

**Agenda Item:** 9.1  
**Source:** NTT DoCoMo  
**Title:** Correspondence of mode in lu UP protocol layer to services  
**Document for:** Discussion

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### 1.Introduction

This document describes Correspondence of the *mode* in lu UP protocol layer to service.

### 2.Discussion

Reference [1] specifies two modes: *support mode* and *transparent mode*. Each mode has its own applied region. Support mode should be applied to the services that are not capable of performing the following functions in upper layer:

- Timing assurance (i.e. receiver can retrieve the correct interval of frames despite jitter)
- Error detection

On the other hand, if other layer already provides these functions, transparent mode should be applied to the service in lu UP protocol. Derived from the above rule, support mode should be applied to speech service and transparent mode should be applied to PS service. This has already implicitly been regarded as an assumption.

In addition to speech and PS services, applied mode for other services such as UDI CS data, Multi Media Telephony and Circuit switched type of data should be specified. The following table proposes the applied mode for each service.

	UDI CS data	Multi Media Telephony	Circuit switched type of data such as modem and fax
Timing assurance for payload	Needed, but no function	Needed, but no function	Not needed
Error detection for payload	Not needed	Not needed	Needed, and RLP has this function
Applied mode	Support mode	Support mode	Transparent mode

### 3.Proposal

It is proposed that the following table should be added in an annex of reference [1].

Examples of service	Applied mode
Speech UDI CS data Multi Media Telephony	Support mode
Packet Circuit switched type of data such as modem and fax	Transparent mode

### 4.References

[1] UMTS 25.415, Ver.0.2.1