Why do I perceive high delay during secure call?

Human ear cannot generally perceive mouth-to-ear delay under 200 milliseconds.

If you perceive a delay during call, chances are that is between 300 and 500 milliseconds, which is perfectly acceptable to have a conversation on phone.

Higher delay in the order of 1-2 seconds (such as satellite communications) makes phone call more difficult, but still doable with some practice.

There are two main causes for perceivable delay using EVSS:

- network jittering: audio data packets arrives irregularly, with variable delay, depending on network issues and structure. PrivateWave is constantly measuring jittering and automatically adapts to it, adding a delay buffer, in order to produce a constant and smooth audio flow
- network latency: audio data packets flows from caller PrivateWave -> PrivateServer -> called PrivateWave and in the opposite direction. If both parties are far from PrivateServer the transmission of audio data will get a delay.

Network	Generation	Jittering
GPRS	2G	500 - 2000 ms
EDGE	2.5G	200 - 500 ms
3G	3G	100 - 300 ms
HSDPA	3.5G	100 - 300 ms
LTE	4.G	100 - 200 ms

While GPRS provides enough bandwidth for PrivateWave to play crystal-clear audio, it exhibits a high jitter, which introduces a perceivable delay.