



**BOTSWANA TELECOMMUNICATIONS  
AUTHORITY**

**TYPE APPROVAL GUIDELINES**

**December 2012**

# Guide to Registration for Type Approvals

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## **1 Introduction**

The Botswana Telecommunications Authority (BTA) is the regulatory authority established in the Republic of Botswana under the Telecommunication Act 1996 (the Act).

In accordance with Article 21 of the Act, BTA has powers to issue regulations concerning type approval.

The arrangements for type approval are set out formally in the BTA Regulations for Registration of Terminal Equipment and Radio Equipment for Type Approval. This guide explains the practical implementation of the procedures.

## **2 What equipment must be registered for type approval?**

In general, all telecommunications terminal equipment and all radio equipment must be registered for type approval.

BTA publishes a list of technical specifications and corresponding equipment types subject to registration. If an equipment type does not appear in the list or there is not an applicable technical specification then BTA will decide, on a case-by-case basis, whether an application for type approval may be made and what technical requirements will apply. BTA reserves the right to decline any application for registration.

Equipment that meets the technical specifications published by BTA and which has been registered with BTA is type approved for the purposes of the Act. A registration may specify conditions which must be complied with if the type approval is to apply.

## **3 Licences for use and sale of radio equipment**

All radio equipment requires a licence (Radio Licence) from BTA for use of the radio spectrum.

Certain equipment types covered by a general or class licence will not require an individual licence for radio spectrum usage if they meet the requirements of the relevant technical specification for Botswana. BTA will maintain a list of the equipment types that do not require an individual licence. In all other cases, possession or operation of radio equipment without a licence is an offence under the Act.

All suppliers and distributors of radio equipment in Botswana must also obtain a licence (Dealer Licence) from BTA to sell such equipment.

Registration of radio equipment for type approval by BTA applies in addition to the need for Radio Licence and Dealer Licence.

#### **4 Repair Service**

An acceptable repair service must be established in Botswana for each type of equipment that is registered unless an exemption is secured from BTA. Repairs / service do not necessarily have to take place in Botswana provided there is a contact point in Botswana and evidence of a formal arrangement between the contact and an acceptable provider of repair services elsewhere.

#### **5 Who can apply for registration?**

The manufacturer or importer of equipment for sale or hire in Botswana must register the equipment with BTA unless the equipment concerned is procured from a manufacturer or importer who has already registered the identical equipment type.

The application for registration must be made by a citizen of the Republic of Botswana or a company incorporated in the Republic of Botswana (local presence/office).

#### **6 How to apply for registration**

An application to register equipment must be made on the official application form available from BTA. Application forms must be submitted in English.

One application may cover a range of related products provided that the application details the differences and the compliance of all of them is justified on the basis of the supporting documentation (see section 13 on supporting documentation).

Separate applications should be made for models supplied under different brand names. The brand names will be separately listed in the register maintained by BTA.

The application must be accompanied by a declaration of conformity (see section 11).

It is not necessary to submit any other documentation or a sample of the equipment unless requested to do so by BTA.

An application that is complete and in order will normally be processed within seven days of its receipt at BTA. Applications that are not complete and / or not in order may be rejected or sent back for extra documentation.

Successful registration of equipment will result in a corresponding entry in the register of type approvals maintained by BTA for the purposes of the Act and open to inspection by the public.

#### **7 Renewal and cancellation of Registration**

Registration will normally be granted for a term of one calendar year. An annual renewal fee is payable to keep a registration in effect. If the fee is not paid by the anniversary date, the type approval will be suspended for a period of 14 days and if payment remains outstanding at the end of that period the registration and hence type approval will be cancelled.

BTA reserves the right to cancel a registration at any time where it has reason to believe that the relevant regulations and technical requirements have not been observed.

## **8 Fees**

BTA publishes a list of fees payable. Income from fees is offset against BTA's costs of registration and market surveillance activities.

Fees are payable by the applicant at the time of submission of the respective application. The fee is non-refundable.

The proposed type approval fees are attached as Appendix 4 to the Guidelines.

## **9 Technical Requirements**

BTA publishes technical specifications with which equipment is expected to comply. In the absence of a relevant specification, BTA may specify technical requirements on a case-by-case basis. In any event, it is required that all equipment registered:

- (a) is electrically safe for users, subscribers or the employees of the telecommunications system operators;
- (b) is electromagnetically compatible with other equipment to which it is or will be connected or used;
- (c) is fitted with a device which will protect the telecommunication system of which it is a part or to which it is connected against electrical, electromagnetic or other similar damage;
- (d) makes efficient use of the radio spectrum where applicable; and
- (e) is capable of interworking with other telecommunication equipment for the purposes of establishing, modifying, charging for, holding or clearing real and virtual connections.

## **10 Test Results**

Test results must be obtained from a laboratory that has been accredited by a body that is a member of the ILAC Mutual Recognition Arrangement.

BTA has a list of recognised / preferred laboratories. The list can be found on the BTA web site or on request from BTA.

Test results should not be included with the application unless specifically requested by BTA. However, the equipment must be tested for compliance with BTA's requirements and reference to such compliance must be included in the declaration of conformity (see section 11) submitted with the application.

Test reports and any other test results must be retained in the supporting documentation (see section 13).

## **11 Declaration of Conformity (DoC)**

The DoC is a document drawn up by the manufacturer or supplier (wherever located) on company letterhead or stationery and signed by them confirming that the product complies with the regulations and technical specifications that apply in Botswana. It must be prepared and maintained in accordance with ISO/IEC 17050-1:2004. In addition to the minimum DoC content specified in clause 6.1 of that standard, the supporting information of clause 6.2 a), b) and e) must also be included. The applicant must satisfy himself that the DoC is authentic and applies to the equipment he wishes to supply in Botswana.

An example of a suitable format for a Declaration of Conformity is given in Appendix 1.

## **12 Alternative to Declaration of Conformity**

Where equipment has been approved in another country or region to technical requirements that are the same as those required in Botswana then evidence of such type approval may be offered in place of a DoC. The evidence should be referenced in a covering letter that includes any of the information mentioned in section 11 which is not explicit in the evidence itself and which gives an undertaking to make the supporting documentation available to BTA on request.

## **13 Supporting Documentation**

The supporting documentation is the complete dossier of evidence that describes in detail the products concerned and the basis on which they are declared to meet the appropriate technical requirements for Botswana. It is not necessary for the applicant to have copy of this supporting documentation or for a copy to be supplied with the application. However, the nature of the arrangements between the applicant and the party providing the declaration of conformity must be such that the applicant can make a copy of the supporting documentation available to BTA without undue delay.

The format of the supporting documentation is flexible to accommodate the needs of different product types but it must comply with ISO/IEC 17050-2:2004. It should have some unique identification number or other identifier of its own which is cross-referenced from the DoC. The whole of the contents of the supporting documentation set out in section 5 of the above standard [with the exception of clause 5.2 a)] is applicable in the present context. The following notes illustrate some particular points which should be considered.

In relation to 5.1 a):

- a brief technical description of the equipment including an explanation of the intended use of the equipment as presented to the user and any installation specific information relevant to compliance;
- identification of the telecommunications networks concerned and any intentional radio spectrum usage;
- identification of software and firmware that may affect compliance of a network interface or have an effect on radio frequency emissions;

- if the equipment is an interface card or module for installation in a host equipment, the description must give sufficient information for compatible hosts to be determined; and
- where more than one model is covered, details of the relationships between the models and the rationale for including them.
- Detailed information of the power levels which the equipment operate within, this is especially important is deciding whether equipment falls on the low power for exemption from radio licensing.

A copy of the user information may be a convenient way of dealing with some of the above points.

In relation to 5.1 b):

- circuit diagrams and PCB layouts for those parts of the equipment which have a direct impact on compliance with the technical requirements. For example: network interface circuits and radio interfaces (antennas or connection points for antennas); audio components in live speech equipment; line signalling; ports for connecting other equipment; power supplies and all network affecting elements. Full diagrams and complete functional information are not required but there must be sufficient detail to understand the compliance issues and to show the build level of the product in relation to the build level of any sub-assemblies;
- part lists in so far as they are relevant to the above. Components which are critical to compliance should be identified and fully specified with suitable tolerances. Care should be taken to ensure that alternative sources of supply are also evaluated; and
- photographs of both the interior assembly and exterior of the product sufficient to permit a person to determine that a product is the same as that submitted for registration.

In relation to 5.1 c):

- identification of all the BTA and other technical specifications that apply and the related test results;
- test reports or test data and details of test methods where these are not specified in the specifications; and
- justification for any cases where tests are not performed. This might be the case, for example, where several models are covered or where reliance is placed on a similar product for which data is held in another file (which must be cross-referenced)

Do not submit the supporting documentation to BTA unless it is specifically requested.

The supporting documentation may be kept electronically provided clear legible paper copies of the whole dossier or extracts from it can be produced on request.

The supporting documentation must be kept available for inspection by BTA for at least 5 years after the last product of the relevant type has been supplied to Botswana.

## **14 Marking**

All registered equipment must be marked as shown in Appendix 2 unless an exemption has been granted by BTA. The mark should be a permanent mark close to the model identification. It may also be helpful to use it on the packaging and in user information but it is not mandatory in these places unless for reasons of size or practicality the product itself is not marked.

The mark should be durable and the text no less than 2mm in height.

An exemption from marking the equipment directly will usually be granted where the applicant undertakes to provide a copy of the declaration of conformity with each item of equipment sold or to apply the mark to the packaging of the equipment prior to sale or to display a copy of the notice set out in Appendix 3 close to the equipment at the point of sale and in advertisements to supply the product.

## **15 What about equipment manufactured abroad and modified locally in Botswana?**

Equipment manufactured abroad and modified locally in Botswana is included in the arrangements for registration. Typically, the party performing the modification will be the applicant for registration.

In all cases, the supporting documentation should explain the modifications and reference test results on the modified product or explain why the test results on the unmodified product remain valid.

## **16 Products Already Registered**

The registration application and associated documentation is the intellectual property of the applicant. A registered product cannot be supplied without the involvement and consent of the original applicant.

If another person wishes to supply the identical product without the involvement and consent of the original applicant then that other person must seek his own separate registration for the equipment.

If the original applicant is willing to consent to the supply of a registered product under a different brand name the procedure is straightforward. A separate application for registration must be made for the brand name but the applicant is able to reference the existing registration in the application. If the applicant for the brand name registration is different from the original application, then the brand name application should include a letter of authority from the original applicant authorising use of the data held by BTA and agreeing to make the

supporting documentation available in support of the brand name product should circumstances so require.

## **17 Surveillance**

Market surveillance will be conducted to promote continued compliance of telecommunications equipment with applicable regulatory standards, in order to prevent radiocommunication interference, harm to the public telecommunication networks and to ensure the safety of telecommunications personnel and users. The BTA will monitor the market to ensure that radiocommunications equipment available in the market has been type-approved in accordance with laid down procedures.

Importers/Distributors or Suppliers of radiocommunications equipment are required to cooperate with BTA surveillance activities and provide communications equipment samples and documentations on request at no cost. In the event that any communications equipment is found to be non-compliant with the Type Approval system, the BTA may take any enforcement action or measures, as it deems appropriate, against the parties (companies or individuals) held responsible for importing the non-compliant equipment. In some cases, this may mean issuing an instruction or notice to importers, wholesalers, retailers or users to cease supplying or using the relevant communications equipment as it may be recalled and withdrawn from markets and could be impounded or destroyed.

All other measures of legal recourse within the laws of Botswana remain at BTA's disposal. In addition, the unauthorized users of licensed communication Equipment will also be held responsible for owning and/or operating such equipment without the proper authorization from BTA

Where a check is inconclusive or unsatisfactory, additional information will be requested and a sample for test at a laboratory nominated by BTA may be required. The holder of the registration will be responsible for all laboratory charges incurred.

## **18 Transfers**

Equipment registrations are not transferable without the explicit consent of BTA. BTA will wish to be satisfied that appropriate arrangements have been made for the new owner of the registration to receive the necessary support of the party issuing the DoC including access to the supporting documentation.

## **19 Changes**

If a product change introduces an additional network interface or requires the use of additional radio frequencies or new software, then a new application for registration must be made.

Changes that may affect an existing network interface or have an effect on safety, EMC or radio frequency emissions must be tested and assessed to the extent necessary to establish that ongoing compliance will be maintained. A

record of the changes, relevant test results, the assessment of their impact etc must be maintained in the supporting documentation.

Changes that are essentially cosmetic or that are non-network affecting or that have no potential or actual effect on safety, EMC or radio frequency emissions may be introduced provided a record of the changes and the assessment of their impact is maintained in the supporting documentation.

If a change affects any of the information recorded in the Registration for Type Approval or the Declaration of Conformity, then a new Registration for Type Approval and / or Declaration of Conformity must also be submitted to BTA.

It will also be necessary to assess ongoing compliance whenever the relevant national specifications are amended.

## **20 Contact Details**

Botswana Telecommunications Authority,  
Independence Avenue, Plot 206/207

PRIVATE BAG 00495  
GABORONE BOTSWANA

Tel: +267-3957755

Fax: +267-3957976

Email: [engineering@bta.org.bw](mailto:engineering@bta.org.bw)

## APPENDIX 1 – Specimen Pro-forma Declaration of Conformity

Reference:	
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I / We .....  
(name of manufacturer/supplier)

Of .....  
.....  
.....  
(address including postcode)

**declare under my/our sole responsibility that the product(s)**

.....  
.....  
(product description including brand name, type or model and any supplementary information such as lot, batch or serial number identification)

**to which this declaration relates, is/are in conformity with the BTA Regulations for Registration of Terminal Equipment & Radio Equipment for Type Approval and the following national specifications.**

.....  
.....  
.....  
**and that I have examined the technical basis for this declaration which is based on test reports and /or certificates issued by**

.....  
.....  
**Supporting documentation relevant to this declaration has been compiled under the reference number given above and will be made available to BTA on request.**

**Signature** ..... **Date:** .....  
(for and on behalf of manufacturer/supplier)

**NOTE:** For information on how to complete this declaration and prepare the supporting documentation, please refer to ISO/IEC 17050 Conformity assessment – Supplier’s declaration of conformity Part 1: General requirements, Part 2: Supporting documentation and the corresponding sections of the BTA Guide to Registration for Type Approval.

## APPENDIX 2 – Label

**BTA**  
**REGISTERED No :**  
**nnnnnn**

**Note:** Where “nnnnnn” appears shall be substituted the registration number allocated by BTA to the equipment concerned.

## APPENDIX 3 – Notice

### **NOTICE**

This equipment has been registered with the Botswana Telecommunications Authority for use in Botswana.

**BTA  
REGISTERED No:  
nnnnnn**

**Note:** Where “nnnnnn” appears shall be substituted the registration number allocated by BTA to the equipment concerned. Where the notice covers more than one type of equipment in an advertisement or display, the registration numbers for all equipment concerned shall be cited.

## APPENDIX 4 – Type Approval Fees

The proposed type approval fees

Application Fee – per submission	P100
<b>Registration fee – single line equipment</b> Alarms Systems Answering Machines Basic Telephone Cordless Telephone Faxes Low Power Devices (short range devices) Modems Multiplex equipment (Voice and Data) Radio Interface Equipment Radio Transmitters (including broadcasting) Wireless Microphones Wireless Modem Cellular Phones PABX with less than 24 Ports Switches with less than 24 Ports Basic Routers Wireless Terminals	P500
<b>Registration fee – PBX / multi-line equipment including Gateways e.g. GSM, VOIP etc</b> PABX with 24 – 48 ports PABX with 48 – 128 ports PABX with 128 – 256 ports PABX more than 256 ports IP PBX	P1,000 P1,500 P2,000 P2,500 P2500
<b>Registration Satellites</b> Satellite Earth Station VSAT Terminal	P2,500 P1,500
<b>Data Modems (including Switches, Routers, etc)</b> <b>Switches less than 24 ports</b>  Routers with multiple ports IP Switch IP Routers RLAN Access Points Amateur Transmitter FM Transmitter	P1,000  P1,000 P1,000 P1,000 P1,000 P1,000
Supplementary fee for range of products	P250
Annual renewal fee	P100

## APPENDIX 5 – Type Approval Application Form



### BOTSWANA TELECOMMUNICATIONS AUTHORITY

PRIVATE BAG 00495 GABORONE BOTSWANA TEL:  
+2673957755

FAX: +2673957976 e-mail: [engineering@bta.org.bw](mailto:engineering@bta.org.bw) website: [www.bta.org.bw](http://www.bta.org.bw)

### Registration for Type Approval

<b>Name of Applicant Company or Person</b>	<b>Address</b>
<b>Company / ID No:</b>	
<b>Contact Information</b> Tel. office: Tel. mobile: Fax: Email:	

<b>Contact Information</b> Please provide contact details for the person dealing with this application.	
<b>Name</b>	<b>Telephone</b>
<b>Title / Position:</b>	<b>Fax</b>
<b>Email</b>	

<b>Product Details</b> Please give details of the product. Include serial numbers if the registration is for a single batch of equipment. A separate application form should be used for each family or range of products. <b>Make / Brand Name</b> ----- <b>Product / Model Identification</b> ----- ----- <b>Brief Description</b> Please give a brief description of the product. The description must identify all telecom networks to which connection is intended and all radio transmitters. For all radio transmitters specify the frequency range, channels/separation, modulation methods, output power and antenna type/gain. ----- -----
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<b>Manufacturer or supplier making the Declaration of Conformity (DoC)</b>	
<b>Name</b>	<b>Contact person</b>
<b>Address</b>	<b>Name</b>
	<b>Telephone</b>
	<b>Fax</b>
	<b>Email:</b>
<b>Identifying particulars of the DoC:</b>	

<b>Repair Service Provider in Botswana</b>	
<b>Name</b>	<b>Contact person</b>
<b>Address</b>	<b>Name</b>
	<b>Telephone</b>
	<b>Fax</b>
	<b>Email:</b>

<b>Agreement</b>	
I / We hereby apply registration for the above product and agree to abide by the BTA Regulations for Registration of Terminal Equipment & Radio Equipment for Type Approval.	
I / We believe that the DoC referenced above and supplied with this application is authentic and that it applies to the product described above.	
I / We authorise BTA to discuss details related to this application with the manufacturer or supplier identified above.	
<b>Print name</b>	<b>Signature of the applicant</b>
<b>Title / Position</b>	
<b>Date</b>	

<b>For official use</b>	<b>Registration number</b>

## APPENDIX 6 – List of BTA Recognized Laboratories

LABORATORY	COUNTRY	CONTACT / ADDRESS	TEL/FAX	E-mail
CETECOM-ICT Services GmbH	Germany	Ernst Hussinger	49 681 598 8721 49 681 598 8775	<a href="mailto:ernst.hussinger@ict.cetecom.de">ernst.hussinger@ict.cetecom.de</a>
EMC Technologies Pty Ltd	Australia	Mr C Zombolas	61 3 9335 3333 61 3 9335 9260	<a href="mailto:chris@emctech.com.au">chris@emctech.com.au</a>
Radio Frequency Investigation Ltd	UK	Richard Jacklin	44 1372 370900 44 1372 370999	<a href="mailto:Richard.jacklin@rfi-wireless.com">Richard.jacklin@rfi-wireless.com</a>
Telefication B.V.	Netherlands	Wouter Blom Edisonstraat 12a NL- 6902 PK ZEVENAAR	31 316 583 180 31 316 583 189	<a href="mailto:wblom@telefication.com">wblom@telefication.com</a>
TRL Compliance Services	UK	Mark Heaven	44 1684 833818 44 1684 833858	<a href="mailto:mark.heaven@trlcompliance.com">mark.heaven@trlcompliance.com</a>
SABS - TCS Pty	South Africa	ML Sibeko		<a href="mailto:SIBEKOML@sabs.co.za">SIBEKOML@sabs.co.za</a>