

**Agenda Item:** 9.3.4  
**Source:** Telecom Modus  
**Title:** SSDD impacts on RRC Protocol  
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## **1 INTRODUCTION**

This contribution proposes supporting information related to ‘Site Selection Diversity Transmit power control’ (SSDD) on RRC protocol. We propose this information to be included in [2].

## **2 SSDD**

### **2.1 Background**

SSDD is an optional macro diversity method in soft handover mode whereby the UE selects one of its cells from its active set to be ‘primary’, and all others are classed as ‘non-primary’. The main objective of SSDD is to transmit on the downlink from the best cell, thus reducing the interference caused by multiple transmissions in a soft handover mode. SSDD is initiated and terminated in the SRNC.

For further information on SSDD, please read reference [1], section 4.2.3.

### **2.2 SSDD indicator**

Based on the soft handover active cell set, the SSDD function is initiated/terminated in the SRNC. The status of SSDD (i.e. initiated/terminated) is sent to the UE. We propose that the SSDD status indicator is to be included in the corresponding procedures of the RRC protocol.

### **2.3 UE ‘SSDD’ capability**

The SRNC should contain the UE SSDD capability prior to initiation of SSDD. We propose that the SRNC receives an indication of the UE’s SSDD capability, to be included in the corresponding procedures in the RRC protocol.

### **3 PROPOSED CHANGES**

We propose:

**RRC protocol (proposal of changes in [2]):**

RRC protocol message 8.3.8.1 UE Capability Information in [2]: we propose this message to include the UE 'SSDT' capability.

RRC protocol message 8.3.5.1 Active cell update in [2]: we propose this message to include the 'SSDT' initiation/termination indicator.

### **4. REFERENCES**

[1] XX.07, Physical layer Procedures, ver. 1.0

[2] YY.31, Description of the RRC, ver. 0.2.0