



**Scheme for Designating
Local
Testing Laboratories and Certification Bodies**

for

Conformity Assessment

of

Telecommunication Equipment

IDA MRA DES SCHEME

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Info-Communications Development Authority of Singapore
Resource Management & Standards Division
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1 Introduction

- 1.1 The Infocomm Development Authority of Singapore (IDA) designates Singapore testing laboratories and product certification bodies as conformity assessment bodies (CABs) for conformity assessment of telecommunication equipment to IDA's technical regulations (see Annex 2). IDA may also designate Singapore CABs for conformity assessment to the technical regulations of foreign countries having Mutual Recognition Arrangements (MRAs) with IDA Singapore.
- 1.2 This document outlines the process to be followed and the conditions and requirements to be fulfilled by applicants requesting for designation of testing laboratories or certification bodies to perform conformity assessment. Under this Scheme, IDA recognises a CAB designated by IDA for testing and/or certification to IDA's technical regulations. Under the conditions and procedures specified in an MRA, MRA Parties will normally recognise a CAB designated by IDA for testing and/or certification to the MRA Parties' technical regulations.
- 1.3 Designation means the authorisation by a Designating Authority of a CAB to undertake specified conformity assessment activities under the terms of an MRA. This may include procedures defined by MRA Parties for telecommunication equipment and the associated EMC and/or electrical safety requirements.

2 References

ISO/IEC Guide 2:1996	Standardization and related activities – General vocabulary
ISO/IEC 17025: 1999	General requirements for the competence of testing and calibration laboratories
ISO/IEC Guide 65: 1996	General requirements for bodies operating product certification systems

3 Definitions

Accreditation Body is a body appointed by a Party to conduct and administer an accreditation system that grants accreditation to testing laboratories or certification bodies for conformity assessment of telecommunication equipment.

Administrative Arrangements are publicly available procedures or legal arrangements within a Party's jurisdiction which have impact on the conformity assessment procedures for telecommunication equipment within the scope of an MRA.

Conformity Assessment is any activity concerned with determining that the relevant requirements are fulfilled. Typical examples of conformity assessment activities are testing, evaluation, verification, assurance of conformity (supplier's declaration and certification), registration, accreditation and approval as well as their combinations.

Conformity Assessment Body refers to a third party or a supplier's testing laboratory, or a certification body that performs conformity assessment to an importing Party's Technical Regulations.

Designating Authority is a body with authority and competence to designate, list, verify the compliance of, limit the designation of, and withdraw the designation of CABs within its jurisdiction.

Designated CAB refers to a conformity assessment body designated by IDA.

Designated testing laboratory refers to a testing laboratory designated by IDA.

Designated certification body refers to a certification body designated by IDA.

Party refers to a member country that chooses to join an MRA.

Supplier refers to the party that is responsible for ensuring that products meet and, if applicable, continue to meet, the requirements on which the certification is based.

Technical Regulations are those technical requirements, legislative and regulatory provisions, and administrative arrangements that a Party has specified pertaining to the registration, testing or certification of equipment in which compliance is mandatory.

Telecommunication equipment or equipment refers to line terminal equipment and radio-communication equipment.

4 Conceptual Scheme of Designation



Schematic Diagram for Designation of CABs

5 Designating Authority

- 5.1 IDA, as the Designating Authority in Singapore, designates testing laboratories and certification bodies as CABs for conformity assessment of telecommunication equipment to IDA's technical specifications.
- 5.2 Where required to act as the Designating Authority under an MRA, IDA will designate CABs in Singapore for recognition by the other MRA Parties as specified under the MRA.

6 Scope of Designation

- 6.1 Application for designation is open to any testing laboratory or certification body which conducts its business of conformity assessment in Singapore. Testing laboratories and certification bodies accredited by the Singapore Accreditation Council (SAC) may apply for designation. The scope of designation is limited to the scope for which accreditation is granted by the SAC.
- 6.2 IDA designates CABs in Singapore for the testing and certification of telecommunication equipment and the electromagnetic compatibility, radiation safety and electrical safety requirements of such equipment.
- 6.3 Designation for MRA purposes will be carried out in accordance with the provisions of the applicable MRA. Foreign testing laboratories and certification bodies may contact their Designating Authorities for designation and notification to IDA provided that their countries have an MRA with IDA Singapore. Please refer to the "IDA Scheme for Recognising Foreign Testing Laboratories and Certification Bodies for Conformity Assessment of Telecommunication Equipment" (IDA MRA REC Scheme) for more information.

7 Scope of Accreditation

- 7.1 Test laboratories may be accredited by SAC and designated by IDA to carry out tests to one or more of the applicable IDA Technical Regulations for the line terminal and/or radio-communication equipment under test (see Annex 2).
- 7.2 Certification bodies may be accredited by SAC and designated by IDA to certify equipment to one or more of the applicable IDA Technical Regulations under the scope for line terminal and/or radio-communication equipment in Annex 2. The scope of equipment permitted is dependent on the certification bodies' core testing capabilities, knowledge and expertise in evaluating test data and reports to the IDA technical regulations. The minimum set of testing capabilities expected of certification bodies to be considered for a particular scope of accreditation and designation is defined in § 5 and § 6 in Annex 3.

8 Eligibility of Testing Laboratories and Certification Bodies

- 8.1 To be eligible for designation as an IDA recognised test laboratory, the applicant or organisation must:
 - (a) be an entity legally identifiable and located in Singapore;
 - (b) be accredited by SAC in accordance with ISO/IEC 17025 for testing laboratories in the relevant area of telecommunications, EMC or electrical safety; the accreditation shall be relevant to the equipment types and technical regulations for which designation is sought;
 - (c) have the capability and technical competence in performing the tests against the technical regulations concerned; and

- (d) have expert knowledge of all the applicable technical regulations and administrative requirements relevant to the conformity assessment of the equipment.
- 8.2 To be eligible for designation as an IDA recognised certification body, the applicant or organisation must:
- (a) be an entity legally identifiable and located in Singapore;
 - (b) be accredited by SAC in accordance with ISO/IEC Guide 65 for equipment certification bodies in the relevant area of telecommunications, EMC or electrical safety; the accreditation shall be relevant to the equipment types and technical regulations for which designation is sought;
 - (c) have testing facilities accredited in accordance with ISO/IEC 17025 in the relevant area of telecommunications, EMC or electrical safety; the accreditation shall be relevant to the equipment types and technical regulations for which designation is sought; and/or have arrangements with testing laboratories that are recognised by IDA under MRA or have been evaluated by the certification body to be competent in accordance with ISO/IEC 17025;
 - (d) have the capability and technical competence in performing the tests and certification against the technical regulations concerned; and
 - (e) have expert knowledge of all the applicable technical regulations and administrative requirements relevant to the conformity assessment of the equipment.

9 Application for Designation

- 9.1 Applications or enquiries for designation of CABs (testing laboratories or certification bodies) should be addressed to IDA at the following address:

Manager (Standards Development & Equipment Conformance)
Resource Management & Standards Division
Infocomm Development Authority of Singapore (IDA)
10 Pasir Panjang Road
#10-01 Mapletree Business City
Singapore 117438
Fax: (65) 6659 2502

- 9.2 The applicant should complete the application form (shown in Annex 1) and return it with the application package to IDA.

9.3 Application Package for Designation of Testing Laboratory

The application package shall include the following:

- (a) Documents showing proof of the testing laboratory as an identifiable legal entity;
- (b) Certificate of Accreditation by SAC, indicating the scope of accreditation and including information that the testing laboratory has been accredited to ISO/IEC 17025 to the technical regulations, standards or specifications for which designation is sought;
- (c) Organisation Structure and Staffing Chart;
- (d) Laboratory Layout;
- (e) Statement of testing facilities and description of test methods to be used for testing each particular technical regulation, standard or specification;

- (f) Sample copy of the test report to be used by the testing laboratory;
- (g) Quality Manual; and
- (h) A fee of \$ 200 to be paid at the time of submission of application. This fee is non-refundable. Payment of fees should be in cheques made payable to "IDA Singapore".

9.3 Application Package for Designation of Certification Body

The application package shall include the following:

- (a) Documents showing proof of the certification body as an identifiable legal entity;
- (b) Certificate of Accreditation by SAC, indicating the scope of accreditation and including information that the certification body has been accredited to ISO/IEC 17025 and Guide 65, and to the technical regulations, standards or specifications for which designation is sought;
- (c) Copies of contractual arrangements made with other recognised testing laboratories (if any);
- (d) Organisation Structure and Staffing Chart;
- (e) Laboratory Layout;
- (f) Statement of testing facilities and description of test methods to be used for testing each particular technical regulation, standard or specification;
- (g) Sample copies of the test reports and certificate to be used by the certification body;
- (h) Quality Manual;
- (i) Checklists to show that the certification body meets the requirements of IDA and/or the MRA partner(s) for which designation is sought (e.g. a copy of checklist given in Annex 3 is returned to IDA with the relevant sections completed according to the scope of accreditation achieved);
- (j) A fee of \$ 200 to be paid at the time of submission of application. This fee is non-refundable. Payment of fees should be in cheques made payable to "IDA Singapore".

10 Approval

- 10.1 During the evaluation of the application, applicant may need to make arrangements for IDA's representatives to visit the applicant's laboratories or premises to observe testing in progress and carry out whatever evaluations deemed necessary.
- 10.2 After completion of evaluation by the IDA, the applicant will be informed of the outcome of the application. A Designation Certificate will be issued when IDA is satisfied that the applicant has complied with the stipulated requirements.
- 10.3 Designation by IDA does not imply the acceptance by IDA of any responsibility for the services provided by the designated CAB (testing laboratory or certification body).
- 10.4 The Designation is valid for a period of three (3) years with provision for renewal on expiry. Validity is subject to the continued accreditation by SAC.

11 Obligations of the Designated Testing Laboratory

- 11.1 Designated testing laboratories shall ensure that they maintain their accreditation status from SAC.
- 11.2 Designated testing laboratories shall ensure that their testing of equipment is in accordance with the procedures, rules and policies of IDA or the requirements as provided for under the MRA.
- 11.3 Unless specifically approved by IDA, designated testing laboratories shall not conduct testing for prohibited equipment set out in the Third Schedule of the Telecommunication (Dealers) Regulations 2004 and the Telecommunication (Dealers) (Amendment) Regulations 2007, listed as follows:
- (a) Scanning Receivers;
 - (b) Military Communication Equipment;
 - (c) Telephone Voice Changing Equipment;
 - (d) Radio-communication Equipment operating in frequency bands 890-915 MHz and 935-960 MHz except Cellular Mobile Phones or such other equipment approved by IDA; and
 - (e) Radio-communication Jamming Devices operating in any frequency band.
- 11.4 Designated testing laboratories shall immediately notify IDA on any of the following:
- (a) changes in its legal, commercial, organisation or accreditation status;
 - (b) changes of premises;
 - (c) changes which may affect continuing compliance with any of the criteria or requirements specified by IDA or the relevant MRA.
- 11.5 Designated testing laboratories shall fully indemnify and hold IDA harmless from and against all liabilities, damages, claims, costs and expenses incurred or sustained by IDA as a result of any action taken or omitted to be taken by IDA relating to the designation of such testing laboratories.
- 11.6 Designated testing laboratories shall comply with such terms and conditions of designation as IDA may publish from time to time.

12 Obligations of the Designated Certification Bodies

- 12.1 Designated certification bodies shall ensure that they maintain their accreditation status from SAC.
- 12.2 Designated certification bodies shall ensure that their testing, evaluation and certification of equipment is in accordance with the procedures, rules and policies of IDA or the requirements as provided for under the MRA.
- 12.3 Equipment certification carried out by a designated certification body shall be based on an application package comprising:
- (a) An application form
 - (b) IDA specification checklist (if applicable);

- (c) Test reports from type testing of a sample model of equipment to IDA's technical regulations (telecommunications, EMC, electrical safety and EMR where applicable) by testing laboratories accredited to ISO/IEC 17025;
 - (d) Four colour photographs capturing front, rear, side view and product label of the equipment which shows trade and product name; and
 - (e) A set of technical documents consisting of a general description of the equipment, technical data, facilities supported by the equipment, sales brochures and other related documents.
- 12.4 Unless specifically approved by IDA, designated certification bodies shall not conduct certification for prohibited equipment set out in the Third Schedule of the Telecommunication (Dealers) Regulations 2004 and the Telecommunication (Dealers) (Amendment) Regulations 2007, listed as follows:
- (a) Scanning Receivers;
 - (b) Military Communication Equipment;
 - (c) Telephone Voice Changing Equipment;
 - (d) Radio-communication Equipment operating in frequency bands 890-915 MHz and 935-960 MHz except Cellular Mobile Phones or such other equipment approved by IDA; and
 - (e) Radio-communication Jamming Devices operating in any frequency band.
- 12.5 Designated certification bodies using the services of subcontracting laboratories shall remain responsible for the tests and shall ensure that the laboratory is designated by IDA, or accredited to ISO/IEC 17025 or evaluated by it to be competent in accordance with ISO/IEC 17025 and testing to IDA's technical regulations.
- 12.6 After issuing a certificate of conformity, the designated certification body when requested by IDA, shall submit a copy of the certificate and application package to IDA in English Language.
- 12.7 Designated certification bodies shall have a record system which provides for a retention period of 5 years for documents related to the equipment certification.
- 12.8 The duties of a designated certification body shall include the publishing and maintaining of a list of equipment certifications, submission of testing/evaluation/certification reports and other information, participation in appropriate proficiency testing programs and carrying out of tasks as requested by IDA or required under the MRA, as appropriate. All information and reports submitted to IDA shall be in English Language.
- 12.9 Designated certification bodies should perform post-certification surveillance activities for products certified by them as required by IDA or the relevant MRA. Surveillance undertaken by the designated certification body should give assurance that certified products continue to comply with the technical regulations to which they are certified. Designated certification bodies should report results of the surveillance to IDA.
- 12.10 If during post-certification surveillance of certified equipment, a designated certification body determines that the equipment fails to comply with the applicable technical regulations, it shall immediately notify the equipment supplier, the appropriate importing Party and IDA. The designated certification body shall also provide a follow-up report within thirty days of the action taken by the supplier to correct the situation.
- 12.11 Designated certification bodies should have a procedure to inform IDA within 14 days of any changes that will affect the conformity of the certified equipment.
- 12.12 Designated certification bodies shall not:

- (a) grant a waiver of conformity to any of the applicable IDA technical regulations;
- (b) grant a change in ownership of certificates; and
- (c) perform equipment certification on types of telecommunication equipment that do not have the applicable IDA technical regulations or type approval specifications established and published.

12.13 Designated certification bodies shall immediately notify IDA on any of the following:

- (a) changes in its legal, commercial, organisation or accreditation status;
- (b) changes of premises;
- (c) changes which may affect continuing compliance with any of the criteria or requirements specified by IDA or the relevant MRA.

12.14 Designated certification bodies shall fully indemnify and hold IDA harmless from and against all liabilities, damages, claims, costs and expenses incurred or sustained by IDA as a result of any action taken or omitted to be taken by IDA relating to the recognition of such certification bodies.

12.15 Designated certification bodies shall comply with such terms and conditions as IDA may publish from time to time.

13 Reference to Designation Status

13.1 Designated CABs (testing laboratories or certification bodies) may advertise their designation status with regard to standards or parts thereof which are included in the scope of designation. The scope of designation is specified in the Designation Certificate.

13.2 The advertisement must not imply or otherwise suggest that IDA has endorsed the product or imply that the designated CAB is an agent or representative of IDA.

13.3 CABs whose designations have been suspended or withdrawn for any reason shall discontinue advertisement of their designated status and not make any misleading statements regarding their designation status.

14 Post-designation Surveillance

As and when required, IDA will conduct surveillance assessments and other non-routine assessments on the designated CABs to ensure that standards of practice are maintained or to investigate complaints made against designated CABs on matters related to their designation.

15 Withdrawal of Designation

15.1 IDA will suspend or withdraw the designation of a CAB (testing laboratory or certification body) if:

- (a) the CAB 's accreditation by SAC is withdrawn;
- (b) it is found that the CAB is not complying with the criteria or requirements of this scheme, or with the requirements that it was designated to; or
- (c) IDA determines there is a just cause for withdrawing the designation.

- 15.2 A CAB whose designation and recognition has been suspended or withdrawn will be removed from the list of designated CABs. Such action will, however, take place only after consultation between IDA and the affected CAB. It is expected that the CAB would normally take immediate corrective action, to IDA's satisfaction.
- 15.3 In situations where a formal review process exists, such as in MRAs, IDA may only issue a designation suspension to the designated CAB until the completion of the formal review process.

Infocomm Development Authority of Singapore
10 Pasir Panjang Road
#10-01 Mapletree Business City
Singapore 117438

Main Telephone No: 6211 0888
Telephone No. : 6211 1926
Fax No. : 6659 2502



Application for Designation of Testing Laboratories and Certification Bodies for Conformity Assessment of Telecommunication Equipment

- Notes: 1. Please submit the form to the above address together with the following:
- a) Application fee of \$200
 - b) Documents of proof of CAB's status as an entity legally identifiable and located in Singapore
 - c) Certificate of Accreditation by SAC, indicating the scope of accreditation as well as technical regulations, standards or specifications for which designation is sought
 - d) Organisation Structure and Staffing Chart
 - e) Laboratory Layout
 - f) Statement of Testing Facilities and description of test methods to be used for testing each particular technical regulation, standard or specification
 - g) Sample copy of the test report/certificate to be used by the laboratory
 - h) Quality Manual
 - i) Copies of contractual arrangements with other testing laboratories (applicable to certification bodies only)
 - j) Checklist on the technical competence of the certification body (applicable to certification bodies only)
2. Payment should be made with a crossed cheque payable to "IDA Singapore". The application fee is not refundable.

APPLICANT'S NAME & ADDRESS:		CONTACT NAME & DESIGNATION:
TELEPHONE NO:	FACSIMILE NO:	E-MAIL ADDRESS:

TESTING LABORATORY/CERTIFICATION BODY'S NAME & ADDRESS:
OPEN AREA TEST SITE'S ADDRESS (IF APPLICABLE):

STANDARD(S), SPECIFICATION(S) OR PART(S) THEREOF FOR WHICH DESIGNATION IS SOUGHT: (If space is insufficient, please attach additional sheet (s))			
<u>Products</u>	<u>Types of Testing</u>	<u>Applicable Standards</u>	<u>Applicable MRA</u>

AGREEMENT: THE APPLICANT AGREES TO: <ol style="list-style-type: none"> i) Fulfil all conditions and meet all requirements in accordance with the Scheme for Designating Testing Laboratories and Certification Bodies for Conformity Assessment of Telecommunication Equipment issued by the Authority; and ii) Indemnify the Authority from and against all liabilities, damages, claims, costs and expenses incurred or sustained by the Authority as a result of any action taken or omitted to be taken by the Authority relating to the designation of the CABs

Applicant's Signature & Date

Name and Designation

Company's Stamp

List of Technical Regulations

Table 1 - Technical Specifications for Line Terminal Equipment

No.	Reference	Date	Title of Specification
1.	PSTN Terminal Equipment		
	IDA TS PSTN	May 11	Technical Specification for Terminal Equipment connecting to the Public Switched Telephone Network (PSTN)
2.	ADSL Modems & Access Equipment		
	IDA TS ADSL	May 11	Technical Specification for Asymmetric Digital Subscriber Line (ADSL) Modems
3.	Narrow band & Broadband ISDN Equipment		
3.1	IDA TS ISDN-BA	May 11	Technical Specification for connecting to the Integrated Services Digital Network (ISDN) using Basic Access
3.2	IDA TS ISDN-PRA	May 11	Technical Specification for connecting to the Integrated Services Digital Network (ISDN) using Primary Rate Access
3.3	IDA TS BISDN	May 11	Technical Specification for connecting to the Broadband Integrated Services Digital Network (BISDN)
4.	Digital Leased Circuit Equipment		
	IDA TS DLCN	May 11	Technical Specification for Digital Interfaces based on hierarchical bit rates of 2048 kbit/s, 34 368 kbit/s and 139 264 kbit/s
5.	Cable Modems		
	IDA TS CM	May 11	Technical Specification for Cable Modems (CM) connected to the Radio-Frequency Interface of the High-speed Data-Over-Cable Systems (DOCSIS 1.1)

Note: Please download the latest version of the applicable IDA Technical Specification from IDA's website: <http://www.ida.gov.sg> under "Policies & Regulation" >> "Standards".

The requirements to comply with IEC 60950-1 for electrical safety and IEC CISPR 22 for electromagnetic compatibility (IDA EMC framework) are defined in the Technical Specifications as part of the conformity assessment requirements together with the telecommunications part.

Any change of technical requirements is highlighted in the Addendum/Corrigendum to the respective IDA Technical Specifications.

List of Technical Regulations

Table 2 - Technical Specifications for Radio-Communication Equipment

No.	Reference	Date	Title of Specification
1.	Short Range Devices		
	IDA TS SRD	May 11	Technical Specification for Short Range Devices
2.	Public Radio-communication & Private Land Mobile Radio Equipment		
	IDA TS LMR	Jun 11	Technical Specification for Land Mobile Radio Equipment
3.	Radio Amateur Equipment		
	IDA TS AR	May 11	Technical Specification for Amateur Radio Equipment
4.	Cordless Telephones and Cordless Telecommunication Systems		
	IDA TS CT-CTS	May 11	Technical Specification for Cordless Telephone and Cordless Telecommunication Systems
5.	Digital Radio-communication Transceiver		
5.1	IDA TS CMT	Jun 11	Technical Specification for Cellular Mobile Terminal
5.2	IDA TS CBS	Jun 11	Technical Specification for Cellular Base Station and Repeater System
5.3	IDA TS GMPCS	Aug 11	Technical Specification for Global Mobile Personal Communication by Satellite (GMPCS) Terminals
6.	Wireless Broadband Access Equipment		
	IDA TS WBA	May 11	Technical Specification for Wireless Broadband Access (WBA) Equipment
7.	Radio Pagers (Public Paging Service)		
	IDA TS RPG	May 11	Technical Specification for Radio Pagers (Public Paging Service)
8.	Ultra-Wideband (UWB) Devices		
	IDA TS UWB	May 11	Technical Specification for Ultra-Wideband (UWB) Devices

Note: Please download the latest version of the applicable IDA Technical Specification from IDA's website: <http://www.ida.gov.sg> under "Policies & Regulation" >> "Standards".

Where applicable, the requirements to comply with IEC 60950-1 for electrical safety and IEC CISPR 22 for electromagnetic compatibility (IDA EMC framework) are defined in the Technical Specifications.

Any change of technical requirements is highlighted in the Addendum/Corrigendum to the respective IDA Technical Specifications.

Annex 3

Checklist for Assessment on the Technical Competence of Certification Bodies

GENERAL		Remarks
1.	<p>The Certification Body (CB) is accredited to ISO/IEC Guide 65; IDA Scheme for Designating Testing Laboratories and Certification Bodies for Conformity Assessment of Telecommunication Equipment; and one or more of the Technical Regulations under the scope for:</p> <p>Line Terminal Equipment (Table 1, Annex 2) and/or</p> <p>Radio-communication Equipment (Table 2, Annex 2)</p>	
2.	<p>CB is accredited to ISO/IEC 17025 for a core set of testing capabilities under the scope for Line Terminal Equipment (Table 1, Annex 2) and/or Radio-communication Equipment (Table 2, Annex 2).</p>	
3.	<p>CB has demonstrated through assessment, competence, efficiency, experience and familiarity with technical regulations as well as conformity with applicable parts of the ISO/IEC 17025 and Guide 65. CB has also demonstrated the ability to recognise areas where correct interpretation of the technical regulations and conformity assessment procedures is necessary.</p>	
4.	<p>CB has the latest copy of the IDA Equipment Registration Guide and is familiar with the telecommunication equipment approval requirements.</p>	
5.	<p>CB has the following core set of testing capabilities to be qualified for certification to Technical Regulations under the scope for Line Terminal Equipment (Table 1, Annex 2):</p> <ul style="list-style-type: none"> a. Impedance limits for unlooped condition <ul style="list-style-type: none"> i. DC resistance at 100 Vdc (IDA TS PSTN, 6.2.1.1, test method: ETSI TBR 21, A.4.4.1) ii. Impedance in the frequency range of 300 – 3400 Hz (IDA TS PSTN, 6.2.1.2, test method: ETSI TBR 21, A.4.1.1) iii. Impedance at 24 Hz (IDA TS PSTN, 6.2.1.3, test method: ETSI TBR 21, A.4.4.2) iv. Ringing signal detector sensitivity (IDA TS PSTN, 6.2.1.4, test method: ETSI TBR 21, A.4.5) b. Impedance limits for looped condition <ul style="list-style-type: none"> i. DC resistance for line current up to 110 mA (IDA TS PSTN, 6.2.2.1 & 6.2.2.4, test method: ETSI TBR 21, A.4.7.1) ii. Return loss (IDA TS PSTN, 6.2.2.2/6.2.2.3, test method: ETSI TBR 21, A.4.7.2 /TBR 38, A.2.8) c. Impedance unbalance about earth (IDA TS PSTN, 6.3, test method: ETSI TBR 21, A.4.7.4) d. Signal frequencies and levels <ul style="list-style-type: none"> i. Transmit level (IDA TS PSTN, 6.4.1, test method: ETSI TBR 21, A.4.7.3.1) ii. Multi-frequency Push-Button (MFPB) signalling (IDA TS PSTN, 7.2, test method: ETSI TBR 21, A.4.8.2) 	

Checklist for Assessment on the Technical Competence of Certification Bodies

6.	CB has at least one of the following core sets of testing capabilities to be qualified for certification to Technical Regulations under the scope for Radio-communication Equipment.	
6.1	<p><u>Short Range Devices (Table 2, 1, Annex 2)</u></p> <p>Minimum set of test capabilities includes measurements of:</p> <ul style="list-style-type: none"> a. Operating frequencies b. Effective radiated power or equivalent isotropically radiated power c. Spurious emissions <p>Measurements are performed according to the FCC measurement standards set out in FCC Part 15.31, 15.33 and 15.35; or methods of measurement set out in ETSI EN 300 330-1, EN 300 220-1, EN 330 440-1, EN 300 328, EN 301 893 or EN 301 091 that are applicable to the scope of accreditation.</p>	
6.2	<p><u>Land Mobile Radio Equipment (Table 2, 2, Annex 2)</u></p> <p>Minimum set of test capabilities includes measurements of:</p> <ul style="list-style-type: none"> a. Operating frequencies b. Effective radiated power or equivalent isotropically radiated power c. Spurious emissions <p>Measurements are performed according to the methods of measurement set out in ETSI EN 300 086-1, EN 300 296-1, FCC Part 90, EN 300 113-1, EN 300 390-1 or EN 300 394-1 that are applicable to the scope of accreditation.</p>	

Checklist for Assessment on the Technical Competence of Certification Bodies

SCOPE FOR LINE TERMINAL EQUIPMENT (TABLE 1, ANNEX 2)		
PSTN Terminal Equipment		
7.	CB has the necessary test equipment and demonstrated the ability to perform the set of tests defined in § 5: a. Impedance limits for unlooped condition b. Impedance limits for looped condition c. Impedance unbalance about earth d. Signal frequencies and level e. Multi-frequency Push-Button (MFPB) signalling	
8.	CB refers to the latest version of the IDA TS PSTN for the limits to be verified and the ETSI TBR 21 for the applicable test methods.	
9.	CB has knowledge and expertise in evaluating test data, reports and technical documents for compliance with essential parameters listed in the IDA TS PSTN.	
10.	CB has knowledge and expertise in evaluating test data, reports and technical documents for compliance with the following requirements:	
	a. Analogue handset (IDA TS PSTN, Annex A)	
	b. 2-wire analogue leased line (IDA TS PSTN, Annex B)	
	c. Call detail recording facility (IDA TS PSTN, Annex C)	
	d. Cordless telephone facility (IDA TS PSTN, Annex D)	
	e. Coinafon (IDA TS PSTN, Annex E)	
	f. Credit card, phonecard, ATM card, cashcard and multi-coin payphone (IDA TS PSTN, Annex F)	
	g. Caller Identity Equipment (IDA TS PSTN, Annex G)	
	h. Call switching equipment (IDA TS PSTN, Annex H)	
	i. Direct inward dialling facility (IDA TS PSTN, Annex I)	
	j. Short Message Service (IDA TS PSTN, Annex K)	
	k. POTS Splitter or line filters for use with ADSL services (IDA TS PSTN, Annex L)	

Checklist for Assessment on the Technical Competence of Certification Bodies

ADSL Modems & Access Equipment		
11.	CB has the latest version of the IDA TS ADSL and copies of the ITU-T Rec. G.992.1 to G.992.5 and/or TIA-968-A as reference documents.	
12.	CB has knowledge and expertise in evaluating test data, reports and technical documents for compliance with essential parameters listed in the IDA TS ADSL.	
Narrow Band & Broadband ISDN Equipment		
13.	CB has the latest version of the IDA TS ISDN-BA and/or TS ISDN-PRA, and copies of the ITU-T Rec. I.430, I.431, Q.921, Q.931 and/or G.961 as reference documents.	
14.	CB has knowledge and expertise in evaluating test data, reports (physical, link and network layers) and technical documents for compliance with essential parameters listed in the IDA TS ISDN-BA and/or ISDN-PRA.	
15.	CB has the latest version of the IDA TS BISDN and copies of the ITU-T Rec. I.432.1 to I.432.4, Q.2931, Q.2971, I.361, I.371 and Q.2130 as reference documents.	
16.	CB has knowledge and expertise in evaluating test data, reports (physical layer) and technical documents for compliance with essential parameters listed in the IDA TS BISDN.	
Digital Leased Circuit Equipment		
17.	CB has the latest version of the IDA TS DLCN and copies of the ITU-T Rec. G.703, G.704, G.706 and G.804 as reference documents.	
18.	CB has knowledge and expertise in evaluating test data, reports and technical documents for compliance with essential parameters listed in the IDA TS DLCN.	
Cable Modems		
19.	CB has the latest version of the IDA TS CM and copies of the ITU-T Rec. J.112 Annex B (03/2004), SP-RFIV1.1-110-030730 and SP-BPI+-111-040407 as reference documents.	
20.	CB has knowledge and expertise in evaluating test data, reports and technical documents for compliance with essential parameters listed in the IDA TS CM.	
Electrical Safety		
21.	CB has a copy of the IEC 60950-1 and knowledge and expertise in evaluating test data and reports for compliance with the applicable requirements defined in IEC 60950-1, e.g. according to the class of equipment and type of TNV circuit.	
Electromagnetic Compatibility (EMC)		
22.	CB has a copy of the CISPR 22, and knowledge and expertise in evaluating test data and reports for compliance with the applicable requirements defined in CISPR 22.	

Checklist for Assessment on the Technical Competence of Certification Bodies

SCOPE FOR RADIO-COMMUNICATION EQUIPMENT (TABLE 2, ANNEX 2)		
Short Range Devices		
23.	CB has the necessary test equipment and demonstrated the ability to perform the set of tests defined in § 6.1: a. Operating frequencies b. Effective radiated power or equivalent isotropically radiated power c. Spurious emissions	
24.	CB refers to the latest version of the IDA TS SRD for the limits to be verified, and the FCC Part 15.31, 15.33 and 15.35; or ETSI EN 300 330-1, EN 300 220-1, EN 330 440-1, EN 300 328, EN 301 893 and/or EN 301 091 for the applicable test methods.	
25.	CB has knowledge and expertise in evaluating test data, reports and technical documents for compliance with essential parameters listed in the IDA TS SRD.	
Land Mobile Radio (Trunked Radio) & Amateur Radio Equipment		
26.	CB has the necessary test equipment and demonstrated the ability to perform the set of tests defined in § 6.2: a. Operating frequencies b. Effective radiated power or equivalent isotropically radiated power c. Spurious emissions	
27.	CB refers to the latest version of the IDA TS LMR and/or IDA TS AR for the limits to be verified, and the ETSI EN 300 086-1, EN 300 296-1, FCC Part 90, EN 300 113-1, EN 300-390-1, EN 300 394-1 and/or EN 301 783-1 for the applicable test methods.	
28.	CB has knowledge and expertise in evaluating test data, reports and technical documents for compliance with essential parameters listed in the IDA TS LMR and/or IDA TS AR.	
Cordless Telephones & Cordless Telecommunication Systems		
29.	CB has the latest version of the IDA TS CT-CTS, ETSI EN 301 406 and other related reference documents, and/or RCR STD-28 V1 R1, RCR STD-28 V2 and RCR TR-23 as reference documents.	
30.	CB has knowledge and expertise in evaluating test data, reports and technical documents for compliance with essential parameters listed in the IDA TS CT-CTS.	

Checklist for Assessment on the Technical Competence of Certification Bodies

Digital Radio-communication Transceiver		
31.	CB has the latest version of the IDA TS CMT and/or IDA TS CBS and ETSI EN 300 607-1, EN 301 511, EN 301 502, EN 300 609-4, EN 301 908-1, EN 301 908-2, EN 301 908-3, EN 301 908-11, EN 301 908-13, EN 301 908-14, EN 301 908-15, EN 301 908-18, EN 301 489-1, EN 301 489-23 and/or other related reference documents.	
32.	CB has knowledge and expertise in evaluating test data, reports and technical documents for compliance with essential parameters listed in the IDA TS CMT and/or IDA TS CBS.	
33.	CB has copies of the CENELEC EN 50360:2001 and EN 50361:2001, and knowledge and expertise in evaluating test data and reports for compliance with the applicable ICNIRP recommendation on radiation and safety (SAR) requirements.	
34.	CB has knowledge of the GMPCS terminals working with satellite and terrestrial cellular radio systems, requirements of the ITU GMPCS MOU mark, and is able to determine compliance with the IDA TS GMPCS.	
Radio Pagers		
35.	CB has the latest version of the IDA TS RPG, and other related reference documents.	
36.	CB has knowledge and expertise in evaluating test data, reports and technical documents for compliance with essential parameters listed in the IDA TS RPG.	
Ultra-Wideband (UWB) Devices		
37.	CB has the latest version of the IDA TS UWB, and other related reference documents.	
38.	CB has knowledge and expertise in evaluating test data, reports and technical documents for compliance with essential parameters listed in the IDA TS UWB.	

Annex 4

Addendum/Corrigendum

Changes to IDA MRA DES SCHEME Issue 3 Rev 7, Aug 2011			
Page	Ref.	Items Changed	Effective Date
	Annex 2 Table 2 (2)	Updates in the List of Technical Regulations: – Issue Date for IDA TS GMPCS is now Aug 11, as the Technical Specifications for GMPCS has been revised to change reference to IDA TS CMT instead of IDA TS GSM-MT and IDA TS 3G-MT.	11 Aug 2011
Changes to IDA MRA DES SCHEME Issue 3 Rev 6, May 2011			
Page	Ref.	Items Changed	Effective Date
14	Annex 2 Table 2 (2) Table 2 (5)	Updates in the List of Technical Regulations: – Issue Date for IDA TS LMR is now Jun 11, as the Technical Specifications for Land Mobile Radio Equipment has been revised to change reference to IDA TS CMT instead of IDA TS GSM-MT. – The 4 Technical Specifications, IDA TS GSM-MT, IDA TS GSM-BS, IDA TS 3G-MT and IDA TS 3G-BS have been withdrawn and replaced by: IDA TS CMT – Cellular Mobile Terminal IDA TS CBS – Cellular Base Station and Repeater System	17 June 2011
20	Annex 3 (31) Annex 3 (32)	Update to the Checklist for Assessment on the Technical Competence of Certification Bodies: – IDA TS GSM-MT, IDA TS GSM-BS, IDA TS 3G-MT and IDA TS 3G-BS have been replaced by IDA TS CMT and IDA TS CBS. – Withdrawal of EN 301 087 and EN 301 419-2. Inclusion of EN 301 908-11, EN 301 908-13, EN 301 908-14, EN 301 908-15 and EN 301 908-18. – IDA TS GSM-MT, IDA TS GSM-BS, IDA TS 3G-MT and IDA TS 3G-BS have been replaced by IDA TS CMT and IDA TS CBS.	17 June 2011
Changes to IDA MRA DES SCHEME Issue 3 Rev 5			
Page	Ref.	Items Changed	Effective Date
		The IDA MRA DES SCHEME Issue 3 Rev 5, Apr 2011 has been replaced by the IDA MRA DES SCHEME Issue 3 Rev 6, May 2011.	1 May 2011
		Change of IDA's address/contact nos at cover page, page 6 and page 12 to Mapletree Business City.	
13	Annex 2	Dates of the Technical Regulations listed in Table 1 & 2 have been revised to May 2011.	
Changes to IDA MRA DES SCHEME Issue 3 Rev 4			
Page	Ref.	Items Changed	Effective Date

Addendum/Corrigendum

		The IDA MRA DES SCHEME Issue 3 Rev 4, Jul 2009 has been replaced by the IDA MRA DES SCHEME Issue 3 Rev 5, Apr 2011.	
14	Annex 2	Updates in the List of Technical Regulations:	
	Table 2 (1)	– Issue Date for IDA TS SRD is now Apr 11, as the Technical Specifications for Short Range Devices has been revised with additional frequency allocations.	1 Apr 2011
	Table 2 (2)	– Issue Date for IDA TS LMR is now Feb 11, as the Technical Specifications for Land Mobile Radio Equipment has been revised to allow 6.25 kHz channel spacing for certain frequency bands.	Feb 2011
Changes to IDA MRA DES SCHEME Issue 3 Rev 3			
Page	Ref.	Items Changed	Effective Date
		The IDA MRA DES SCHEME Issue 3 Rev 3, January 2008 has been replaced by the IDA MRA DES SCHEME Issue 3 Rev 4, July 2009.	15 Jul 2009
14	Annex 2	Updates in the List of Technical Regulations:	
	Table 2 (1)	– Issue Date for IDA TS SRD is now Jul 09, as the Technical Specifications for Short Range Devices has some editorial changes. For clarity, Short Range Devices (SRD) requiring IDA's approval for operation are listed separately in Table 2.	
	Table 2 (5.1)	– Issue Date for IDA TS GSM-MT is now Jul 09, as the Technical Specifications for GSM Mobile Terminals has been updated to include the extended GSM band and a provision to highlight security feature for IMEI.	
	Table 2 (5.2)	– Issue Date for IDA TS GSM-BS is now Jul 09, as the Technical Specifications for GSM Base Station and Repeater Equipment has been updated to include the extended GSM band.	
	Table 2 (5.3)	– Issue Date for IDA TS 3G-MT is now Jul 09, as the Technical Specifications for IMT-2000 Third-Generation (3G) Cellular Mobile Terminals has been updated to include a provision to highlight security feature for IMEI.	
Changes to IDA MRA DES SCHEME Issue 3 Rev 2			
Page	Ref.	Items Changed	Effective Date
		The IDA MRA DES SCHEME Issue 3 Rev 2, July 2007 has been replaced by the IDA MRA DES SCHEME Issue 3 Rev 3, January 2008.	3 Jan 08
14	Annex 2	Updates in the List of Technical Regulations:	
	Table 2 (1)	– Issue Date for IDA TS SRD is now Jan 08, as the Technical Specifications for Short Range Devices has been revised with additional frequency allocations.	

Annex 4

Addendum/Corrigendum

	Table 2 (8)	– Introduction of a new technical specification, IDA TS UWB, Technical Specification for Ultra-Wideband (UWB) Devices.	
20	Annex 3 § 37 § 38	A new item 'Ultra-Wideband (UWB) Devices' has been added in the Checklist.	
Changes to IDA MRA DES SCHEME Issue 3 Rev 1			
Page	Ref.	Items Changed	Effective Date
		The IDA MRA DES SCHEME Issue 3 Rev 1, July 2005 has been replaced by the IDA MRA DES SCHEME Issue 3 Rev 2, July 2007.	23 Jul 07
8	§ 11.3	Automatic Call Diverters have been removed from the list of Prohibited Telecommunication Equipment under the Third Schedule of the Dealers Regulations.	
9	§ 12.4		
	Annex 2	Revised to draw attention to the following: <ul style="list-style-type: none"> – CABs should go to the IDA website (www.ida.gov.sg under Policies & Regulations >> Standards) to obtain the latest version of the applicable Technical Specification. – Where relevant, electrical safety and EMC requirements are given in the Technical Specifications. – Any change of technical requirements is highlighted in the Addendum/Corrigendum to the respective IDA Technical Specifications. 	
	Annex 3 § 11	3 more ITU-T Recommendations referred to in the IDA TS ADSL may be included, showing that the range supported may start from G.992.1 and extend to G.992.5.	
	Annex 3 § 29	Reference documents ETSI ETS 176-1 & 176-2 have been superseded by the EN 301 406.	
	Annex 3 § 31	Reference documents ETSI EN 301 502, EN 301 087 and EN 300 609-4 for GSM base stations are included. These 3 references made in the IDA TS GSM-BS, were not highlighted in the Checklist (Annex 3 to this Scheme) earlier.	