ST Engineering

CARRIER ID (**DVB-CID**) IDENTIFY THE SOURCE OF AN INTERFERING CARRIER

With satellite interference becoming an increasing problem, Carrier Identification (CID) is an important part of the solution to mitigate carrier interference, of which 90% in unintentional. CID is a signal embedded into a video or data transmission path. It allows satellite operators and end- users to identify the source of an interfering carrier.

The DVB standard implementation of Carrier ID (DVB-CID) is a signal embedded into a video or data transmission path to correctly identify a carrier when it is causing interference in the satellite network.

The identifier contains mandatory information such as a 64-bit MAC address and a vendor serial number, as well as optional user configurable data including GPS coordinates, the carrier name and user contact coordinates. This information is injected into the carrier by the modulator at the uplink site.

Special measurement receivers are installed at the satellite operator facilities. Whenever interference occurs, these receivers can read out the contact information from the carrier and quickly point out the source of interference. Resolving the interference issue is, in most cases, only a phone call away.

In order to lower the impact on the throughput over the satellite, the carrier ID information is spread below the noise floor of the carrier. The image depicts an instance of interference between two carriers and the location of the carrier ID info.

Benefits

- Rapidly pinpoint the source of interference, saving effort, money and reduced downtime due to interference
- Applications include any broadcast or data transmission application

