

## **Question from ARIB for clarification on the proposed document (Doc.8F/1079(Rev.1))**

### **ARIB-1: Activity factor in Voice traffic capacity**

Reference: 8F/1079(Rev.1), A3.1.1.1 in Section 3 and Section 2.3.1.1

**Question:** We understood that the voice activity factor assumed for voice capacity simulation was 40% in the proposal, which is different from one in M.1225 (50%). What is a rationale to use the different assumption? What are possible impacts on the voice capacity results if you use 50% for the voice activity factor?

### **ARIB-2: Assumed path loss model and channel model in Voice traffic capacity**

Reference: 8F/1079(Rev.1), A3.1.1.1 in Section 3

**Question:** Why did the simulation in proposal assume "Vehicular" for path loss model and "Pedestrian B" for channel impulse response model, which are for different test environments? Is it possible to consider capacity based on path loss model and channel impulse response model from the same test environment, such as "Vehicular", "Outdoor to indoor and pedestrian" and/or "Indoor office"?

### **ARIB-3: Call blocking rate in Voice traffic capacity**

Reference: 8F/1079(Rev.1), A3.1.1.1 in Section 3 and Section 2.3.1.3

**Question:** We understood that the call blocking rate assumed for voice capacity simulation was 2% in the proposal, which is different from one in M.1225 (1%). What is a rationale to use the different assumption? What are possible impacts on the voice capacity if you use 1% for the call blocking rate?

### **ARIB-4: Referenced Recommendation in A.3.2.1**

Reference: 8F/1079(Rev.1), A3.2.1 in Section 3 (A.1.3.7.1/A.1.3.7.2)

**Comment:** This section is closely related to the item #1 "One-way end-to-end delay less than 40 ms." in "Voice and data performance requirements".

Therefore, referenced ITU Recommendation need to be ITU-T G.174 and G.114 that referred from G.174.

G.114 contains the guidance on the delay performance issue of IP over VoIP.

**Question:** Isn't there any problem (such as tap length calculation may not converge due to different echo characteristic on both sides) when echo cancellers are installed on both MS and BS?

### **ARIB-5: Terminology and Assumption of "tolerable delay spread"**

Reference: 8F/1079(Rev.1), A3.4.1.4 and A3.4.2.2.2 in Section 3

<Related attributes> A1.3.1.1, A1.3.1.2, and A1.3.1.3 in Section 2.1

**Question:** We have two questions on this issue.

One is the verbiage of "delay spread". We believe you mean the

"maximum excess delay" of delay profile because Vehicular B channel model

has the path of 20us delay with -16dB power. Is our understanding correct? Second, even if our understanding is correct, the 20us delay occurs ISI (inter-symbol-interference) in the proposed system with CP=11.4us (See Table 2 in Section 1.3.3, A1.2.1.4 in Section 2.1, and Table 14 in Section 2.3.3.1), and the performance is significantly degraded in such a condition. Whilst the CP of  $T_g/4$ (=22.8us) is defined in Table 384b in the 802.16e standard document. What is your assumption of the items listed in the Reference mentioned above?

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