

[0014] U.S. Utility application Ser. No. 11/356,775, filed Feb. 17, 2006, by Krishnakant M. Patel, Bruce D. Lawler, Giridhar K. Boray, and Brahmananda R. Vempati, entitled "ENHANCED FEATURES IN AN ADVANCED VOICE SERVICES (AVS) FRAMEWORK FOR WIRELESS COMMUNICATIONS SYSTEMS," attorney docket number 154.18-US-U1, which application claims the benefit under 35 U.S.C. Section 119(e) of U.S. Provisional Application Ser. No. 60/654,271 (154.18-US-P1);

[0015] P.C.T. International Application Serial Number PCT/US2006/011628, filed Mar. 30, 2006, by Krishnakant M. Patel, Gorachand Kundu, Sameer Dharangaonkar, Giridhar K. Boray, and Deepankar Biswas, entitled "TECHNIQUE FOR IMPLEMENTING ADVANCED VOICE SERVICES USING AN UNSTRUCTURED SUPPLEMENTARY SERVICE DATA (USSD) INTERFACE," attorney docket number 154.19-WO-U1, which application claims the benefit under 35 U.S.C. Section 119(e) of U.S. Provisional Application Ser. No. 60/666,424 (154.19-US-P1);

[0016] U.S. Utility application Ser. No. 11/462,332, filed Aug. 3, 2006, by Deepankar Biswas, Krishnakant M. Patel, Giridhar K. Boray, and Gorachand Kundu, entitled "ARCHITECTURE AND IMPLEMENTATION OF CLOSED USER GROUP AND LIMITING MOBILITY IN WIRELESS NETWORKS," attorney docket number 154.20-US-U1, which application claims the benefit under 35 U.S.C. Section 119(e) of U.S. Provisional Application Ser. No. 60/705,115 (154.20-US-P1);

[0017] U.S. Utility application Ser. No. 11/463,186, filed Aug. 8, 2006, by Ravi Ayyasamy and Krishnakant M. Patel, entitled "ADVANCED VOICE SERVICES CLIENT FOR BREW PLATFORM," attorney docket number 154.21-US-U1, which application claims the benefit under 35 U.S.C. Section 119(e) of U.S. Provisional Application Ser. No. 60/706,265 (154.21-US-P1);

[0018] U.S. Utility application Ser. No. 11/567,098, filed Dec. 5, 2006, by Ravi Ayyasamy, Bruce D. Lawler, Krishnakant M. Patel, Vyankatesh V. Shanbhag, Brahmananda R. Vempati, and Ravi Shankar Kumar, entitled "INSTANT MESSAGING INTERWORKING IN AN ADVANCED VOICE SERVICES (AVS) FRAMEWORK FOR WIRELESS COMMUNICATIONS SYSTEMS," attorney docket number 154.23-US-U1, which application claims the benefit under 35 U.S.C. Section 119(e) of U.S. Provisional Application Ser. No. 60/742,250 (154.23-US-P1); and

[0019] U.S. Utility application Ser. No. 11/740,805, filed Apr. 26, 2007, by Krishnakant M. Patel, Giridhar K. Boray, Ravi Ayyasamy, and Gorachand Kundu, entitled "ADVANCED FEATURES ON A REAL-TIME EXCHANGE SYSTEM," attorney docket number 154.26-US-U1, which application claims the benefit under 35 U.S.C. Section 119(e) of U.S. Provisional Application Ser. No. 60/795,090 (154.26-US-P1);

[0020] U.S. Utility application Ser. No. 11/891,127, filed Aug. 9, 2007, by Krishnakant M. Patel, Deepankar Biswas, Sameer P. Dharangaonkar and Terakanambi Nanjanayaka Raja, entitled "EMERGENCY GROUP CALLING ACROSS MULTIPLE WIRELESS NETWORKS," attorney docket number 154.27-US-U1, which application claims the benefit under 35 U.S.C. Section 119(e) of U.S. Provisional Application Ser. No. 60/836,521 (154.27-US-P1);

[0021] all of which applications are incorporated by reference herein.

BACKGROUND OF THE INVENTION

[0022] 1. Field of the Invention

[0023] This invention relates in general to wireless communications systems, and more specifically, to connected portfolio services for wireless networks.

[0024] 2. Description of Related Art

[0025] Advanced Voice Services (AVS), also known as Advanced Group Services (AGS), such as two-way half-duplex voice calls within a group, also known as Push-to-Talk (PTT) or Press-to-Talk (P2T), as well as other AVS functions, such as Push-to-Conference (P2C) or Instant Conferencing, Push-to-Message (P2M), etc., are described in the co-pending and commonly-assigned patent applications cross-referenced above and incorporated by reference herein. These AGS functions have enormous revenue earnings potential for wireless communications systems, such as mobile phone networks.

[0026] Currently, there are three major approaches employed in providing PTT or P2T in wireless communications systems. One approach requires the installation of a dedicated private network, parallel to the wireless communications system, to support the group-based voice services. NEXTEL uses such a system, based on a solution developed by MOTOROLA known as IDEN. However, a dedicated private network is costly to install and maintain and is employed by a few public wireless carriers. Also, the IDEN system is non-standard, and hence cannot be used in standard wireless communications networks, such as those based on GSM (Global System for Mobile Communications) and CDMA (Code Division Multiple Access).

[0027] Another approach is based on Voice over IP (VoIP) technologies. While this approach promises compliance with newer and emerging standards, such as GPRS (General Packet Radio Service), UMTS (Universal Mobile Telecommunications System), etc., it does not provide a solution for carriers employing wireless communications systems based on existing standards, such as GSM, CDMA, etc. However, even for the newer standards, solutions based on VoIP have serious drawbacks, including slower call setup, significant overhead, increased susceptibility to packet losses, low bit rate voice coders, and significant modifications to the mobile handset.

[0028] Still another approach is the innovative approach described in the co-pending and commonly-assigned patent applications cross-referenced above and incorporated by reference herein. In this approach, advanced voice services are provided by a real-time exchange (RTX), also known as a dispatch gateway (DG), that interfaces to the wireless communications system to provide the advanced voice services therein, wherein both the real-time exchange and mobiles that use the advanced voice services communicate with each other using call setup and in-band signaling within the wireless communications system.

[0029] However, notwithstanding the innovations described in the co-pending and commonly-assigned patent applications cross-referenced above, there is a need in the art for improvements to these advanced voice services, as well as additional advanced voice services, that comply with existing and emerging wireless standards and provide superior user experiences. The present invention aims to satisfy this need