# JT-Q1228-b IN (intelligent network) Interface between Local Network and Service Providing Network Capability Set 2

#### 1. Relations with international standards

This standard defines IN (intelligent network) interface between Local Network and Service Providing Network, based upon ITU-T Recommendations Q.1224,Q.1225,Q.1228 and Q.1290.

ITU-T Recommendations Q.1224,Q.1225 and Q.1228 have approved on ITU-T SG11 meeting held in September 1997 And Q.1290 has also approved on ITU-T SG11 meeting held in May 1998.

## 2. Summary of differences between ITU-T Recommendations and this standard

#### 2.1 Optional items

None

#### 2.2 National items

None

#### 2.3 Others

- (1) This standard indicates deletions from the above ITU-T Recommendations by the following rules.
  - (a) Sections which are defined in the ITU-T Recommendations, however, are not defined in this standard, are indicated by section numbers and section titles with the deletion symbol "#" in the table of contents and the text.

(b) Description in chapters which is defined in the ITU-T Recommendations, however, is not defined in this standard, is deleted without the deletion symbol "#".

(2) This standard defines only the necessary parts in order to standardize IN (intelligent network) interface between Local Network and Service Providing Network.

(3) This standard is consisted of the following two parts. One is the necessary part in order to standardize IN (intelligent network) interface between Local Network and Service Providing Network, which is extracted downstream from ITU-T IN Recommendations CS-2 including general concepts of IN. The other is the description of this TTC standard specific. TTC specific descriptions are indicated by the symbol "\*" in the text.

(4) This standard uses figure number and table number provided by the above ITU-T Recommendations directly under the chapter number - section number of this standard.

The rules of providing figure number and table number are indicated below.

L			1		
ITU-T	figure/	number	TTC	figure/table	number providing
Rec.	table	providing	Standard	numbering	example
	numbering	example		rule	
	rule				
Q.1224	section	FIGURE 4-3/	Chapter 2	Chapter	FIGURE 2-4-3/JT Q1228-b*
	number -	Q.1224		number -	(ITU-T Q.1224)
	sequential			ITU-T providing	
	number			number	
	in section				
Q.1225	sequential	TABLE 2/	Chapter 3	Chapter	TABLE 3-5-2/JT-Q-1228-b*
	number	Q.1225		number -	(ITU-T Q.1225)
				section	
				number -	
				ITU-T providing	
				number	
Q.1228	sequential	FIGURE 3-10/	Chapter 4	Chapter	TABLE 4-3-3/JT-Q1228-b
	number	Q.1228		number -	(ITU-T Q.1228)
				section number -	
				ITU-T providing	
				number	
Q.1290	table/figure		Chapter 5	table/figure	
	nothing			nothing	

## 2.4 Comparison of sections between ITU-T Recommendations and this standard

The following tables show differences in sections between the ITU-T Recommendations and this standard.

Chapter 1 Introduction

TTC Standard	ITU-T Rec.	Difference from
		ITU-T Rec.
Sec. 1 General		Add
Sec. 2 Service descriptions		Add
Sec. 3 Basic concepts		Add
Sec. 4 Definition of connecting		Add
function between		
signalling networks		

### Chapter 2 Distributed functional plane (corresponding to Q.1224)

TTC Standard	ITU-T Rec.	Difference from ITU-T Rec.
Sec.1 General	Sec.1 General	Partially delete/ partially modify
Sec.2 Scope of IN distributed	Sec.2 Scope of IN distributed	Partially delete/
functional plane for	functional plane for	partially modify
capability Set2	capability Set2	
Sec.3 Distributed functional	Sec.3 Distributed functional	Partially delete/
model for IN CS-2 between	model for IN CS-2	partially modify
networks		
Sec.4 SSF/CCF model	Sec.4 SSF/CCF model	Partially delete/
		partially modify
Sec.5 Specialized Resource (SRF)	Sec.5 Specialized Resource (SRF)	Partially delete/
Function Model	Function Model	partially modify
Sec.6 Service Control Function	Sec.6 Service Control Function	Partially delete/
(SCF) Model	(SCF) Model	partially modify
Sec.7 Service Data Function	Sec.7 Service Data Function	Delete
(SDF) Model	(SDF) Model	
Sec.8 Call Unrelated Service	Sec.8 Call Unrelated Service	Delete
Function(CUSF) Model	Function(CUSF) Model	
Sec.9 Service Management	Sec.9 Service Management	Delete
Function(SMF) Model	Function(SMF) Model	
Sec.10 Mapping of the global	Sec.10 Mapping of the global	Delete
Functional plane to the distributed	Functional plane to the distributed	

functional plane	functional plane	
	Sec.11 Information flow diagrams	Delete
	and distributed service logic	
Sec.11 Mapping of service		Add
Functions to the functional		
architecture		
Sec.12 Relationship between FEs	Sec.12 Relationship between FEs	Partially delete/
1	r	partially modify
Annex A Mobility Aspects	Annex A Mobility Aspects	Delete
Annex B Telecommunication	Annex B Telecommunication	Delete
Management Network(TMN)	Management Network(TMN)	
concepts	concepts	
Annex C IN SSF Q3 Management	Annex C IN SSF Q3 Management	Delete
		Derete
Information Model	Information Model	
Annex D IN Testing and Fault	Annex D IN Testing and Fault	Delete
Management	Management	
Annex E SSF/SCF		Add
relationship scenarios		
Annex F BCSM SDL Diagrams		Add
Appendix Example/Application	Appendix Example/Application	Delete
of IN SSF Q3Management	of IN SSF Q3Management	
Information Model	Information Model	
Appendix Information flows	Appendix Information flows	Delete
and call models for terminal mobility	and call models for terminal mobility	
Appendix Supplementary		Add
explanation about basic procedure		
of connection between		
signalling networks		
of connection between		

Chapter 3 Physical plane ( corresponding to Q.1225 )

TTC Standard	ITU-T Rec.	Difference from ITU-T Rec.
Sec.1 General	Sec.1 General	Partially delete/
Sec.2 Requirements and assumptions	Sec.2 Requirements and assumptions	Partially delete/ partially modify
Sec.3 Physical entities (PEs)	Sec.3 Physical entities (PEs)	Partially delete/
Sec.4 Mapping requirement	Sec.4 Mapping requirements	F
Sec.5 Mapping the distributed	Sec.5 Mapping the distributed	Partially delete/
functional plane to the	functional plane to the	partially modify
physical plane	physical plane	

# Chapter 4 Protocol for connection between signalling networks (corresponding to Q.1228 )

TTC Standard	ITU-T Rec.	Difference from ITU-T Rec.
Sec.1 Introduction	Sec.1 Introduction	Partially delete/
Sec.2 General	Sec.2 General	Partially delete/
Sec.3 Interface recommendation	Sec.3 Interface recommendation	Partially delete/
for telecommunication service	for telecommunication service	partially modify
Sec.4 Common IN CS-2 Types	Sec.4 Common IN CS-2 Types	Partially delete/ partially modify
Sec.5 SSF/SCF Interface	Sec.5 SSF/CCF-SCF Interface	Partially delete/ partially modify
Sec.6 SCF-SRF Interface	Sec.6 SCF-SRF Interface	Delete
Sec.7 SCF-SDF Interface	Sec.7 SCF-SDF Interface	Delete
Sec.8 SDF/SDF Interface	Sec.8 SDF/SDF Interface	Delete
Sec.9 SCF/SCF Interface	Sec.9 SCF/SCF Interface	Delete
Sec.10 SCF/CUSF Interface	Sec.10 SCF/CUSF Interface	Delete
Sec.11 SSF application entity	Sec.11 SSF application entity	Partially delete/
procedures	procedures	partially modify
Sec.12 SCF application entity	Sec.12 SCF application entity	Partially delete/
procedures	procedures	partially modify
Sec.13 SRF application entity procedures	Sec.13 SRF application entity procedures	Delete
Sec.14 SDF application entity procedures	Sec.14 SDF application entity procedures	Delete
Sec.15 CUSF application entity procedures	Sec.15 CUSF application entity procedures	Delete
Sec.16 Error procedures	Sec.16 Error procedures	Partially delete/ partially modify
Sec.17 Detailed Operation	Sec.17 Detailed Operation	Partially delete/
Procedures	Procedures	partially modify
Sec.18 Service assumed from	Sec.18 Service assumed from	Partially delete/
Lower Layers	Lower Layers	partially modify
Sec.19 IN Generic Interface	Sec.19 IN Generic Interface	Delete

Annex A INAP SDLs	Annex A INAP SDLs	Delete
Annex B Definition about		Add
Abort Reason		
Annex C Assignment rule of		Add
Call Segment ID(Csid)		
AnnexD TTC Specific Definition		Add
of Internal Structure		
of OCTET STRING		
Appendix I Expanded ASN.1	Appendix I Expanded ASN.1	Delete
Appendix Data Modelling	Appendix Data Modelling	Delete
Appendix Examples of	Appendix Examples of	Delete
SPKM Algorithms	SPKM Algorithms	
Appendix		Add
Realization method of message		
prioritization		

Chapter 5 Glossary of terms used in the definition of intelligent networks (corresponding to Q.1290)

TTC Standard	ITU-T Rec.	Difference from
		ITU-T Rec.
Sec.1 General	Sec.1 General	Partially delete/
		partially modify
Sec.2 Terms and definition	Sec.2 Terms and definition	Partially delete/
		partially modify
Annex A ACRONYMS	Annex A ACRONYMS	Partially delete/
		partially modify

Annex A

TTC Standard	ITU-T Rec.	Difference from
		ITU-T Rec.
Restart Notification Processing		Add
Application		

# 3. The history of revised versions

Version	Date	Outline
1	April 28, 1998	Established
2	November 26,1998	<ul> <li>Addition of parameters etc., which are required in order to support Number Portability of logical numbers</li> <li>The maximum length expansion of CalledNumber type</li> <li>Correction of errors and modification toward</li> </ul>
3	April 22,1999	<ul> <li>appropriate descriptions</li> <li>Addition of INAP operations and parameters to carrier interconnection charge billing system</li> <li>Addition of non charge instruction function to a user</li> <li>Addition of called IN information indication/non-indication instruction to the called party</li> <li>Addition of called sub address instruction function</li> <li>Correction of errors and modification</li> </ul>
4	November 25,1999	<ul> <li>toward appropriate description</li> <li>Addition of INAP parameters to support Number Portability for Free Phone service</li> <li>Extension of the number of degits for Assisting SSP IP Routing Address corresponding to the extension of the number of digits for Called Party Number on ISUP</li> <li>Correction of errors and modification toward appropriate description</li> </ul>
5	April 20,2000	<ul> <li>Addition of parameters to indicate whether the generation/override of called IN number is allowed or not allowed</li> <li>Addition of carrier interconnection charge billing information to support Number Portability for Free Phone service</li> <li>Correction of errors and modification toward appropriate description</li> </ul>
6	November 27,2001	- Modifications for reference of coding for

## 4. Others

(1) Reference standards and recommendations

TTC Standards :	JT-Q711,JT-Q713,JT-Q714,
	JT-Q762,JT-Q763,JT-Q771,JT-Q772,JT-Q773,JT-Q774
	JT-Q931,JT-Q932
	JT-Q1600
ITU-T Recommendations :	E.164(1991)
	I.130(1988)
	Q.29(1988),
	Q.71(1993),
	Q.700(1993),Q710(1988),Q.715(1996),Q.775(1993)
	Q.1201(1992),Q.1204(1993),Q.1205(1993),Q.1208(1997),
	Q.1211(1993),Q.1214(1995),Q.1218(1995),Q.1221(1997)
	Q.1400(1993)
	X219(1988),X.229(1988),
	X.680(1994),X.681(1994),X.682(1994),X.683(1994),
	X.690(1994),X.880(1994)