

# SIP

- ❑ Session Initiation Protocol
- ❑ Comes from IETF

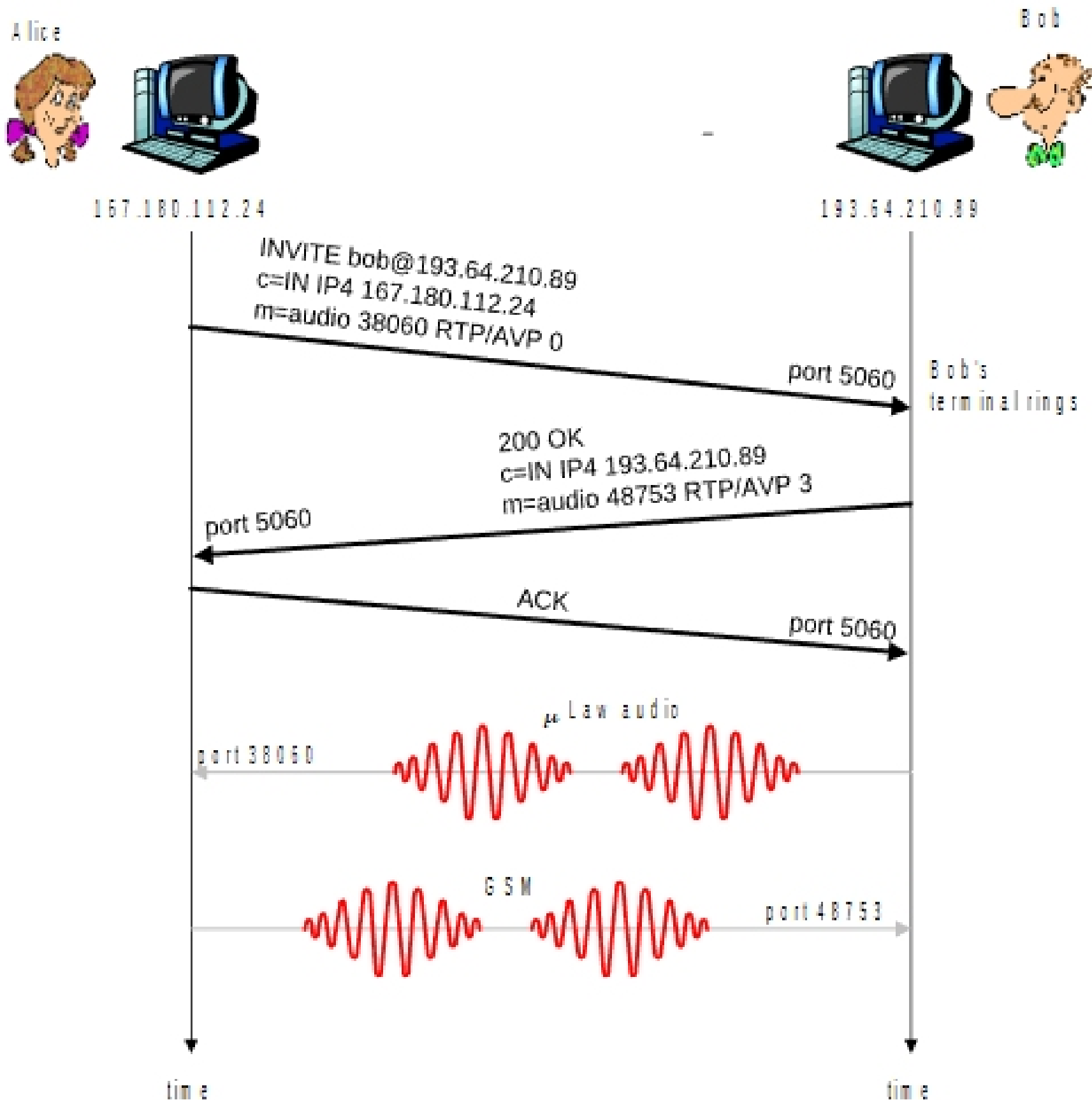
## SIP long-term vision

- ❑ All telephone calls and video conference calls take place over the Internet
- ❑ People are identified by names or e-mail addresses, rather than by phone numbers.
- ❑ You can reach the callee, no matter where the callee roams, no matter what IP device the callee is currently using.

# SIP Services

- Setting up a call
  - Provides mechanisms for caller to let callee know she wants to establish a call
  - Provides mechanisms so that caller and callee can agree on media type and encoding.
  - Provides mechanisms to end call.
- Determine current IP address of callee.
  - Maps mnemonic identifier to current IP address
- Call management
  - Add new media streams during call
  - Change encoding during call
  - Invite others
  - Transfer and hold calls

# Setting up a call to a known IP address



- Alice's SIP invite message indicates her port number & IP address. Indicates encoding that Alice prefers to receive (PCM ulaw)

- Bob's 200 OK message indicates his port number, IP address & preferred encoding (GSM)

- SIP messages can be sent over TCP or UDP; here sent over RTP/UDP.

- Default SIP port number is 5060