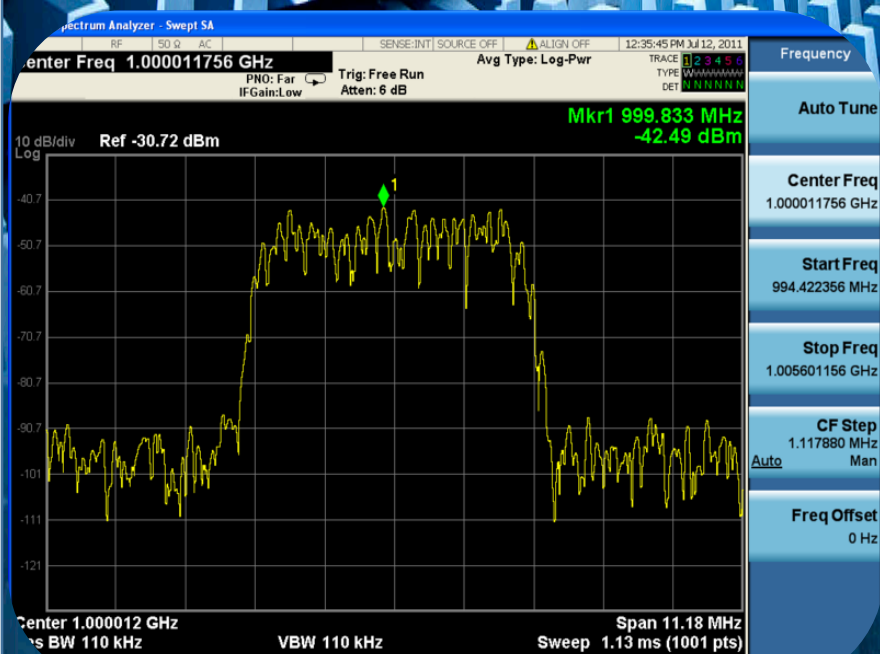


TYPE APPROVAL GUIDELINES



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1 Introduction

The Zambia Information and Communications Technology Authority (Authority) is provided for under section 4 of the Information and Communications Technologies Act No. 15 of 2009 (ICT Act). Section 6 of the ICT Act empowers the Authority to regulate the provision of electronic communications services and products and monitor the performance of the sector, including the levels of investment and the availability, quality, cost and standards of the electronic communications services.

Under section 66 of the ICT Act and Regulation 4 of the ICT (Type Approval) Regulations, Statutory Instrument No. 6 of 2011, a person shall not use, supply, sell, offer for sale, lease or hire any electronic communications equipment or apparatus without approval from the Authority. Further, section 7 of the ICT Act, empowers the Authority to issue guidelines for the better carrying out of its mandate. Pursuant to the mandate referred to above, the Authority issues these Guidelines.

2 Status of Guidelines

These Guidelines shall be read as one with the ICT Act, Statutory Instrument No. 6 of 2011, licence terms and conditions and any other relevant laws.

3 Definitions

In these Guidelines, unless the context otherwise requires-

“Accredited test laboratory” includes a laboratory that is recognised by the Authority in line with International Laboratories Accreditation Cooperation and ISO 17025 standards and published on the Authority website.

“Applicant” means a person who lodges an application for type approval, type acceptance or modification;

“Authority” has the meaning assigned to it under the ICT Act;

“Electronic Communications Apparatus” has the meaning assigned to it under the ICT Act;

“Label” means a mark affixed as evidence of conformance with relevant standards of an electronic communications apparatus intended for use, supply, sell, offer for sale, lease or hire in the Republic.

“Type Approval” means a process by which the Authority verifies whether the electronic communications apparatus conforms to standards applicable in the Republic.

4 Scope of Guidelines

These Guidelines shall apply to any electronic communications apparatus to be used, supplied, sold, offered for sale, leased or hired in the Republic provided the electronic communications apparatus is constructed or adapted for use as part of, or for the purpose of, an electronic communications service.

5 Application for Type Approval, Type Acceptance and Modification

5.1 An Applicant who intends use, supply, sell, offer for sale, lease or hire any electronic communications apparatus shall apply to the Authority using any of the following processes, as the case may be:

- (a) type approval;
- (b) type acceptance; or
- (c) modification.

5.2 A type approval certificate issued by the Authority, under these Guidelines, shall be specific to a model of the electronic communications apparatus.

5.3 A person who intends to use, supply, sell, offer for sale, lease or hire a type approved model of an electronic communications apparatus shall not to be required to apply for the approval of that model.

5.4 Type approval and type acceptance certificates issued by the Authority with respect to a model of an electronic communications apparatus shall remain valid unless revoked.

5.5 Application procedure for type approval

5.5.1 An Applicant shall follow the type approval process where the model of the electronic communications apparatus -

- (a) is not approved by the Authority; or
- (b) does not have a certificate of conformity from a National Regulatory Authority or a Conformity Assessment Body recognised by the Authority

whether or not it contains assembled parts that are type approved.

5.5.2 The following procedure shall be used when applying for type approval:

- (a) The Applicant shall apply for type approval in a manner prescribed in Appendix 1.
- (b) The Applicant shall obtain the prescribed application form at the Authority's registered office or online from the Authority's website (www.zicta.zm).
- (c) The Applicant shall, where an application is lodged physically, submit to the Authority a duly completed application form in triplicate.
- (d) Where the application is made electronically, the form referred to in (c) shall not be submitted in triplicate.
- (e) The Applicant shall ensure that a separate application form is completed for each model of electronic communications apparatus requiring approval.
- (f) Where an Applicant applies for the type approval of two or more models with the same technical characteristics, the applicant shall make one application and furnish the Authority with a declaration of similarity issued by a manufacturer of the electronic communications apparatus requiring approval. For the avoidance of doubt-
 - (i) Only electronic communications apparatus that is technically the same in every aspect including the circuit diagram, behaviour and performance, shall be considered in determining similarity.
 - (ii) Cosmetic differences such as colour, texture, or shape of the electronic communications apparatus shall not be considered in determining similarity.
- (g) an application referred to in (a) shall be accompanied by the following:
 - (i) Duly signed and dated test reports issued by accredited test laboratories, approved by the Authority, demonstrating that the electronic communications apparatus complies with the relevant technical standards prescribed in Appendix 2 and any other applicable standards as amended from time to time;
 - (ii) A declaration of conformity issued by an independent third party;
 - (iii) Technical and operational documents of the electronic communications apparatus including user and installation manuals;

- (iv) Circuit diagram, printed circuit board layout, part list and other relevant design information;
 - (v) External and internal photographs of the electronic communications apparatus;
 - (vi) Where applicable, sample units of the electronic communications apparatus with the appropriate accessories for testing and verification of declared information; and
 - (vii) Any other information that the Authority may deem necessary.
- (h) The samples referred to in (e)(vi) shall remain a property of the Authority, and shall be used as a source of reference in future compliance assessments for the approved electronic communications apparatus.
 - (i) The Authority shall, upon receipt of a complete application, issue a quotation of a non-refundable fee payable by the Applicant as prescribed in the second schedule of Statutory Instrument No. 6 of 2011.
 - (j) The Authority may undertake the testing of an electronic communications apparatus for type approval purposes.
 - (k) Where applicable, the Authority may request an Applicant to subject the electronic communications apparatus for testing by an independent laboratory approved by the Authority at the Applicant's cost.
 - (l) The Authority shall, where it is satisfied that the Applicant has met the requirements in accordance with Regulation 7 of Statutory Instrument No. 6 of 2011, issue a type approval certificate bearing a unique number.

5.6 Application procedure for type acceptance

- 5.6.1 An Applicant shall follow the type acceptance process where there is evidence that the electronic communications apparatus is type approved by a National Regulatory Authority or a Conformity Assessment Body that has entered into a mutual recognition agreement with the Authority.
- 5.6.2 The Authority shall from time to time publish, on the Authority website, the approved list of National Regulatory Authorities and Conformity Assessment Bodies.

5.6.3 The following procedure shall be used when applying for type acceptance:

- (a) The Applicant shall apply for type acceptance in a manner prescribed in Appendix 1.
- (b) The Applicant shall obtain the prescribed application form at the Authority's registered office or online from the Authority's website (www.zicta.zm).
- (c) The Applicant shall, where an application is lodged physically, submit to the Authority a duly completed application form in triplicate.
- (d) Where the application is made electronically, the form referred to in (c) shall not be submitted in triplicate.
- (e) The Applicant shall ensure that a separate application form is completed for each model of electronic communications apparatus requiring approval.
- (f) An application referred to in (a) shall be accompanied by the following:
 - (i) A duly signed Certificate of conformance issued by a National Regulatory Authority or a Conformity Assessment Body that has entered into a mutual recognition agreement with the Authority;
 - (ii) Full name and mailing address of the manufacturer of the electronic communications apparatus and that of the Applicant;
 - (iii) Copy of installation and operating instructions to be furnished to the user;
 - (iv) Technical and operational documents of the electronic communications apparatus including user and installation manuals; and
 - (v) Any other information that the Authority may deem necessary.
- (g) The Authority shall, upon receipt of a complete application, issue a quotation of a non-refundable fee payable by the Applicant as prescribed in the second schedule of Statutory Instrument No. 6 of 2011.
- (h) The Authority shall, where it is satisfied that the Applicant has met the requirements in accordance with Regulation 6 of Statutory Instrument No. 6 of 2011, issue a type approval certificate bearing a unique number

5.7 Application for modification procedure

- (a) An Applicant shall apply for modification in a manner prescribed in clause 5.5 where the electronic communications apparatus is type approved or type accepted but has undergone modification that changes its technical characteristics.
- (b) An Applicant may apply for modification where the electronic communications apparatus is renamed or rebranded.
- (c) A holder of a type approval certificate that has undergone name change shall notify the Authority within 14 days of the name change.

6 Revocation of approval

6.1 An approval issued by the Authority under these Guidelines may be revoked if-

- (a) Obtained by fraud or submission of false information or statements relating to the model of the electronic communications apparatus;
- (b) The model of the electronic communications apparatus deviates from and fails to comply with relevant standards issued by the Authority;
- (c) The Authority becomes aware of any circumstance or fact which would have required or permitted the Authority to refuse to grant the approval;
- (d) There is a change in the applicable standards; or
- (e) The revocation is in the public interest.

6.2 The Authority shall before revoking an approval, give written notice to the holder of a type approval certificate of its intention to revoke the approval and shall-

- (a) give reasons for the intended revocation; and
- (b) require the holder to show cause within a period of 7 days why the approval should not be revoked.

6.3 The Authority may recall from the market the model of the electronic communications apparatus whose approval has been revoked.

7 Labelling Requirements

- 7.1. Unless otherwise determined by the Authority, a manufacturer, distributor, importer or supplier shall ensure that type approved electronic communications apparatus is affixed with a legible label-
- (a) Approved by the Authority as shown in Appendix 3;
 - (b) Issued by a National Regulatory Authority or a Conformity Assessment Body where the electronic communications apparatus is approved using the type acceptance process.
- 7.2. A manufacturer, distributor, importer or supplier shall ensure that the label referred to in 7.1 is visible and legible at all times.
- 7.3. A label shall be affixed on the electronic communications apparatus, the packaging and included in the user manual.
- 7.4. Where affixing a label as prescribed in 7.3 is not feasible, an alternative method of displaying the label approved by the Authority in writing may be used.
- 7.5. A manufacturer, distributor, importer or supplier shall ensure that a label is affixed on an electronic communications apparatus before it is imported, supplied, sold, offered for sale or leased.

8 Failure to comply with Guidelines

A person who fails to comply with these Guidelines commits an offence under section 79(1) of the ICT Act.

9 Exemption

- 9.1. An individual shall be exempt from the requirement for type approval if the electronic communications apparatus is acquired for an individual's personal use.
- 9.2. The Authority shall from time to time determine and publish on its website a list of exempt electronic communications apparatus.

10 Prohibited

The Authority shall from time to time determine and publish on its website a list of electronic communications apparatus prohibited for use in the Republic.

11 Repeal

The Type Approval Guidelines, 2015 are hereby repealed.

APPENDIX 1:

FORM

1 -

Application for Type Approval, Type Acceptance and Modification

APPENDIX 1
(Regulations 6)

Form 1
(Regulation 6)
(To be completed in triplicate)



ZICTA

ZAMBIA INFORMATION AND COMMUNICATIONS TECHNOLOGY AUTHORITY

The Information and Communication Technologies Act, 2009
(Act No. 15 of 2009)

The Information and Communication Technologies
(Type Approval) Regulations, 2011

APPLICATION FOR TYPE APPROVAL, TYPE ACCEPTANCE AND MODIFICATION			
Application Type		Type Approval [] Type Acceptance [] Modification []	()
A. APPLICANT'S DETAILS		Information Provided	Check List (✓)
1	Type of Applicant (Tick Appropriate)	<input type="checkbox"/> Local Manufacturer <input type="checkbox"/> International Manufacturer <input type="checkbox"/> Commercial User <input type="checkbox"/> Licenced Operator Licence Number: <input type="checkbox"/> Authorised Dealer Registration Number: <input type="checkbox"/> Private user <input type="checkbox"/> Other Specify:	()

2	Company Name		
3	Contact Person		()
4	Physical Address		()
5	Postal Address		()
6	Phone	Fixed: Mobile: Fax:	()
7	Email:		()
8	Manufacturer Name and Address		()
9	Required Documentation for Type Approval	1. Technical and operational documents of the electronic communications apparatus including user and installation manuals; 2. A declaration of conformity issued by the manufacturer; 3. Circuit diagram, printed circuit board layout, part list and other relevant design information; and 4. External and internal photographs of the electronic communications apparatus;	() () () ()
10	Required Documentation for Type Acceptance	1. A duly signed Certificate of conformance issued by a National Regulatory Authority or a Conformity Assessment Body that has entered into a mutual recognition agreement with the Authority; and 2. Technical and operational documents of the electronic communications apparatus including user and installation manuals;	() ()

B. TECHNICAL DETAILS OF THE EQUIPMENT		Information Provided					
11	Equipment Category (Tick Appropriate)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		GSM	DECT	UMTS/3G/4G	TETRA	Amateur Radio	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Private Mobile Radio	Radar	Maritime Radio	Radar	RLAN	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Wimax	FWA	Microwave	Sound Broadcasting	TV Broadcasting	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
WiFi	Bluetooth	RFID	Amateur Satellite Radio	Radio Navigation			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Satellite TV	VSAT	Analog PSTN	xDSL	Voice Equipment			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
Leased Line Equipment	Switched Data	Other (Specify)					
12	Intended Use	Private: <input type="checkbox"/> Commercial: <input type="checkbox"/> Retail: <input type="checkbox"/> Other: <input type="checkbox"/> (specify)					
13	Equipment Details	Brand Name: Type Name: Model Number:					

		<div>Country of Origin:</div> <div>Frequency Range (MHz):Bandwidth:</div> <div>Transmission Capacity:No. of Channels:</div> <div>Output Power (mW):Channel Spacing:</div> <div>Frequency Stability:</div> <div>Modulation Type(e.g. AM, FM, OFDM etc):</div> <div>ITU Emission Designator:</div>	
14	Antenna Details	<div>Type: [] Integral [] External</div> <div>Gain:</div> <div>Power Source: [] Power Source [] Connectors</div> <div>[] Software Others (Specify):</div>	
15	Equipment License	[] Required [] Not Required	
16	Standards Compliance	<div>EMC</div> <div>Radio</div> <div>Health and Safety</div>	<div>Test Report No.</div> <div>Test Report No.</div> <div>Test Report No.</div> <div>()</div>

		Technology Specific	Test Report No.	
17	Serial Number of Sample Equipment Submitted for tests			()

DECLARATION

I/we declare that all the particulars and information provided in this application are complete, correct and true and I/we agree that in the event that any of the said particulars and information provided is found to be untrue or fraudulent, the assignment/reservation will be revoked.

I/we agree that in the event that of the revocation of the assignment/reservation, any fees paid to the Authority in respect of the same shall be forfeited. I/we declare that in the event that the nature of my/our business changes, or I/we no longer carry out operations in terms of the assignment/reservation, I/we will notify the Authority in which case my/our assignment/reservation may be revoked or revised.

Declared at _____ this _____ day of _____ 20_____ by the following persons who are duly authorised to sign for and on behalf of the applicant under the authority of the Power of Attorney or Board Resolution which are hereby attached.

Applicant's Name

Date

Applicant's Signature

FOR OFFICIAL USE ONLY

Received by: _____

Officer

Receipt No.: _____

Date Received: _____

Amount Received: _____

Serial No. of Applicant: _____

STAMP

APPENDIX 2:

Type Approval Standards

Public Mobile

Service defined	Frequency Band	Applicable Sub-section of Framework		Reference standards for conformity		
GSM	880 - 915 MHz	GSM Base Station and Ancillary equipment	1.1	Z S E N 3 0 1 4 8 9 1	EN 301 489-8	
	925 - 960 MHz				EN 301 502	
DCS	1705 - 1785 MHz	GSM Handsets, terminals & ancillary equipment	1.2		EN 301 489-7	
	1805 - 1880MHz				EN 301 511	
DECT	1880 - 1900 MHz	DECT cordless telecoms equipment	1.3		EN 301 489-6	
					EN 301 406	
IMT	1900 - 1920 MHz	UMTS handsets and related equipment	1.4		EN 301 908-1	EN 301 908-2
	1920 - 1980 MHz					EN 301 908-6
	2110 - 2170 MHz	UMTS base stations	1.5			EN 301 489-24
						EN 301 908-3
						EN 301 908-7
						EN 301 908-11
						EN 301 489-23

Private Mobile

Frequency Band	Applicable Sub-section of Framework		Reference standards for conformity	
380 - 399.9 MHz 410 - 430 MHz	TETRA radio equipment	2.1	Z S E N 3 0 1 4 8 9 1	EN 301 489-18 EN 303 035-1 EN 303 035-2
3.5 - 3.8 MHz 7.0 - 7.2 MHz 14 - 14.35 MHz 21 - 21.45 MHz 24.89 - 24.99 MHz 144 - 146 MHz	Amateur radio and ancillary equipment	2.2		ZS EN 301 489-15 EN 301 783-2
26.965- 27.405 MHz	Citizen band radio and ancillary equipment	2.3		EN 301 489-13 EN 300 135 EN 300 135-1 EN 300 135-2
430- 470 MHz	Analogue and digital PMR equipment	2.4		EN 300 296-2 EN 301 166-2 EN 300 489-5 EN 300 793 EN 300 471-2 EN 300 086-2 EN 300 113-2
	Short range PMR and ancillary equipment	2.5		EN 300 390-2
156.025 - 174 MHz	Maritime Radio	2.6		EN 300 698 EN 301 025 EN 301 178
1.260 - 1.350 GHz 2.700 - 3.300 GHz 9.3 - 9.5 GHz 76 - 77.5 GHz	Radar for radio-navigation	2.7		TBC EN 302 248 EN 302 194

Fixed Wireless

Service	Frequency Band	Applicable Sub-section of Framework		Reference standards for conformity		
RLAN Wi-Fi WLAN	5.725 - 5.85 GHz	5 GHz high performance RLAN and ancillary equipment	3.1	Z S E N 3 0 1 4 8 9 1 4 8 9 1	ZS EN 301 489-17 EN 301 893	
WiMax	2.495 - 2.690 GHz 3.40 - 3.60 GHz	WiMax equipment	3.2			EN 301 753
FWA WLL (phased out) BWA	10.60 - 10.68 GHz 1.429 - 1.452 GHz 2.3 - 2.4 GHz 4.8 - 5.0 GHz	Fixed Wireless Access and ancillary equipment	3.3			EN 301 753 EN 302 326-2 EN 302 326-3
Digital Microwave Radio	10.7 - 11.7 GHz 12.75 - 13.25 GHz 14.40 - 15.35 GHz 17.70 - 19.70 GHz 21.20 - 23.60 GHz 27.50 - 29.50 GHz 31.80 - 33.40 GHz 37.0 - 39.5 GHz	Point-to-point radio fixed link equipment and antenna	3.4		EN 301 489-4 EN 302 217-2-2 EN 302 217-3	EN 302 217-4-2

Short Range Devices

Typical Application Type	Authorised Frequency Bands /Frequencies (channel spacing)	Applicable sub-section of Framework		Reference standards for conformity		Maximum Field Strength /RF Output power
ISM	6765 kHz - 6795 kHz 13.553 MHz - 13.567 MHz 26.957 MHz - 27.405 MHz 40.66 MHz - 40.7 MHz	Non-specific short range devices	4.1	ZS E N	FCC Part 15 ZS EN 300 220 ZS EN 300 330	42 dBuA/m at 10m e.r.p. 10 mW
	868 MHz - 868.6 MHz 868.7 MHz - 869.2 MHz 869.4 MHz - 869.65 MHz 869.7 MHz - 870 MHz	Non-specific short range devices	4.1	3 0 1	ZS EN 300 220	e.r.p. 25 mW e.r.p. 100 mW e.r.p. 25 mW e.r.p. 25 mW
ISM, WLAN, Bluetooth	2400 MHz - 2483.5 MHz	Non-specific short range devices	4.1	4 8	ZS EN 300 440	e.i.r.p. 10 mW indoor only
ISM	61 GHz - 61.5 GHz 122 GHz - 123 GHz 244 GHz- 246 GHz	Non-specific short range devices	4.1	9 1	ZS EN 300 440 FCC Part 15	e.i.r.p. 100 mW

Short Range Devices

Typical Application Type	Authorised Frequency Bands /Frequencies (channel spacing)	Applicable sub-section of Framework		Reference standards for conformity		Maximum Field Strength /RF Output power
Active Medical implant, hearing aids, etc.	401 MHz - 406 MHz 9 kHz -315 kHz 30 MHz - 37.5 MHz 169.4 MHz - 174 MHz	Wireless applications in healthcare & listening devices	4.7	Z	EN 301 839 EN 302 537 EN 302 195 EN 302 510 ZS EN 300 422	e.r.p 25 uW 30 dBuA/m at 10 m e.r.p 1 mW e.r.p 10 mW
Cordless loudspeakers, headphones, etc.	43 MHz, 46 MHz, 47MHz, 49 MHz 900 MHz 1795 MHz - 1800 MHz 87.5 MHz - 108 MHz	Wireless audio applications	4.8	S E N	EN 301 357	e.r.p. 10 mW " e.i.r.p. 20 mW e.r.p 5 mW
Vehicle immobilizer, antitheft system, navigation device, etc.	133 kHz 134 kHz 433.72 MHz - 434.12 MHz 133 kHz 433 MHz 458.95 MHz 2450.00 MHz 24.15 GHz 76 GHz - 77 GHz 1575.42 MHz 13.553 MHz - 13.576 MHz	Vehicle-fitted radio products	4.9	3 0 1 4 8 9 1	ZS EN 300 220 " " " " " " ZS EN 300 328 ZS EN 300 440 EN 301 091 EN 302 291 ZS EN 300 330	60 dBuA/m at 10 m 70 dBuA/m at 10 m, e.r.p. 10 mW (10 dBm) 75.6 dBuA/m at 3m, e.r.p. 0.1 mW 95 dBuA/m at 3 m e.r.p 1 mW 70 dBuA/m at 10 m, e.r.p. 10 mW (10 dBm) e.i.r.p 1 mW e.i.r.p 10 mW 10 W to 15 W Peak e.i.r.p 316.22 W Peak e.i.r.p 60 dBuA/m at 10 m

Short Range Devices

Typical Application Type	Authorised Frequency Bands /Frequencies (channel spacing)	Applicable sub-section of Framework		Reference standards for conformity		Maximum Field Strength / RF Output power			
SRD radar systems	10.5 GHz - 10.6 GHz 24.05 GHz - 24.25 GHz 57 GHz - 64 GHz 75 GHz - 85 GHz	Radio determination application	4.2	Z S E N 3 0 1 4 8 9 1	ZS EN 300 440 EN 302 288 EN 302 372	e.i.r.p 500 mW e.i.r.p 100 mW e.i.r.p -41.3 dBm /MHz			
Vehicle telematics	5795 MHz - 5805 MHz 76 GHz- 77 GHz	Road transport and traffic telematics	4.3		EN 300 674 EN 200 674 EN 301 091	e.i.r.p 2 W 55 dBm peak e.i.r.p -50 dBm Average power- 23.5 dBm			
Car immobilisers, alarm systems, data transfer to handheld devices, etc.	9 kHz - 148.5 kHz 3155 kHz- 400 kHz	Inductive applications	4.4		EN 302 291 ZS EN 300 330	72 dBuA/m at 10 m 13.5 dBuA/m at 10 m			
	6765 kHz - 6795 kHz 7400 kHz - 8800 kHz 13.553 MHz - 13.567 MHz 26.957 MHz - 27.283 MHz					42 dBuA/m at 10 m 9 dBuA/m at 10 m 60 dBuA/m at 10 m 42 dBuA/m at 10 m, e.r.p 10 mW			
	430 MHz - 435 MHz 830 MHz - 850 MHz				FCC Part 15 ZS EN 300 220	e.r.p 10 mW e.r.p 10 mW			
	Purpose of controlling movement of a model				26 MHz, 27 MHz, 76 MHz 34.995 MHz, 35.225 MHz	Model control	4.5	ZS EN 300 220	e.r.p 100 mW Only for flying models
	Article identification, asset tracking, alarms, etc.				13.553 MHz - 13.567 MHz 2446 MHz- 2454 MHz	Radio Frequency identification applications	4.6	EN 302 291 ZS EN 300 440	60 dBuA/m at 10 m e.i.r.p 500 mW

Satellite

Service defined	Frequency Band	Applicable Sub-section of Framework		Reference standards for conformity		
				Z S E N	EN 301 489-20	EN 301 721
Amateur Satellite Radio	7.0 - 7.1 MHz 14.0 - 14.25 MHz 21.0 - 21.45 MHz 24.89 - 24.99 MHz 144 - 146 MHz 24.0 - 24.05 GHz 47.0 - 47.2 GHz	MSS equipment operating below 1 GHz	5.1	3 0 1 4 8 9 1	EN 301 489-20	EN 301 721
Radar & Navigation Systems and Active Sensors (GPS) S-DAB	1215 - 1260 MHz 1479.5 -1492 MHz	MSS equipment operating between 1-3 GHz	5.2			EN 301 425 EN 301 441 EN 301 442 EN 301 444 EN 301 681
Satellite TV Other VSAT	3.625 - 4.2 GHz 5.85 - 6.45 GHz 10.7 - 12.75 GHz 13.75 - 14.5 GHz 14 - 14.5 GHz 19.7- 20.2 GHz 21.4 - 22 GHz	VSAT and ancillary equipment	5.3		EN 301 489-12	EN 301 428 EN 301 443 EN 301 360 EN 301 459

Broadcasting

Service defined	Frequency Band	Applicable Sub-section of Framework		Reference standards for conformity	
FM Radio T-DAB	87.5 - 108 MHz 1452 - 1479.5 MHz	Sound broadcasting equipment	6.1	ZS E N 3 0 1 4	EN 301 489-11 EN 302 018-2
TV Broadcast	47 -68 MHz 174 - 230 MHz 470 - 790 MHz	Vision broadcasting equipment	6.2	8 9 1	EN 301 489-7 EN 301 489-14 EN 302 297

Broadcasting

Type of TTE	Subtype	Applicable Standard
Decoder	Terrestrial	ZS 817: 2014
TV	iDTV	ZS 824: 2015

Telecommunications Terminal Equipment (TTE) - PSTN

Type of TTE	Subtype	Applicable Standard	Description
Analog PSTN TTE: *Single Line equipment directly connecting to analog PSTN *Single Line telephony *Fax Machines *Analogue Modems *Answering machines *Adjuncts and telephones offering analogue CLI *Subscriber Meter *PSTN Connected Security Alarms	General (applicable to all)	ZS ETSI TBR 021	* Terminal Equipment (TE); Attachment requirements for pan-European approval for connection to the analogue Public Switched Telephone Networks (PSTNs) of TE (excluding supporting the voice telephony service) in which network addressing, if provided, is by means of Dual Tone Multi-Frequency (DTMF) signalling
	Pulse or Loop Disconnect dialling	ZS ETSI ES 201 187	* 2-wire analogue voice band interfaces; Loop Disconnect (LD) dialling specific requirements
	Analogue telephones and other equipment whichoff analogue handset telephony such as modems or fax machines CallerLine Identification (CLI)	ZS ETSI TBR 038 ZS ETSI ES 201 235-3	* Public Switched Telephone Network (PSTN); Attachment requirements for a terminal equipment incorporating an analogue handset function capable of "supporting the justified case service when connected to the analogue interface of the PSTN * Access and terminals (AT) specification of Dual-Tone Multi Frequency (DTMF) Transmitters and receivers; Part 3 Receivers
	Fixed Line Short Message Service (SMS)	ZS ETSI ES 201 912	* Access and Terminals (AT); Short Message Service (SMS) for PSTN/ ISDN; Short Message Communication between a fixed network Short Message Terminal Equipment and a Short Message Service Centre
		ETSI TS 103 912	* Access and Terminals (AT); Short Message Service (SMS) for PSTN/ ISDN; Short Message Communication between a fixed network Short Message Terminal Equipment and a Short Message Service Center (Corrections to ES 201 912 V1.1.1)
		ZS ETSI EN 300 659-2	* Access and Terminals (AT); Analogue access to the Public Switched Telephone Network (PSTN); Subscriber line protocol over the local loop for display (and related) services; Part2: Off-hook data transmission
		ETSI ES 200 778-2	* Access and Terminals (AT); Analogue access to

			the Public Switched Telephone Network (PSTN); Protocol over the local loop for display and related services; Terminal equipment requirements
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TTE - xDSL

Type of TTE	Subtype	Applicable Standard	Description
xDSL Modem	HDSL	ZS ETSI ETR 152	* Transmission and Multiplexing (TM); High bit-rate Digital Subscriber Line (HDSL) transmission system on metallic local lines; HDSL core specification and applications for 2 048 kbit/s based access digital Sections
		ZS ETSI TS 101 135	* Transmission and Multiplexing (TM); High bit-rate Digital Subscriber Line (HDSL) transmission system on metallic local lines; HDSL core specification and applications for combined ISDN-BA and 2 048 kbit/s Transmission
	SHDSL	ZS ITU G992.1	* Single-Pair High-Speed Digital Subscriber Line (SHDSL) subscriber transceivers
	SDSL	ZS ETSI TS 101 524-1	* Transmission and Multiplexing Access transmission system on metallic access cables. Symmetrical single pair high bit rate Digital Subscriber Line (SDSL)
	ADSL	ETSI ES 202 913	* Access and Terminals (AT); POTS requirements applicable to ADSL modems when connected to an analogue presented PSTN line
		ETSI TS 101 952-1-1	* Access network xDSL transmission filters. Part 1: ADSL splitters for European deployment; Sub-part 1: Specification of the low pass part of ADSL/POTS Splitters
		ETSI TS 101 952-1-2	* Access network xDSL transmission filters. Part 1: ADSL splitters for European deployment; Sub-part 2: Specification of the high pass part of ADSL/POTS Splitters

TTE - Other

Type of TTE	Subtype	Applicable Standard	Description
Voice Equipment	Payphone	ZS ETSI1-ETS 300 400	* Integrated Services Digital Network (ISDN); Telephony terminal Payphones
	PBX and Key Systems	ZS ETSI ES 201 168	* Speech Processing, Transmission and Quality Aspects (STQ); Transmission characteristics of digital Private Branch exchanges (PBXs) for interconnection to private networks, to the public switched network or to IP gateways
	Voice over IP terminals	ZS ITU-T Rec. G.711	* The Vo/IP terminal equipment shall have an audio codec capable of encoding and decoding speech according to ITU-T Rec. G.711 and capable of transmitting and receiving A-law and u-law. It may support other codecs (ITU-T Rec. G.726 ADPCM, G.728 LD-CELP, G.729 CS-ACELP G.729a CS-ACELP, G.723.1 MPMLQ G.723 ACELP). * The Vo/IP terminal equipment shall support Dynamic Host Configuration Protocol (DHCP) and Real-Time Protocol (RTP).
		ZS ITU-T Rec. H.323	* If the video codec is provided, it shall comply with requirements given in ITU-T Rec. H.323.
		IETF MEGACOIP Phone Media Gateway standard	* If the Vo/IP terminal equipment is an MEGACO/H248 based terminal it shall also support IETF MEGACOIP Phone Media Gateway standard
		IETF Session Initiation Protocol (RFC3261, RFC3262, RFC3263, RFC3264 AND RFC3265)	* If Vo/IP Terminal Equipment uses SIP
		IETF RFC1933	* For Vo/IP Terminal Equipment with IPv6 support the equipment shall implement the mechanisms specified in RFC1933 (Transition Mechanisms for IPv6 Hosts and Routers) in order to maintain compatibility with IPv4.
		ETSI ES 201 168	* Speech Processing, Transmission and Quality Aspects (STQ); Transmission characteristics of digital Private Branch exchanges (PBXs) for interconnection to private networks, to the

			public switched network or to IP gateways
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TTE – Other

Type of TTE	Subtype	Applicable Standard	Description
Leased Lines	TTE offering direct connection to SDH relay services	ZS ETSI ETS 300 232/AI	* Transmission and Multiplexing (TM); Optical interfaces for equipments and systems relating to the Synchronous Digital Hierarchy (SDH)
		ZS ETSI ETS 300 300	* Broadband Integrated Services Digital Network (BISDN); Synchronous Digital Hierarchy (SDH) based user network access; Physical layer User Network Interfaces (UNI) for 155 520 kbit/s and 622 080 kbit/s Asynchronous Transfer Mode (ATM) B-ISDN applications ITU-R:
		ZS ETSI ETS 300 814	* Digital Video Broadcasting (DVB); DVB interfaces to Synchronous Digital Hierarchy (SDH) networks
	Switching equipments offering direct connection to 2 and 4 wire analogue Leased Line services	ETSI ES 203 021-1	* Access and Terminals (AT); Harmonized basic attachment requirements for Terminals for connection to analogue interfaces of the Telephone Networks; Update of the technical contents fo TBR 2.1, EN 301 437, TBR 015 TBR 017; Part 1: General aspects
		ETSI ES 203 021-2	* Access and Terminals (AT); Harmonized basic attachment requirements for Terminals for connection to analogue interfaces of the Telephone Networks; Update of the technical contents fo TBR 2.1, EN 301 437, TBR 015 TBR 017; Part 2: Basic transmission and Protection
	Digital Leased Line - Co-directional G703	ZS ITU-T Rec. G.703	* General aspects of digital transmission systems terminal equipments Physical /Electrical characteristics of Hierarchical Digital Interfaces
	Digital Leased Line - N x 64kbps	ZS ITU-T Rec. H.244	* Synchronized aggregation of multiple 64 or 56 kbit/s channels
		ZS ITU-T Rec. H.323	* Packet-based multimedia communications systems
		ZS ETSI TBR 014	* Business Telecommunications (BTC); 64 kbit/s digital unrestricted leased line with octet integrity (D64U); Attachment requirements for terminal equipment interface
		ZS ETSI TBR 014/A1	* Business Telecommunications (BTC); 64 kbit/s

			digital unrestricted leased line with octet integrity (D64U); Attachment requirements for terminal equipment interface
		ZS ETSI EN 300 290	* Access and Terminals (AT); 64 kbit/s digital unrestricted leased line with octet integrity (D64U); Terminal equipment Interface

TTE- Other

Type of TTE	Subtype	Applicable Standard	Description
Digital Leased Lines	Digital Leased Line - E1 2.048Mbps	ZS ETSI TBR12	* Business Telecommunications (BTC); 2.048 kbit/s digital unstructured leased lines (D2048U); Attachment requirements for terminal equipment interface
		ETSI TBR012/AI	* Business Telecommunications (BTC); Open Network Provision (ONP) technical requirements; 2.048 kbit/s digital unstructured leased line (D2048U); Attachment requirements or terminal equipment interface
		ZS ETSI TBR13	* Business Telecommunications (BTC); 2.048 kbit/s digital unstructured leased lines (D2048S); Attachment requirements or terminal equipment interface
		ZS ETSI EN 300 248	* Access and Terminal (AT); 2 048 kbit/s digital unstructured leased line (D2048U); Terminal equipment interface
		ZS ETSI EN 300 420	* Title: Access and Terminals (AT); 2 048 kbit/s digital unstructured leased lines (D2048S); terminal equipment interface
	Digital Leased Line - E3 45Mbps	ZS ETSI EN 300 689	* Access and Terminal (AT); 34 Mbit/s digital leased line (D34U and D34S) Terminal equipment interface
		ETSI TBR24	* Business Telecommunications (BTC); 34 Mbit/s digital unstructured and structured leased lines (D34Uand D34S); Attachment requirements for terminal equipment interface
	Digital Leased Line - 140Mbps	ZS ETSI TBR 025	* Business Telecommunications (BTC); 140 Mbit/s digital unstructured and structured leased lines (D140U and D140S); Attachment requirements for terminal equipment interface
		ZS ETSI EN 300 690	* Access and Terminals (AT); 140 Mbit/s digital leased lines (D140U and D140S); Attachment * (D140U and D140S); Terminal equipment

			interface
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TTE – Switched Data

Type of TTE	Subtype	Applicable Standard	Description
Switched data services	Basic Rate ISDN	ZS ETSI TBR 003	* Integrated Services Digital Network (ISDN); Attachment requirements for terminal equipment to connection to an ISDN using ISDN basic access
		ZS ETSI TBR 008	* Integrated Services Digital Network (ISDN); Telephony 3.1 kHz teleservices; Attachment requirements for handset terminals
		ZS ITU-T Recommendation G.961	* Digital transmission system on metallic local lines for ISDN basic rate access
		ZS ETSI ETR 080	* Transmission and Multiplexing (TM); Integrated Services Digital Network (ISDN) basic rate access; Digital transmission system on metallic local lines
	Primary Rate ISDN	ZS ETSI TBR 004/AI	* Integrated Services Digital Network (ISDN); Attachment requirements for terminal equipment to connection to an ISDN using ISDN primary rate access
		ZS ETSI TBR 008	* Integrated Services Digital Network (ISDN); Telephony 3.1 kHz teleservices; Attachment requirements for handset terminals systems
	X25	ZS ETSI TBR 2	* Attachment requirements for Data Terminal Equipment (DTE) to connect to Packet Switched Public Data Networks (PSPDNs) for CCITT Recommendation X.25 interfaces at data signalling rates up to 1920 kbit/s utilizing interfaces derived from CCITT Recommendations X.21 and X.21bis
		ZS ITU-T Recommendation X.25	* Interface between Data Terminal Equipment (DTE) and Data Circuit-terminating Equipment (DCE) for Terminals operating in the Packet Mode and connected to Public Data Networks by Dedicated Circuit

TTE – Switched Data

Type of TTE	Subtype	Applicable Standard	Description
Switched data services	X21	ZS ETSI TBR 2	* Attachment requirements for Data Terminal Equipment (DTE) to connect to Packet Switched Public Data Networks (PSPDNs) for CCITT Recommendation X.25 interfaces at data signalling rates up to 1920 kbit/s utilizing interfaces derived from CCITT Recommendations X.21 and X.21bis
		ZS ETSI ETS300 103	* Integrated Services Digital Network (ISDN); Support of CCITT Recommendation X.21. X.21 bis and X.20 bis based Data Terminal Equipments (DTEs) by an ISDN Synchronous and asynchronous terminal adaption functions
		ZS ITU-T Recommendation X.21	* Interface between Data Terminal Equipment and Data Circuit-termination equipment for synchronous operation on Public Data Network
		ZS ITU-T Recommendation X.21 bis	* Use on Public Data Networks of Data Terminal Equipment (DTE) which is designed for interfacing to Synchronous V-Series Modems
	Frame Relay	ZS ETSI TCRT 020	* Network Aspects (NA); European frame relay services
		ZS ETSI ETS300 399-1	* Frame relay services; Part 1: General description
		ZS ETSI ETS300 399-2	* Frame relay services; Part 2: Integrated Services Digital Network (ISDN); Frame relay bearer service; Service definition
		ZS ETSI ETS300 399-3	* Frame relay services; Part 3: Frame relay data transmission service; Service definition

Health and Safety

Type of Health and Safety standard	Applicable Standard	Description
Electrical	EN 60950 or IEC 60950	* Safety of information technology equipment
Radio and SAR	ZS EN 50360	* Product standard to demonstrate the compliance of mobile phones with the basic restrictions related to human exposure to electromagnetic fields (300 MHz - 3 GHz)

	EN 50371	* Generic standard to demonstrate the compliance of low power electronic and electrical apparatus with the basic restrictions related to human exposure to electromagnetic fields (10 MHz - 300 GHz) - General public
	ZS EN 50385	* Product standard to demonstrate the compliance of radio base stations and fixed terminal stations for wireless
	EN 50392	* Generic standard to demonstrate the compliance of electronic and electrical apparatus with the basic restrictions related to human exposure to electromagnetic fields (0 Hz - 300 GHz)
	ZS EN 60215	* Safety requirements for radio transmitting equipment
Optical and laser	ZS EN 60825-1 or ZS IEC 60825-1 ZS EN 60825-2 or ZS IEC 60825-2	* Safety of laser products - Part 1: Equipment classification, requirements and user's guide * Safety of laser products - Part 2: Safety of optical fibre communication systems

EMC

Type of EMC standard	Applicable Standard	Description
Information technology equipment	ZS EN 55022 or CISPR 22	* Radio disturbance characteristics * Limits and methods of measurement
	ZS EN 55024 or CISPR 24	* Immunity characteristics * Limits and methods of measurement
	ZS EN 61000-3-2 or ZS IEC 61000-3-2	* Limits for harmonic current emissions (equipment input current up to and including 16 A per phase) * Limitation of voltage changes, voltage fluctuations and flicker in
	ZS EN 61000-3-3 or ZS IEC 61000-3-3	public low-voltage supply systems
Limits	ZS EN 61000-3-11 or ZS IEC 61000-3-11	* Equipment with rated current ≤ 75 A and subject to conditional connection * Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems * Equipment with rated current ≤ 75 A and subject to conditional connection * Electromagnetic compatibility and Radio spectrum Matters

		(ERM)
	ETSI EN 301 489	* ElectroMagnetic Compatibility (EMC) standard for radio equipment and services * Various parts as applicable to terminal type
	ZS EN 61000-6-1 or ZS IEC 61000-6-1	* Immunity for residential commercial and light-industrial environments
Generic standards	ZS EN 61000-6-2 or ZS IEC 61000-6-2	* Immunity for industrial environments
	ZS EN 61000-6-3 or ZS IEC 61000-6-3	* Emission standard for residential, commercial and light-industrial environments
	ZS EN 61000-6-4 or ZS IEC 61000-6-4	* Emission standard for industrial environments

APPENDIX 3

ZICTA Type Approval Label



- i. The characters shall appear in black print against a white background.
- ii. The colour code is

Blue

- a. C: 100
- b. M:100
- c. Y: 0
- d. K: 0

Black

- a. C: 0
 - b. M: 0
 - c. Y; 0
 - d. K: 100
- iii. No character shall be less than 2mm in height.
 - iv. The word “ZICTA” shall be at least 3mm in height. The size ratio of all the characters and symbol shall be maintained relative to ZICTA.
 - v. Where “ZMB/ZICTA/TA/YYYY/..” appears shall be substituted the registration type approval certificate number allocated by ZICTA to the concerned equipment model.