

SURUHANJAYA KOMUNIKASI DAN MULTIMEDIA MALAYSIA
Malaysian Communications and Multimedia Commission

GUIDELINE ON THE PROVISIONING OF VOIP SERVICE

1. Introduction

The advancements in communications technology have enabled telephone calls to be made and received through the Internet. Voice service via Internet Protocol (IP) is an application service of IP telephony. Thus, the provision of Voice over Internet Protocol (VoIP) is one of the services that come under the purview of IP telephony.

There are currently two ways of how VoIP service can be provided:

- a. PC to PC- based or what is known as internet telephony; and
- b. Phone to phone based through Public Switched Telephone Network (PSTN), which involves multistage access dialing known as VoIP.

The Ministry of Energy Communications and Multimedia had issued a policy position that the provision of PC to PC base internet telephony is not subject to licensing. However, in the case of VoIP, provision of the service requires an Applications Service Provider (ASP) Individual licence as stipulated in the Communications and Multimedia (Licensing) Regulations 2000.

This guideline is intended to facilitate parties interested to understand the mechanics of the provisioning of VoIP services in Malaysia.

2. This guideline covers the following subjects:

- Technical attributes of VoIP services
- Licensing requirements
- Technical compliance requirements
- Customer access arrangement
- Quality of service
- Complaints procedure

3. Technical Attributes of VoIP

- 3.1 The VoIP Service is classified as a service in which the caller dials a special service number, which is not being charged, for example, Freephone service number, to access the service.
- 3.2 The Freephone service number can be obtained from the Network Provider. The Freephone Service Provider Codes assigned to the Network Provider are shown in Table A.

- 3.3 All call charges are borne by the VoIP service provider that subscribes to the Freephone service.
- 3.4 A caller from a cellular network calling Freephone number may be charged as a call within the same mobile charging area whereby this mobile charging area is that approved by the Commission.
- 3.5 Figure 1 illustrates the components of the VoIP and the linkages relating to the users and the Network Provider.

4. Licensing Requirements

- 4.1 A VoIP service provider will require an Applications Service Provider (ASP) Individual licence under the Communications and Multimedia Act 1998 for the provision of the VoIP service.
- 4.2 The existing telecommunications operators are allowed to provide the services under the licence issued under the repealed Telecommunications Act 1950.

5. Technical Compliance Requirements

- 5.1 Any equipment/interface that is to be connected to the Network Provider for the purpose of accessing the VoIP service must be type approved by SIRIM or a certifying agency authorized by the Commission.

6. Customer Access Arrangement

- 6.1 Access to the VoIP service is through a special dialed code (1-800 Freephone service numbers). The call is routed by a licensed Network Provider to the VoIP server provided by the VoIP service provider for the purpose of setting up a call. Figure 2 illustrates the components of the VoIP linkage for the access.
- 6.2 VoIP service provider will negotiate on commercial basis with the Network Provider to connect their server to the remote access server (RAS), which resides with the Network Provider as illustrated in Figure 2.
- 6.3 The Freephone service will enable VoIP customers to dial-in to the service from any network. The dial-in process is the first stage of the multistage call set-up that involves a circuit switched to a packet switched interface.
- 6.4 Billing of call charges shall be deducted from the accounts payable to which the caller subscribes to the respective VoIP service provider. However, for the Freephone service, the VoIP service provider will absorb the call charges based on national and international calls (if applicable) that are payable to the Network Provider.

7. Quality of Service

- 7.1 A VoIP service provider is responsible for ensuring that voice passes through its network with minimal voice loss and unauthorized access in accordance with the performance indicators as benchmark by the VoIP service provider.
- 7.2 The routing shall be done so as to facilitate the most efficient way of getting packets to their desired destination.
- 7.3 The VoIP infrastructure and service shall be built on the principles of scalability, availability and performance.
- 7.4 Necessary measures shall be taken by the VoIP service provider and the Network Provider to minimize any congestion that may be faced in accessing the VoIP service. This shall be done by the provision of sufficient circuits and Point of Presence in the local access network. These circuits may be leased from any licensed Network Provider.

8. Complaints Procedure

- 8.1 Each VoIP service provider shall provide a helpdesk with a contact number to facilitate users enquiry and/or complaints with regard to the VoIP service.
- 8.2 The helpdesk shall be accessible via Freephone to enable customers to be connected to the service provider support assistant personnel.
- 8.3 In the event that any complaint, dispute or claim arises relating to whether there has been a breach by the VoIP service provider, such complaint, dispute or claim, the parties involved shall attempt to resolve them expeditiously.
- 8.4 In the event that the VoIP service provider and/or the Network Provider have breached a licence condition, the Commission shall have the right to institute action according to the relevant conditions of the licence.

Note: In this guideline the term Network Provider refers to Network Facilities Provider and/or Network Service Provider.

The information contained in this document is intended to facilitate the prospective applicants wishing to provide VoIP service. The Commission reserves the right to change and/or amend this document without giving prior notice. This document has no legal standing and is not intended to substitute for legal advice.

TABLE A: LIST OF FREEPHONE SERVICE PROVIDERS

Freephone Service Prefix	AB Code	Subscriber Number	Freephone Service Provider
1800	11	XX XX	CELCOM
	99		
1800	28	XX XX	DIGI TELECOMMUNICATIONS
	68		
1800	82	XX XX	MAXIS
	83		
1800	33	XX XX	PRISMANET
	77		
1800	80	XX XX	TELEKOM MALAYSIA
	81		
	88		
1800	18	XX XX	TT DOTCOM
	38		

FIGURE 1: NETWORK DIAGRAM

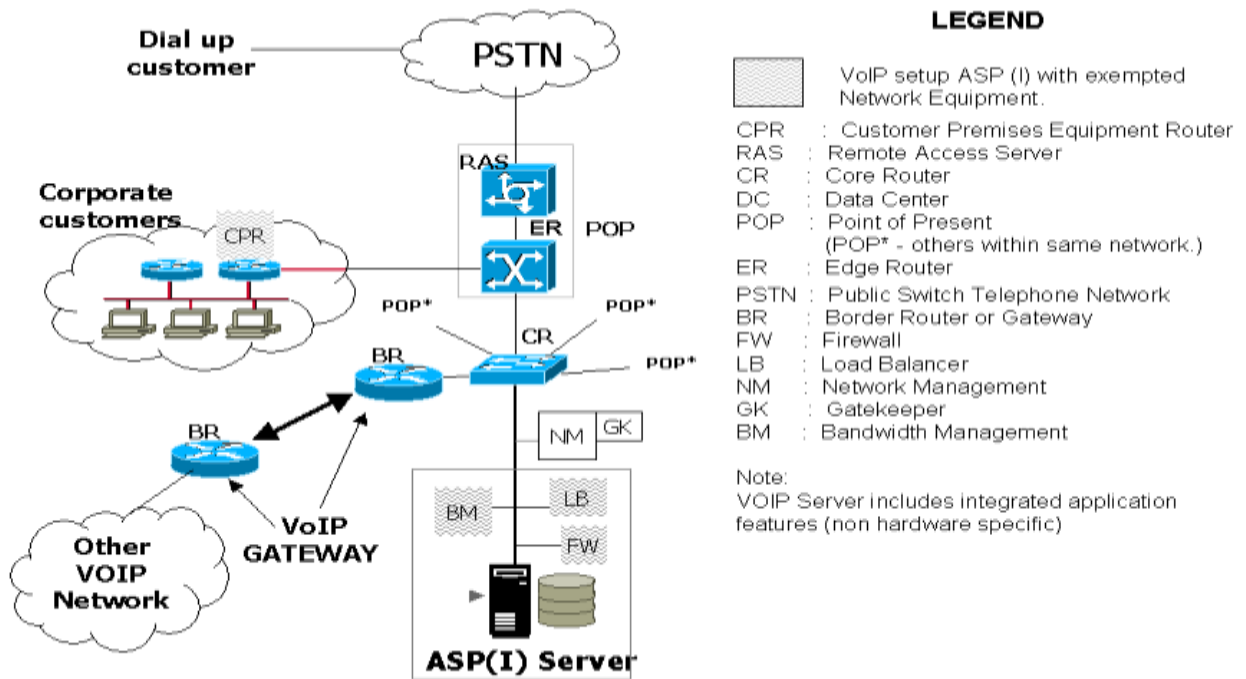


FIGURE 2: CUSTOMER ACCESS ARRANGEMENT

