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Agenda item: **8.1.2**
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Title: **SSDT in Release 99 and Release 4**
Document for: **Discussion**

1. Introduction

RAN WG1 chairman reported that there was discussion on SSDT in Release 99. In the report, possible solutions about the inclusion of SSDT are presented. We believe that TSG RAN should not decide to remove a feature without clear reasons at this late stage. If we remove SSDT or make it optional in Release 99, specifications would become unstable, and thus availability of mobile terminals would be more likely to be delayed.

In this contribution, we would like to explain that SSDT is not incomplete, not incompatible nor an obsolete feature.

2. Discussion

(1) Incomplete issues

We believe that SSDT operation is well defined in the specification. Although CRs are currently discussed, they are only for further clarification.

From such clarification, CRs cannot be taken as a proof that SSDT is incomplete. If TSG RAN regards this as proof of incompleteness, it would mean that TSG RAN should remove some other items as incomplete features. Note that a large number of CRs are still submitted.

(2) Incompatible issues

There are no unsolved problems in SSDT operation in combination with other mandatory features. There was an argument in TSG RAN WG1 that the combination of SSDT and closed-loop TX diversity should be restricted due to lack of performance specifications for the combined operation. Note that features are incompatible if the features cannot operate simultaneously, but this is not the case for SSDT and closed-loop TX diversity.

If TSG RAN regards the lack of performance specifications for the combined operation as evidence of incompatibility, it would mean that TSG RAN should remove

many other features such as CL TX diversity in SHO.

(3) Obsolete issues

A feature is obsolete when the rationale for the incorporation of the feature in the specifications is no longer valid e.g. a functionality which has become useless or which has been superseded by another feature allowing to obtain the same functionality [1].

It is shown that SSDT can enhance downlink capacity by up to 50% [2], and this gain has been unchanged. Furthermore, it has been shown that operating SSDT simultaneously with other TX diversity methods does produce further improvement in downlink capacity [3].

Therefore TSG RAN should not regard SSDT as an obsolete feature.

3. Conclusion

We propose that TSG RAN confirm that SSDT is retained in Release 99 as previously agreed in TSG RAN.

References

[1] RP-010717, “Urgent work to be started by TSG RAN Working Groups in order to improve further the quality of TSG RAN specifications,” TSG RAN Officials.

[2] TR25.922 V3.6.0, “Radio resource management strategies (Release 1999).”

[3] R1-99-911, “System level performance of parallel operated SSDT and Tx antenna diversity systems,” NEC.