented for approval at the same meeting. May be done if the corresponding CR on earlier release fulfils the criteria set for the CRs on that release. But as soon as a Specification has been raised to a version corresponding to a later Release and a correction is done on an earlier Release, a CR with this category has to be generated to introduce the same changes into the later Release version(s). This category shall not be used for Release 1999.</u> |
| B | Addition of feature | <u>New The new feature is to be included in to the Release, and the reference is not to the Specification itself. This will normally correspond to an identified work item. This category shall not be used for a frozen Release 1999.</u> |
| C | Functional modification of feature | Any functional modification shall correspond to an identified work item. However backward compatibility shall be ensured when the issue has an impact on the UE. This category shall not be used for a <u>frozen Release 1999.</u> |
| D | Editorial modification | Editorial modifications shall have no impact on an implementation. <u>An editorial modification to a frozen Release shall be permitted only if a category A or category F change to the same specification is approved in the same TSG meeting, i.e. an editorial modification shall not trigger a version increase in a frozen specification.</u> |
| E | (not used) | |
| F | Correction | Used: 1 to correct an error in the specification <u>(i.e. a clear instruction in the specification which leads to incorrect operation of the system); or</u> 2 <u>to correct an ambiguity in the specification which could lead to different implementations which cannot inter-operate; or</u> 3 <u>to add a part of a functionality agreed for the Release found to be missing in the specification; or</u> <u>34 to correct an approved CR that has been incorrectly implemented; or</u> 5 <u>to correct a misalignment between the specifications (stage 1, stage 2 & stage 3) for a feature or service.</u> Corrections can lead to functional modification, but these shall be considered as category F. |

The Change Request form, with embedded instructions for use, is available from the 3GPP file server (<http://www.3gpp.org/ftp/Information/>).

The CR database is available from the 3GPP file server (http://www.3gpp.org/ftp/Information/Databases/Change_Request/).

****** Next modified section ******

4.6.4 Handling of the Change Requests

Entry to the TSG WG:

A proposed CR should be brought to the relevant Group primarily responsible for the specification concerned and discussed there, before presentation to the TSG. If possible it should be distributed, by the source, as soon as possible and prior to the coming Group meeting to the relevant email reflector (with a clear indication of the subject), for the purpose of shortening discussions in meetings and to try at as early a stage as possible to come to a widely acceptable

solution. Comments from secondarily responsible TSGs (if any) shall ~~be~~ have been sought and comments shall have been taken into account before presentation to the TSG for approval.

To ease the work of the Group and of the Support Team, a proposed CR should be presented in a form suitable for TSG WG agreement and TSG approval. If a CR is not immediately accepted the originator shall update the CR taking into account comments and other guidelines from the relevant groups, including change of reference version if needed, and to re-present it to the Group.

All CRs shall be presented in electronic form.

CR identification:

During the course of its development, a CR may be modified, and the CR's progress shall be indicated by allocation of a revision number: rev. 1, 2, and so on. A given revision of a CR is uniquely defined by

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

The CR number shall be allocated by the Support Team. It may be allocated ~~prior to~~ before, during or after the TSG ~~Sub-Working~~ Group meeting at which it is discussed but before submission to the TSG. Even though different TSG ~~Sub-Working~~ Groups may have different working routines, it is beneficial and thus recommended that CR numbers are allocated no later than at TSG Working Group agreement.

For a given Specification, CR numbers shall be unique and shall never be reused., ~~not even a~~ Numbers used for rejected CRs shall not be reused. If a CR is rejected, and the responsible Group considers it useful to bring a modification of the CR to a subsequent TSG for approval, the new CR shall be allocated a new number.- That is, it shall not be presented as a revision of the same CR number previously rejected.

Impact on other specifications and Joint CRs:

If the contents of the CR is such that, in isolation, it makes the whole set of approved Specifications inconsistent, corresponding CRs shall also be considered and produced. This should ~~preferably~~ be carried out by the originator of the CR (and his colleagues in other Groups) in advance. The Support Team is co-responsible for identifying and communicating cross-TSG and cross-TSG-WG impacts.

In principle, a CR shall not be forwarded to the TSG unless the potential impact on other specifications has 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 sets of CRs should be combined into a single document, by the Support Team, before submission to all responsible TSGs and called 'Joint CRs'. An approval by all primarily responsible TSGs is necessary.

If some of the corresponding CRs are to be considered by other Groups, the Support Team shall be responsible for monitoring the result in those Groups and for submitting the full set, when available, to the TSG. This might mean that in some cases the CRs agreed in the TSG WG ~~agreed~~ CRs are not presented to the immediately following TSG meeting due to outstanding CRs from other Groups.

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. If a CR causes an inconsistency with an existing/approved test or O&M specification, the corresponding CRs should be presented together with the core specification CR.

Handling of the CR in the TSG:

When the TSG WG has agreed to a CR and comments from secondarily responsible TSG (WG)s have been taken into account, the Support Team shall ensure that it is correctly formatted and assembled, and shall submit the CR to the primarily responsible TSG for formal approval.

The Support Team shall make available to the TSG summary lists of all CRs presented for decision. This list shall be updated to show the decision reached for each and every CR.

Decisions on CRs, and results:

The TSG shall considers and concludes on each ~~strategie~~-CR independently, except for Joint CRs, which are handled and concluded together; ~~and the verdicts could on each CR shall be as one of the followings:~~

Table 1: TSG decision possibilities on CRs

| Verdict | Meaning |
|----------------|---|
| 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 TSG- <u>Working</u> Group for revision and possible re-submission at a later TSG meeting. |
| Rejected: | CR not acceptable. Further discussions on the subject, if any, to <u>shall</u> take place within the responsible Group. |

Control and notification of CR decisions:

At the end of each TSG meeting, the Support Team shall issue 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 shall 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 TSG delegates and the Support Team since it takes some time before the new versions of the specifications can be compiled and released.