

Satellite RF Interference (RFI) is a scourge for the satellite communications industry, as operators are faced with a growing number of unauthorized carriers, cross-polarization interferences and other issues associated with equipment problems or human errors. For essential and quick resolution of instances of Satellite RF Interference, the source of interference needs to be rapidly detected, characterized and geo-located. Carrier ID (CID) can identify the source of RFI carrier both quickly and efficiently.

Carrier ID (CID) is a simple concept. Each transmit carrier will have a unique number plate (ID encoded) which can be decoded by satellite operators. In the event of an RFI issue, operators can identify the person who manages the interfering carrier and immediately contact the customer to investigate and solve the RFI issue.

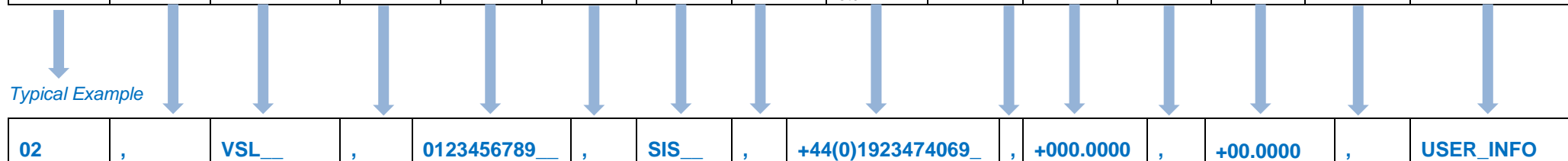
**Network Information Table (NIT) Carrier Identification Descriptor:**

The Network Information Table (NIT) always contains the manufacturers name and the unique unit serial number. In addition, encoders will have the possibility to have data automatically added into Network Information tables to provide traceability. Additional information can be added in the MPEG NIT by the up-linker, including client ID, contact number, latitude, longitude, etc. **(ETSI TS 103 129).**

**Carrier Identifier Format Details - Total Character Count = 80 (Maximum size for Carrier ID in the NIT excluding Descriptor Tag and Length field)**

The missing characters shall be replaced by “\_” (underscore). Example: 1 missing character: “\_” 2 missing characters: “\_\_”

Carrier Identifier Format	Comma Separator	Encoder Manufacturer <i>mandatory</i>	Comma Separator	Encoder Serial Number <i>mandatory</i>	Comma Separator	Carrier Identifier	Comma Separator	Telephone Number	Comma Separator	Longitude	Comma Separator	Latitude	Comma Separator	User Information
2 character string  Numeric Only (Now '02')	1 character string	5 character string  Name of Encoder Manufacturer	1 character string	12 character string  Electronic Serial Number of Encoder	1 character string	5 character string  Name of Carrier Company	1 character string	17 character string  Numeric only and “+”, “(”, “)”  Typically – Operator’s MCR/POC Number, etc.	1 character string	9 character string  +000.0000 to +/- 180.0000 Numeric Only and “+”, “-”, “.”	1 character string	8 character string  +00.0000 to +/- 90.0000 Numeric Only and “+”, “-”, “.”	1 character string	15 character string  Service Information/Other User Field, etc



**02,VSL\_\_,0123456789\_\_,SIS\_\_,+44(0)1923474069\_\_,+000.0000,+00.0000,USER\_INFO**

The information on Carrier ID can now be completed during or after the registration of the earth station via the EUTELSAT Extranet web site.