



Suruhanjaya Komunikasi dan Multimedia Malaysia
Malaysian Communications and Multimedia Commission

***QUALITY OF SERVICE MANDATORY
STANDARDS REPORT FOR THE
PERIOD ENDING JUNE 2004***

1. The Mandatory Standard (MS) on Quality of Service were put in place to ensure that minimum standards of quality are offered to protect the rights of consumers and provide them with a visible and specific criterion through which the quality of services received or used can be gauged.

MS Quality of Service Phase 1

2. The Commission under the Ministerial Direction on Quality of Service, Number 1 of 2002, had on 28 June 2002 issued Determinations Nos. 1 to 4, 2002 on the Mandatory Standard for Quality of Service.
3. The MS Quality of Service covers services such as Public Switched Telephone Network Service (PSTN) , Public Cellular Service (PCS), Dial-Up Internet Access Service and Content Application Services.
4. Four separate Commission Determinations which were made on 28 June 2002, came into operations on 1st January 2003 and applies to the licensees as shown in the table below:

	Framework on Quality of Service Phase 1	Licensees
1.	Commission Determination on the Mandatory Standards for Quality of Service (Public Switched Telephone Network Service) <u>Determination No. 1 of 2002</u>	ASP PSTN
2.	Commission Determination on the Mandatory Standards for Quality of Service (Public Cellular Service) <u>Determination No. 2 of 2002</u>	ASP Cellular mobile
3.	Commission Determination on the Mandatory Standards for Quality of Service (Dial Up Internet Access Service) <u>Determination No. 3 of 2002</u>	ASP Dialup Internet access
4.	Commission Determination on the Mandatory Standards for Quality of Service (Content Applications Services) <u>Determination No. 4 of 2002</u>	CASP Radio and TV free-to-air broadcasting

MS Quality of Service Phase 2

5. The Commission then registered another set of Determinations (Phase 2) on 17 November 2003.

6. This MS QoS covers the following:

	Framework on Quality of Service Phase 2	Licensees
1.	Commission Determination on the Mandatory Standards for Quality of Service (Public Payphone Service) <u>Determination No. 3 of 2003</u>	ASP Public Payphone
2.	Commission Determination on the Mandatory Standards for Quality of Service (Digital Leased Line Service) <u>Determination No. 4 of 2003</u>	NSP Digital Leased Line
3.	Commission Determination on the Mandatory Standards for Quality of Service (Broadband Access Service) <u>Determination No. 5 of 2003</u>	NSP Broadband Access

7. Determination No. 3 of 2003 (Public Payphone Service) came into operation on 1 June 2004, as such no mandatory report was required to be submitted for this period ending June 2004.

8. Determinations No. 4 of 2004 (Digital Leased Line Service) and No. 5 of 2004 (Broadband Access Service) were effective from 1 January 2004.

MS Quality of Service - Reporting

9. Non-compliance with the MS Quality of Service is a breach of section 105 (3) CMA where a person subject to a Mandatory Standard shall comply with the mandatory standard.

10. In the event a person omits or neglects to comply with such Mandatory Standard, he shall be liable to a fine not exceeding one hundred thousand ringgit or to imprisonment for a term not exceeding two years or both as provided for by Section 242.

11. From 1st January 2003, Applications Service Providers (ASPs) and Network Service Providers (NSPs) are required to submit reports to the Malaysian Communications and Multimedia Commission every six months detailing various aspects of their performance and with a signed declaration attesting to its accuracy.
12. Under the Determinations, submissions of Quality of Service reports by licensees are at intervals of every 6 months.
13. Complete and accurate records on the mandatory standards shall be maintained by the licensees and reports to be submitted in the form and format as prescribed by the MCMC.
14. Licensees must submit the MS QOS reports to the MCMC not later than 6 weeks after 30 June for the reporting period January to June, and 31 December for reporting period July to December respectively. Non-submission is also a breach of the mandatory standards.
15. Reports submitted by licensees are recorded and analyzed for non-compliance.
16. An audit and certification process was included to ensure that records submitted by licensees are accurate. MSC Technology Centre Sdn Bhd was subsequently, appointed auditor in late 2003 to audit reports submitted by licensees.
17. Even though, the audit and certification acts as the underlying process in terms of accuracy verification, action will still be undertaken based upon reports of non-compliance submitted by the licensees

18.24 major and randomly selected licensees underwent the audit exercise for reports submitted for the period January 2004 to June 2004.

19. The results are shared with the industry to ensure licensees continue improving their quality of service.

20. It was noted that for Phase 1, even though this is the second round of audit conducted, there were many variances from the report submitted due to licensee's misinterpretation of the Determinations. This will be clarified through improved FAQs published on the website.

21. For Phase 2, it is the first report submission that was audited, and most variances are also due to misinterpretation and misunderstanding of the Determinations. All submitted reports under Phase 2 were audited.

22. It is noted that for the standard on Fulfillment of Installation Order (for PSTN, Digital Leased Line and Broadband Access services), the auditor found that the provision of exclusion clauses for a variety of situations such as customer cancels or defers appointment and customer premise inaccessible, may have contributed to a number of high performance including some achieving 100%.

23. In order to have better understanding of the report, readers are advised to read the report in conjunction with the Determinations.

24. Below are the results of the QoS MS report submission for the period July 03 to December 03.



MCMC QUALITY OF SERVICE AUDIT
Summary Report for Period Ending June 2004

Determination No. 1 of 2002 - Public Switch Telephone Network

PSTN	% Complaints of bills issued	% Bill complaints resolved within 15 bus days	% Bill complaints resolved within 30 bus days	Number of general customer complaints per 1000 lines p.a.	% Service restoration Fulfilled within 24 hours	% Service restoration Fulfilled within 48 hours
Mandatory Standard	2%	90%	95%	50	80%	90%
TT dotCom	0.96	94.08	98.41	3	98	99
DiGi Telecom	0.2	100	100	42	94	96
Maxis Broadband	0.31	90.13	96.99	9.56	88.09	97.39
Telekom (M) Bhd	0.06	98.9	98.5	1.5	84.07	94.12

PSTN	No. of service trouble reports for every 1000 line	% Installation orders Fulfilled within 24 hours	% Installation orders Fulfilled within 48 hours	% Installation Orders Fulfilled within 7 days
Mandatory Standard	500	80%	90%	100%
TT dotCom	21.9	98.86	96.7	100
DiGi Telecom	69	86	92	100
Maxis Broadband	125.47	95.87	99.77	100
Telekom (M) Bhd	263.2	97.68	98.67	100

Bold –audited figures



MCMC QUALITY OF SERVICE AUDIT
Summary Report for Period Ending June 2004

Determination No. 2 of 2002 – Public Cellular service

PCS	% Complaints of bills issued	% Bill complaints resolved within 15 bus days	% Bill complaints resolved within 30 bus days	Number of general customer complaints per 1000 lines p.a.
Mandatory Standard	2%	90%	95%	50
Celcom (019)	0.47	90.36	95.09	28.92
Celcom (013)	0.14	90.12	95.01	53.5
Digi (016)	0.13	97.72	98.55	14.91
Malaysian Mobile (012 & 017)	0.41	91.43	97.66	13.81



MCMC QUALITY OF SERVICE AUDIT
Summary Report for Period Ending June 2004

Determination No. 3 of 2002 - Dial Up Internet Access service

Dial up Internet	% Complaints of bills issued	% Bill complaints resolved within 15 bus days	% Bill complaints resolved within 30 bus days	Number of general customer complaints per 1000 lines p.a.
Mandatory Standard	2%	90%	95%	50
TM Net	0.10	90.60	94.30	66
Jaring	0.01	100	100	0.05

Bold – audited figure

N/A – Not available



Determination No. 4 of 2002 – Content Application Services

CASP	% Annual service availability
Mandatory Standard	99%
8TV	99.84
Nat7	99.72
Channel 9	99.63
Synchrosound (WA FM)	99.99
Star Rfm	99.96
TV3	99.97
Maestra (Mix)	99.92
Maestra (ERA)	99.92
Measat (Hitz)	99.92
Measat (MyFm)	99.91
Measat (Light and Easy)	99.91
Suara Johor (Best 104)	99.64
Kristal Harta (Cats FM)	100
Perfect Excellence Waves (Sinar FM)	99.87
IKIM (Radio IKIM)	99.75
Husa Network (Manis FM)	99.9
Radio Lebuhraya (THR)	99.93

Bold – Audited figures

N/ App – Not applicable



MCMC QUALITY OF SERVICE AUDIT
Summary Report for Period Ending June 2004

Determination No. 4 of 2003 - Digital Leased Line Service

DIGITAL LEASED LINE	Annual Service Availability		
	Local Digital Leased Line Service	National Digital Leased Line Service	International Digital Leased Line Service
Standard	99%	99.9%	99.99%
Telekom Malaysia Berhad	N/A	99.76%	99.95%
Celcom (M) Bhd	99.90%	99.88%	0
Maxis Broadband Sdn Bhd	N/A	99.00%	99.89%
DIGI Telecommunications Sdn Bhd	99.94%	99.98%	0
TT dotCom Sdn Bhd	99.87%	99.88%	99.88%
Fiberail Sdn Bhd	0	99.89%	0



**MCMC QUALITY OF SERVICE AUDIT
Summary Report for Period Ending June 2004**

DIGITAL LEASED LINE	Fulfillment of installation orders					
	Local Digital Leased Line Service		National Digital Leased Line Service		International Digital Leased Line Service	
	% Fulfilled within 1 weeks	% Fulfilled within 2 weeks	% Fulfilled within 2 weeks	% Fulfilled within 3 weeks	% Fulfilled within 4 weeks	% Fulfilled within 5 weeks
Standard	90%	100%	90%	100%	90%	100%
Telekom Malaysia Berhad	N/A	N/A	89.29%	98.24%	98.90%	100.00%
Celcom (M) Bhd	100.00%	100.00%	100.00%	100.00%	0	0
Maxis Broadband Sdn Bhd	N/A	N/A	98.63%	100.00%	92.31%	100.00%
DIGI Telecommunications Sdn Bhd	100.00%	100.00%	100.00%	100.00%	0	0
TT dotCom Sdn Bhd	95.08%	98.36%	100.00%	100.00%	100.00%	100.00%
Fiberail Sdn Bhd	0	0	0	0	0	0



MCMC QUALITY OF SERVICE AUDIT
Summary Report for Period Ending June 2004

DIGITAL LEASED LINE	Service Restoration Performance	
	% Fulfilled within 24 hours	% Fulfilled within 48 hours
Standard	80%	90%
Telekom Malaysia Berhad	99.01%	99.51%
Celcom (M) Bhd	98.03%	98.82%
Maxis Broadband Sdn Bhd	93.64%	96.36%
DIGI Telecommunications Sdn Bhd	100.00%	100.00%
TT dotCom Sdn Bhd	92.68%	92.78%
Fiberail Sdn Bhd	100.00%	100.00%



MCMC QUALITY OF SERVICE AUDIT
Summary Report for Period Ending June 2004

Determination No. 5 of 2003 - Broadband Access Service

Broadband Access	Fulfillment of installation orders		
	% Fulfilled within 24 hours	% Fulfilled within 48 hours	% Fulfilled within 7 days
Standard	80%	90%	100%
Telekom Malaysia Berhad	100.00%	100.00%	100.00%
Maxis Broadband Sdn Bhd	81.16%	95.65%	100.00%
Time dotnet Bhd	97.01%	97.51%	100.00%



**MCMC QUALITY OF SERVICE AUDIT
Summary Report for Period Ending June 2004**

Broadband Access	Service Restoration Performance	
	% Fulfilled within 24 hours	% Fulfilled within 48 hours
Standard	80%	90%
Telekom Malaysia Berhad	80.72%	94.09%
Maxis Broadband Sdn Bhd	88.57%	100.00%
Time dotnet Bhd	86.82%	93.58%

Broadband Access	Network Performance			
	% of number of sample with Network Latency below 85ms	% of number of sample with bandwidth utilisation more than 70% of subscribed level	% of Packet loss	% of network availability
Standard	95%	95%	1%	99.99%
Telekom Malaysia Berhad	100.00%	96.67%	0.00%	99.96%
Maxis Broadband Sdn Bhd	100.00%	100.00%	0.00%	99.98%
Time dotnet Bhd	99.00%	97.50%	0.00%	100.00%