

To: TSG RAN WG3
Source: TSG RAN WG1
Title: Proposed LS on Higher Layer Signalling for Site Selection
Diversity Transmission Power Control

During WG1#9 meeting last week at Dresden, WG1 considered a couple of proposals regarding optimum cell ID code for SSdT power control. However, WG1 could not make a conclusion on this issue without confirmation from RAN WG3 on some SSdT related assumptions being used during the discussion.

Therefore, TSG RAN WG1 would like to invite response from RAN WG3 on the following questions for confirmations on the assumptions.

Q1. Would it be possible to dynamically allocate the SSdT ID codes of cells by high layer signalling for more reliable radio link maintenance?

Q2. Does the Node B know whether the UE is in the mode of soft handover or not?

Q3. Does the Node B have the knowledge about the SSdT ID codes of other Node Bs?

Also, WG1 would like to know the followings from the current WG3 specification.

1. Current SSdT code ID allocation procedure in UTRAN
2. Way of the maintenance of Radio Link ID-SSdT ID mapping table in UTRAN

To help WG3 understand the SSdT power control, the following explanation about SSdT in RAN WG1 specification is added to this LS.

SSdT power control is an optional macro diversity method in soft handover mode. The UE selects one of the cells from its active set to be 'primary, and all other cells are classed as 'non primary'. The main objective is to transmit on the downlink from the primary cell, thus reducing the interference caused by multiple transmissions in a soft handover mode. A second objective is to achieve fast site selection without network intervention, thus maintaining the advantage of the soft handover. In order to select a primary cell, each cell is assigned a temporary identification (ID) and UE periodically informs a primary cell ID to

the connecting cells. The cells that are not selected by UE switch off the transmission power. The primary cell ID is delivered by UE to the active cells via uplink FBI field. And there are total 8 cell ID codes. SSDT activation, SSDT termination and ID assignment are all carried out by higher layer signalling.

Reference

[1] TS 25.214, Physical Layer Procedures (FDD), v.3.0.0 (1999-10).