



ARENA

aselsan

4G IMS

IP MULTIMEDIA SUBSYSTEM

#PublicSafetyCommunication



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IP MULTIMEDIA SUBSYSTEM

ARENA 4GIMS is a component designed to integrate voice, video, and other media types in IP-based networks. It provides users with various communication services such as voice calls, video conferencing, and instant messaging. ARENA 4GIMS and EPC work together in VoLTE (Voice over LTE) to combine IP telephone with data communication. It enables the use of the SIP protocol to activate voice calls and other communication services in 4.5G networks.

Multimedia Telephony Services

- Voice over LTE (VoLTE): High-quality voice calls over the LTE network
- Video over LTE (ViLTE): Video calling services using the LTE network

Enhanced Communication Services

- Enhanced messaging: Advanced messaging features like group chat, file transfer and presence information via OTT applications runs on LTE network
- SMS-over-IP support

Session Management

- SIP (Session Initiation Protocol) for session control and signaling
- Support for multimedia sessions, including voice, video and messaging

Quality of Service (QoS)

- Ensures high-quality multimedia services by prioritizing traffic and managing network resources
- Supports mechanisms for bandwidth management and low latency

Security

- Secure transmission of multimedia data using encryption and authentication
- Protection against eavesdropping and unauthorized access
- Support of integration with cryptological devices (HSM)

Interoperability

- Seamless integration with existing telecom networks and services
- Compatibility of cutting edge 5G networks for smooth transition and service continuity

Service Delivery

- Enables the creation and delivery of a wide range of multimedia services and applications
- Supports third-party service providers and developers through open APIs and standards

Scalability and Flexibility

- Designed to handle a large number of simultaneous multimedia sessions
- Easily adaptable to new services and evolving technologies

Technical Specifications

- High-quality voice and video call infrastructure (VoLTE and ViLTE)
- Conference calls
- Supporting services (call forwarding, call hold)
- SMS support over IP Infrastructure
- External network connectivity support
- Support for multiple and high-quality codecs
- High-performance system infrastructure
- Full integration with MC Services
- Emergency call support via IMS infrastructure
- Topology hiding and session controller support
- 3GPP TS 23.228 IP multimedia subsystem (IMS)
- Counter and KPI support to monitor system health
- Service continuity support with redundant operating structure
- Support for integration with lawful interception services
- Call authorization and barring support

