TSG-RAN Working Group 3 meeting #1 ***TSGW3#1(99)068***
Bonn 2nd - 5th February 1999

Agenda Item: **7**

Source: **NEC Corporation, NTT, NTT DoCoMo, Fujitsu, Mitsubishi Electric, NTT Comware, Panasonic, Tu-ka Tokyo, Tu-ka Kansai, Japan Telecom**

Title: **The Comparison of UMTS-ZZ.11 and TTC/ARIB description of Iu**

Document for:

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1. Introduction

This contribution presents a table that indicates the differences and similarities between TTC/ARIB Description of the Iu Interface ref[1]with the ETSI UMTS-ZZ.11 ref [2].

The comparison follows the order of the section structure within UMTS ZZ.11 ref[2].

The results of the comparison are shown in the results column. In the case where difference between the two documents occur, there is supporting comments highlighting the differences. If there are no difference found then the results column indicates 'no difference'

There is also a subsequent column titled 'proposal' which presents proposals for acceptance in order to resolve the highlighted differences.

2. Comparison Table

Table 1,2,3,4,5 show the comparison between TTC/ARIB Description of the Iu Interface ref[1] and the ETSI UMTS-ZZ.11 ref [2].

3. Reference

[1] Draft Description If Iu Interface Version 1.0.0
[2] UMTS ZZ.11 Description Of Iu Version 0.1.0
[3] UMTS ZZ.02 UTRAN Functions, Examples on Signalling Procedures Version 0.1.0

Table 1 From Chapter 1 to chapter 8

Contents	**UMTS-ZZ.11**	**TTC/ARIB-Description of Iu Interface**	**Comparison Result**	**Proposal**
1. Intellectual Property Right	description for ETSI	no description		propose to have text description that can represent common for 3GPP
2. Foreword	Description for ETSI	description for TTC/ARIB		propose to have text description that can represent common for 3GPP
3. Scope	Description for ETSI	description for TTC/ARIB		propose to have text description that can represent common for 3GPP
4. References	Reference to UMTS document	no references described		propose to have reference to common 3GPP document
5. Definitions, Abbreviations and Symbols			**No differences**	
6. General Aspects	no description	no description	**No differences**	3GPP resolution required
7. Function of the Iu Interface Protocol	no description	no description	**No differences**	3GPP resolution required
8. Iu Interface Protocol Structure	Implicit under layer	explicit under layer	**Differences** TTC/ARIB has agreed to have SS7 as the signalling bearer for RANAP over Iu Interface.	Having SS7 as a signalling bearer to satisfy TTC/ARIB requirement.

Table 2 Chapter 9. Iu Interface Protocol Layer Specification for Radio Network Control Plane

Contents	UMTS-ZZ.11	TTC/ARIB-Description of Iu Interface	Comparison result	Proposal
9.1 Introduction	no description	no description	**No differences**	
9.2 Radio Network Layer				
9.2.1 General	no description	no description	**No differences**	
9.2.2 RANAP Procedure				
9.2.2.1 Serving RNS relocation	**Source RNS-CN**: <Relocation Required>	**Source RNS-CN** <RNC Relocation Request>	**Differences** The message names of <Relocation Required> and <RNC Relocation Request>	3GPP resolution required
	<Bearer Release> <Bearer Release Complete>	<Signalling Channel Release> <Signalling Channel Release Response>	The message names of <**Bearer** Release> and <**Signalling Channel** Release>	
	CN-Target RNS	**CN-Target RNS** <Signalling Channel Setup> <Signalling Channel Setup Response>	TTC has <Signalling Channel Setup> and <Signalling Channel Setup Response>	

Contents	UMTS-ZZ.11	TTC/ARIB-Description of Iu Interface	Comparison result	Proposal
	<Relocation Request>	<RNC Relocation >	The message name of <Relocation Request> and <RNC Relocation>	
	<Relocation Proceeding 1> <Relocation Proceeding 2>		ETSI has <Relocation Proceeding 1> and <Relocation Proceeding 2>	
	<Relocation Complete>	<RNC Relocation Response>	The message name of <Relocation Complete> and <RNC Relocation Response> TTC has an option that the trigger of [SRNS Relocation] can be the Target RNS i.e. the Target RNS send the first SRNS Relocation message to CN. The procedure shown in TTC/ARIB Chapter 9.2.2.1. is the case that trigger by Source RNS .	
9.2.2.2 Inter RNS hard handover	**Source RNS-CN** <Relocation Required>	**Source RNS-CN** <Handover Required>	**Differences** The message name of <Relocation Required> and < Handover Required>	Take TTC/ARIB as a base because it matches ZZ.02.
	<Handover Command>	<Handover Command>		
	<Bearer Release> <Bearer Release Complete>	<Signalling Channel Release> <Signalling Channel Release Response>	The message name of <**Bearer** Release> and <**Signalling Channel** Release>	
	CN-Target RNS <Relocation Request>	**CN-Target RNS** <Handover Request>	The message name of <Relocation Request> and <Handover Request>	
	<Relocation Proceeding 1>	<Handover Request Acknowledge>	The message name of <Relocation Proceeding 1> and <Handover Request Acknowledge>	
	<Relocation Proceeding 2>		ETSI has the <Relocation Proceeding2>	
		<Handover Detect>	TTC/ARIB has the <Handover Detect>	
	<Relocation complete>	<Handover Complete >	The message name of <Relocation complete> and <Handover Complete>	

Contents	UMTS-ZZ.11	TTC/ARIB-Description of Iu Interface	Comparison result	Proposal
			Note The Inter RNS hard handover sequence flow in ZZ.11 version 0.1.0 seems has conflict compare to ZZ.02.	
9.2.2.3 Radio Access Bearer Assignment		The title is < Bearer Setup>	**Differences**	Take TTC/ARIB messages name as a base, because CN does not know the "**Radio**" inside UTRAN.
	RNC-CN <Radio Access Bearer Assignment Request >	**RNC-CN** <Bearer Setup>	The messages name <Radio Access Bearer Assignment Request> and <Bearer Setup>	
	<Queuing Indication>		TTC/ARIB does not have <Queuing Indication>	Incorporate <Queuing Indication>, in order to satisfy ETSI requirement.
	<Radio Access Bearer Assignment Complete>	<Bearer Setup Response>	The messages name <Radio Access Bearer Assignment Complete> and <Bearer Setup Response>	
	<Radio Access Bearer Assignment Failure>	<Bearer Setup Failure>	The messages name <Radio Access Bearer Assignment Failure> and <Bearer Setup Failure>	
Bearer Release		9.2.2.4 Bearer Release	**Differences** ETSI include Iu Bearer Release in the Radio Access Bearer Assignment procedure. The message <Radio Access Bearer Assignment Request> has the functionality of both assignment and release, and also has the functionality of setup or release more then one bearer.	3GPP resolution required
		Bearer Release Request	TTC/ARIB has separate chapter for Bearer Release Request	Take TTC/ARIB as a base, it is easier to read.
Iu Release	9.2.2.4 Iu Release no description	9.2.2.7 Signalling Channel Release	**Differences** This procedure seems similar to TTC/ARIB Signalling Channel Release	Take TTC/ARIB as a base.

Contents	UMTS-ZZ.11	TTC/ARIB-Description of Iu Interface	Comparison result	Proposal
Overload	9.2.2.5 Overload		**Differences** TTC/ARIB does not have overload procedure	Take ETSI as a base
Bearer Reconfiguration		9.2.2.5 Bearer Reconfiguration	**Differences** ETSI does not have Bearer Reconfiguration procedure	Take TTC/ARIB as a base
Signalling Channel Setup		9.2.2.6 Signalling Channel Setup	**Differences** ETSI does not have Signalling Channel Setup procedure	Take TTC/ARIB as a base
Signalling Channel Release	9.2.2.4 Iu Release no description	9.2.2.7 Signalling Channel Release	**Differences** This procedure seems similar to TTC/ARIB Iu Signalling Channel Release	Take TTC/ARIB as a base
Reset	9.2.2.6 Reset	9.2.2.8 Reset	**No Differences**	
Common ID	9.2.2.7 Common ID	9.2.2.9 Common ID	**Differences** Text description	Take ETSI as a base, because it describes more detail.
Paging	9.2.2.8 Paging	9.2.2.10 Paging	**Differences** The sending of Paging Response as a MM Protocol message has been decided in TTC/ARIB	3GPP resolution required
Trace Invocation	9.2.2.9 Trace Invocation		**Differences** TTC/ARIB does not have Trace Invocation	Take ETSI as a base
Cipher Mode Control	9.2.2.10 Cipher Mode Control	9.2.2.11 Cipher Mode Control	**Differences** TTC/ARIB can get the Cipher Algorithms from the first message that UE send to UTRAN. ETSI receives the cipher algorithms from CN.	3GPP resolution required
CN Information Broadcast	9.2.2.11 CN Information Broadcast		**Differences** TTC/ARIB does not have CN Information Broadcast	Take ETSI as a base
Direct Transfer	9.2.2.12 Direct transfer <Direct Transfer Request>	9.2.2.12 Direct Transfer <Direct Transfer>	**Differences** The messages name <Direct Transfer Request> and <Direct Transfer>	
Initial UE Message		9.2.2.13 Initial UE Message	**Differences** ETSI does not have Initial UE Message	Take TTC/ARIB as a base
9.2.3 RANAP Messages			**Differences** TTC/ARIB list all messages, contents are included in the messages.	Take TTC/ARIB as a base

Contents	UMTS-ZZ.11	TTC/ARIB-Description of Iu Interface	Comparison result	Proposal
9.2.4 RANAP information elements			**Differences** TTC/ARIB list some elements and some elements have their field. And also TTC/ARIB has defined the coding format.	Take TTC/ARIB as a base
9.3 Transport layer 9.3.1 General			**No differences**	
9.3.2 Service provided by the signaling bearer			**No differences**	
9.3.3 Iu Signalling Bearer			**Differences** TTC/ARIB has agreed to have SS7 as the signalling bearer for RANAP over the Iu Interface.	Having SS7 as a signalling bearer to satisfy TTC/ARIB requirement.

Table 3 Chapter10. Iu Interface Protocol Layer Specification for Transport Network Control

Contents	UMTS-ZZ.11	TTC/ARIB-Description of Iu Interface	comparison result	Proposal
10.1 Introduction			**no description in both ETSI and TTC/ARIB**	3GPP resolution required
10.2 Transport layer				
10.2.1 General				
10.2.2 ALCAP				
10.2.3 Network Layer				
10.2.4 Data Link Layer				

Table 4 Chapter11. Iu Interface Protocol Layer Specification for User Plane

Contents	UMTS-ZZ.11	TTC/ARIB-Description of Iu Interface	comparison result	Proposal
11.1 Introduction			**no description in both ETSI and TTC/ARIB**	3GPP resolution required
11.2 Radio Network Layer				
11.2.1 General				
11.3 Transport Layer				

Table5 Chapter 12 to 14

Contents	**UMTS-ZZ.11**	**TTC/ARIB-Description of Iu Interface**	**comparison result**	**Proposal**
12. Physical Layer			**no description in both ETSI and TTC/ARIB**	3GPP resolution required
13. Example Sequences				
14. History				