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#### 1. Introduction

The Botswana Communications Regulatory Authority (BOCRA); is the regulatory authority established in the Republic of Botswana under the Communications Regulatory Authority Act of 2012 (the Act). In accordance with Article 84 and 85 of the Act, BOCRA has powers to issue regulations concerning type approval.

The arrangements for type approval are set out formally in BOCRA's 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 (including broadcast transmission equipment and DTT & Satellite receiver equipment) must be registered for type approval.

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

Equipment that meets the technical specifications published by BOCRA and which has been registered with BOCRA 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 BOCRA 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.

BOCRA 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 of radio equipment in Botswana must also obtain a licence (Dealer Licence) from BOCRA to sell such equipment. Registration of radio equipment for type approval by BOCRA applies additionally to Radio Licences and Dealer Licences.

#### 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 BOCRA. 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 BOCRA 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.

#### 6. How to apply for registration

An application to register equipment must be made on the official application form available from BOCRA. 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 BOCRA.

The application must be accompanied by a declaration of conformity (see section 11 on declaration of conformity) and full set of test reports detailing the conformity.

It is not necessary to submit any other

documentation or a sample of the equipment unless requested to do so by BOCRA. An application that is complete and in order will normally be processed within three days of its receipt at BOCRA. Applications that are not complete and / or not in order may be rejected.

Successful registration of equipment will result in a corresponding entry in the register of type approvals maintained by BOCRA for the purposes of the Act and open to inspection by the public by means of a database published on the BOCRA website.

#### 7. Renewal and cancellation of Registration

Registration will normally be granted for the lifetime of the specific version of the equipment. Variations or upgrades of equipment must be specifically type approved where such upgrades impact equipment safety, EMC, spectrum use, and standards. BOCRA 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

BOCRA publishes a list of fees payable. Income from fees is offset against BOCRA'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 nonrefundable. The type approval fees are attached as Appendix 4 to the Guidelines.

#### 9. Technical Requirements

BOCRA publishes technical specifications with which equipment is expected to comply. In the absence of a relevant specification, BOCRA 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.

BOCRA has a list of recognised / preferred laboratories. The list can be found on the BOCRA web site or on request from BOCRA. Test results should be included with the application unless BOCRA specifically states in writing that test results are not required.

The equipment must be tested for compliance with BOCRA's specification and should include the areas of Safety, EMC and Technical Standards. Reference to such compliance must be included in the declaration of conformity (see section 11) submitted with the application. Any other test results must be included 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 BOCRA 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 BOCRA 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 shoul 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.

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 subassemblies:
- parts 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 BOCRA 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)

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 BOCRA 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 BOCRA. The mark should be a permanent mark close to the model identification.

It is also permitted to place the marking on the packaging instead of on the device, in cases where opening the packaging would render it un-re-sealable.

E-labelling is also permitted, where the equipment in question has an integral screen, in which case the marking may be shown on the screen (for example at switch-on, or accessed via a simple menu function) 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 entity wishes to supply the identical product without the involvement and consent of the original applicant then that other entity must seek his own and 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 BOCRA and agreeing to make the supporting documentation available in support of the brand name product should circumstances so require.

#### 17. Surveillance

All parties involved in the import, manufacture and supply of equipment are expected to satisfy themselves that the equipment in which they deal complies with the relevant technical specifications and that the documentation that accompanies it is authentic.

It is a violation of the Act to supply telecommunications equipment which is not type approved, that is to say, equipment that is not registered and/ or which does not meet the relevant technical specifications. In some cases, it is a violation of the Act to be in possession of equipment that is not type approved whether or not there is any intention to supply.

From time to time BOCRA will check registered products and / or ask the supplier of a registered product to make all or part of the supporting documentation available. BOCRA has powers to require information to be supplied and to seize equipment suspected of being in contravention of the Act.

BOCRA may perform checks on terminal equipment and radio equipment at any time as a result of a complaint, a report of interference, visual inspection of products in a retail outlet, inappropriate advertising or simply a random selection. Where a check is inconclusive or unsatisfactory, additional information will be requested and a sample for test at a laboratory nominated by BOCRA 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 BOCRA. BOCRA 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, 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 BOCRA.

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

#### 20. Transitional Arrangements

All previous type approval arrangements cease summarily when this scheme comes into effect. Terminal equipment and radio equipment being imported into Botswana and/or supplied under previous type approval schemes at the time this scheme comes into effect may continue to be imported and supplied for the duration specified in the original approval.

However, holders of such approvals are encouraged to migrate to the new scheme and there will be no charge for registration or renewal under the new scheme until the expiry date of the original approval.

Equipment being imported into Botswana and/or supplied under previous type approval schemes at the time this scheme comes into effect must be registered under this scheme if import and/or supply is to continue beyond the expiry of the existing approval.

#### 21. Contact Details

Botswana Communications Regulatory Authority Plot 50671, Independence Avenue Private Bag 00495 Gaborone Tel: +267 395 7755 Fax: +267 395 7976 Email: info@bocra.org.bw Website: www.bocra.org.bw





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

			Reference:	
I / We (name of manufacturer/suppli	or)			
Of				
· · · · · · · · · · · · · · · · · · ·				
(address including postcode)				
	declare under my/	our sole responsibil	ity that the pro	duct(s)
(product description including number identification)	ı brand name, type or n	nodel and any supple	ementary informa	ation such as lot, batch or serial
	this declaration relate			
Registra	ation of Terminal Equip follo	oment & Radio Equi wing national specif		Approval and the
		5 1		
and tha	t I have examined the test repo	technical basis for t orts and /or certificat		which is based on
	-		-	
Support	ing documentation rele	overt to this declars	tion has been a	ompiled under the
	nce number given abov			
Signature		Date:		
(for and on behalf of manufac		Date		
NOTE: For information on ho				
documentation, please refer t declaration of conformity Part				1
and the corresponding section				

BOC



APPENDIX 2 – Label



Note: Where "nnnnnn" appears shall be substituted by the registration number allocated by BOCRA to the equipment concerned.



## **APPENDIX 3 – Notice**

## NOTICE

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

> BOCRA REGISTERED No: nnnnnn

Note: Where "nnnnnn" appears shall be substituted by the registration number allocated by BOCRA to the equipment concerned.



## APPENDIX 4 – Type Approval Fees

Item	Assumed Life	Fee (Pula)
Alarm Systems	5	2400
Answering Machines	5	2400
Basic Telephone	5	2400
Cordless Telephone	5	2400
Faxes	5	2400
Low Power Devices (SRD)	2	1100
Data Modems (incl. switches, routers)	5	2400
Multiplex Equipment (Voice and Data)	7	3100
Radio Interface Equipment	7	3100
Radio Transmitters (incl. Broadcasting)	7	3100
Wireless Microphones	5	2400
Cellular Phones	2	1100
PABX with less than 24 ports	7	3100
Switches with less than 24 ports	7	3100
Basic Routers	5	2400
Wireless Terminals	5	2400
PABX with 24 - 47 ports	7	5700
PABX with 48 - 127 ports	7	8300
PABX with 128 - 255 ports	7	10900
PABX with 256 or more ports	7	13500
Satellite Earth Station	7	13500
VSAT Terminal	7	8300
Switches with more 24 or more ports	7	5700
DTT Set- Top-Box Receivers	5	2400

## **APPENDIX 5 – Type Approval Application Form**

## BOTSWANA COMMUNICATIONS REGULATORY AUTHORITY

PRIVATE BAG 00495 PLOT 50671,INDEPENDENCE AVE, GABORONE BOTSWANA TEL: +2673957755 FAX: +2673957976 e-mail: info@bocra.org.bw website: www.bocra.org.bw

## **Registration for Type Approval**

Name of Applicant Company or Person	
Company / ID No:	
<b>Contact Information</b> Tel: Mobile: Fax: Email:	

Address		

#### **Contact Information**

Please provide contact details for the person dealing with this application.

Name	Telephone					
Title / Position:	Fax					
Email						

#### **Product Details**

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.

## Make / Brand Name

## Product / Model Identification

#### **Brief Description**

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.



I	•••••	 • • • • •	•••••	• • • • •	•••••	 • • • • •	• • • • •	•••••	•••••	 	• • • • • •	•••••	 •••••	 	• • • • •	••••	•••••	 	 •••••	•••••	 • • • • • •	•••••	•••••	• • • • •	 		 •••••		•••••	 	 	•••••	• • • • • •	
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#### Manufacturer or supplier making the Declaration of Conformity (DoC)

Name	Contact person						
Address	Name						
	Telephone						
	Fax						
	Email						
Identifying particulars of the DoC:							

#### **Repair Service Provider in Botswana**

Name	Contact person					
Address	Name					
	Telephone					
	Fax					
	Email					

#### Agreement

I / We hereby apply registration for the above product and agree to abide by the BOCRA 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 BOCRA to discuss details related to this application with the manufacturer or supplier identified above.

Print name	Signature of the applicant
Title / Position	
Date	
For official use	Registration number



## **APPENDIX 6 Type Approval Database Examples**

Malaysia, http://ecomm.sirim.my/SirimEnquiry/search\_Label.aspx

	Label S	Serial No.	bd	1234	456	С			
BD	ample of Label Serial No. f 0123456C' or bd1234566' arch IMEI Information arch Product Serial No Label ReleaseDate	BD123456G' or 'b	di23466g*   BDI Search Cert Hold				Model	Brand	
1	Serial No. Released at	RAKW72A/1206/S(08				0/1000	5130 XpressMusic (51300-2) (RM-495)	NOKIA	View
		,	SUN, BHU		MOBILE STATION		Support Sluetooth][1 SIM, 1 IMEI]		Details

#### Egypt, http://www.tra.gov.eg/presentations/TypeApproval/Wireless.xlsx

Equipment Description	Brand & Model	Compliance Standards
108M Wireless 802.11b/g USB Adapter	TP-Link TL-WN620G	EN300 328, EN301 489-17, EN60950-1
108Mbps 802.11g Wireless Access Point	TEW-450APB	EN300 328-1, EN300 328-2, EN301 489-1, EN301 489-17, EN60950-1

Jordan, http://www.trc.gov.jo/index.php?option=com\_equipments&lang=english

Approved Equipment Search Results						
Category	Brand Name	Model	Model #			
gsm	AEG	AEG	9020			
gsm	AEG	AEG	TP 9050			
gsm	AEG	AEG	TP 9070 DTFX			
gsm	ALCATEL	9109	HC1000			
gsm	ALCATEL	ALCATEL	HB200			
gsm	ALCATEL	ALCATEL	HC400			
nsm	ALCATE!	ALC.ATEL	HC600			





## **APPENDIX 7 – List of BOCRA 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	ernst.hussinger@ict.cetecom.de
EMC Technologies Pty Ltd	Australia	Mr C Zombolas	61 3 9335 3333 61 3 9335 9260	chris@emctech.com.au
Radio Frequency Investigation Ltd	UK	Richard Jacklin	44 1372 370900 44 1372 370999	Richard.jacklin@rfi-wireless.com
Telefication B.V.	Netherlands	Wouter Blom Edisonstraat 12a NL- 6902 PK ZEVENAAR	31 316 583 180 31 316 583 189	wblom@telefication.com
TRL Compliance Services	UK	Mark Heaven	44 1684 833818 44 1684 833858	mark.heaven@trlcompliance.com
SABS - TCS Pty	South Africa	ML Sibeko	+27(0)12 428 7911 +27(0)12 344 1568	SIBEKOML@sabs.co.za

Please note that testing should only be done by laboratories that that has been accredited by a body that is a member of the ILAC Mutual Recognition Arrangement





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