

Agenda item:

Source: Nokia, Motorola, T-Mobile, Ericsson, Orange, Panasonic, Qualcomm, Telecom Italia, 3, NTT DoCoMo, Alcatel, Telefonica, Lucent

Title: Feature clean up, way forward

Document for: Decision

1. INTRODUCTION

This document contains features based on the presentation on the document [10], and related discussions in RAN#27.

2. DISCUSSIONS

During the presentation of the RP-050125 it was discovered that some other topics could be considered to be included into this list. Additional issues agreed to be included into the list are:

- Compressed mode by puncturing,
- CPCH

Based on the initial analyses [6-9], further discussion after the working group meeting, and RAN#27 discussions, the following set of features could be removed from the specifications.

- 80 ms TTI for DCH
 - In the scope of recent discussions of delays, and the need to enhance this behaviour, it is going to be unlikely that DCH based services will be based on 80 ms TTI in future.
 - In the RAN adhoc meeting (10.3.-05) on feature clean-up, consensus was reached that the support of 80ms TTI would be only required when supporting SF512. In all other cases the support of 80ms TTI is not required.
- SSDT
 - As now the WCDMA networks have started and it is expected that infrastructure vendors and operators are having clearer picture what features are implemented and used in networks it is going to make use of some features less relevant. It seems that SSDT is part of the latter case unlikely to be introduced in the networks. In addition, all efforts to speed up UE testing time are welcomed, and hence we consider this feature possible to remove.
- TGPL2
 - This is already proposed for removal in CRs [1-5], which are technically endorsed by the working groups.
- Observed time difference to GSM cell
 - This measurement was defined for compressed mode optimization purposes. Using these time difference measurement results the network could optimize a BSIC re-confirmation compressed mode patten for each UE. However, this feature has not been well finalised in the specifications. Furthermore, the feature has not been seen necessary in real networks. As some further work would anyway be expected to make this compressed mode optimisation feature feasible, it would mean that the feature is not likely to become usable in practice.
- Support of dedicated pilot as sole phase reference
 - The support is not mandatory in HSDPA and not applicable for F-DPCH. Concerns have also been raised about the usage of the feature in real networks.
- Tx diversity closed loop mode2
 - Feature is not defined for HSDPA and F-DPCH and therefore it is not efficiently usable in the networks.

- DSCH (FDD mode)
 - This feature is optional and not used in real networks. Furthermore, the introduction of HSDPA will diminish the benefits that DSCH could provide.
- DRAC
 - This feature is optional. Furthermore, motivation for the removal of this feature is rather similar as the one of SSDT. It is unlikely that DRAC will be introduced in the networks.
- Compressed mode by puncturing
 - The feature is not used in real networks. Furthermore, as compressed mode by puncturing is only applicable for fixed positions in DL, it not expected to be the best way of handling compressed mode measurements with future services.
- CPCH
 - The feature is optional and not used in real networks.

In addition discussion on what release feature removal would be considered. Several companies expressed concerns whether this would have effect for rel-99 and –4 specifications. Based on discussion there seems to be concensus to apply this feature removal for rel-5 onwards.

It needs to be understood that whole clean up exercise for all the proposed features should be applied from one release onwards to limit the discussions and ensure fast progress on this issue.

This would provide a clean cut, which would be beneficial for further development of specifications in case of introduction of new features or even when correcting the existing features.

3. PROPOSAL

RAN#27 meeting agrees to remove a set of UTRAN features listed in in Section 2 in order to simplify specifications. It is also agreed, that the support of 80ms TTI is only required when supporting SF512 in the terminal. In all other cases 80 ms TTI for DCH support is removed from rel 5 onwards.

R99 & Rel4 are remained untouched that is to say R99 and Rel-4 mobile and network requirements are left untouched. Features would only be removed from release 5 onwards, and WG's are tasked to prepare a set of necessary CR's for each feature and provide them for RAN#28 approval. CR's have to pay attention that they shall not have impact elsewhere in rel-5 or rel-6 specifications. This feature clean up would simplify mobile requirements and enables smooth evolution with less complexity.

4. REFERENCES

- [1] RP-040524 Removal of TGPL2 Ericsson, Nokia
- [2] R1-050110, Technically endorsed RAN1 CRs for TGPL2
- [3] R2-050585, R2-050586, R2-050587, R2-050588, Technically endorsed RAN2 CRs to RAN plenary#27
- [4] R3-050246, R3-050247, R3-050248, R3-050249, R3-050250, R3-050251, R3-050252, R3-050253, Technically endorsed RAN3 CRs to RAN plenary#27
- [5] R4-050034, R4-050035, R4-050036, R4-050037, R4-050038, R4-050039, R4-050040, R4-050041 Technically endorsed RAN4 CRs to RAN plenary#27
- [6] R1-050172, Feature Clean-Up, Nokia, Motorola
- [7] R2-050583, Feature Clean-Up, Nokia, Motorola
- [8] R3-050245, Feature Clean-Up, Nokia, Motorola
- [9] R4-050214, Feature Clean-Up, Nokia, Motorola
- [10] RP-050125, Feature clean up, Nokia, Motorola, T-Mobile, Ericsson, Panasonic, NTT DoCoMo, Qualcomm, Telecom Italia