

VoIP (Voice over Internet Protocol) offers end users a lot of features and cost savings compared to the traditional PSTN (Public Switched Telephone Network) . The following table is a brief comparison of the two technologies:

Carrier Lines

PSTN Dedicated lines required from the telco.

VoIP All voice channels can be transmitted over the one Internet connection

Bandwidth

PSTN Each analogue telephone line uses 64kbps in each direction.

VoIP Using compression, VoIP can use as little as ~10kbps in each direction. Further bandwidth can be saved by using silence suppression (not transmitting when the person is not speaking).

Features such as call waiting, Caller ID, conferencing, music on hold, etc.

PSTN Often available at an extra cost.

VoIP Generally available for free.

Remote PABX extensions for teleworkers and branch-offices.

PSTN Very costly and require dedicated lines for each remote extension.

VoIP Remote extensions are a standard feature.

Expansability and upgradeability

PSTN Complex: can require significant hardware additions, provisioning of new lines, etc.

VoIP Often just requires more Internet bandwidth and software upgrades.

Choice of companies to terminate calls

PSTN Each line is provisioned by a single telco, meaning there is very limited least cost routing.

VoIP Hundreds of VoIP providers to choose from to terminate calls.

Typical business line rental

PSTN \$40

VoIP \$11

Typical local call cost

PSTN 17c

VoIP 14c

Typical mobile call cost

PSTN 35c/min + flagfall

VoIP 32c/min (no flagfall)

Free Calls

PSTN None

VoIP To other VoIP users of the same gateway (eg., between offices)