PROPOSAL FOR THE NEW MANDATORY STANDARDS ON THE QUALITY OF SERVICE FOR BROADBAND WIRELESS ACCESS SERVICE

This Public Inquiry Paper was prepared in fulfillment of Section 104(2) of the Communications and Multimedia Act 1998

14 August 2009
In this public inquiry paper, the Commission seeks to invite submissions from members of the public and participants of industry on the proposed standards 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  
The Malaysian Communications and Multimedia Commission  
63000 Cyberjaya,  
Selangor.

Fax: +603 – 8688 1003  
E-mail: qosbwa@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 Broadband has been identified as the backbone for development of Knowledge Economy (K-Economy) in Malaysia. Realizing the importance of broadband, Cabinet Committee on Broadband (CCB) in the meeting on July 2007 has set the national broadband target of 50% household penetration by end 2010.

2 In order to achieve the aspired target, government has launched two initiatives, Broadband for General Population (BBGP) and High Speed Broadband (HSBB).

3 BBGP is broadband services with the throughput up to 10 Mbps. BBGP consists of broadband services through wired and wireless technologies such as ADSL, WiMAX, WiFi and HSDPA. These services are targeted to serve general public nationwide.

4 HSBB, which is implemented through Public Private Partnership (PPP) between Government and Telekom Malaysia (TM), is a premium broadband service which will provide throughput of more than 10Mbps. Initially HSBB will be rolled out in the nation’s key economic and population zones through fiber optic infrastructure.

5 Existing Determination No. 4 of 2003, Commission Determination on Mandatory Standards for Quality of Service for Digital Leased Line and Determination No. 1 of 2007, Commission Determination on Mandatory Standards for Quality of Service for Broadband Access regulate provision of minimum service level for digital leased line and wired broadband. As for now, the QoS mandatory standard for broadband wireless access is yet to be in place.
Realizing that, and in an effort to further promote the growth and innovation in this sector, the Commission is in the opinion that there shall be mandatory standards on quality of service (QoS) for broadband wireless access. These standards, in the considered opinion of the Commission will promote a high level of user-confidence in service delivery from the industry and ensure that the expectations of end-users are effectively protected.

In selecting the benchmarks for the Quality of Service standard here, we have ensured that the benchmarks are meaningful to the customer and enabling the customer to assess and make informed decisions on the level of quality that they are enjoying.

The Commission is of the view that the Mandatory Standards on Quality of Service will act as first definitive step towards the formation of a culture of quality consciousness within the communications and multimedia industry. An adherence to the industry best practices will act as an ideal platform for companies with regional and global ambition to launch and expand their business operations. With the onset of globalization, business models and practices must be in tandem with global norms and expectations.

Objective, measurable and auditable standards are vital to ascertain whether the minimum quality of service is being offered. The approaches to be undertaken in this respect include test sampling; observed measurements and recourse to section 268 of the CMA 1998 to facilitate record keeping and auditing where appropriate.

In the long term, the Commission hopes that the industry will of its own initiative, conceptualize, implement and practice high quality of service standards on its own accord, without the need for any
regulatory intervention on the part of the Commission. The competitive environment of the market place will surely act to both motivate and ensure adherence to quality. The intent must always be to identify with the concerns of users with respect to a wide variety of services, and to formulate meaningful definitions of acceptable standards of quality.

**Non-compliance with a mandatory standard**

11 It is to be noted that 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 QUALITY OF SERVICE FRAMEWORK

BROADBAND WIRELESS ACCESS SERVICE

Definition

12 This section applies to all Network Service Providers (NSP) and Application Service Providers (ASP) providing broadband wireless access service.

13 Broadband Wireless Access (BWA) is defined as broadband data access by wireless means to consumer and business markets. In this determination, BWA will cover an always-on wireless bandwidth service which consists of fixed, nomadic and mobile BWA that has minimum downstream or upstream capacity of 256 Kbps.

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

BILLING PERFORMANCE

Definition

14 Billing performance means the integrity and reliability of the billing system as shown in billing accuracy and timeliness in resolving billing disputes, which will be reflected in the number of billing complaints. Billing complaints include payments made and wrongly credited or not credited, double charges, non-refund of deposits, late bills, non-receipt of bills, fraud, wrongly addressed bills and other billing errors.
Standard

15 The percentage of billing complaints in any one billing period shall not exceed 2% of the total number of bills issued during the billing period. For this purpose all billing complaints on one bill shall be taken as one complaint.

16 Billing complaints shall be resolved within the following time frames:
   (a) 90% of billing complaints shall be resolved within 15 business days of receipt of the complaint; and
   (b) 95% of billing complaints shall be resolved within 30 business days of receipt of the complaint.

Measurement

17 The measurement is described by the ratio:

\[
\frac{\text{Total number of billing complaints for the billing period}}{\text{Total number of bills issued over a billing period}} \times 100
\]

Reporting

18 Complete and accurate records of billing complaints shall be maintained by relevant NSPs and ASPs. Such reports shall be in the form and format as may be prescribed by the Commission from time to time. Each report shall be accompanied by a declaration signed by an officer of the NSP and ASP duly authorized by the board of directors, stating that the report is true and accurate. These reports shall be submitted to the Commission not later than six weeks after 30 June for reporting period January to June, and six weeks after 31 December for reporting period July to December respectively.
GENERAL CUSTOMER COMPLAINT HANDLING

Definition

19 General customer complaint means any complaint received on service matters including late or no service restoration after a report has been made, slow network response, unprofessional staff and other complaints related to customer services.

Standard

20 The number of customer complaints shall not exceed 50 complaints per 1000 customers in a 12-month period.

Measurement

21 The measurement is described by the ratio:

\[
\frac{\text{Total number of complaints received over a 12 month period}}{\text{Customer base at the end of the reporting period}} \times 1000
\]

Reporting

22 Complete and accurate records of customer complaints shall be maintained by relevant NSPs and ASPs. Such reports shall be in the form and format as may be prescribed by the Commission from time to time. Each report shall be accompanied by a declaration signed by an officer of the NSP and ASP duly authorized by the board of directors, stating that the report is true and accurate. These reports shall be submitted to the Commission not later than six weeks after 30 June for reporting period January to June, and six weeks after 31 December for reporting period July to December respectively.
STANDARDS ON NETWORK PERFORMANCE

Definitions

23 MyIX means Malaysia Internet Exchange.

24 **Network latency** means the round trip delay for traffic from the end-user to MyIX, based on a minimum standard packet size of 32 bytes.

25 **Throughput** means the amount of data moved to and from the MyIX successfully in a given time period.

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

Standards

27 **Network latency:** The proposed standard for network latency from the broadband user to MyIX shall be no more than 250ms, 95% of the time.

28 **Throughput:** The proposed standard for throughput between the broadband user and MyIX shall be no less than 70% of the subscribed level for 70% of the time; both for the purposes of uploading and downloading.

29 **Packet loss:** The packet loss shall not exceed 5% between the broadband user and MyIX. Packet loss is measured by averaging samples over the measurement period.
Question 2: SKMM seeks views on the proposed definitions and standards for broadband wireless access services.

**REQUIREMENT FOR BETTER USER EXPERIENCE**

30. 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.

**Audit and verification**

31. The Commission may from time to time conduct an audit on the report(s) submitted, perform test call sampling and/or service observation to verify compliance with these mandatory standards.