

TERMS AND CONDITIONS FOR TELECOMMUNICATION TECHNICAL TRIALS

1 INTRODUCTION

- 1.1 This document contains the terms and conditions which shall be complied with by a person¹ who intends to conduct technical trials (as described in condition 3 below) on telecommunication systems and/or services in Singapore.

2 SCOPE OF TECHNICAL TRIALS REQUIRING IDA'S APPROVAL

- 2.1 Any person who wishes to conduct any technical trial on any telecommunication service, system and/or network under any of the following circumstances (hereinafter referred to as a "trial licensee") must obtain prior written approval from IDA. Such persons include:
- (a) A person who does not already hold a licence from IDA which would allow the provision of the telecommunication systems and/or services which are intended to be used or provided in the technical trial;
 - (b) An existing licensee whose licence does not allow the provision of the specific telecommunication systems and/or services which are intended to be used or provided in the technical trial; or
 - (c) An existing licensee who does not have the required radio frequency for its technical trial (including those who are intending to provide services during their technical trial which are beyond the scope of their existing spectrum right or licence).
- 2.2 Trial licensees should note that separate licences or authorisations may be required from other government agencies in relation to the deployment and/or provision of certain types of telecommunication systems and/or services in Singapore².



¹ The word "person" as used herein includes both natural and legal persons (e.g. companies).

² For example, trial licensees may need to comply with terms and conditions that may be imposed by the Media Development Authority of Singapore if they intend to distribute any Internet content.

3 NATURE OF TRIAL

- 3.1 The nature of the trial must be non-commercial, i.e., trial participants shall not be charged for any service or equipment made available to them during the technical trial. However, the trial licensee can levy a refundable deposit for the equipment utilised by the trial participants.
- 3.2 Trial licensees shall not impose any obligations on trial participants that would require them to subscribe to any non-trial service that may be offered by the trial licensee.
- 3.3 If a trial licensee intends to launch the trial service on a non-trial basis at the end of its technical trial, it must obtain the appropriate licence from IDA, or expand an existing licence to include the new systems and/or services.

4 OPERATING CONDITIONS FOR TECHNICAL TRIALS

4.1 Participants

- 4.1.1 The number of participants in the technical trial will be subject to IDA's prior written approval.
- 4.1.2 If the trial network is connected to any public telephone network of any Facilities-Based Operator or Services-Based Operator, the trial licensee must inform trial participants in advance that they could be liable for any local or international call charges from such operators incurred during the trial.

4.2 Period of Trial

- 4.2.1 The period of the technical trial must be for a fixed duration. In general, any technical trial shall not last more than 6 months where there is no use of radio frequencies.
- 4.2.2 For technical trials that require the use of radio frequencies, the trial period will be subject to condition 4.7.5.
- 4.2.3 Any request for extension of the period of technical trial must be submitted to IDA for prior written approval and, in such an event, IDA will determine a reasonable period for the technical trial, taking into consideration the proposed trial set-up.

4.3 Trial Publicity

- 4.3.1 Technical trial publicity material must be submitted to IDA for information at least 3 days before release.

4.3.2 Trial licensees must not make any claim to be a service provider/operator on the basis of the technical trial.

4.4 Interconnection with the Public Telephone Network

4.4.1 Any proposed interconnection to a public telephone network or any other telecommunication networks authorised by IDA shall be subject to IDA's prior written approval and any terms and conditions which IDA may impose in respect thereof from time to time.

4.5 Geographic Coverage of Trial

4.5.1 The geographic coverage of the technical trial must be clearly specified and shall be subject to IDA's prior written approval.

4.6 Future Public/Commercial Service

4.6.1 An approval by IDA for a technical trial shall not be construed in any way as an approval or indication of future approval from IDA that any other licence or right shall be granted to the trial licensee who wishes to offer its trial services on a non-trial basis after the conclusion of its technical trial.

4.7 Frequency Fees/Station Fees and Other Fees Payable

4.7.1 The trial licensee shall be subject to the payment of radio frequency fees, station licence fees or any other fees determined by IDA to be applicable. The fees are shown in Annex 1.

4.7.2 Trial licensees should note that radio frequency fees and station fees are separately payable to IDA for the allocation and management of radio frequencies.

4.7.3 Any frequency spectrum allocated for the purposes of the technical trial must only be used for the technical trial and not for any other purposes.

4.7.4 Any frequency spectrum allocated for the purposes of the technical trial must not be construed in any way as an approval or indication of frequency spectrum being available or to be allocated for any future non-trial service.

4.7.5 Any technical trial that requires the allocation of frequency spectrum by IDA on an ad-hoc temporary basis will be for a period not exceeding 90 days.

4.8 Precautions against Interference

4.8.1 For technical trials involving wireless technologies, the radio-communications stations/networks shall be subject to inspection, where necessary, by an officer of IDA prior to the commencement of the trial.

- 4.8.2 The trial licensee shall take all precautions necessary to ensure that there is no interference with any authorised networks of IDA.
- 4.8.3 The trial licensee shall also take the necessary steps, at its own cost and on a timely basis, to rectify any interference problems, including the setting up of monitoring facilities and procedures that will keep track of any potential interference problems.
- 4.8.4 The trial licensee shall provide information on radio frequency measurements, if any.

4.9 Changes to Technical Trial

- 4.9.1 Any changes to the technical trial proposed by the trial licensee must be submitted to IDA for prior written approval. IDA may impose any additional terms and conditions it deems fit.
- 4.9.2 Any proposed changes must be submitted to IDA at least two weeks before the proposed implementation date.
- 4.9.3 IDA reserves the right to require changes to be made to the technical trial. IDA will give the trial licensee at least two weeks notice to implement the changes.

4.10 Provision of Information

- 4.10.1 The trial licensee shall provide IDA with any documents or information that IDA may be notice require, on a timely basis and at its own cost, for IDA's exercise of its function and duties under the Act. The Licensee undertakes to IDA that any such document and information provided to IDA shall be true, accurate and complete.
- 4.10.2 IDA may use and disclose any such document or information provided to IDA pursuant to Condition 4.10.1 as IDA deems fit. Where IDA proposes to disclose any document or information obtained pursuant to Condition 4.10.1 and IDA considers that the disclosure would result in the release of information concerning the business, commercial or financial affairs of the Licensee or which disclosure would or could reasonably be expected to adversely affect the Licensee's lawful business, commercial or financial affairs, IDA will give the Licensee a reasonable opportunity to make representations on the proposed disclosure before IDA makes a final decision on whether to disclose the information.

4.11 Governing Law and Jurisdiction

4.11.1 The governing law of this document shall be the laws of Singapore. The trial licensee shall agree to be subject to the laws of Singapore including but not limited to the Telecommunications Act (Cap 323) and the Telecommunications (Radio-communication) Regulations. The trial licensee shall submit to the exclusive jurisdiction of the Singapore Courts.

4.12 Compliance with conditions

4.12.1 The trial licensee shall comply with the trial conditions provided herein. In the event that the trial licensee breaches any of the trial conditions, IDA shall have the right to terminate the technical trial or require the trial licensee to take the appropriate corrective action.

4.13 Termination of Technical Trial

4.13.1 Where the trial licensee has breached any of the terms and conditions herein, IDA may terminate the technical trial after giving due notice in writing to the trial licensee.

4.13.2 Such a notice in writing shall be deemed to be given if sent by pre-paid registered post or facsimile to the registered address of the trial licensee, in the event of termination by IDA.

4.13.3 IDA shall not be liable for any loss suffered by trial participants or the trial licensee, in the event of termination by IDA.

4.13.4 Where the trial licensee wishes to terminate the technical trial, IDA shall be kept informed of the decision, including the rationale of the decision.

4.13.5 In the event the technical trial is terminated, the trial licensee will be obliged to remove all equipment, including equipment at the premises of trial participants, within two weeks unless a time extension has been sought and obtained from IDA.

4.14 Local Representative

4.14.1 The trial licensee shall have a local office for purposes of discharging the obligations and settling the payment of any fees under these terms and conditions. In the event that the trial licensee is an overseas entity, the trial licensee shall appoint a local authorised representative for the said purposes.

5 APPLICATION PROCEDURE

5.1 Interested parties who wish to conduct technical trials should submit their applications forms to:

Info-communications Development Authority of Singapore
8 Temasek Boulevard
#14-00 Suntec Tower Three
Singapore 038988

Attention: Senior Director (Policy & Competition Development)

- 5.2 The application form should be submitted at least two weeks before the intended date of the commencement of the technical trial.
- 5.3 Where a technical trial involves the use of radio frequencies, the processing of the application form by IDA may take more than 2 weeks in order to co-ordinate the intended use of radio frequencies. Applicants should therefore submit their application forms as early as possible to avoid any delay.

Notes:

- 1 This document has no legal standing and is not intended as a substitute for legal advice. While every effort has been made to provide an accurate and authoritative account of the licensing regime, the licence(s) to be granted to successful applicants will be the complete authoritative text.**
- 2 The information contained in this document is intended to assist interested parties in applying for the relevant licences. It does not bind IDA to any particular course of action in relation to the handling of any application, or to the terms of any licence to be granted, or to grant any licence to any party. IDA reserves the right to change its policies and/or to amend this document without prior notice.**
- 3 The grant of a licence is at the sole discretion of IDA. IDA reserves the right not to accept any application submitted. IDA will undertake to explain to the applicant concerned, on the applicant's request, why the applicant is unsuccessful in its application for a licence.**
- 4 IDA reserves the right to disclose the identities of parties who have submitted applications. All other information received will be treated in confidence.**

FREQUENCY AND EXPERIMENTAL STATION/NETWORK FEE TABLE

Fees for Ad Hoc Temporary Radio Frequency Assignment

Bandwidth	Fee	
1. Frequencies from Table 1 (see below)	\$100	
2. All other frequencies	<u>10 days or less*</u>	<u>11 – 90 days</u>
$x \leq 25$ kHz	\$ 100	\$ 175
$25 \text{ kHz} < x < 500$ kHz	\$ 150	\$ 275
$500 \text{ kHz} \leq x < 1$ MHz	\$ 450	\$ 825
$1 \text{ MHz} \leq x < 20$ MHz	\$ 900	\$1,625
$x \geq 20$ MHz	\$1,550	\$2,800

* Unless otherwise determine by the Authority, a fee of \$100 is payable for the use of any of the above radio frequencies if the period of usage or cumulative period of usage is less than 24hours.

Table 1

	Frequency	Bandwidth
i)	25273 kHz	16 kHz
ii)	71.575 MHz	16 kHz
iii)	83.875/87.875 MHz	16 kHz
iv)	137.175/141.775 MHz	16 kHz
v)	161.450 MHz	16 kHz
vi)	434.850/439.850 MHz	16 kHz
vii)	455 MHz	16 kHz
viii)	821 MHz	± 2 MHz
ix)	866 MHz	± 2 MHz
x)	1530 – 1544 MHz	Satellite Receive Band
xi)	1575.42 MHz	GPS Receive
xii)	1880 – 1900 MHz	Low power devices of 100 mW or less
xiii)	2450 MHz	± 50 MHz
xiv)	3400 – 4200 MHz	Satellite Receive Band
xv)	5800 MHz	± 75 MHz
xvi)	10.7 – 11.7 GHz	Satellite Receive Band
xvii)	12.5 – 12.75 GHz	Satellite Receive Band

Note: The above list may be modified from time to time due to international/national frequency allocations.