

FMS Eco Driving Report Structure

IO Name	Record Structure	Description
Event Type		0 - Periodic 1 - Trip Start 2 - Trip End 3 - Driver change 4 - Device startup 5 - Device off / reset 6 - End of Day 7 - VIN Change
Ignition		0 - Ignition Off 1 - Ignition On
Trip		Trip Odometer value
Total Distance		Total Distance IO element indicates measured vehicle total traveled distance.
Engine Fuel used		Accumulated amount of fuel used during vehicle operation.
Active Driver ID		Driver ID number
VIN Number		Vehicle identification number
Event Counter		Number of events
Coasting Distance		1. Fuel rate below X or Engine torque below X 2. Brake switches off (brakes are not currently in use) 3. Vehicle speed above X km/h 4. Cruise control is not detected to be enabled (OFF)
Coasting Fuel used		Accumulated amount of fuel used during Coasting event.
Coasting Time		Time of how long the event lasted
EcoRoll Distance		1. Fuel rate below X or Engine torque below X 2. Brake switches off (brakes are not currently in use) 3. Vehicle speed above X km/h. 4. Cruise control is not detected to be enabled (OFF) 5. Neutral gear detected
EcoRoll Fuel used		Accumulated amount of fuel used during EcoRoll event.
EcoRoll Time		Time of how long the event lasted
Braking Distance		Brake pedal is used
Braking Fuel used		Accumulated amount of fuel used during Braking event.
Braking Time		Time of how long the event lasted
Braking Count		Amount of brakes
Retarder Distance		Retarder braking detected from FMS parameter
Retarder Fuel used		Accumulated amount of fuel used during Retarder event.
Retarder Time		Time of how long the event lasted
Cruise Distance		Cruise control is detected to be is used
Cruise Fuel used		Accumulated amount of fuel used during Cruise event.
Cruise Time		Time of how long the event lasted
Torque Distance		Distance counted from configured X acceleration pedal position level
Torque Fuel used		Accumulated amount of fuel used during Torque event.
Torque Time		Time of how long the event lasted
PTO Distance		Distance counted on PTO event.
PTO Fuel used		Accumulated amount of fuel used during PTO event.
PTO Time		Time of how long the event lasted
Fuel While Driving		1. Speed > 0km/h is detected 2. Fuel consumption parameter is received 3. Ignition ON
Fuel While Idle		1. Speed = 0km/h is detected 2. Fuel consumption parameter is received 3. Ignition ON
Engine Load fuel		1. Engine load percentage will be configurable parameter X% 2. Speed > 0km/h is detected 3. Fuel consumption parameter is received 4. Ignition ON 5. Engine load parameter > X is detected
Total Distance		Total distance count
Total Fuel used		Total Fuel used count
Total Time		Total time of how long the events lasted
Short Stops Count		Total Short stops count
Long Stops Count		Total Long stops count
Speed Range 1 Distance		Distance traveled in meters during certain speed ranges on trip
Speed Range 2 Distance		
Speed Range 3 Distance		
Speed Range 4 Distance		
Speed Range 5 Distance		
Speed Range 6 Distance		
Speed Range 7 Distance		
Speed Range 8 Distance		
Speed Range 9 Distance		
Speed Range 10 Distance		
Speed Range 1 Fuel used		Fuel used in milliliters during certain speed ranges on trip
Speed Range 2 Fuel used		
Speed Range 3 Fuel used		
Speed Range 4 Fuel used		
Speed Range 5 Fuel used		
Speed Range 6 Fuel used		
Speed Range 7 Fuel used		
Speed Range 8 Fuel used		
Speed Range 9 Fuel used		
Speed Range 10 Fuel used		
Speed Range 1 Time		Trip time duration in seconds during certain speed ranges
Speed Range 2 Time		
Speed Range 3 Time		
Speed Range 4 Time		
Speed Range 5 Time		
Speed Range 6 Time		
Speed Range 7 Time		
Speed Range 8 Time		
Speed Range 9 Time		
Speed Range 10 Time		
RPM Range 1 Distance		Distance traveled in meters during certain RPM ranges on trip
RPM Range 2 Distance		
RPM Range 3 Distance		
RPM Range 4 Distance		
RPM Range 5 Distance		
RPM Range 6 Distance		
RPM Range 7 Distance		
RPM Range 8 Distance		
RPM Range 9 Distance		
RPM Range 10 Distance		
RPM Range 1 Fuel used		Fuel used in milliliters during certain RPM ranges on trip
RPM Range 2 Fuel used		
RPM Range 3 Fuel used		
RPM Range 4 Fuel used		
RPM Range 5 Fuel used		
RPM Range 6 Fuel used		
RPM Range 7 Fuel used		
RPM Range 8 Fuel used		
RPM Range 9 Fuel used		
RPM Range 10 Fuel used		
RPM Range 1 Time		Trip time duration in seconds during certain RPM ranges
RPM Range 2 Time		
RPM Range 3 Time		
RPM Range 4 Time		
RPM Range 5 Time		
RPM Range 6 Time		
RPM Range 7 Time		
RPM Range 8 Time		
RPM Range 9 Time		
RPM Range 10 Time		
Torque Range 1 Distance		Distance traveled in meters during certain Torque ranges on trip
Torque Range 2 Distance		
Torque Range 3 Distance		
Torque Range 4 Distance		
Torque Range 5 Distance		
Torque Range 6 Distance		
Torque Range 7 Distance		
Torque Range 8 Distance		
Torque Range 9 Distance		
Torque Range 10 Distance		
Torque Range 1 Fuel used		Fuel used in milliliters during certain Torque ranges on trip
Torque Range 2 Fuel used		
Torque Range 3 Fuel used		
Torque Range 4 Fuel used		
Torque Range 5 Fuel used		
Torque Range 6 Fuel used		
Torque Range 7 Fuel used		
Torque Range 8 Fuel used		
Torque Range 9 Fuel used		
Torque Range 10 Fuel used		
Torque Range 1 Time		Trip time duration in seconds during certain Torque ranges
Torque Range 2 Time		
Torque Range 3 Time		
Torque Range 4 Time		
Torque Range 5 Time		
Torque Range 6 Time		
Torque Range 7 Time		
Torque Range 8 Time		
Torque Range 9 Time		
Torque Range 10 Time		
Braking Range 1 Distance		Distance traveled in meters during certain Braking ranges on trip
Braking Range 2 Distance		
Braking Range 3 Distance		
Braking Range 4 Distance		
Braking Range 5 Distance		
Braking Range 6 Distance		
Braking Range 7 Distance		
Braking Range 8 Distance		
Braking Range 9 Distance		
Braking Range 10 Distance		
Braking Range 1 Fuel used		Fuel used in milliliters during certain Braking ranges on trip
Braking Range 2 Fuel used		
Braking Range 3 Fuel used		
Braking Range 4 Fuel used		
Braking Range 5 Fuel used		
Braking Range 6 Fuel used		
Braking Range 7 Fuel used		
Braking Range 8 Fuel used		
Braking Range 9 Fuel used		
Braking Range 10 Fuel used		

FMS Eco Driving parsed example

Unparsed data

```

00000000 000001F3 8E 01 00000186B6204915 00 0F0E8788 209ADC40 007B 0027 11 0000 2EE0
0023 0000 0000 0023 2F65 00000000 2F66 00000000 2F67 00000000 2F68 00000000 2F69
00000000 2F6A 00000000 2F6B 00000000 2F6C 00000000 2F6D 00000000 2F6E 00000000 2F6F
00000000 2F70 00000000 2F71 00000000 2F72 00000000 2F73 00000000 2F74 00000000 2F75
00000000 2F76 00000000 2F77 00000000 2F78 00000000 2F79 00000000 2F7A 00000000 2F7B
00000000 2F7C 00000000 2F7D 00000000 2F7E 00000000 2F7F 00000000 2F80 00000000 2F81
00000000 2F82 00000000 2F83 00000000 2F84 00000000 2F85 00000000 2F86 00000000 2F87
00000000 0000 0000 01 0000CE87
    
```

Parsed data

Parsed Beacon data part

```

Zero Bytes
Data Field Length
Codec ID
Number of Data 1 (Records)
Timestamp
Priority
Longitude
Latitude
Altitude
Angle
Satellites
Speed
Event Type
Number of total ID's
Number of One Byte IO ID's
Number of Two Bytes IO ID's
Number of Four Bytes IO ID's
RPM Range 4 Distance
RPM Range 4 Distance Value
RPM Range 5 Distance
RPM Range 5 Distance Value
RPM Range 6 Distance
RPM Range 6 Distance Value
RPM Range 7 Distance
RPM Range 7 Distance Value
RPM Range 8 Distance
RPM Range 8 Distance Value
RPM Range 9 Distance
RPM Range 9 Distance Value
RPM Range 10 Distance
RPM Range 10 Distance Value
RPM Range 1 Fuel used
RPM Range 1 Fuel used Value
RPM Range 2 Fuel used
RPM Range 2 Fuel used Value
RPM Range 3 Fuel used
RPM Range 3 Fuel used Value
RPM Range 4 Fuel used
RPM Range 4 Fuel used Value
RPM Range 5 Fuel used
RPM Range 5 Fuel used Value
RPM Range 6 Fuel used
RPM Range 6 Fuel used Value
RPM Range 7 Fuel used
RPM Range 7 Fuel used Value
RPM Range 8 Fuel used
RPM Range 8 Fuel used Value
RPM Range 9 Fuel used
RPM Range 9 Fuel used Value
RPM Range 10 Fuel used
RPM Range 10 Fuel used Value
RPM Range 1 Time
RPM Range 1 Time Value
RPM Range 2 Time
RPM Range 2 Time Value
RPM Range 3 Time
RPM Range 3 Time Value
RPM Range 4 Time
RPM Range 4 Time Value
RPM Range 5 Time
    
```

HEX Code Part

```

00 00 00 00
00 00 01 F3
8E
01
00 00 01 86 B6 20 49 15
00
0F 0E 87 88
20 9A DC 40
00 7B
00 27
11
00 00
2E E0 (AVL ID: 12000)
00 23
00 00
00 00
00 23
2F 65 (AVL ID: 12133)
00 00 00 00
2F 66 (AVL ID: 12134)
00 00 00 00
2F 67 (AVL ID: 12135)
00 00 00 00
2F 68 (AVL ID: 12136)
00 00 00 00
2F 69 (AVL ID: 12137)
00 00 00 00
2F 6A (AVL ID: 12138)
00 00 00 00
2F 6B (AVL ID: 12139)
00 00 00 00
2F 6C (AVL ID: 12140)
00 00 00 00
2F 6D (AVL ID: 12141)
00 00 00 00
2F 6E (AVL ID: 12142)
00 00 00 00
2F 6F (AVL ID: 12143)
00 00 00 00
2F 70 (AVL ID: 12144)
00 00 00 00
2F 71 (AVL ID: 12145)
00 00 00 00
2F 72 (AVL ID: 12146)
00 00 00 00
2F 73 (AVL ID: 12147)
00 00 00 00
2F 74 (AVL ID: 12148)
00 00 00 00
2F 75 (AVL ID: 12149)
00 00 00 00
2F 76 (AVL ID: 12150)
00 00 00 00
2F 77 (AVL ID: 12151)
00 00 00 00
2F 78 (AVL ID: 12152)
00 00 00 00
2F 79 (AVL ID: 12153)
00 00 00 00
2F 7A (AVL ID: 12154)
    
```

