

**Agenda Item:**

**Source:** Ericsson

**Title:** Functional Split of Admission Control

**Document for:**

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## **1. INTRODUCTION**

This contribution studies the radio network function Admission Control. As the standard only should specify the information on the interfaces and not the radio network algorithms, we identify the information required to be transferred on each interface for this function. We propose this contribution to be included in [1].

## **2. FUNCTIONAL SPLIT OF ADMISSION CONTROL**

The purpose of the admission control is to admit or deny new users, new radio access bearers or new radio links (for example due to UE access, RAB assignment/reconfiguration and handover). The admission control admits or denies the requests and bases its decision on available resources and RAB information (for example priority or cause for request). The admission control may give different answers depending on priority and situation.

The admission control may consider the load in several cells in the decision. This implies that at RNC borders, there is a need for additional information exchange between the admission control functions in both RNCs. The exact definition of this information is for further study.

## **3. INTERFACE ASPECTS**

The following can be said about the information transfer needed to support the Admission Control function.

### **3.1 Iur Interface**

At setup or reconfiguration of a radio link in another RNC, the admission control in that RNC is implicitly invoked.

Additional information exchange between RNCs regarding admission control of cells in border areas is for further study (whether to use load indication or admission requests etc).

### **3.2 Iub Interface**

On the Iub interface the admission control function has at least a need for:

- Peak  $I_{UL}$  for each cell and frequency
- Average  $I_{UL}$  for each cell and frequency
- Peak  $P_{DL}$  for each cell and frequency
- Average  $P_{DL}$  for each cell and frequency

## **4. PROPOSED CHANGES**

Section 12.5 of [1] describes the UTRAN internal interfaces. We propose the following text to be added in [1]:

### **Iur Interface**

#### **12.5.1.1.X Admission Control**

Admission control in a neighboring RNC is implicitly invoked during radio link setup/modify.

Additional information exchanges between admission control functions located in different RNCs are for further study.

### **Iub Interface**

#### **12.5.2.2.X Admission Control**

The admission control function located in the RNC receives information about peak and average  $I_{UL}$  for each cell and UL frequency and peak and average  $P_{DL}$  for each cell and DL frequency.

## **5. REFERENCES**

- [1] ZZ.01, UTRAN Architecture Description, Ver. 0.1.0