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# **ABSTRACT**

We carried out this research to improve domestic approval systems and approval & testing fees of the information and communications equipments with worldwide level. For the purpose of conducting this research, we collected and analysed not only the domestic approval systems such as type approval for the wired or wireless communications equipments, type registration and EMC registration, but also those of foreign countries.

In this research, we proposed a new regulations on the approval of the information and communications equipments so as to cope with the international trend of propelling the active MRA with other countries, and unify the related regulations as single regulation for the smooth management process and user's convenience, and we suggested the calculation standards and methods of the approval and testing fees for communications equipments.

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(ISDN)

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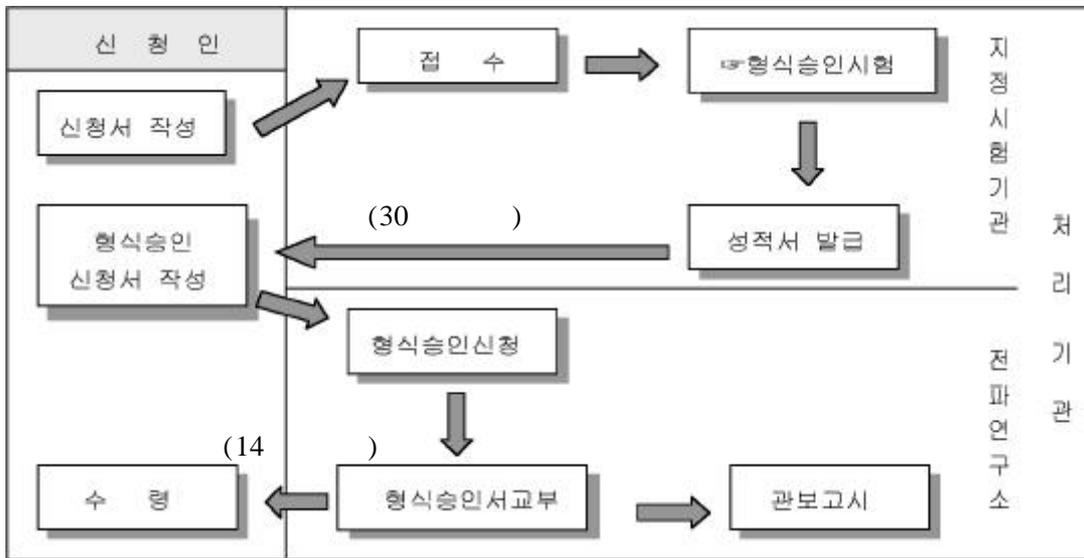
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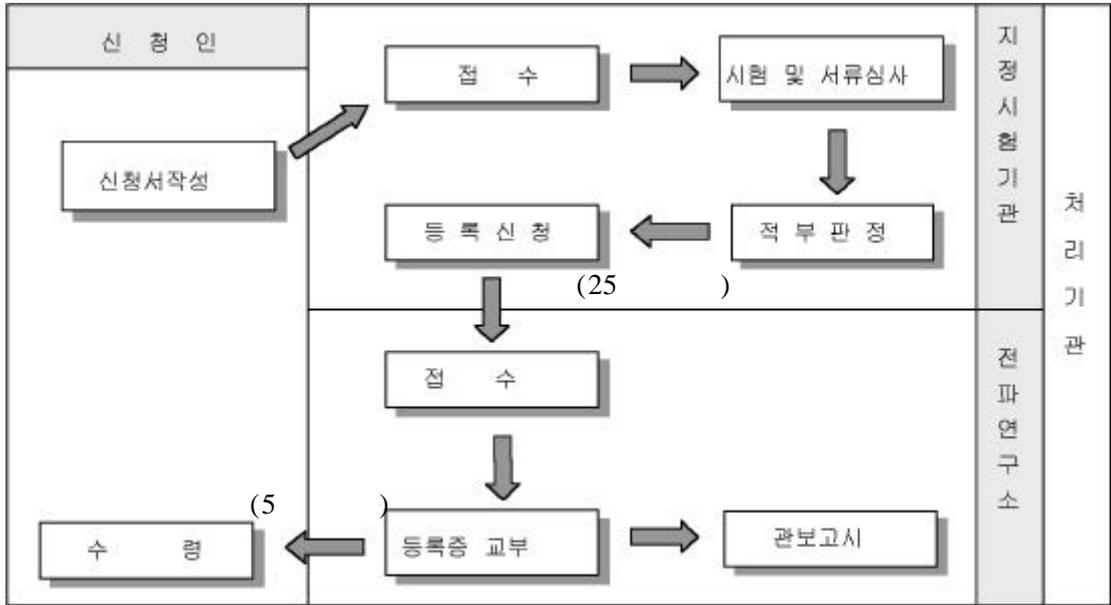
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		690,000
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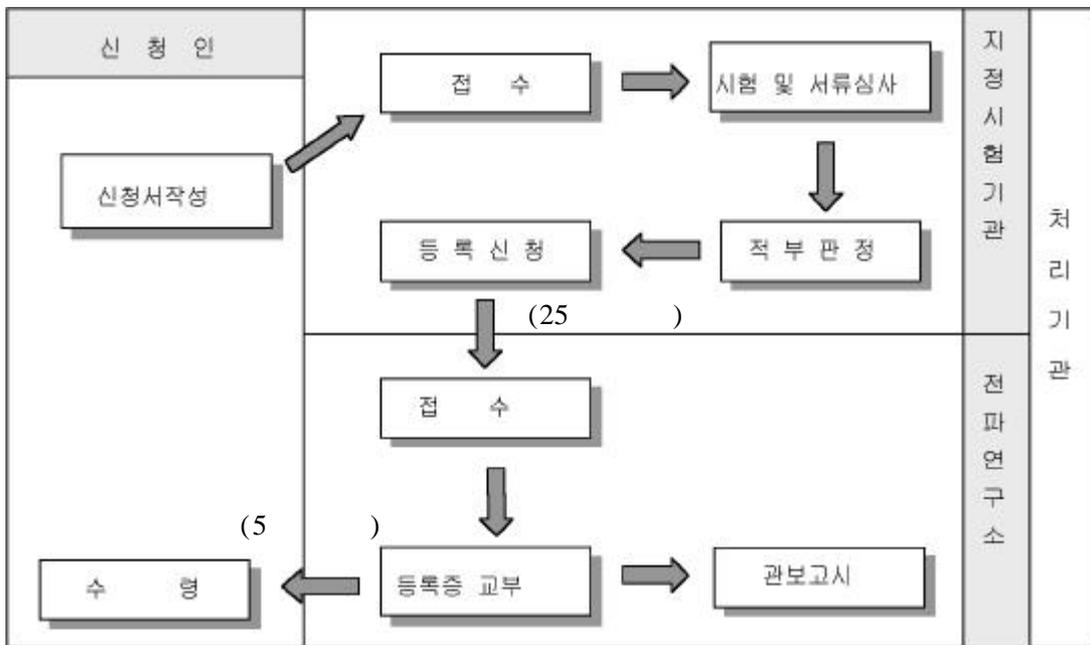
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가 1998.5.8 /EU MRA  
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 , 1 MRA( ) , ,  
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 가 MRA  
 FCC Part 0, 2, 15, 25, 68  
 , GEN Docket No 98- 68 1998.12.17  
 1998.12.23 . (GEN  
 Docket 98- 68)  
 o TCB<sup>1)</sup>  
 o 가 NIST<sup>2)</sup>  
 o MRA 가  
 o TCB  
 - TCB : ISO/IEC 가 25 65  
 - : ISO/IEC 가 58 61

1) TCB : Telecommunications Certification Body ( )  
 2) NIST : the National Institute of Standards and Technology( )

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(Designation Body)

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FCC가

Certification

(DoC) Verification

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Type Approval, Type

acceptance, Certification, Registration, Notification, DoC Verification

ET Docket No. 97- 94<sup>3)</sup>

TCB

(GEN Docket 98- 68)

Certification, DoC,

Verification

3) ET Docket No. 97-94

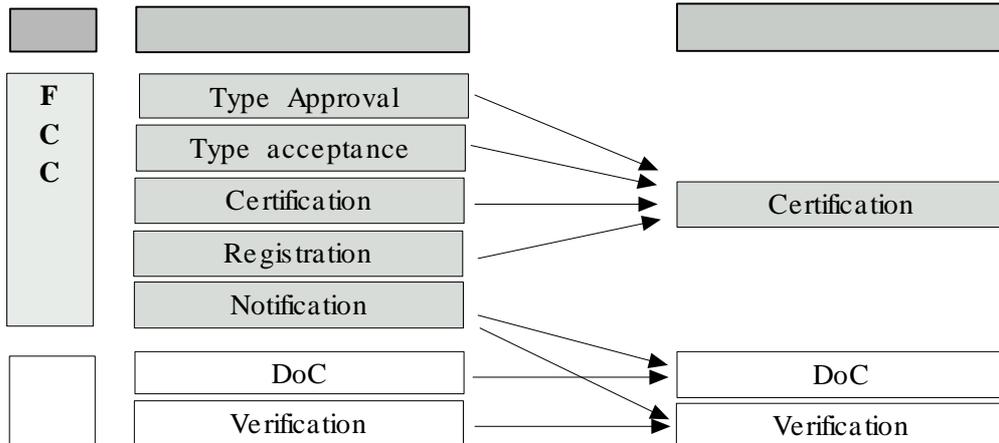
o Type acceptance, Certification, Notification, DoC, Verification

Registration

Certification,

DoC, Verification Registration

o DOC Verification



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Type Approval, Type acceptance,  
Certification, Registration, Notification, DoC Verification 2- 12

[ 2- 12] FCC

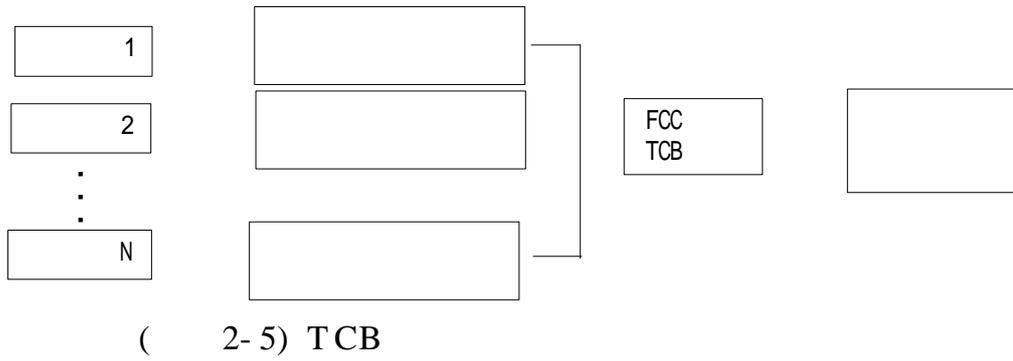
		FCC
<del>Type Approval ( )</del>	- FCC ( ) FCC Certification (62FR10471, Mar. 7,1997 ET Docket No.97- 94 )	-
<del>Type Acceptance ( )</del>	- FCC , , Certification (ET Docket No.97- 94 )	-
<del>Certification ( )</del>	- FCC , ,	-
<del>Registration ( )</del>	- FCC , , Certification (GEN Docket 98- 68 )	-
<del>Notification ( )</del>	- FCC가 (report) FCC DoC Verification FCC (report) (ET Docket No. 97- 94 )	-
<del>DoC ( )</del>	- NIST A2LA 가	-
<del>Verification ( )</del>	- 가	-

Type approval( ) FCC  
가 FCC  
Certification . Type acceptance, Certification( ),  
Registration( ) ( ,  
) , FCC  
FCC Certification  
. Notification( )  
FCC (report)  
FCC Verification( ) DoC( )  
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[ 2- 13]

Most transmitters	Certification
Scanning Receiver	Certification
CSTD	DoC
PC's peripherals	DoC
Most receivers	DoC
TV interface device	DoC
Consumer ISM(Part 18)	DoC
Other ISM eqpt(Part 18)	verification
TV & FMreceivers	verification
All other ITE	verification
Pt to pt Microwave	verification
Broadcast transmotters	verification
Aux.BC transmitters	verification
INMARSAT equipment	verification
106 MHz ELT	verification
Cable TV Relay xtmrs	verification
Wildlife tracking xtmrs	verification
Telephone Term eqpt	Certification

FCC TCB (TCB) Certification  
. TCB



Certification

(FCC TCBs)

FCC 47 USC 158, 159, FCC PART 1  
 , Application processing fees( ) Annual  
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 Application processing fees( )  
 가 , ,  
 , annual regulatory fees( ) FCC , ,  
 rulemaking( ), ,  
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 Application processing fees( )

FCC

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(FCC )

	FCC Form No.	Fee
Common Carrier Services - Telephone Equipment Registration	FCC 730 & FCC 159	\$200.00
- CERTIFICATION:		
a) All Receivers (except TV and FM)	731 & 159	\$365.00
b) Devices under Parts 11, 15 & 18(except receivers)	"	940.00
c) All other Devices	"	475.00
d) Modification and Class II Permissive Changes	"	45.00
e) Request for confidentiality( )	"	135.00
- ASSIGNMENT OF APPLICANT CODE ( )	"	45.00

confidentiality) 135

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(Assignment of Applicant Code)

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Industry Canada( )

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CP- 01(Certification Procedure- 01) RSP- 100(Radio Standards Procedures- 100)

[ 2- 15]

- - CP- 01 : CP : Certification Procedure
  - CS- 02 : (2 /4 )
    - CS : Certification Standards( )
  - CS- 03 : (PSTN, DS1 , ISDN )
  - CS- 04 : ( Paging )
  - CS- 05 : ( )
  - IS- 01 : ( / )
  - (TRC : Teleco Regulation Circulars)
    - TRC- 49
    - TRC- 34, 43, 46, 55, 56, 57, 72, 75, 77, 81
- - RSP 100 : RSP : Radio Standard Procedure
  - RSP 101 : 960MHz
  - RSP 110 :
  - RSP 113 : 960MHz
  - RSP 114, RSP 116
  - RSS 117 ~ 210
    - RSS : Radio Standard Specification
  - RIC 1~66 (RIC : Radiocommunication Information Circulars)
  - CPC 2- 0- 01~CPC 2- 6- 06
    - CPC : Client Procedure Circulars
- EMI
  - ICES- 001 : EMI ( , , )
  - ICES- 002 : EMI ( )
  - ICES- 003: EMI ( )
  - ICES- 004: EMI ( )
  - EMCAB- 1 : 0.010- 10,000MHz /
  - EMCAB- 2 :
  - EMCAB- 3 : ICES- 003
    - ICES : Interference- Causing Equipment Standard(EMI )
    - EMCAB : ElectroMagnetic Compatibility Advisory Bulletin(EMC )
- - BPR : (BPR : Broadcast Procedures and Rules)
  - BP- 23 : (BP : Broadcast Procedures)
  - BP- 23 : (BP : Broadcast Procedures)
  - BTS 1- 1, 1- 2, 3, 14 :
  - RSS- 150,153,154 :
  - TB- 1 ~ 4 :

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CP- 01(Certification Proce-  
RSP- 100(Radio Standards Pro-

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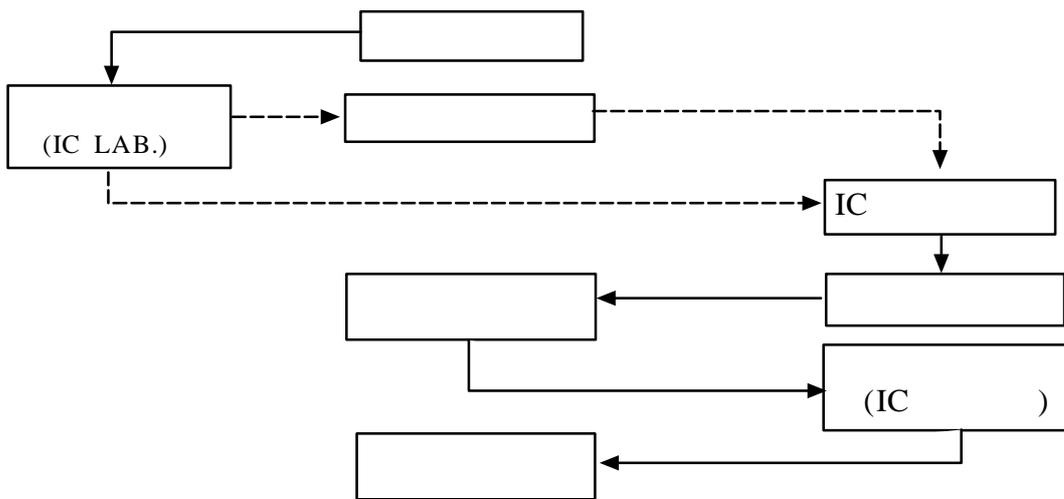
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( 2- 6)

(Certification)

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TRC- 49(Telecommunications Regulation

Circulars)

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(assessment fees),

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(reassessment fee),

(testing fees),

(certification fees),

(label fees)

가 (assessment fees)

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[ 2-16]

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	FEE
1. Land or Marine communications apparatus or mobile station	\$ 900
2. Cellular communications apparatus, single mode	900
3. Cellular communications apparatus, dual mode	1,200
4. Aeronautical communications or navigation apparatus	800
5. Emergency Position Indicating Radio Beacons or Personal Locator Beacons	1,000
6. Emergency locator transmitters, land or marine	300
7. Radar	800
8. General radio service apparatus	550
9. Cordless telephones (radio portion)	350
10. Low Power License Exempt apparatus	425
11. AM, FM or TV broadcasting apparatus	450
12. Terminal equipment, single-line and component devices	570
13. Terminal equipment, multi-line devices	1,100
14. Terminal equipment, telex devices	475
15. Apparatus not otherwise herein described	200

(testing fees)

1 \$120

\$7,200,

\$1,800

(certification fees)

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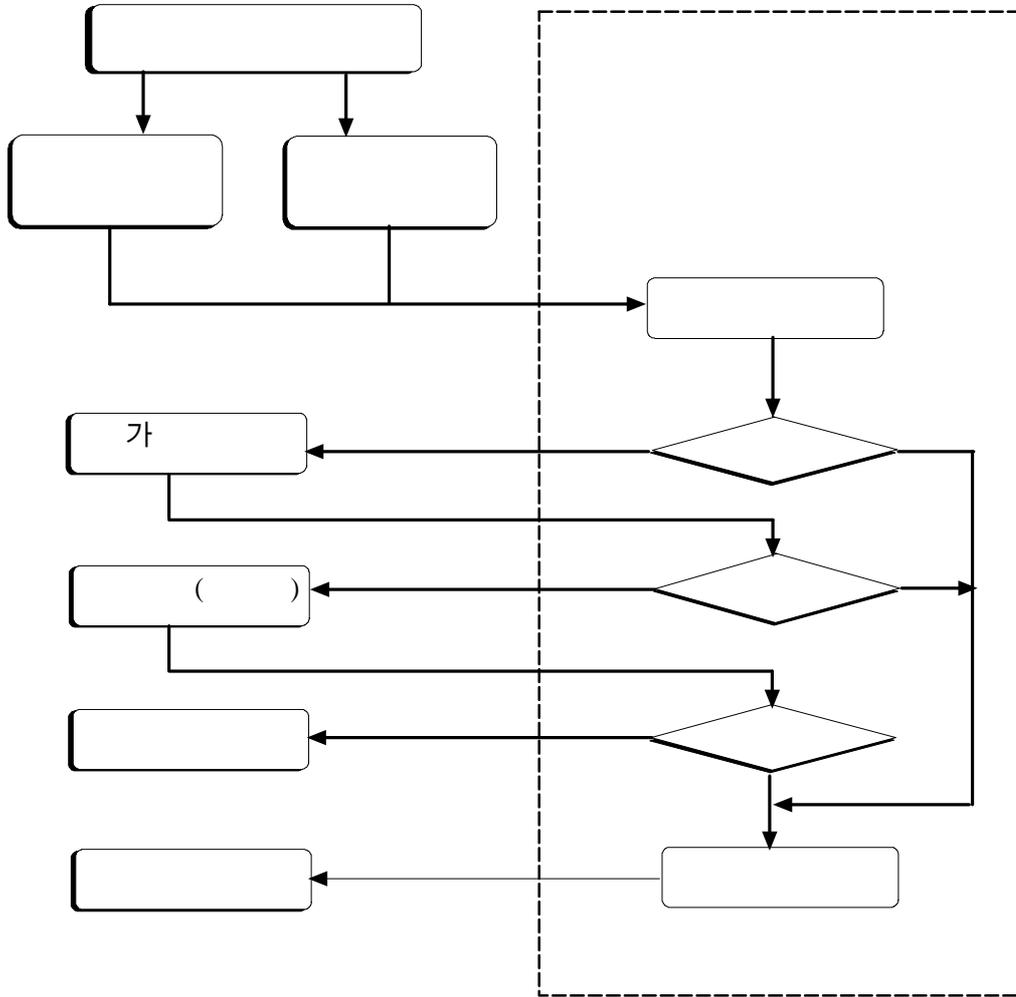
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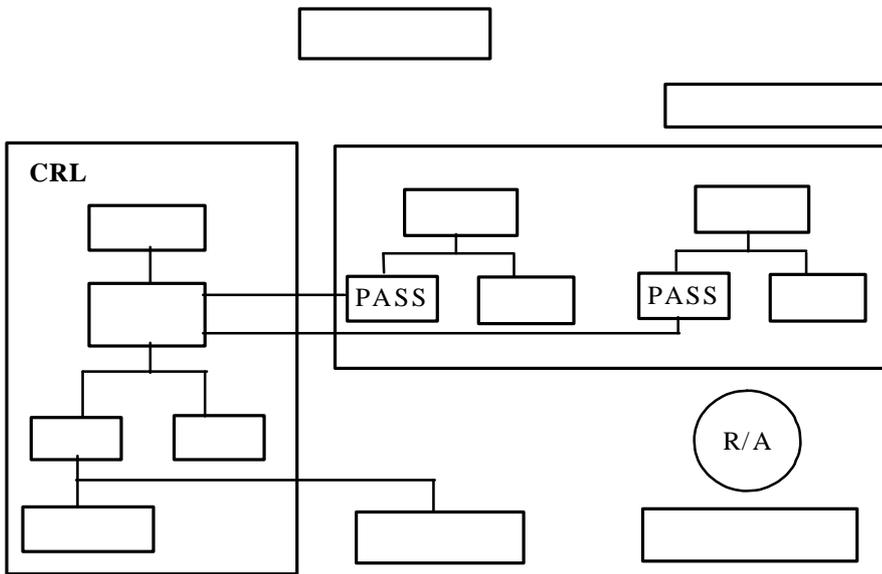
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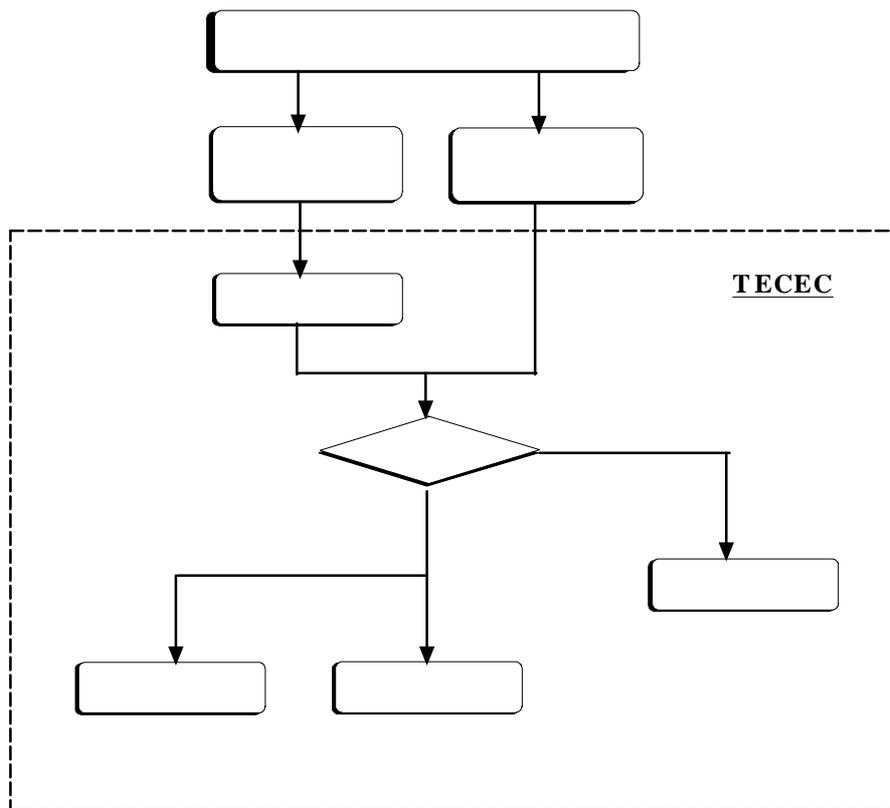
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VCCI(Voluntary Control

Council for Interference by Information Technology Equipment:

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VCCI 1985 12

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	(d)	(e)					
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-	351,700	326,600	211,500	299,300	274,200	59,300	56,800
-	722,600	697,500	271,600	571,300	546,200	86,300	83,800
- , ,	331,500	306,400	211,500	282,900	257,800	55,600	53,100
o	125,400	100,300	81,600	114,100	89,000	27,900	25,400
o	330,000	304,900	210,000	281,600	256,500	55,400	52,900
o	150,000	124,900	110,000	136,300	111,200	36,300	33,800
o	157,500	124,900	115,500			38,100	32,800
- , ,							
o	346,500	293,800	220,500			58,200	52,900
- , ,							
o /	346,500	293,800	220,500			58,200	52,900
o	346,500	293,800	220,500			58,200	52,900
- 가 ,4 가							

(a) MPT

( )

(b)

(c) 1, 2 (?)

(d)

(e)

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(CRL)

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(CRL )

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	CRL ( + )
	597,300
( )	1,300,600
“ (가 )	“
“ ( ,가 )	“
“ EPIRB	775,600
“ EPIRB	775,600
“	“
“	“
DSC (MF/HF)	1,079,300
“	871,900
“	671,800
DSC (VHF)	893,400
“	614,500
“	600,300
DSC A	593,200
“ B	“
	586,100
	664,700
“ MF	“
“ MF/HF	“
“ VHF	“
“ (?)	“
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“ A	1,029,300
“ C	“
	1,300,600
	755,600
“	“
“ /	914,000
ALPA 1	1,300,600

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TELEC

CRL

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“ 4	1,077,700	53,800	646,000
“ ALPA	396,100	19,600	237,000
“	459,500	22,800	275,000
“	507,000	25,200	304,000
“	538,800	26,900	323,000
DSB	688,000	34,200	
“	443,700	22,000	266,000
“	871,700	43,400	
800MHz	776,600	38,700	
“	“	“	
“ 1500MHz	“	“	
MCA 800MHz	“	“	465,000
" 1500MHz "	“	“	“
"	“	“	“
"	“	“	“
"	“	“	“
"	“	“	“
"	“	“	“
27,150 MHz	507,000	25,200	304,000
400MHz	633,900	31,600	380,000
“	713,200	35,400	427,000
“			427,000
SSB	855,800	42,600	513,000
“	681,400	34,000	408,000
“	570,400	27,500	342,000
FM	649,800	32,400	389,000
“	554,700	27,500	332,000
“	507,000	25,200	304,000

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(test certification) type (type certification) .

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type

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(TELEC )

	1. (1 : )	2. (Type : )
o	5,500	810,000
o	5,500	810,000
o FDMA	2,900	510,000
o MCA	2,900	710,000
o	5,500	710,000
o	“	810,000
o convenience	”	810,000
o	“	810,000
o MCA	4,300	710,000
o SSB	3,400	810,000
o	5,500	810,000
o F3E	3,400	810,000
o	2,900	710,000
o	3,500	770,000
o	1,000	710,000
o personal	3,800	810,000
o	2,000	710,000
o 50GHz CR	10,000	710,000
o	2,700	810,000
o	1,200	210,000
o	3,900	710,000
o VSAT	12,000	810,000
o 800MHz TDMA	2,900	510,000
o “ FDMA	15,100	810,000
o “ TDMA	“	810,000
o 1.5GHz TDMA	2,900	510,000
o “ TDMA	15,100	810,000
o CDMA	2,900	510,000
o CDMA	15,100	810,000
o	1,200	510,000

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o	5,500	810,000
o 22GHz	10,000	810,000
o	1,900	810,000
o MCA	2,900	710,000
o	1,200	310,000
o PHS	1,200	310,000
o PHS	3,800	810,000
o PHS	"	810,000
o PHS	"	810,000
o 38GHz	10,000	810,000
o RZSSB	4,300	810,000
o RZSSB	"	810,000
o RZSSB	"	810,000
o	3,500	770,000
o BEACON	3,500	770,000
o TKd ( )	5,800	770,000
o " ( )	5,800	770,000
o	5,500	810,000
o INMARSAT	8,600	810,000
o 가	6,700	810,000
o ( )	1,200	510,000
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(ACA) (ACCC : Australian Competition and Consumer Commission)가 (ACA)

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ACA [Telecommunications Labelling(Customer Equipment and Customer Cabling) Notice No. 2 of 1997]

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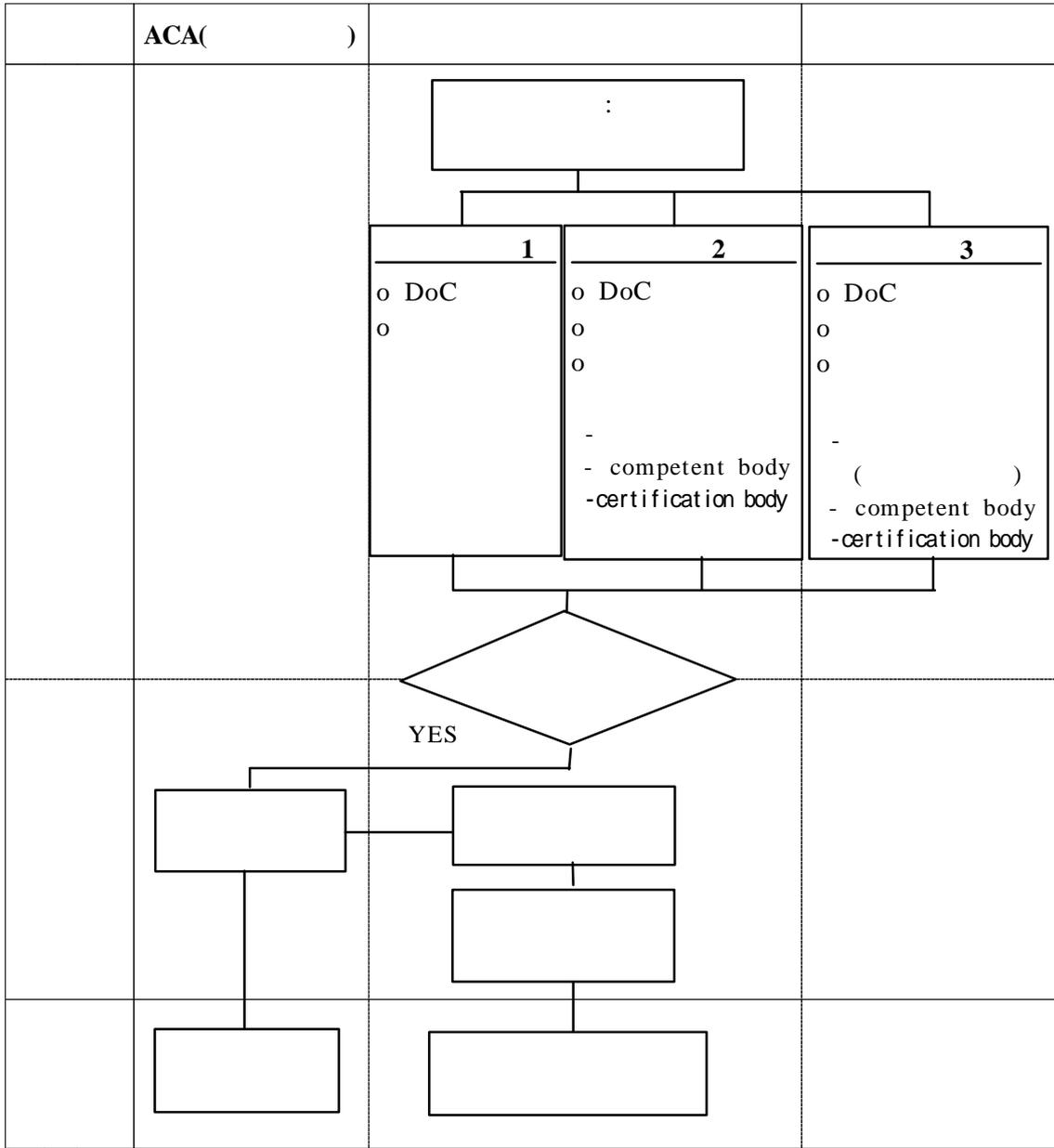
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PSTN	ACA TS 001 ACA TS 002 ACA TS 004	3

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ACA TS 001,

002, 004 , 2- 10 3

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o (9.7MHz- 1GHz )	AS 4295(1995)	2
o 121.5, 243.0MHz	AS/NZS 4330(1995)	3
o 406 MHz	AS/NZS 4280(1995)	3
o (30MHz )	AS/NZS 4355(1995)	2
o UHF	AS/NZS 4365(1996)	2
o	AS 4367(1996)	2
o ( 1W , 25MHz- 25 GHz )	AS 4268.2(1995)	1
o (1.7MHz 30- 41MHz )	AS/NZS 4281(1995)	1
o VHF , ( )	AS/NZS 4415(1996)	3

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		FCC	IC	ACA	
		FCC, TCBs	IC	ACA	JATE, CRL, TELEC
o o - - -		o CFR47 - PART 2 - FORM 730, 731	o o - CP 01 - RSP 100	o o - ACA	o o - - -
- - - -		Certification Doc Verification	Certification DoC	DoC ACA	- - - -
- - - -		FCC Part 15, 18, 68	CS- 02, 03, 04, 05 RSS 117 210	- ACA- TS - ACA- RS	- - - -
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TCB, JATE, TELEC .

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9) GEN Docket No. 98-68

10) (NIST) TCB

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Type Approval<sup>13)</sup> 1997.5

Certification

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(62FR10471, Mar.7,1997

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-	125,000 (863,000)	240,000	492,000	(3,517,000)
-	125,000 (1,282,400)	“		(7,226,000)
-	125,000 (1,117,400)	“		(3,315,000)
- ISDN	125,000 (863,000)	“		(3,300,000)
-	125,000 (1,117,400)	“		(3,315,000)
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- 가	66,800 (334,000)	1,182,000	756,000	(5,100,000)
-	144,400 (722,000)	492,000		(13,006,000)
-	49,600 (248,000)			(5,973,000)
-	80,000 (400,000)		676,000	(13,006,000)
-	95,200 (476,000)	1,182,000	836,000	(7,132,000)
-	146,800 (734,000)	492,000		(6,647,000)

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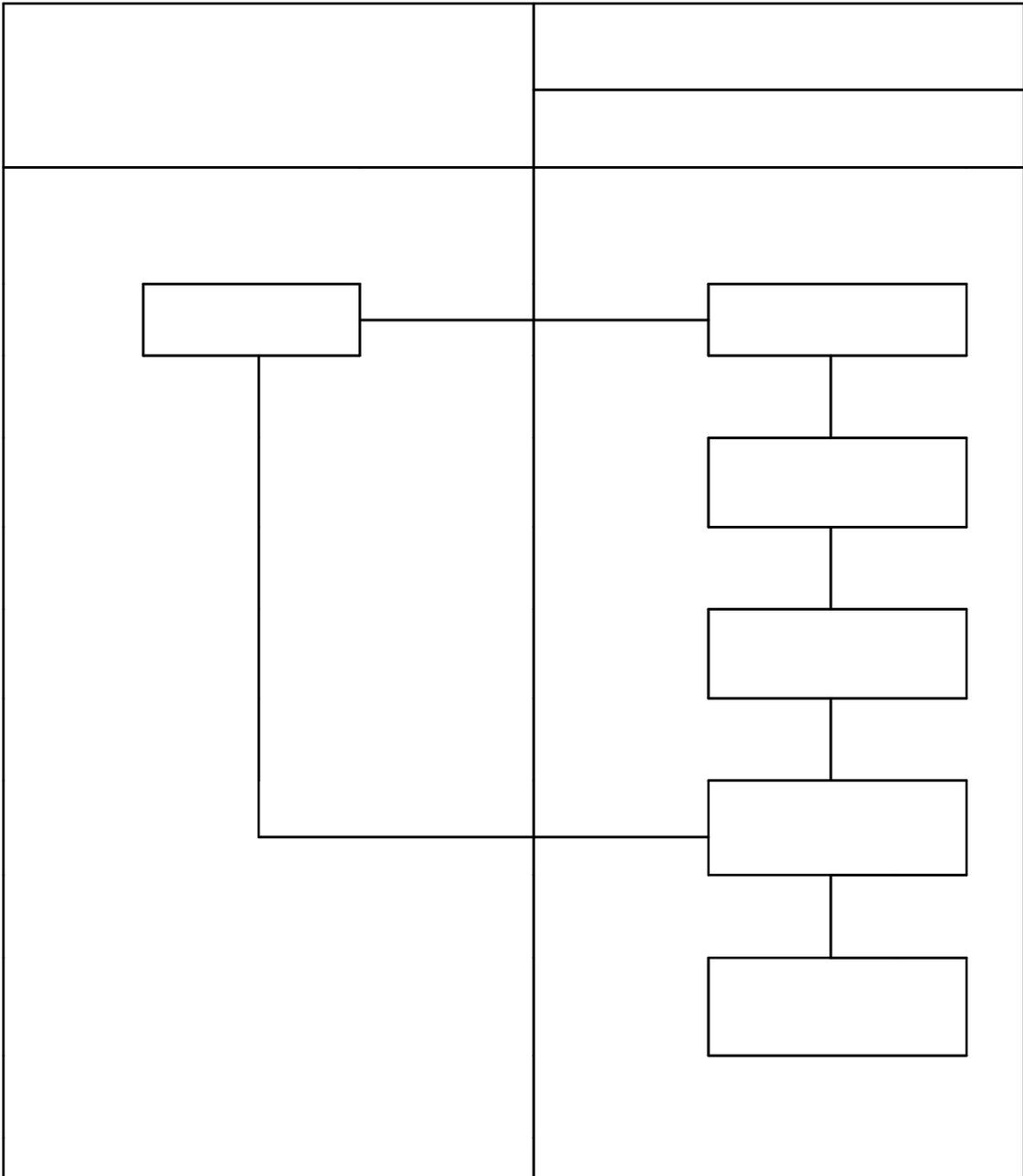
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## **Certificate of Information and Communication Equipment**

( Certification Type ) :

( Certification No ) :

( Equipment Name ) :

( Type of Equipment ) :

( Applicant or Trade Name ) :

( Manufacturer and Nation ) 가 :

( Others ) :

It is certified that foregoing equipment has been certificated under the provisions of the Regulations on certification of information and communication equipment

( Year ) ( Month ) ( Date )

( )  
Director General of Radio Research Laboratory  
Ministry of Information and Communication  
Republic of Korea

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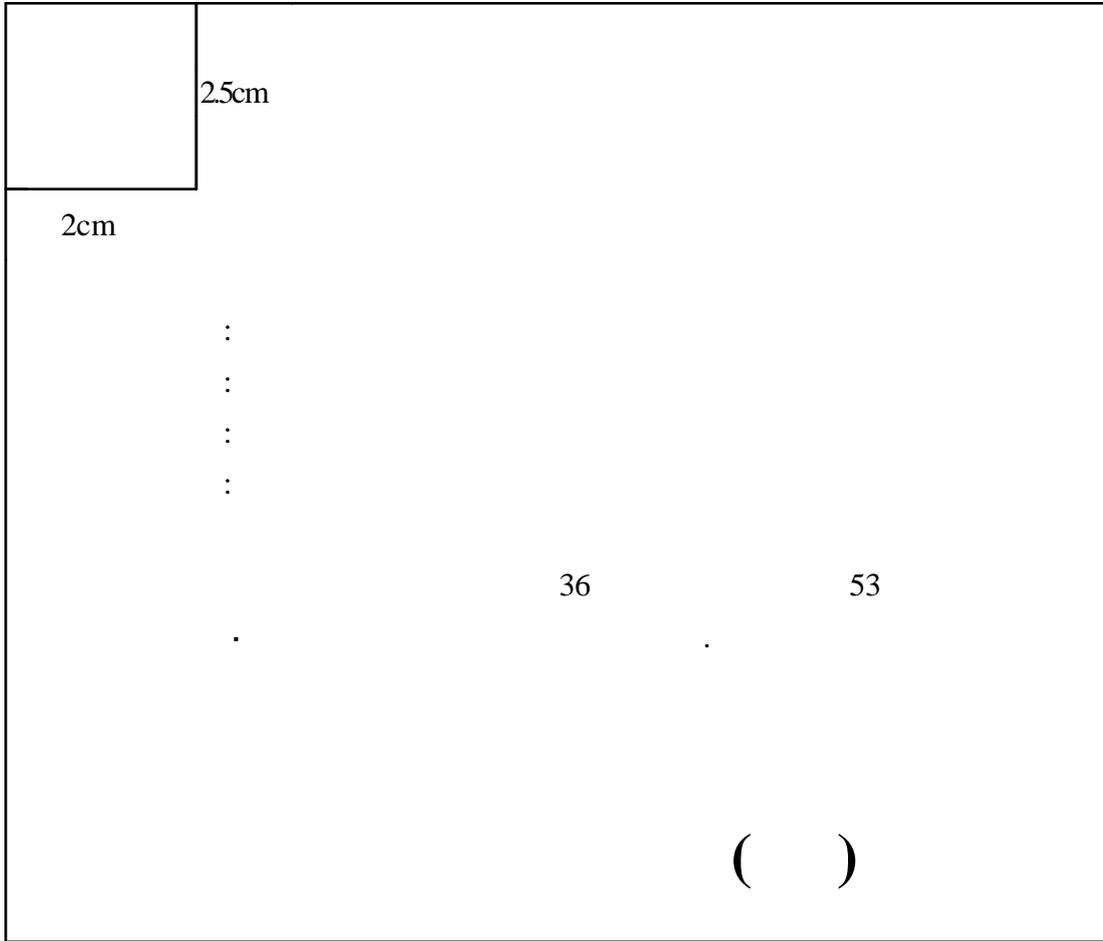
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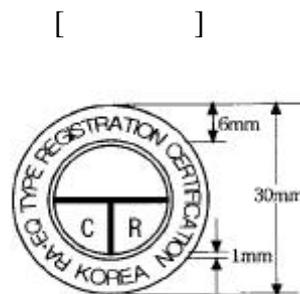
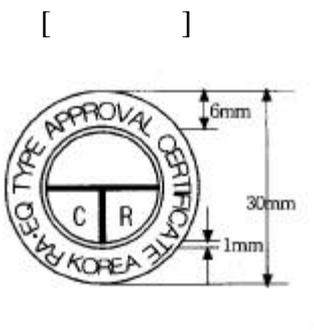
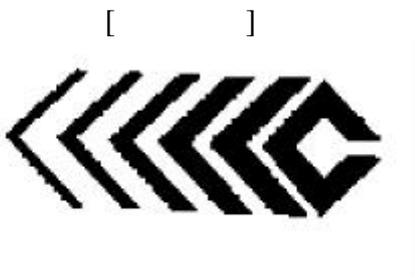
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$$\begin{aligned} &= ( \quad \times \quad ) + ( \quad \\ &\quad \times 120\% ) + [ ( \quad + \quad ) \times 30\% ] \\ &= (47 \times 11,496) + (540,312 \times 120\%) + \\ &[(540,312 + 648,374) \times 30\%] = 540,312 + 48,374 + 356,606 \\ &1,545,000 \end{aligned}$$

o

$$\begin{aligned} &= ( \quad \times \quad ) + ( \quad \\ &\quad \times 120\% ) + [ ( \quad + \quad ) \times 30\% ] \\ &= (12 \times 11,496) + (137,952 \times 120\%) + \\ &[(97,716 + 165,542) \times 30\%] = 137,952 + 165,542 + 78,977 \\ &382,000 \end{aligned}$$

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$$\begin{aligned} &= ( \quad \times \quad ) + ( \quad \\ &\quad \times 120\% ) + [ ( \quad + \quad ) \times 30\% ] \end{aligned}$$

$$= (19 \times 11,496) + (218,424 \times 120\%) + [(218,424 + 262,108) \times 30\%] = 218,424 + 262,109 + 144,160 = 625,000$$

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$$= (32 \times 11,496) + (367,872 \times 120\%) + [(367,872 + 441,446) \times 30\%] = 367,872 + 441,446 + 242,795 = 1,052,000$$

o

$$= (81 \times 11,496) + (931,176 \times 120\%) + [(931,176 + 1,117,411) \times 30\%] = 931,176 + 1,117,411 + 614,576 = 2,663,000$$

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$$= (6 \times 11,496) + [(2 \times 11,496) \times (71 \div 766)] + [(34 \times 11,496) \times (94 \div 766)] = 68,976 + 2,069 + 46,904 = 118,000$$

o

$$\begin{aligned} &= \left( \frac{6}{11,496} \times 11,496 \right) + \left[ \left( \frac{2}{11,496} \times 11,496 \right) \times (507 \div 9,788) \right] + \\ &\quad \left[ \left( \frac{18}{11,496} \times 11,496 \right) \times (60 \div 9,788) \right] \\ &= (6 \times 11,496) + [(2 \times 11,496) \times (507 \div 9,788)] + \\ &\quad [(18 \times 11,496) \times (60 \div 9,788)] \\ &= 68,976 + 1,150 + 1,242 + 71,000 \end{aligned}$$

o

$$\begin{aligned} &= \left( \frac{6}{11,496} \times 11,496 \right) + \left[ \left( \frac{2}{11,496} \times 11,496 \right) \times (116 \div 2,116) \right] + \\ &\quad \left[ \left( \frac{98}{11,496} \times 11,496 \right) \times (121 \div 2,116) \right] \\ &= (6 \times 11,496) + [(2 \times 11,496) \times (116 \div 2,116)] + \\ &\quad [(98 \times 11,496) \times (121 \div 2,116)] = 68,976 + 1,150 + 67,596 + 138,000 \end{aligned}$$

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9. , 가 , 1999- 19 , 1999.3.11
10. ( ) 가 , 가 , 1999 7
11. FCC, REPORT AND ORDER in GEN Docket No. 98-68, 1998 12 23
12. FCC, REPORT AND ORDER in ET Docket No. 97-94, 1997
13. Industry Canada, Certification Procedure 01 (CP-01), Issue 8, 1998 9
14. Industry Canada, Radio Standards Procedure 100 (RSP-100), Issue 7, 1997
15. ACA, Telecommunications Labelling (Customer Equipment and Customer Cabling) Notice No. 2, 1997
16.
  - o <http://www.fcc.gov> : FCC
  - o <http://xinfo.ic.gc.ca> : (IC)
  - o <http://www.tsacc.ic.gc.ca/TAPAC/document.html> : ( )
  - o <http://www.aca.gov.au> : (ACA)
  - o <http://www.mpt.go.jp> :
  - o <http://www.jate.or.jp> :
  - o <http://www.telec.or.jp> :
  - o <http://www.crl.go.jp> : (CRL)