HOW TO APPLY FOR TYPE-APPROVAL OR TYPE-ACCEPTANCE OF RADIO EQUIPMENT

What is type-approval?

Radio equipment (radiocommunications equipment and any equipment emitting radio frequency energy) shall meet minimum technical requirements prescribed by the Telecommunications Authority. The technical requirements for radio equipment commonly in use in Hong Kong are prescribed in the form of HKTA specifications for the purposes of ensuring electrical safety, prevention of interference and public network connection. Radio equipment which has been evaluated against and meets the relevant HKTA specification is granted a type-approval by the Telecommunications Authority.

Is it mandatory for radio equipment to obtain type approval?

At present, the Office of the Telecommunications Authority (OFTA) operates an HKTEC Scheme to set out the framework for evaluation and certification of telecommunications equipment. Details of the Scheme can be found in Information Note OFTA I 421 "*Hong Kong Telecommunications equipment Evaluation and Certification (HKTEC) Scheme*".

Under the HKTEC Scheme, radio equipment will be classified under the "Voluntary Certification Scheme" (VCS) or the "Compulsory Certification Scheme" (CCS). The CCS is further divided into Category I (Cat. I) and Category II (Cat. II) according to the need for evaluation by a recognised testing agency.

Radio equipment classified under the VCS can be used or marketed in Hong Kong without obtaining type-approval. However, it is incumbent on suppliers or radio dealers to ensure that their radio equipment meet the prescribed technical requirements. The suppliers or radio dealers may apply to OFTA for type-approval of radio equipment against the relevent HKTA specifications on a voluntary basis. In general, voluntary

type-approval applies to radio equipment which is exempted from licensing under the Telecommunications Ordinance. More details about the exempted radiocommunications equipment can be founded in Information Note OFTA I 402 "*Technical Performances for Radiocommunications Apparatus covered by the Telecommunications (Telecommunications Apparatus)(Exemption from Licensing) Order*".

Radio equipment classified under the CCS must be granted a type-approval before it can be offered for sale in Hong Kong. Such equipment include high power radiocommunications apparatus, use of which is generally subject to licensing control.

How can type approval be obtained?

Type-approval of radio equipment can be obtained through one of the following three methods:

(a) Based on the result of tests on samples of the radio equipment conducted by OFTA against the relevant HKTA specification;

(b) Based on the result of tests on samples of the radio equipment conducted by a recognised testing agency against the relevant HKTA specification; or

(c) Based on the type-approval granted to the radio equipment by an overseas administration against a specification equivalent to the relevant HKTA specification.

For radio equipment under the VCS or CCS Cat. I, type-approval can also be granted based on the test reports produced by the manufacturers themselves. Classification of radio equipment under VCS, CCS Cat. I and CCS Cat. II can be found in Schedule A. The classification will be updated from time to time by the Telecommunications Authority when required.

Is type approval obtained elsewhere acceptable in Hong Kong?

For radio equipment already type-approved by an overseas administration, the Telecommunications Authority recognises its type-approval as long as the specification based on which the type-approval was granted is equivalent to the relevant HKTA specification. If not, it is necessary to evaluate the equipment with respect to the parts of the relevant HKTA specification that are different from the specification used by the overseas administration.

Which testing agencies are recognised to conduct evaluation of radio equipment?

The Telecommunications Authority recognises testing agencies meeting prescribed requirements for carrying out the evaluation tests against the HKTA

specifications. Applicants may appoint these recognised testing agencies to conduct tests of their radio equipment. More details about recognised testing agencies can be found in Information Note OFTA I 411 "*Recognised Testing Agency (RTA) for Conducting Evaluation Test of Telecommunications Equipment*".

What is the procedure for applying for type-approval?

The procedure consists of two stages:

A. Document evaluation

(i) where the submitted technical specification or service manual is examined to verify if radio equipment is likely to pass the equipment evaluation in stage B ;

(ii) where the submitted type-approval certificate issued by other telecommunications administration is examined to see if equipment evaluation is necessary ; or

(iii) where the submitted test report produced by a recognised testing agency is examined to see if equipment evaluation is necessary.

B. Equipment evaluation where samples are requested to be submitted for laboratory testing against the relevant HKTA specification.

Normally, the manufacturers or radio dealers of the radio equipment are the persons that will apply for type-approval. The detailed procedure is as follows:

(a) Obtain an Application Form from OFTA at:

29/F Wu Chung House,
213 Queen's Road East,
Wanchai, Hong Kong.

You may also telephone the Radio Laboratory of OFTA on +852 2343 7565 or send a fax to +852 2343 5824.

(b) Fill in the relevant information as requested on the Form and provide the detailed technical information on the equipment by way of service manual / technical manual which should include circuit diagrams, printed circuit board layout and constructional details. If the intention is to apply for type-approval for the equipment based on the result of tests conducted by a recognised testing agency or similar approval from an overseas administration, a copy of the relevant test report or type-approval certificate should also be attached.

(c) Send the completed Form together with the required documents and appropriate document evaluation fee (see Schedule A) to the Radio Laboratory of OFTA at the address as shown above.

(d) OFTA will evaluate the application based on the information provided. You will be informed as soon as possible whether equipment evaluation is required. Normally, you will be informed of the result of the document evaluation within one month from your submission of application.

(e) Equipment which passes the document evaluation will proceed, if necessary, to equipment evaluation based on physical testing of the samples submitted by the applicant. The duration of the combined document and equipment evaluation will normally be within two months from the date of the first application but this does not include the time spent on waiting for the delivery of the samples and the associated documentation. The equipment evaluation will involve the following steps:

(i) Fill in any further technical information as requested on the Application Form for the equipment evaluation.

(ii) Refer to the full equipment evaluation fees as given in Schedule B of this Information Note. The fees may be reduced according to the actual technical parameters to be tested. You will also be informed of the exact fee for equipment evaluation.

(iii) Submit samples in accordance with advice on the Form together with the appropriate fee for equipment evaluation and all the relevant accessories. Where the equipment to be evaluated is bulky and hard to send to the Radio Laboratory of OFTA, on-site testing at the applicant's premises may be considered.

(iv) Obtain an acknowledgement of receipt of the samples from the authorised officer of the OFTA as appropriate.

(f) Both successful and unsuccessful applicants will be informed of the test results and asked to collect their samples. The successful applicant will receive a Certificate of Type-approval issued by the Telecommunications Authority.

What is type-acceptance?

For radio equipment without relevant HKTA specification for type-approval evaluation, a type-acceptance procedure is available. Manufacturers or radio dealers are invited to submit the technical specifications of the equipment to OFTA for consideration. Testing of equipment samples may be required. The applicant will be informed of the result of the type-acceptance evaluation.

Can a type-approved or type-accepted radio equipment be modified?

Modification to type-approved or type-accepted radio equipment requires prior approval from the Telecommunications Authority. Supporting documents should be submitted to show that the radio equipment to be modified continues to comply with the required technical performance. However, cosmetic change (e.g. change in colour) is not considered as a "modification".

How to obtain HKTA specifications and information notes?

HKTA specifications and information notes can be obtained through one of the following methods:

- OFTA's Internet Home Page. The Home Page address is http://www.ofta.gov.hk;

- Hard copies will be available upon request to:

  Radio Laboratory,
  Office of the Telecommunications Authority,
  29/F Wu Chung House,
  213 Queen's Road East, Wanchai,
  Hong Kong.
  Tel. No.: +852 2343 7516
  Fax. No.: +852 2343 5824
  Email : radiolab@ofta.gov.hk

How to obtain additional information?

Additional information may be obtained from:

Senior Telecommunications Engineer,
Standards Section,
Office of the Telecommunications Authority,
29/F Wu Chung House,
213 Queen's Road East, Wanchai,
Hong Kong.

Tel No. : +852 2961 6628
Fax No. : +852 2838 5004
Email : standards@ofta.gov.hk

Office of the Telecommunications Authority
November 2005

Application Form for Application for Type Approval of Radio Equipment (STD-1)
[Click here to download the Application Form]

Schedule A : Classification of Equipment Type and Document Evaluation Fee (as of 6 November 2005)

Equipment Type	Relevant HKTA Specification	Classification	Evaluation Fee (HK$) (*see Note 1*)
Mobile Earth Stations for Global Non-Geostationary Mobile-Satellite Service Systems in the Bands 1-3 GHz	(*see Note 2*)	VCS	1,600
Mobile Equipment for use in the public mobile radiotelephone service including: • 800 MHz TDMA dual-mode • 800 MHz CDMA dual-mode • GSM, PCS and GSM/PCS dual-mode • 3G mobile CDMA Direct Spread (UTRA FDD)	 HKTA 1029 HKTA 1031 HKTA 1033 HKTA 1048		3,200
TV antenna amplifier	HKTA 1019		
Low power device	HKTA 1035		
Model control and radio equipment operating in the 27 MHz band	HKTA 1041		
Radio Frequency Identification (RFID) Equipment operating in the 865 – 868 MHz and/or 920 – 925 MHz Bands	HKTA 1049		
Cordless telecommunications apparatus (CTA) including: • 1.7/47 MHz cordless telephone • 864.1/868 MHz cordless telephone • 46/49 MHz cordless telephone • PHS • DECT • 2.4 GHz cordless telephone • 5.8 GHz cordless telephone • 254/380 MHz cordless telephone • 2.4 GHz wireless LAN equipment • 5 GHz wireless LAN equipment	 HKTA 1006 HKTA 1015 HKTA 1026 HKTA 1027 HKTA 1034 HKTA 1039 HKTA 1039 HKTA 1045 HKTA 1039 HKTA 1039		
409 MHz short-range portable radio	HKTA 1044		
Public paging receiver	HKTA 1004		3,900
Equipment for use in Maritime GMDSS radio services including: • Radiotelephone equipment operating on the frequency 2182 kHz • Radiotelephone distress frequency watch receiver • MF and HF single sideband radiotelephone transmitters and receivers • Radiotelephone alarm signal generating devices • Narrowband direct-printing telegraph equipment for the reception of navigational and meterorological warnings and urgent information to ships (NAVTEX) • HF narrow-band direct-printing telegraph equipment for the reception of navigational and meteorological warnings and urgent information to ships • 406 MHz emergency position-indicating radio beacon (EPIRB) • Ship earth stations capable of 2-way communications	 HKTA 1218 HKTA 1223 HKTA 1224 HKTA 1225 HKTA 1257 HKTA 1258 HKTA 1259 HKTA 1260	CCS Cat. II	1,600

• 1.6 GHz float-free satellite emergency position-indicating radio beacons (EPIRBs) operating through the geostationary INMARSAT satellite system • Float-free VHF emergency position-indicating radio beacons (EPIRBs) • VHF radio installations capable of voice communications and digital selective calling • Shipborne MF radio installations capable of voice communications and digital selective calling • Shipborne MF/HF radio installations capable of voice communications, narrow-band direct-printing and digital selective calling • Shipborne integrated radiocommunications system (IRCS) • Survival craft two-way VHF radiotelephone apparatus • Marine radar transponder (SART) • Inmarsat enhanced group call (EGC) equipment and Inmarsat Standard-C ship earth station for direct-printing	HKTA 1261 HKTA 1262 HKTA 1263 HKTA 1264 HKTA 1265 HKTA 1266 HKTA 1277 HKTA 1281 HKTA 1282		
Wireless microphone equipment not exempted from licensing	HKTA 1008		3,200
Citizen Band (CB) radio equipment, including: • CB radio transceiver for use on-board craft and vessels • CB radio transceiver operating in the 27 MHz band	 HKTA 1022 HKTA 1050		
Land Mobile Radio Equipment including: • Angle modulated VHF and UHF land mobile radio transceiver (See *Note 3*) • Public paging transmitter • Angle modulated VHF and UHF land mobile radio transceiver intended primarily for data application (See *Note 3*) • Angle modulated 800 MHz trunked radio equipment • TETRA trunked radio equipment • Base station equipment for use in the public mobile radiotelephone service including 800 MHz TDMA dual-mode, 800 MHz CDMA dual-mode, GSM, PCS, GSM/PCS dual-mode and 3G	 HKTA 1002 HKTA 1004 HKTA 1010 HKTA 1016 HKTA 1047 HKTA 1020 HKTA 1030 HKTA 1032 HKTA 1043		3,900
Fixed Link Equipment including: • 1429-1530 MHz fixed link transceiver • 38 GHz digital fixed link equipment • 23 GHz digital fixed link equipment • 5 GHz wireless access equipment	 HKTA 1003 HKTA 1036 HKTA 1037 HKTA 1042		
• Other equipment including: • SSB equipment for voluntary fitting in small craft in the 1.605-27.5 MHz frequency band • Angle modulated VHF maritime for voluntary fitting in small craft • Industrial, scientific & medical (ISM) equipment	 HKTA 1001 HKTA 1005 HKTA 1007		
Equipment type not specified above	subject to type-acceptance procedure		
Registration for each equipment variant (see *Note 4*)			800
Issue of replacement certification (*see Note 5*)			400

Schedule B : Additional Fees for Equipment Evaluation by OFTA
(as of 6 November 2005)

Equipment Type	**Relevant HKTA Specification**	**Full Evaluation fee (HK$)** (*see Notes 1, 6 & 7*)
Single-sideband (SSB) equipment for voluntary fitting in small craft in 1.6 - 27.5 MHz frequency band	HKTA 1001	21,000
Angle modulated VHF and UHF land mobile transceiver	HKTA 1002	12,800
Wideband land mobile radio transceiver (*see Note 8*)	HKTA 1002	21,000
1429-1530 MHz fixed link transceiver	HKTA 1003	8,700
Public paging transmitter	HKTA 1004	6,600
Public paging receiver	HKTA 1004	6,600
Angle modulated VHF maritime for voluntary fitting in small craft	HKTA 1005	11,600
1.7/47 MHz cordless telephone	HKTA 1006	9,300
Industrial, Scientific and Medical (ISM) equipment	HKTA 1007	14,700
Wireless microphone equipment	HKTA 1008	7,200
Angle modulated VHF and UHF land mobile transceiver intended primarily for data applications	HKTA 1010	12,800
Wideband land mobile radio transceiver intended primarily for data applications (*see Note 8*)	HKTA 1010	21,000
864.1/868 MHz cordless telephone	HKTA 1015	10,400
Angle modulated 800 MHz trunked radio	HKTA 1016	11,600
Angle modulated 800 MHz trunked radio with “Talk-around” channel	HKTA 1016	16,300
TV antenna amplifier	HKTA 1019	4,500
CB radio transceiver for use on-board craft and vessels	HKTA 1022	3,700
46/49 MHz cordless telephone	HKTA 1026	10,400
Low power device	HKTA 1035	4,200
Model control and radio equipment operating in the 27 MHz band	HKTA 1041	4,200
409 MHz short-range portable radio	HKTA 1044	8,000

254/380 MHz cordless telephone	HKTA 1045	10,400
CB radio transceiver operating in the 27 MHz band	HKTA 1050	4,200
Any other radio equipment	------	21,000

Notes:

Note 1 The Telecommunications Authority reserves the right to classify a piece of equipment into one or more of the equipment types given in the Schedules and charge the applicant according to fee of each equipment type separately.

Note 2 Mobile earth station will be evaluated against the technical criteria as set out in the schedule 1 of the Telecommunications (Telecommunications Apparatus) (Exemption from Licensing) Order.

Note 3 Transmitter part of the land mobile transceiver is classified under CCS Cat. II while the receiver part is classified under CCS Cat. I.

Note 4 Equipment variant refers to a model (together with its associated accessories) having electrical and mechanical characteristics identical to an approved equipment. Applicant may apply for equipment variant in Hong Kong.

Note 5 Replacement certificate may be issued on the declaration made by the applicant that the original certificate is defaced, destroyed or lost.

Note 6 An extra transportation fee of HK$ 1,400 will be imposed on application requiring on-site evaluation.

Note 7 The fee may be reduced if not all the parameters specified in the relevant HKTA specification are to be tested.

Note 8 The wideband land mobile radio transceiver has a nominal operating frequency band exceeding the following spectrum widths:

(a) 20 MHz for highest operating frequency < 500 MHz
(b) 40 MHz for highest operating frequency ≥ 500 MHz

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