



MALAYSIAN COMMUNICATIONS AND MULTIMEDIA COMMISSION

**PROPOSAL FOR THE DETERMINATION OF A LIST OF REQUIRED
APPLICATIONS SERVICES AND THE CLASSES OF NETWORK SERVICE
PROVIDER WHO SHALL PROVIDE THEM UNDER SECTIONS 192 AND 193 OF
THE COMMUNICATIONS AND MULTIMEDIA ACT 1998**

DISCUSSION PAPER

14 June 2002

PREFACE

In this discussion paper, the Commission seeks to invite submission from interested parties on the issues raised in the discussion paper or any other matters of interest relevant to the subject. Written submissions, be it in **hard copy** or in **electronic form**, should be provided to the Commission before **12 noon on 15 July 2002**. Submissions should be addressed to:

The Malaysian Communications and Multimedia Commission
Level 11, Menara Dato' Onn,
Putra World Trade Centre,
45 Jalan Tun Ismail
50480 KUALA LUMPUR

Attention: Ms. Shafarina Saleh
Industry Development Division

Telephone +60 3 4047 7000
Fax: +60 3 2693 4881
E-mail: ras@cmc.gov.my

In the interest of fostering an 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 extends our appreciation to interested parties for their participation and for providing written submissions in this consultative process.

TABLE OF CONTENTS

PREFACE.....	2
TABLE OF CONTENTS	3
CHAPTER 1: ABBREVIATIONS	4
Abbreviations.....	4
CHAPTER 2: INTRODUCTION	5
CHAPTER 3: BACKGROUND	6
RAS as required under the CMA	6
Status before RAS under CMA is determined.....	7
Public emergency call services.....	7
Directory information services.....	8
Operator assistance services.....	8
RAS-type provisioning in other countries.....	8
CHAPTER 4: PROPOSED RAS LIST AND CLASSES OF NSP.....	9
What should be included in the list of RAS?	9
Emergency services	9
Directory assistance services.....	9
Operator assistance services,.....	10
Services for the Disabled Consumers	10
Who Shall Provide RAS ?	11
CHAPTER 5: PROPOSED PRINCIPLES RELATING TO PROVISION OF RAS	12
Operating hours.....	12
Quality of service	12
No undue preference	12
Awareness.....	12
Accessibility.....	12
Charges.....	13
Emergency Numbers	13
Networking of Public Number Databases	13
Cost of Provisioning.....	13
Appendix A	15
How RAS Works in the CMA Environment – Typical Architecture of RAS.....	15
Appendix B	16
Position of Services Provided in Malaysia before CMA.....	16
Appendix C	17
Current Required Applications Services (RAS) in Selected Countries.....	17

CHAPTER 1: ABBREVIATIONS

Abbreviations

ASP	Applications service provider
CMA	Communications and Multimedia Act 1998
NSP	Network service provider
RAS	Required applications service

CHAPTER 2: INTRODUCTION

1. RAS is a basket of services which are to be provided by classes of the NSP as per the provisions in the CMA. These services are required as they are very basic services which are essential in supporting consumers using the applications and network services.
2. Section 192 of the CMA states that the Minister is empowered to determine a list of RAS. Subsection 192(2) stipulates that the list may include, but is not limited to :
 - a. Emergency services ;
 - b. Directory assistance services ;
 - c. Operator assistance services ; and
 - d. Services for disabled consumers.
3. Subsection 193(1) also stipulates that the Minister may determine the classes of NSP who shall provide any or all of the services on the list of RAS.
4. Following from the list that has been determined, subsection 193(2) provides that the Commission shall direct the said NSP to provide the RAS. Section 194 further stipulates that the Commission may provide or specify operational details relating to an RAS determined under subsection 193(1).
5. This discussion paper sets out a framework for RAS for the Minister's consideration before he makes determination the list under s192 and s193.
6. In coming up with this paper, references were made to similar applications services which are made available by service providers outside Malaysia. This discussion paper also provides an overview of the RAS-type services that is currently available in Malaysia.

CHAPTER 3: BACKGROUND

RAS as required under the CMA

7. Subsection 192(2) of the CMA stipulates that the RAS list may include, but is not limited to :
 - a. Emergency Services ;
 - b. Directory Assistance Services ;
 - c. Operator Assistance Services ; and
 - d. Services for Disabled Consumers.

8. RAS is not new to the industry as similar services are required to be provided. They are basically services which are deemed essential to support consumers using the network and application services. These services generally provide support to consumers in relation to:
 - a. Public safety e.g. during an emergency ;
 - b. Directory assistance to assist consumers to locate and resolve numbers and/or addresses of other consumers ;
 - c. Assistance to consumers through an operator whereby the consumer could for example report a fault, get assistance for service difficulties etc; and
 - d. Services that assist and make it user friendly for disabled consumers to use or access a service.

9. Further, it is noted that access to controlled network facilities and services as well as to relevant databases may be necessary to actively provide or support an effective and efficient RAS.

10. The Minister may determine the classes of network service providers who shall provide any or all of the applications services on the list of required applications services. **Appendix A** illustrates RAS provisioning under the CMA environment.

Status before RAS under CMA is determined

11. All licensed domestic network operators and cellular telecommunication operators licensed under the Telecommunications Act 1950 were obligated to provide the emergency services, directory information services and operator assistance services by virtue of their license conditions – details are provided below:

Public emergency call services

- 11.1 The licensee shall provide a telecommunications service by means of which any member of the public may, at any time and without incurring any charge, by means of any item of *telecommunication apparatus* which is lawfully connected to any of the Licensee's Networks at any place in the licensed area and which is capable of transmitting and receiving unrestricted two-way voice telephony services, communicate as swiftly as practicable with any of the *Emergency Organizations* for the purpose of notifying them of an emergency.
- 11.2 Emergency Organizations in respect of the above means the police, fire and ambulance services and any similar organization providing assistance to the public in emergencies.
- 11.3 The telecommunication apparatus is defined on paragraph 11.1 must be capable of both:
 - a. Transmitting for conveyance by means of a Licensee's Network specific signals designated by the Licensee for the purpose of establishing communication with voice telephony apparatus controlled by the Emergency Organizations; and
 - b. Transmitting and receiving uninterrupted simultaneous two way speech conveyed, or as the case may be to be conveyed, by means of the Licensee's Networks.
- 11.4 Emergency calls are routed to answering positions (emergency centers) and operators provided by the licensed domestic network operator. However,

answering of such calls is increasingly being taken up directly by the relevant Emergency Organizations.

- 11.5 Telekom Malaysia Berhad also provides distress, urgency and safety services for shipping in accordance with the Radio Regulations of the International Telecommunications Union.

Directory information services

- 11.6 Licensees are required to provide directory information concerning its services to any person who wishes to use such services.

- 11.7 The public may enquire phone numbers of Telekom Malaysia subscribers by dialing 103. This service is provided by TMB.

- 11.8 Directory enquiries service can be made via internet.

Operator assistance services

12. There are at least 10 different types of services under this category. This category of services basically provide various service assistance to consumers via an operator. Examples for fixed network services are, operator assisted domestic (101) and international (108) calls, service access difficulty and fault reporting (100 for telephone and 1061 for data) and general enquiries and information (102). For mobile network services, examples are customer support (123/1-300/normal mobile number), fault repair (1202 /1-800) and stolen card/phone reporting.

(Please refer to **Appendix B** for a breakdown of such services).

RAS-type provisioning in other countries

13. The RAS items as defined above are also provided, albeit in different forms, in Australia, New Zealand, Canada, USA and UK.

(Please refer to **Appendix C** for more details.)

CHAPTER 4: PROPOSED RAS LIST AND CLASSES OF NSP

What should be included in the list of RAS?

14. The Commission proposes that the RAS should encompass emergency services, directory assistance services and operator assistance services. The Commission may consider proposals on services of disabled consumers and any other relevant services.

Emergency services

- 14.1 This service encompasses the priority handling or routing of emergency calls to the ²emergency call answering positions operated by the NSP to notify emergencies to the relevant emergency organizations such as:

- a. Police ;
- b. Fire Brigade ;
- c. Ambulance ; and
- d. ¹Department of Environment ;

- 14.2 Provisioning of emergency services may require access to controlled network facilities, network services and relevant databases, for the purposes of efficiency and effective routing of calls to the respective emergency call answering position.

Directory assistance services

- 14.3 Directory Assistance Service means a service to obtain the telephone number of a consumer through the assistance of an operator or through automatic means. This service requires access to the respective service providers' database to enable the operator to resolve any enquiry by a consumer on another consumer's telephone numbers.

¹ The Department of Environment deals with environmental alerts or emergencies such as open burning, noise, air and water pollution, floods, etc

² Emergency call answering position includes the operator

14.4 Directory Assistance Services may include an NSP to allow reasonable request by another NSP access to the relevant databases to facilitate enquiry.

Operator assistance services,

14.5 Operator Assistance Services means a service whereby a consumer, by dialing a code or number, could reach for the assistance of an operator. The types of operator assistance service required shall provide any or all:

- a. Get assistance on difficulties in accessing the service ;
- b. Call set up assistance for domestic and international calls ;
- c. Fault reporting and complaints handling; and
- d. General enquiries and information about the network service.

14.6 NSP provides routing of calls to operator answering positions to provide assistance to consumers relating to the network and application service.

Services for the ³Disabled Consumers

14.7 The Commission views that the services under this category are aimed to facilitate use of services by *disabled consumers*. Customer premises equipment (consumer apparatus) plays an important role in aiding disabled consumers with the appropriate functionality.

Due to issues surrounding the provisioning of such services, the provision of services for the disabled will not be included in the proposed RAS. However, NSPs are encouraged to make available these services especially if there are specific requests from disabled consumers.

The Commission intends to work with the relevant parties on the future framework for such services and will revise the RAS list in the future.

³ Disabled Consumers - A person/s having a physical or mental impairment that substantially limits one or more major life activities. This definition of disability principally covers individuals with functional limitations of hearing, vision, movement, speech, or interpretation of information.

Question A

- a. *The Commission seeks comments as regards to the list of services listed in Paragraphs 14 above AND any additional applications services that may be considered under RAS;*
- b. *The Commission solicits comments on paragraph 14.7 specifically on the type of services that would be required by disabled consumers and the type of services for disabled consumers which the NSPs could provide;*
- c. *The Commission seeks comments on information details of customers that may be released by the NSP operator to the caller on the Directory Assistance Services.*

Who Shall Provide RAS ?

15. Section 193(1) of the CMA stipulates that the Minister may determine the classes of network service providers who shall provide RAS.
16. The Commission proposes all NSP individual licensee to provide any or all of the services in the list proposed above.

Question B

The Commission requests comments on its proposal to require all NSP (Individual) licensee to provide any or all of the services listed in the RAS.

CHAPTER 5: PROPOSED PRINCIPLES RELATING TO PROVISION OF RAS

Operating hours

17. The RAS shall be provided on a 24 hours, 7 days a week basis.

Quality of service

18. The RAS service must be provided at the level of quality consistent with the network service. For emergency calls priority routing if supported by the network service should be implemented. End-point connectivity as well as quick and accurate consumer response is a necessary pre-requisite especially for operator assisted RAS services and personnel manning answering positions for handling emergency calls.

19. Priority fault repair service

Any fault or failure of the network service which causes any interruption, suspension or restriction of the communication services provided by means of the networks service, shall be restored as swiftly as possible as provided in the consumer code or any other standards currently in place.

No undue preference

20. The NSP shall not show undue preference to or exercise undue discrimination against particular persons or persons of any class or description, including in particular persons in rural areas, whether in respect of the charges or other terms or conditions applied or otherwise in the provision of the RAS. This rule shall also apply to interconnecting calls from one NSP to another NSP. In short, RAS should be made available to everyone in all areas without prejudice and discrimination.

Awareness

21. When the RAS is available, the NSP need to carry out programs to raise the levels of awareness of the availability of RAS.

Accessibility

22. All consumers shall have access to relevant applications and network services shall have access to emergency services even if the services has been disconnected due to default in payment of bills.

Charges

23. Operator assistance for fault reporting services shall be provided at no charge to consumers.

Emergency Numbers

24. The number for all emergency related calls should be standardized. The current batch of numbers, namely, 999, 991, 992, 994 and 112 should be brought into a single emergency number. Countries like Sweden and Australia have adopted this approach whereby a single emergency number can be dialed from both public switch telephony network and cellular telephony.
25. In view of the nature of emergencies where time is a vital factor, the service providers are also encouraged to vigorously look into the possibility of implementing location information capabilities where the answering point of an emergency service agency could locate the position of the caller.

Networking of Public Number Databases

26. The service providers are also encouraged to initiate work on developing a common database or networking of databases where subscribers from any service provider could ask for the number of a subscriber of other service providers by calling his own service provider's operator or customer service personnel.

Cost of Provisioning

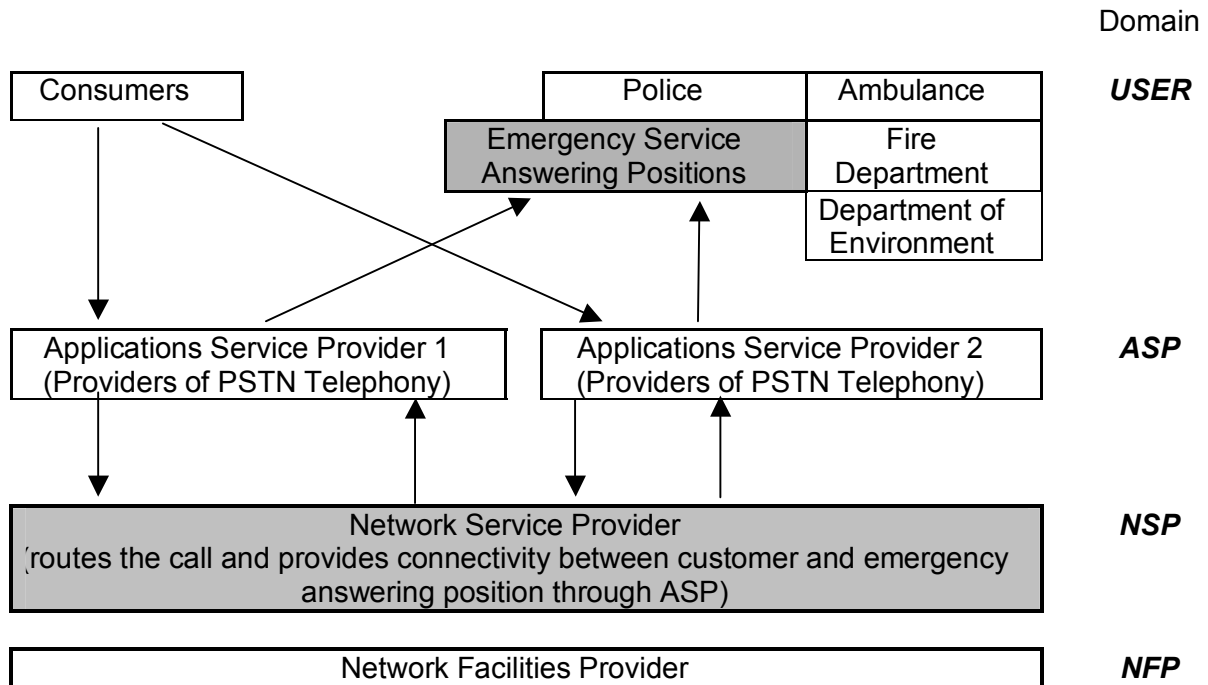
27. All costs associated with the provisioning of RAS shall be borne by the NSPs.

Question C

- a. The Commission solicits comments on the appropriateness of the above principles in the provisioning of the RAS. Notwithstanding, we welcome any additional principles that should be taken into consideration in the provisioning of the RAS;**
- b. The Commission requests comments on paragraph 23 as to whether the operator assistance for fault reporting shall be free of charge;**
- c. The Commission solicits comments on paragraphs 24 on a single number for all emergency calls;**
- d. The Commission seeks comments on its proposal described in paragraph 25 above on the possibility of the NSP of implementing location information capabilities where the answering point of an emergency service agency could locate the position of the caller for both fixed and mobile network;**
- e. The Commission seeks comments on its proposal described in paragraph 26 above on the proposed integrated network databases to support an integrated directory assistance service;**
- f. The Commission solicits comments on paragraph 27 on the cost of RAS provisioning to be borne by the NSPs. Notwithstanding, we welcome any feasible proposals that could be considered in addressing the cost of the provisioning of the RAS.**

Appendix A

How RAS Works in the CMA Environment – Typical Architecture of RAS



Appendix B

Position of Services Provided in Malaysia before CMA

(1) Emergency Services

	Licensee	Fixed Line Emergency	Mobile Emergency	Maritime Emergency
1	TMB	✓	-	✓
2	Maxis	✓	✓	-
3	DiGi	✓	✓	-
4	TM Cellular	-	✓	-
5	Celcom	✓	✓	-
6	Time dotCom	✓	✓	-
7	Mobikom	-	✓	-

(2) Directory Information Services

	Licensee	Directory Enquiries (103)	Printed Directory (white and yellow pages)
1	TMB	✓	✓

(3) Operator Assistance Services

	Licensee	Fixed Line Fault Reporting (100)	Domestic Calls (101)	International Calls (108)	Telegram (104)
1	TMB	✓	✓	✓	✓

Appendix C

Current Required Applications Services (RAS) in Selected Countries

	Country	Emergency Services				Directory Assistance Services	Integrated Public Number Database	Operator Assistance Services
		Paramedics	Fire Alert Service	Police Service	Maritime Emergency			
1	USA	✓	✓	✓		✓		✓
2	UK	✓	✓	✓		✓	✓	✓
3	Australia	✓	✓	✓	✓	✓	✓	✓
4	New Zealand	✓	✓	✓		✓	✓	✓
5	Canada	✓	✓	✓		✓	✓	✓