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1 Scope

During any phase of a voice or video call, the Online Charging System (OCS) may need to deliver billing/charging in-session notifications to the end user via announcements as part of the rating, balance management and billing process. For example, the OCS may need to inform the user about usage states, threshold crossings, offer statuses, reason for call rejection, alerts about low balances, etc.

In Circuit Switched (CS) domain, online charging of a voice session is performed using Customised Applications for Mobile network Enhanced Logic (CAMEL) mechanisms. In order to deliver in-session notifications or to interact with the end user, OCS can use CAMEL messages such as: Play Announcement, Prompt and Collect, Connect to Resource, Establish Temporary Connection. Such notifications can be delivered pre-, mid- or post-call. However, in IMS and MMTel charging defined in TS 32.260 [20] and TS 32.275 [35] as well as in Diameter Credit-Control Application (DCCA) defined in RFC 4006 [402], announcement capabilities, available at the OCS level, are limited to redirection of a session to a given SIP URI at completion of the session. When redirected the session may be connected to a resource that delivers an announcement.

The Announcement service in this specification provides announcement capabilities for use in a Diameter based online charging session. The OCS is able to specify that a given announcement be played to a call party in order to deliver charging/billing related notifications.