



Suruhanjaya Komunikasi dan Multimedia Malaysia
Malaysian Communications and Multimedia Commission



Global Seminar on Quality of Service and Consumer Protection

Consumer Protection in an IP/NGN environment, what role for regulators

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Contents

1. MCMC – a short introduction
2. Telecommunication Market in Malaysia
3. Consumer Protection
 1. Quality of Service
 2. Required Applications Services
 3. Resolutions of Consumer Dispute
 4. Rate Regulations
 5. Universal Service Provision
4. Initiatives under the IP/NGN
5. Role of the Regulator in an NGN Environment



Suruhanjaya Komunikasi dan Multimedia Malaysia
Malaysian Communications and Multimedia Commission



Establishment of MCMC

- **A statutory corporation**
 - **Established by the Malaysian Communications and Multimedia Commission Act 1998 (MCMCA)**
 - **Effective from 1 November 1998**
- **Operational autonomy but subject to policy directives from Minister**





Scope of Responsibility

- To regulate according to the :
 - Communications and Multimedia Act 1998 (CMA)
 - Postal Services Act 1991 (PSA)
 - Digital Signature Act 1997 (DSA)
- Covers telecoms, broadcasters and ISPs; postal and courier services; and digital certification authorities



Licenses Issued (as Q1 2006)

Year	Licence Type		Number of licences
Q1 2006	Individual	Network Facilities Provider	57
		Network Services Provider	63
	Class	Network Facilities Provider	30
		Network Service Provider	31
		Application Service Provider	414
Total			595



Telecommunication Market - Briefs

1. Private sector participation spurred country's infrastructure growth
 - (trunk fiber network criss-crossing Peninsular Malaysia and stretching the South China Sea
 - Own satellite - to develop infrastructure superhighways
2. Growth mainly contributed by the cellular segment
 - Year 2005 - 19.55 mil, Year 2004 - 14.61 mil, Year 2003 - 11.12mil
 - Compared to year 2000 - 5.12million
3. One main fixed line operator (Telekom Malaysia-incumbent)
 - Fixed line growth on the decline
4. 3 major cellular players (Celcom, Maxis and DiGi)
 - Stiff competition. Many packages and low rates (voice and data)
 - SMS traffic (Dec 05 - rose by 156.33% on year- on- year basis
5. Higher growth in broadband penetration compared to Dial-up
 - Internet subscribers (broadband and dial-up) rose to 3.692 million as at March 06



Telecommunication Market (as at Q1,2006)

Population of Malaysia : 26.5 Million

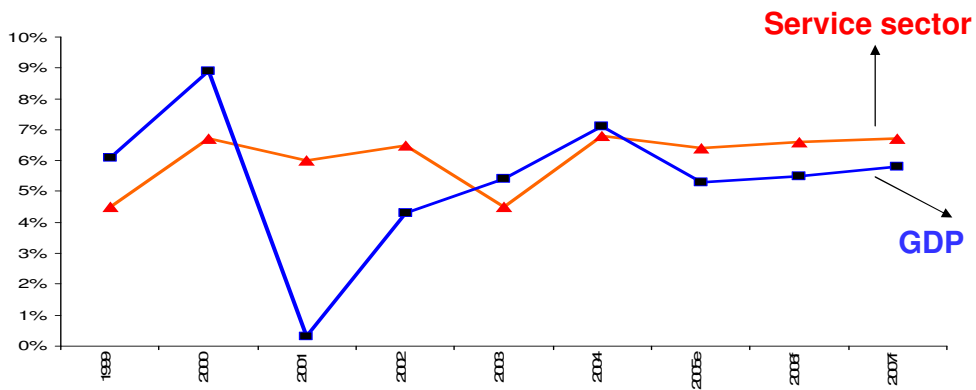
Services	Total Subscription	Penetration Rate (%)
Internet Dial-Up	3,692,000	13.9
Broadband	575,816	2.17
Cellular Phones	20,590,000	77.7
Fixed Line	4,358,000	16.4
Pay TV (Q4,2005)	1,941,000	31.11

Source : MCMC Communications & Multimedia Selected Facts & Figures Q1 2006



The Role of the Service Sector in the GDP of the country

The service sector is expected to steadily contribute towards Malaysia's GDP



Real Gross Domestic Product (GDP) Growth by Sector
e - Estimate
f - Forecast
Source : MIER from MCMC Industry Performance Report, 2005, p9



IP/Next Generation Network Initiatives



NGN Realization

1. Set up of NGN Working Group headed by the Malaysian Technical Standards Forum (2005)
 - One of the four designated Forums under the CMA 98
2. To address issues and concerns on standards and regulatory polices with the on set of IP services
3. Members
 - MCMC, fixed line operator, 3 major cellular operators
4. To-date prepared a Guideline on NGN Realization
 - Outlines views comprising the telecommunications and broadcasting industry



Objectives of NGN WG

1. Highlights implications of network convergence

- Migration of telephony services on to future networks
- Current/future regulatory/interconnect requirements

2. Study on the introduction of broadband NGN services (eg triple play, where voice is incorporated)

3. Single study group and Forum for NGN initiatives

- Share NGN knowledge, define standards for Malaysia's needs
- Core NGN studies covering fixed, mobile and broadband technologies
- Involving all NGN industry players (network providers, content providers, service providers, vendors etc)

4. Identify problems/issues

- Network design implementation, test, commissioning, commercial and etc) and to provide/recommend common solutions for them



Technical Aspects

1. Looks at NGN Architecture

- Introduction of NGN network for Fixed Access
- Migration to Full NGN for Fixed Access
- Evolution/migration from Mobile network
- Fixed Mobile Convergence

2. NGN Security, Fraud and Risk Management

3. End to End Quality of Service

- Commercial understanding on NGN services/products for service operator, customers and regulator

4. Numbering, Naming and Addressing

- Preference given to portable numbering and naming schemes to provide full control to the end-user as well as service providers.

5. Network Interconnect

- Ensuring interoperability among systems and networks



Status - Multi service Convergence Network

1. Migration of Platform-based Services

- Still in the planning and development stage
- Currently Telekom Malaysia (incumbent fixed line operator) is in the process of equipment procurement
- Target to migrate in 2010

2. Cellular - based Services

- The three operators are still in the planning stage



Regulatory Requirements

1. License
 - Current license regime supports the implementation and realization of NGN (NFP/NSP/ASPs)
2. Access
 - Similar to VoIP where the interconnect is at the gateway
Access is not an issue
3. Numbering/addressing/coding
 - Will be addressed under the National Numbering and Electronic Addressing Plan
4. End to End Quality of Service
 - Commercial understanding on NGN services/products for service operator, customers and regulator
5. Numbering, Naming and Addressing
 - Preference given to portable numbering and naming schemes to provide full control to the end-user as well as service providers over his identity
6. Security and safety of subscriber privacy
 - Database and other operational issue



Consumer Protection under the CMA98

Part VII of the CMA Act

- Quality of Service
- Required Applications Services
- Resolution of Consumer Disputes
- Rate Regulation
- Universal Service Provision



Consumer Protection - Regulatory Compliance

1. Quality of Service

- The QoS for the each service is already defined through the existing mandatory standards
- Areas covered : PSTN, Cellular, Dial-up, CASP, Broadband, DLL, Payphone
- Covers both Service and Technical Performances
- Covers compliance and penalty clauses
- QoS subject to review -(to include VoiP)
- Technical teams
 - In discussions with industry related to NGN, IPV6, RFID and broadband services deployment (VoiP etc) and harmonisation
 - Facilitate future role in keeping abreast with technology advancement



QoS MS Standards Defined – 1/2

Service performance	Technical performance
1. Public Switched Telephone Network: <ul style="list-style-type: none">• Billing performance (15 days/30 days)• Installation order (24/48 hours/7days)• Gen. Customer Complaints (50 per 1000 lines)• Restoration performance (24/48 hours)• Service trouble report (500 per 1000 lines)	1.PSTN : <ul style="list-style-type: none">• Operator Speed of answer -emergency call (10/20 sec)• Call Connection lost (6%)• Post Dialing Delay (10/30 sec)
2. Public Cellular Services: <ul style="list-style-type: none">• Billing performance (15 days/30 days)• Gen. Customer Complaints (50 per 1000 cust)	2. PCS: <ul style="list-style-type: none">• Endpoints Service Availability (90%)• Operator Speed of Answer (10/20 sec)
3. Dial-up Internet Access: <ul style="list-style-type: none">• Billing Performance (15 days/30 days)• Gen. Customer Complaints (50 per 1000 cust)	3. Dial-up Internet Access : <ul style="list-style-type: none">• Attempt to log in (max 3x)• Time taken to access (40 sec)• Average download time (80% of speed)



QoS MS Standards Defined – 2/2

Service performance	Technical performance
4. Content Application Services: <ul style="list-style-type: none">• Service Availability (99%)• Billing performance (15/30 days)• Gen. Customer Complaints (50 per 1000 cust)	Nil
5. Public Payphone: Service Availability (90%)	Nil
6. Digital Leased Line : <ul style="list-style-type: none">• Service Availability (99%, 99.9%, 99.99%)• Installation order (1-5 weeks)• Restoration performance (24/48 hours)	Nil
7. Broadband Access Services: <ul style="list-style-type: none">• Installation order (24/48hours/7 days)• Restoration performance (24/48 hours)• Service availability (99.99%)	7. BAS: <ul style="list-style-type: none">• Latency (85ms)• Throughput (70% of b/width subscribed)• Packet Loss (1%)



Rate Regulation

1. Communications and Multimedia (Rates) Rules 2002 regulates the rates for :
 - Local and National PSTN rates
 - Public Payphone
 - Dial-up Internet Access on 15xx
 - Audiotext Hosting Services (600 AB xxx)
2. Covers the rules and compliance and principles in rate setting.
3. Rates are either regulated or unregulated (Access List)
4. NGN Guideline will address tariff regulation in order to avoid price war and protect the network facilities interest for huge investment



Required Applications Service (RAS)

1. List of services classified as "RAS", essential for consumers
 - emergency services
 - directory assistance services
 - operator assistance services
 - services for the disabled (under review)
2. Currently drafting the Operational Direction on the Implementation of RAS. Target completion end of 2005
3. NGN multi-service platform will be taken into consideration in future phases of implementation



Universal Service Provision

1. Provides for basic communications services
2. Focus on access to:
 - Public payphone/basic telephony and Internet access
3. Up to July 2006 – implemented in 64 areas
4. 25 more areas to be covered by end 2006
5. Review of the USP regulations is in progress
 - To expedite the rollout
 - To include broadband services



Role of Regulator in an NGN environment – Consumer Protection

1. Defining Consumer Rights to Satisfactory Service
 - Quality of Service, Operator Code of Conduct via consumer codes (transparency in billing, prohibition against unsolicited calls and e-mails etc)
 - health and safety standards etc
2. Compliance and Enforcement Measures
3. Resolution of Operator – consumer disputes
4. Research, Education and Information
5. Dissemination of information/Awareness
 - Public consultation, website publication, consumer outreach programs, Consumer and Content Forum etc



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Thank you

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website: www.mcmc.gov.my