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Requirements for the Voice-Enabled Equipment

1. **Supported Protocols**
   - SIP (Session Initiation Protocol) as specified in [RFC 3261], for establishing, modifying, and terminating multimedia sessions over IP.
   - DNS-based resolution of SIP servers using:
   - SRV records ([RFC 2782]) for service discovery.
   - NAPTR records ([RFC 3403]) for resolution chaining.
   - A records for resolving proxy and registrar addresses.

2. **IP and NAT Support**
   - The service supports communication over IPv4 only.
   - NAT traversal mechanisms are not supported.

3. **Audio Codec Support**
   - G.711 A-law (PCMA) codec is supported for audio sessions.
   - Fax transmission is supported using G.711 A-law passthrough (not T.38).

4. **Media Handling**
   - Voice Activity Detection (VAD) must be disabled to ensure continuous media transmission.

5. **DTMF Signaling**
   - DTMF tones are transmitted in-band over RTP using the method described in [RFC 2833]/[RFC 4733].

6. **Quality of Service**
   - The service supports packet marking for Quality of Service (QoS) purposes

7. **Session Maintenance**
   - The service requires support for SIP Session Timers as defined in [RFC 4028]. Session Timers are mandatory and must be negotiated during session establishment. The session refresh mechanism must use either INVITE or UPDATE requests, depending on endpoint capabilities and agreement during call setup.