



**Suruhanjaya Komunikasi dan Multimedia Malaysia
Malaysian Communications and Multimedia Commission**

**PROPOSAL FOR THE REVIEW OF THE DETERMINATION NO. 1 OF
2007, COMMISSION DETERMINATION ON THE MANDATORY
STANDARDS FOR THE QUALITY OF SERVICE FOR BROADBAND
ACCESS SERVICE**

This Public Inquiry Paper was prepared in fulfillment of Section 106(1) of the Communications and Multimedia Act 1998

14 August 2009

PREFACE

In this public inquiry paper, the Commission seeks to invite submissions from members of the public and industry on the proposed standards and questions raised in this paper. Written submissions, in **both hard copy and electronic form**, should be provided to the Commission in full by **12 noon, 30 September 2009**. Submissions should be addressed to:

Compliance Department,
Licensing, Economic Regulation and Compliance Division
Suruhanjaya Komunikasi dan Multimedia Malaysia,
63000 Cyberjaya,
Selangor.

Fax: +603 – 8688 1003
E-mail: qosbas@cmc.gov.my

In the interest of fostering informed and robust consultative process, the Commission may publish the comments received. Any commercially sensitive information should be provided under a separate cover clearly marked "CONFIDENTIAL".

The Commission thanks the public and all interested parties for your participation in this consultative process and for providing your submissions and feedback.

CHAPTER 1: INTRODUCTION

- 1 The Determination No. 1 of 2007, Commission Determination on the Mandatory Standards for Quality of Service for Broadband Access Service came into force on 1 January 2008.
- 2 In exercising of the power conferred by section 106 (1) of the Communications and Multimedia Act 1988 [Act 588], the Commission would like to review Determination No. 1 of 2007, Commission Determination on the Mandatory Standards for Quality of Service for Broadband Access Service.
- 3 This paper will propose changes as below on standards for network performance:
 - a. Measurement locations.
 - b. Minimum value for throughput.
 - c. Proposed actions for service providers for better user experience.
 - d. Testing requirement for service providers.
- 4 The review of the Mandatory Standards for Quality of Service for Broadband Access Service will cover the same parameters as current standards. However, the review will focus on setting those parameters at level that are acceptable and promote a high level of user-confidence in service delivery from the industry. This will also ensure that the expectations of end-users are effectively protected.

Non-compliance with a mandatory standard

- 5 Non-compliance with a mandatory standard is a breach of section 105(3) of the CMA 1998. Section 242 of the CMA 1998 makes the breach an offence for which the offender shall be liable to a fine not

exceeding one hundred thousand Ringgit or to imprisonment for a term not exceeding two years or both.

CHAPTER 2: PROPOSED CHANGES ON QUALITY OF SERVICE FRAMEWORK

BROADBAND ACCESS SERVICE

Interpretation

6 MyIX means Malaysia Internet Exchange.

STANDARDS ON NETWORK PERFORMANCE

Definitions

7 **Network latency or ping time** means the round trip delay for traffic within the local broadband network from the end-user to the MyIX, based on a minimum standard packet size of 32 bytes.

8 **Throughput** means the amount of data moved to and from the end-user to the MyIX successfully in a given time period.

9 **Packet loss** means the percentage of packets lost between end user and the MyIX.

Question 1: SKMM seeks views on the above interpretation of words or terms which will be used for the purpose of the Determination.

Standards

10 **Network latency:** The proposed standard for network latency from the broadband user to MyIX shall be no more than 85ms, 95% of the time.

- 11 **Throughput:** The proposed standard for throughput between the broadband user and the MyIX shall be no less than 80% of the subscribed level for 95% of the time; both for the purposes of uploading and downloading.
- 12 **Packet loss:** The packet loss shall not exceed 1% between the broadband user and the MyIX. Packet loss is measured by averaging sample measurements over the measurement period.

Question 2: SKMM seeks views on the proposed standards on network performance for broadband access services.

Requirement for Better User Experience

- 13 In order to provide better services to subscribers and at the same time comply with the QoS Mandatory Standards, service providers shall:
 - a. Improve their network infrastructures to maintain the QoS level as required in this determination despite increase in demand.
 - b. Modify packages offered to subscribers with different pricing commensurate with the attainable QoS, if service providers are not able to improve their network infrastructures in order to provide minimum QoS level as required in this determination.

Question 3: SKMM seeks views on the proposed actions by service providers in order to have better user experience.

Measurement

- 14 Service providers shall be required to install a test server to monitor, record and report the above parameters. The standard end user equipment configuration is personal computer equivalent of at least a 1GHz Pentium IV with 256Mb memory running only a standard browser application. The test server shall be placed at the MyIX.
- 15 Sampling tests may be initiated either by the end user or by the service provider. A minimum sample size for any of the tests shall be at least 100 samples per user. A minimum of 1 user location per Broadband Remote Access Server (BRAS) or the edge node of the regional broadband network shall be tested for this purpose. The test results accumulated by the test server shall be reported to the Commission.
- 16 Service providers shall comply with any further request from the Commission to conduct test at any time.

Question 4: SKMM seeks views on the proposed test measurement to be done by service providers.