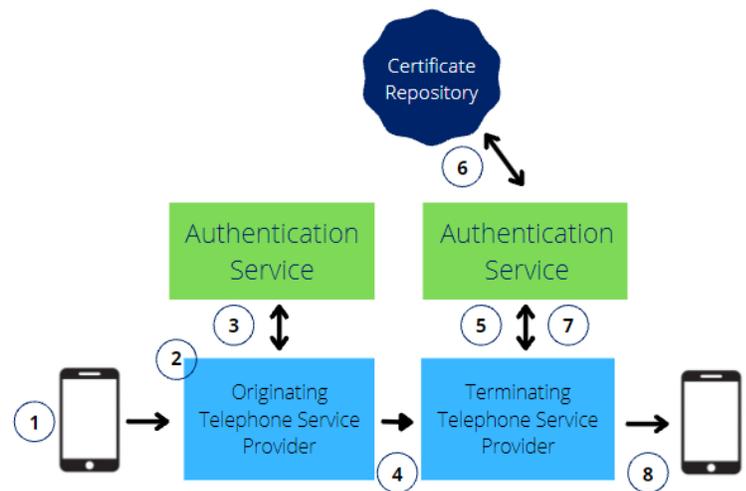


**STIR (Secure Telephony Identity Revisited)** and **SHAKEN (Secure Handling of Asserted information using toKENS)** are the frameworks that promise to prevent the completion of illegally spoofed calls.

**STIR/SHAKEN** uses digital certificates, based on common public key cryptography techniques, to ensure the calling number of a telephone call is secure.

Each telephone service provider obtains their digital certificate from a certificate authority who is a trusted authority.

The certificate technology enables the called party to verify that the calling number is accurate and has not been spoofed.



**Cost:** No additional cost

### How Does STIR/SHAKEN Work?

1. When a call is initiated, a SIP INVITE is received by the originating service provider.
2. The originating service provider verifies the call source and number to determine how to confirm validity.
3. The originating service provider will now create a SIP Identity header that contains information on the calling number, called number, attestation level, and call origination, along with the certificate.
4. The SIP INVITE with the SIP Identity header with the certificate is sent to the destination service provider.
5. The destination service provider verifies the identity of the header and certificate.