METHOD AND SYSTEM FOR MULTIMEDIA MESSAGE SERVICE COMMUNICATION

TECHNICAL FIELD

[0001] The present invention generally relates to the communication technology, and in particular to an interactive method, a user terminal and a communication system used for multimedia message services.

BACKGROUND

[0002] As an attractive value-added service, the short message service (SMS) is increasingly becoming another important service area in mobile communication networks involved voice service as a leading function. A wide range of different value-added data services are based on this kind of mobile data communication means of short message such as mobile phone bank, mobile phone securities, information on-demand, wireless e-mail, wireless data communication and fax etc. All these are referred to as "short message service" (or SMS) in general.

[0003] At present, SMS is a fairly basic data service that enables a wireless subscriber to send simple text messages of up to 160 characters at the present. SMS has, as a insult of the development in communication, been developed from a simple notification means to a versatile platform for value-added services.

[0004] Taking FIG. **1** for example, where a conventional solution is shown for SMS based value-added services adopted for wireless subscribers. For example, if a user wants to ask for a current stock quote of IBM via SMS, he or she has to find the IBM stock quote service code (SQ) and the service provider access number (i.e. message center number, e.g. 123456), and input the command format (i.e. the service code plus the company name: SQ IBM), then sends this to a message center to request the desired information about the stock quote of IBM. Upon receiving a request from a subscriber, the message center (or network server) provides the content requested by the subscriber in response. Although it is very troublesome to remember and input the contents relating to this kind of requests, the SMS based value-added service gives users the convenience to access and to acquire information.

[0005] Because the current short message service supports mainly relatively short texts, the future development in contents of the short messages will be focused on multimedia contents. The most prominent feature of this kind of richer short message service, however, is to support multimedia messages to pass on video clips, pictures, audio samples and text. Multimedia message service (MMS) has been proposed in consequence of the technical upgrades in the short message service.

[0006] MMS is the natural evolution of SMS. The messaging standard for MMS is set up by two organizations, WAP (Wireless Application Protocol) Forum and 3GPP (3rd Generation Partnership Project). Therefore MMS is designed to operate at upper levels of the WAP protocol, without limitation to a certain art of transmission, supporting both the circuit switched data communication and the general packed radio service (GPRS) data communication. MMS currently adopts WAP-push technique, which is a store & transmit function similar to that of SMS, and therefore the current MMS technique remains yet a store/transmit one. This means that if a message is sent by a handset, a recipient will not receive it directly. Instead of that, the message is received in advance by a multimedia message center of the network in which the subscriber resides, and then the multimedia message center sends a notification to the recipient informing that the recipient should download the message from the multimedia message center. A similar multimedia message center exists also in SMS systems, but as all the messages to be sent are text ones, it is relatively simple in operation. Whereas by MMS, the operation in the message center is relatively complex as it will not rely on a certain network of a certain operator, so if, for example, the recipient resides on a slower network, or his/her handset's screen has a different size, the equipment at the operator needs to be able to detect the situations and to configure a corresponding message format.

[0007] MMS is a new global message communication standard, the most prominent feature of which is the supporting of multimedia applications. The multimedia message enables contents and pieces of information with a full range of functions, including images, audio information, video information, data and text, to be transferred, and video clips, pictures, voice and text, supported by a GPRS network, to be transferred, by taking advantage of WAP protocol as a carrier. When the MMS specification was constituted by the standard organization it was once conceived that MMS should be an applications bearing platform serving not only as a store-forward center for messages but performing various enriched applications. Through a mobile terminal supported by MMS a user should enjoy the same content services and experiences, as he or she would get through the classical Internet. As MMS can support a wide range of data format standards, such as image format, audio format, animation format standard, that entirely the same experience as get from the internet is therefor desired to be available for user by MMS, or even multimedia data stream support is expected, when, in future band width allows this, to greatly enhance the message expression capability and enrich message contents. MMS promises a dramatic increase in messaging capabilities that will enrich user experience and create a major new source of revenue for network operators as well as content and service providers. However, a primary shortcoming or imperfection of the current MMS standard is that MMS is still in a situation of "simple communication", that is to say, most of the short message services available at present are unidirectional, generally do not provide interaction between content sources or providers and end users. Although some features of interaction between end users and servers (or content and/or service providers) have been proposed, involved only in those features that a mobile subscriber send a message with a mobile terminal to reply a information request, which do not satisfy real time demands for information interaction from users, and this fact limits the development of the value-added MMS services.

[0008] MMS is the natural evolution of SMS. Because MMS delivers much richer content than SMS, MMS provides a friendly and vivid method for expression. However, the service model inherits from the MMS, and users have to compile the request message by themselves. And currently most of MMS applications only focus on how to transmit and present images, ring tones and text, but do not talk about how to make full use of MMS characteristics to enhance the user experience in MMS value added services. Especially in