

**EXPLANATORY MEMORANDUM
ISSUED BY
INFOCOMM DEVELOPMENT AUTHORITY OF SINGAPORE**

MARKET TRIAL FRAMEWORK AND LICENCE

28 July 2004

A. INTRODUCTION

1. On 23 February 2004, IDA announced its intention to assign the 2.3 GHz and 2.5 GHz spectrum frequency bands for Wireless Broadband Access (“WBA”) deployment. Following the announcement, IDA undertook a public consultation on 2 April 2004 to seek comments on the technical aspects of the spectrum allocation framework, and on the feasibility of a proposed Market Trial Framework that would allow operators or companies to test the commercial viability of WBA services by charging trial participants. The consultation closed on 21 May 2004.
2. IDA is currently formulating the spectrum allocation framework for the 2.3 GHz and 2.5 GHz bands, but has finalised the policy framework for operators and companies to conduct market trial of new technologies, including WBA technologies.

B. OVERVIEW OF COMMENTS RECEIVED ON THE MARKET TRIAL FRAMEWORK

3. The purpose of introducing a Market Trial Framework is to help companies and licensees better test the commercial viability of innovative technologies, including wireless technologies. The framework is designed with a view to support IDA’s policy objective of promoting Singapore as a hub and test-bed for deployment of new technologies and yet ensure fairness to market entrants that took the business risks and applied for full-fledge Facilities-based Operator (“FBO”) and Services-based Operator (“SBO”) licences for service provision.
4. At the close of the public consultation, IDA received comments on the Market Trial Framework from 9 respondents: ArrayComm/ArrayAsia/Kyocera (joint submission), Flarion Technologies, nex-G Systems Pte Ltd, Pacific Internet, Singapore Telecommunications Ltd, Soma Networks and

Cadmus Technologies (joint submission), StarHub Pte Ltd, Telstra Corporation Ltd and Dr Ong Jin Teong. IDA would like to thank the commenters for their inputs.

5. IDA notes that all the commenters in general welcomed IDA's move to allow for market trials of new technologies. They were supportive of the proposed Market Trial Framework, but some commenters submitted that certain features of the framework should be modified. IDA has reviewed the comments and has given extensive consideration to the views and proposals submitted.
6. Taking into consideration the policy objective of the Market Trial Framework and the need to preserve the rights and obligations of our full-fledge FBOs and SBOs, IDA has decided to maintain the proposed Market Trial Framework, with minor amendments to some terms and conditions.
7. The sections below summarise IDA's position on the key issues raised on the Market Trial Framework, explain the rationale behind IDA's position and highlight the key amendments made.

C. POSITION ON KEY ISSUES ON THE MARKET TRIAL FRAMEWORK

Market Trial Licence Period

8. IDA had, in the document issued for public consultation on 2 April 2004, proposed a 6-month Market Trial Licence period, renewable for another 6 months based on the merits of the case. Some commenters suggested reducing the trial period to a 3 month timeframe (renewable up to another 3 months). They opined that a 6 + 6 months period could delay spectrum allocation processes (in the case of wireless technologies), or deter the launch of real commercial services in the market due to the potential of a competitor's commercial trial. A 3 + 3 months period should be sufficient to test various business models and user behaviour. On the other hand, one commenter submitted that the trial period should be extended to 1 year to allow trial licensees to fully evaluate the feasibility of the technology and/or product. Some commenters also questioned how the trial licence period would align with the timeframe for spectrum allocation exercises for wireless technologies.
9. IDA believes that a 6 + 6 months licence period is reasonable for conducting market trials, considering that companies can set up their network under the existing telecommunication technical trial framework for technical testing, and will have the full 6-month period for conducting the market trial. A shorter licence period may not be sufficient for trial licensees to realistically test the commercial viability of the technology and/or product given that the trial licensees may have to spend some time

publicising their trial services and signing up customers. Hence, IDA proposes to maintain the 6 + 6 months licence period.

10. As interested parties could apply for the Market Trial Licence at any time, and as different trial licensees could be conducting market trials for similar technologies at different time periods, it is not possible for IDA to always time its spectrum allocation exercises to the conclusions of all wireless trials. In planning the timing of any spectrum allocation exercise, IDA will assess various criteria including the demand for spectrum and development of the wireless technologies. IDA will also take the time-lines of various wireless market trials into consideration. However, IDA cannot guarantee that the spectrum allocation exercises will be lined-up with market trial periods.

Facilitation by IDA

11. Some commenters submitted that IDA should facilitate and assist trial licensees to obtain interconnection with dominant licensees. One of the commenters also requested for assistance in siting of networks/systems in buildings, and in liaising with government agencies and departments. IDA believes that because the trial services are not provided under full-fledge FBO or SBO licences, trial licensees should not enjoy similar rights as these other licensees.

Market Trial Licence Fees to be Waived for FBOs

12. One commenter requested that the \$2,500 trial licence fee be waived for FBOs as they would already be paying the FBO licence fees for operating and providing telecommunication systems and services.
13. IDA would like to clarify that an FBO or SBO can conduct market trials under his FBO/SBO licence so long as the market trials are within his licence scope and be subject to the FBO/SBO licence fee payment requirement¹. The Market Trial Licence simply provides a further flexibility for FBOs/SBOs to conduct market trials outside their FBO/SBO licence scope, without amending their licences. Therefore, these trials should be subject to the Market Trial Licence fees. Moreover, there is no reasonable basis for differentiating between SBO and FBO trial licensees.

Sale and transfer of networks and systems

14. In the document issued for public consultation on 2 April 2004, IDA had proposed that trial licensees must seek IDA's approval prior to the sale and/or transfer of the networks and systems deployed and used under the

¹ Dominant licensees are to observe the tariff filing requirements under the Telecom Competition Code.

Market Trial Licence. One commenter submitted that IDA should remove the requirement because the trial licensees would have undertaken significant business risks in testing the new technologies and such a requirement would add to the trial licensees' burden.

15. IDA would like to clarify that trial licensees are not required to seek IDA's approval to transfer or sell their networks and systems *after* the Market Trial Licence has expired. However, IDA needs to safeguard against trial licensees circumventing IDA's licensing and regulatory requirements by using another company to apply for another Market Trial Licence and transferring/selling the networks and systems to the new company so as to continue offering the market trial services beyond the allowable period. Hence, to prevent abuse of the Market Trial Framework and to preserve the rights of our full-fledged FBOs and SBOs, it is important that IDA maintains the requirement for trial licensees to seek approval from IDA prior to the sale and/or transfer during the licence period.

Conditions on trial participants

16. One commenter submitted that trial participants should be required to return any equipment that was offered to him/her free of charge during the trial before he/she could be allowed to opt-out of the trial. IDA believes that such service- or contract-related arrangements should be left to the commercial decision of trial licensees. It is not necessary for IDA to impose such requirements as long as trial licensees make clear the terms and conditions of the market or service trials to the participants in advance.

Banker's Guarantee Requirement

17. IDA had, in the document issued for public consultation on 2 April 2004, proposed to require trial licensees who intended to collect monetary deposits and/or issue prepaid cards for collection of payments from their trial participants (other than credit cards) to provide IDA with a banker's guarantee of S\$100,000. While this requirement is consistent with the existing requirement placed on SBO licensees, IDA recognises that it could be onerous if trial licensees only intend to issue a small quantity of prepaid cards or make small amount of prepaid collections during the trial period.
18. Therefore, IDA has relaxed the banker's guarantee requirement to a sum of S\$100,000 or an amount equivalent to the total face value of the prepaid cards or total value of the monetary deposits the trial licensee intends to issue/collect, whichever is lower.

The need for technical trials

19. Some commenters suggested that technical trials should also be carried out to allow operators to iron out any technical problems and issues related to deployments in Singapore's physical environment. IDA would like to clarify that there already exists a telecommunication technical trial framework that allows any operator and company to carry out technical trials of technologies in Singapore.

D. MARKET TRIAL LICENCE

20. IDA has today released the "Guidelines on Submission of Application for Market Trial Licence" containing the finalised Market Trial Framework and a copy of the "Licence to Conduct Market Trials on Telecommunication Systems and Services" containing the conditions for conducting market trials. The relevant documents can be found on the IDA website at www.ida.gov.sg, under the 'Policy and Regulation' section.
21. Companies are invited to apply for the Market Trial Licence starting from today.