

## GIPS VAD/DTX/CNG

### Lower transmitted bandwidth with GIPS VAD/DTX/CNG

Global IP Solutions' Voice Activity Detector (VAD), Discontinuous Transmission (DTX) and Comfort Noise Generator (CNG) are essential for the reduction of the average data rate in voice communication.

The VAD classifies every frame as active speech frame or non-active speech frame. Non-active frames are passed to the comfort noise encoder, that encodes the parameters of the background noise. The DTX defines the packet size and packet interval for the background noise parameters to obtain a decrease in bit rate. On the receiving side, the CNG decoder analyzes the background noise parameters and generates a comfort noise signal.

#### Key benefits

- Lower transmitted bandwidth
- Distinguishes quickly and accurately between speech and background noise signals
- Software solution portable to platform of choice
- Stand-alone VAD, independent of codec used
- Compatible with IETF RFC 3389, RTP Payload for Comfort Noise

#### Features

- Flexible to be used for any narrowband or wideband codec
- VAD/DTX/CNG available in fixed point ANSI C<sup>1</sup>
- Supports multiple frame sizes (10 ms, 20 ms, and 30 ms)

<sup>1</sup>) Please contact a GIPS sales representative for a complete list of implementations.

