

Agenda Item:

Source: China Mobile Communications Corporation, Cingular
Wireless, Huawei Technologies

Title: Proposals on RAN evolution work

Document for: Proposal

Introduction

In the RAN Future Evolution Workshop, many of the presentations pointed out the need of 3G long-term evolution to meet the future demand and to maintain its competitive position for coming decades. It is proposed that 3GPP should initiate the feasibility study of the long-term evolution accounting for the above situation. In this contribution, several proposals about RAN evolution are presented.

Proposal

In our opinion, we propose to set up a Study Item to study RAN evolution as soon as possible. The requirements of RAN evolution are described by the summary of the RAN evolution workshop, e.g., higher spectrum efficiency, cost effective backhaul, flexibility of use of existing and new frequency bands, and so on.

From operator's view, what we need is a continuous competitive network. If it is expected that the 3GPP specification will be competitive from 2005 to 2010 and beyond, we are concerned not only with the long-term evolution but also middle-term evolution.

So we have three proposals for the work methods of RAN evolution that should be further discussed in the course of the Study Item as it unfolds.

1. In the initial Phases of the Study Item work, the requirements should be divided into two categories, the first category should include the requirements we need for the "middle-term" evolution, and the second one should include the others that are more focused on the longer term evolution.
2. In addition, we suggest the standardization process of RAN evolution should be considered as a sequence. In the first step, the specifications of the more "middle-term" requirements should be completed, and in the second step, others should be completed. This is to say, once the feasibility study of a work task is completed, a work item should be set up in a timely and on-going coordinated manner with the other work items to start the specification process. A balance must be maintained of the need to progress and complete the work items specifications and the risk that the work items will proceed in a too independent manner. Caution is needed to ensure that "changes" and "adjustments" to the work items (after they are created) do not cause a particular work item and its specifications to

become uncorrelated to other specifications it might be related to in another work item with subsequent adverse results. The staging of the work is not to preclude work on the “middle-term” and the “longer-term” from occurring in parallel. The intent is to not neglect the “middle-term” needs for the sake of the longer-term.

3. In order to guarantee the completion time of the study item and specifications we suggest that RAN evolution related work tasks be given due time at the meetings, because the meeting time of RAN plenary and WGs are limited and there are a number of work tasks that RAN needs to address. The bottom line is prioritization of the resources.

Conclusion:

It's proposed to set up a Study Item to start the work of RAN evolution as soon as possible. Regarding the work methods of RAN evolution, we suggest the standardization process of RAN evolution should be considered as a sequence, and mindful not to neglect the “middle-term” needs of the industry while also addressing the “longer-term” needs. Furthermore, the RAN evolution related work tasks must be accorded the appropriate resources.