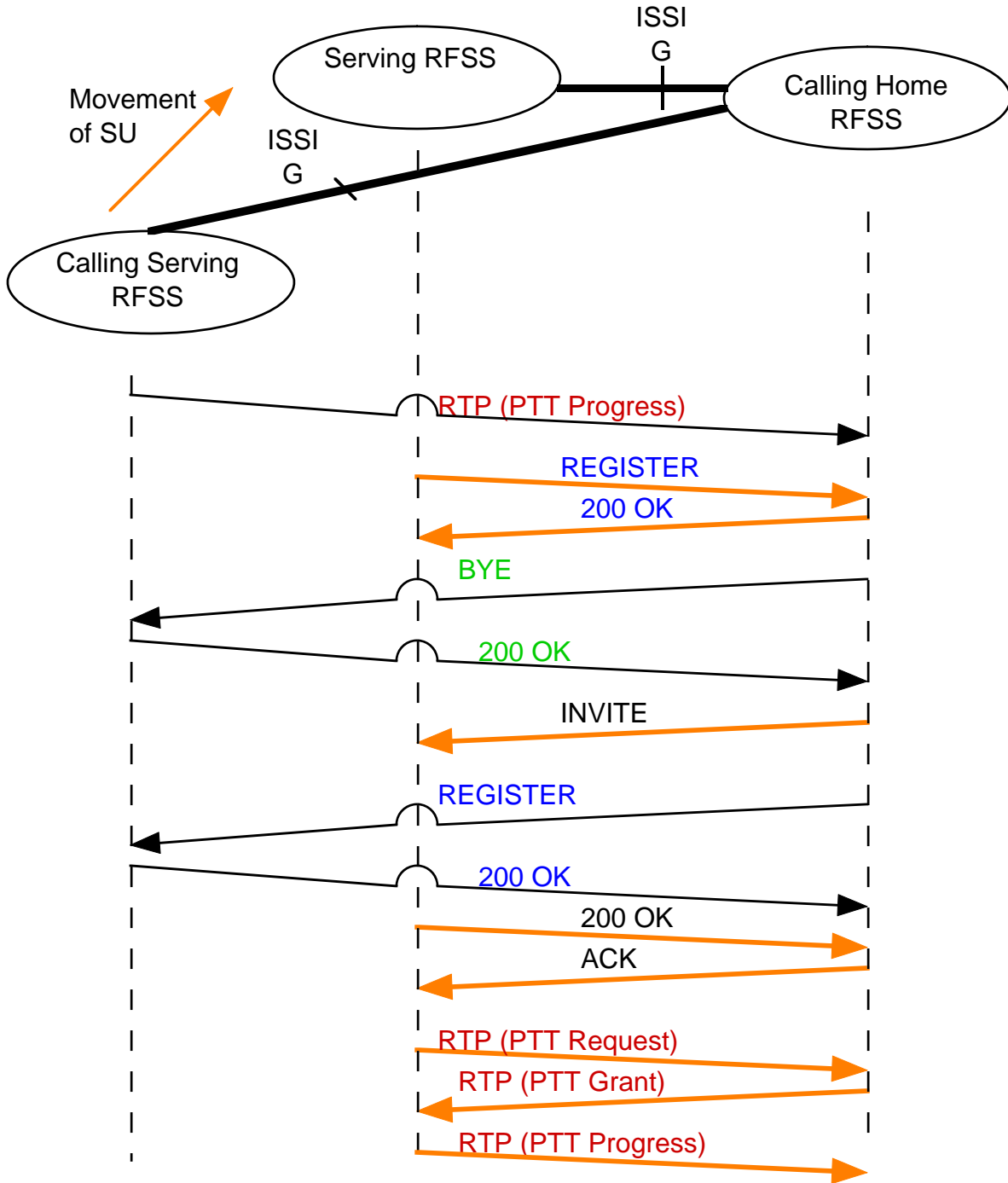


## SU moving from one RFSS to another RFSS while involved in a voice call



## **SU moving from one RFSS to another RFSS while involved in a voice call**

This network topology contains three RFSSs connected by two physical links (indicated by thick black lines).

An SU [Not shown] that is currently involved in an SU-to-SU call moves from its current calling serving RFSS to another serving RFSS.

There is no indication of movement in P25, so the SU continues to transmit its audio data (PTT Progress) as long as it can.

When the SU enters the coverage (serving) area of the next RFSS, that RFSS must register the SU with the SU's home RFSS. The home RFSS upon receiving a SIP REGISTER message from a new RFSS responds with a SIP 200 OK message. The home RFSS must tear down the call with the previous calling serving RFSS by sending a SIP BYE message. The previous calling serving RFSS responds with a SIP 200 OK message and releases any RF resources or RTP resources.

The home RFSS must also send a SIP REGISTER message to the previous calling serving RFSS to deregister the SU. The previous calling serving RFSS responds with a SIP 200 OK message. After this the old calling serving RFSS has no stake in the SU or its call.

In the meantime the home RFSS must also re-invite the SU back to the call, now that it knows where the SU has moved to. The home RFSS does so by sending a SIP INVITE message to the new serving RFSS.

The new serving RFSS responds with a SIP 200 OK message. The home RFSS completes the exchange by sending a SIP ACK message. After this the RFSS can on the behalf of the SU begin to request and send audio data for the SU-to-SU call.