3GPP TSG-SA ***Tdoc SP-030750***
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Source: **MCC**
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Title: **Proposal for improving the accuracy of work planning**

Document for: **discussion / decision**

Background

The 3GPP work plan consists of a number of Features, the Building Blocks beneath them, and the Work Tasks beneath the Building Blocks. These terms are defined in 3GPP TR 21.900. "Features", "Building Blocks" and "Work Tasks" are collectively known as "work items".

Each Feature is described in a "work item description" (WID) form, approved by the responsible TSG. Many of the principle Building Blocks, and some of the Work Tasks also have associated WIDs. The work item's rapporteur reports progress to each TSG plenary meeting, and any substantive changes to the scope or time scales are recorded in an update of the WID. So far so good.

Each Feature is normally functionally decomposed into Stages 1, 2 and 3 (à la ISDN standardization methodology of I.130). Typically, each stage will be a Building Block of the Feature, and will the responsibility of a given Working Group. The WID approved by the TSG will include target completion dates for the development of the necessary new Technical Specifications and Change Requests to existing TSs.

Identification of the problem

At the stage the WID is proposed to the TSG meeting, the time estimates are often very approximate, and accurate time scales only become available as detailed work gets under way in the Working Groups. The Feature's progress is tracked in the Work Plan using a Gantt chart, and is the composite of the progress of each component work item. However, it can be seen by looking at the Gantt chart that almost every Feature is indicated as running late – some by as much as a year. That is, achieved progress is much less rapid not only than originally estimated but than revised at the previous TSG. How can a Feature be a year late when its target completion date was approved by the TSG just three months before?

The reasons for the apparent poor progress are a combination of the following:

?? The target completion date recorded on the Feature's WID has not taken account of actual progress of its constituent work items (Building Blocks and Work Tasks).

?? Its constituent work items are shown as having started the moment the WID was approved. In practice, stage 3 work cannot start until substantial progress has been made with the stage 1 and the stage 2 work. Thus until the task is almost complete, the percentage completion of the stage 3 work item will always make it appear to be behind schedule.

?? Failure to feed back actual progress on a work item to other related work items of the same Feature.

Proposal

The 3GPP Support Team (MCC) therefore proposes the following actions to try to overcome these problems:

1. Time scales recorded in WIDs should be relative, not absolute. That is, rather than estimating the completion date, the WID should state the number of months required to complete it.

2. All work items should be shown as having started not on approval of the WID, but on the generation of the first subsequent contribution to the responsible Working Group.

3. Stage 2 work should not be targeted to start until the stage 1 work reaches at least 50 %. When Stage 1 is provided by the means of new specification(s), this means that the corresponding specification has been presented to the TSG for information.

4. Stage 3 work should not be targeted to start until the stage 2 work reaches at least 50 % (i.e. if applicable, corresponding new specification presented to the TSG for information).

Note that it is not intended that work be deliberately delayed to conform to points 3 and 4: if sufficient background is available to start stages 2 or 3 prior to the 50 % point for the preceding stage, then it may of course begin. In addition, to meet commercial needs, it may be desirable to impose absolute deadlines on the completion of aspects of the work, and again point 1 above is not intended to preclude this possibility.

When a stage is delayed – or advanced! –, the subsequent, dependent, stages are shifted by MCC to respect points 3 and 4 above, unless explicit statement is made in the WID that some stages can overlap.

These simple points, which can be managed by the Support Team without implying any additional work for the TSGs or their WGs other than checking the resulting Gantt chart, should provide a much more realistic work plan, enabling better progress tracking, and a more reassuring Gantt chart. In addition, the Support Team should be permitted to interpret the information coming from the Working Groups to eliminate obvious inaccuracies and report back to the WGs what updates were made.

If these proposals are approved by the TSG, the necessary minor modifications will be introduced to the WID form to add the necessary check points. It will also be useful to enshrine them in 3GPP TR 21.900, and a CR will be brought to the next SA plenary to this end.