3GPP TSG RAN Meeting #22 RP-030666
Maui, Hawaii, US, 9 - 12 December 2003

Agenda Item: 7
Source: Nokia
Title: process for ASN.1 interface freezing
Document for: Discussion & decision

1 INTRODUCTION

After RAN plenary #21, there have been discussions on the freezing of ASN.1 interfaces for Rel-5. In RAN2 meeting #39, there were several company contributions relating to this issue and activity to study ASN.1 status has been started.
The current process is either non-existant or relies substancially on offline effort, resulting in unclarity of actions to take.
This document discusses the importance of having a process and proposes a set of guidelines for future reference.

2 DISCUSSION

Currently the actions required to freezing ASN.1 are not completely clear. Up to now, the majority of actions depended on one company and/or the final checking of ASN.1 before freezing has not always taken action in the appropriate subworking groups:

- Freezing R99 ASN.1: Depended mainly on actions of one company (at least on Uu) checking tabular notation against actual ASN.1 format.
- Freezing Rel-4 ASN.1: Depended mainly on actions from one company and there was no official time allocation for checking consistency (editorial errors, etc) in subworking groups.
- Freezing Rel-5 ASN.1 (not complete): actions started offline and one company has been driving the organizational side of the ASN.1 checking before freezing. More companies are now contributing to this activity.

Generally, the subworking groups are responsible for maintaining the interfaces backwards compatible and particular effort is put to ensure it in frozen releases. It is also ensured that ASN.1 is usable across all releases.
However, the available expertise in this field is much more reduced than in the normal descriptive part of the specification. Furthermore, experience has proven that it is fundamental to ensure maturity and status of ASN.1 before freezing it. Two prime examples of the need for this checking are the Measurement Control message in R99 (see [1]) and the ASN.1 status as highlighted in [2].
It is therefore essential that the process for interface freezing is transparent to all affected groups and parties and dedicated activity occurs in each affected group in studying the issue before making a decision, since this is the only way effective effort will be taken in the checking of ASN.1 with appropriate expertise.

The requirements to ensure an efficient and clear process can then be summarized by:

- Organization of freezing interfaces driven from one group, so that ASN.1 interface freezing can be coordinated.
- Transparency to all parties in affected groups. This is ensured by exchange of LSs.
- Usage of expertise in relevant working groups to report development of ASN.1 status back to the coordinating group, by allocating dedicated time for analysis or dedicated point in the agenda to all relevant contributions and exchange of LSs.

3 PROPOSAL

Based on the discussion above it is seen that it is important to agree on a clear and transparent process for freezing interfaces using ASN.1 notation and take necessary actions to prevent major corrections once the interface has been frozen. Therefore, it is proposed to agree on a set of steps to be used as a reference for all actions relevant to ASN.1 freezing:

1) Interested parties bring contribution to RAN plenary, proposing the freeze ASN.1 for a given release.
2) RAN studies the issue and when decision to start study on ASN.1 freezing is made, RAN sends LS to RAN2/3 requesting status of ASN.1 and/or initiate actions for freezing.
3) Subworking groups initiate interface checking and report status back to RAN. Parties are obviously allowed to bring contributions (analysis of ASN.1) to the subworking groups in order to accelerate the process.
4) When RAN2 and RAN3 have finalized their analysis/corrections and OK status is received from these two WGs in RAN, the decision to freeze interfaces can be taken.

It is also proposed that this process is already used as much as possible when deciding to freeze Rel-5 ASN.1.

4 REFERENCES

[1] TS 25.331 v3g0 (section 11).
[2] R2-032441 Proposed CR to 25.331 [Rel-5] on ASN.1 and tabular corrections
[3] R2-032439 Proposed CR to 25.331 [Rel-4] on Missing CHOICE RLC Info type in the ASN.1 IE 'RB-InformationSetup-r4'