CCITT SGXV
Working Party XV/1
Specialists Group on Coding for Visual Telephony

Document #558
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Source :Japan
Title :Field Trial of FH in Japan

1.Introduction

In Japan a subcommittee established by MPT proceeds standardization along with CCITT works. And that subcommittee set up a field trial group named 'FHG', which is composed of 12 corporations working voluntarily. To perform field trial of FH, all the members gathered in a place with their FHs and confirmed compatibility.

2.Date & Time

1989. 8. 25 ~ 11. 1		:domestic
10. 4	5:00 ~ 7:00	:international (with BTRL)
10. 12	5:00 ~ 7:00	:international (with BTRL)
10. 20	5:00 ~ 7:00	:international (with BTRL)
10. 25	17:00 ~ 19:00	:international (with BTRL)
11. 1	17:00 ~ 19:00	:international (with BTRL)

3.Location

KDD Kamifukuoka R & D Laboratories

4.Attendance

FUJITSU, GCT, HITACHI, KDD, MATUSHITA, MITSUBISHI, NEC, NTT, OKI, SHARP, SONY, TOSHIBA

5.Working Mode of each FH

As shown in table 1

6.System Configuration & Interface Condition

i) back-to-back connection :domestic
   (1) p=1,2
      RS-422/449 interface
   (2) p=6,24
      I.431 interface

ii) INS connection :domestic

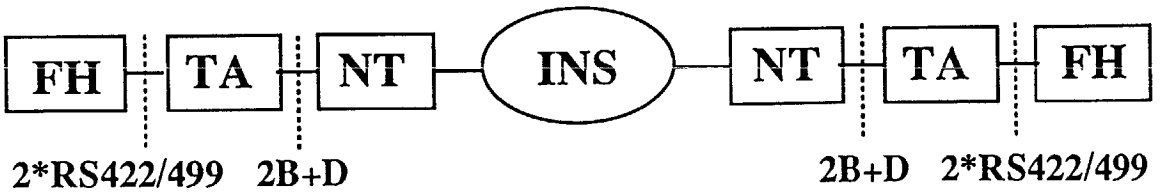

Fig.1 INS connection

FH is located in each organization's premises.
Compatibility through INS network is shown in table 2

iii) IBS connection :international
G.703 section2, G704 section3.1

7.Result of the Trial

In the case of domestic connections, completeness of the equipments are quite different and there has been some misunderstanding on the spec about transmission framing. This has caused incompatibility among some FHs. But there is no other factor for incompatibility, except for IDCT mismatch. And also in the international connection with BTRL compatibility has been confirmed, although IDCT mismatch was observed.

Each item such as error correction, buffer specification, loop filter control, quantizer selection, headers, error characteristics, switch of FCIF/QCIF, clock environment, maximum frame rate specification, and IDCT mismatch is described in detail in the companion documents.

8.Compatibility

As shown in table 2

9.Conclusion

We have succeeded to confirm the compatibility among FHs made independently by plural corporations. And we also examined some details on these hardwares. Most of these works were achieved efficiently by lining up FHs in one place.

Table 1. Working Mode

As of 6 Nov. 1989

Corp.	Minimum Coding Frame Interval : k (30/k)										Supplemental Information					
	p=1 46.4k		p=2 62.4k		p=2 102.4k		p=6 312.0k		p=24 1435.2k		Intra OFF	MC send	TYPE3 extra send/ receive	voice G722 G711 else	ISDN 64/ 1500	else
	QCIF	FCIF	QCIF	FCIF	QCIF	FCIF	QCIF	FCIF	QCIF	FCIF						
NTT	1	1	1	1	1	1	1	1	1	1	YES	ON/ OFF possible	S:NO R:YES	YES NO YES	64	
KDD	1	1	1	1	1	1	1	1	1	1	YES	ON/ OFF possible	S:NO R:YES	YES NO NO	64	
NEC	1	1	1	1	1	1	1	1	1	1	YES	ON/ OFF possible	S:YES R:YES	YES NO YES	64	
OKI	1	3	1	3	-	-	1	2	-	-	YES	ON/ OFF possible	S:YES R:YES	YES NO NO	64	
MITSU -BISHI	1	1	1	1	1	1	1	1	1	1	NO	ON/ OFF possible	S:NO R:YES	YES NO NO	64	p=30 possible
HITACHI	-	-	-	-	-	-	-	1	-	-	YES	ON/ OFF possible	S:NO R:NO	NO NO NO		
MATSU -SHITA	3	-	3	-	-	-	-	-	-	-	NO	ON	S:NO R:NO	NO NO NO	64	
FUJITSU	-	-	2	2	-	-	2	2	-	-	YES	YES	S:NO R:NO	YES NO NO	64	
GCT	-	-	3	-	-	-	-	-	-	-	YES	ON/ OFF possible	S:NO R:NO	NO NO NO	64	
TOSHIBA	1	1	1	1	-	-	1	1	1	1	YES	ON/ OFF possible	S:YES R:YES	NO NO NO	64	
SONY	2	2	2	2	2	2	2	2	-	-	YES	ON/ OFF possible	S:YES R:YES	YES NO NO	64	
SHARP	3	4	3	4	-	-	-	-	-	-	YES	ON/ OFF possible	S:NO R:NO	YES YES NO	64	

Table 2. Compatibility

As of 6 Nov. 1989

receiver / sender	FH A	FH B	FH C	FH D	FH E	FH F
FH A (NTT, KDD, NEC)		46.4k* 62.4k* 102.4k* 312.0k 1435.2k	62.4k* 312.0k	46.4k 62.4k 312.0k	62.4k 312.0k	62.4k*
FH B (KDD, MITSU -BISHI)	46.4k* 62.4k* 102.4k* 312.0k 1435.2k		62.4k	46.4k 62.4k 312.0k	62.4k 312.0k	62.4k
FH C (FUJI -TSU)	62.4k*	62.4k				62.4k
FH D (OKI)	46.4k 62.4k	46.4k 62.4k				
FH E (HITA -CHI)	62.4k 312.0k	62.4k 312.0k	312.0k	312.0k		
FH F (GCT)	62.4k*	62.4k	62.4k			

*:both back-to-back and through INS network