

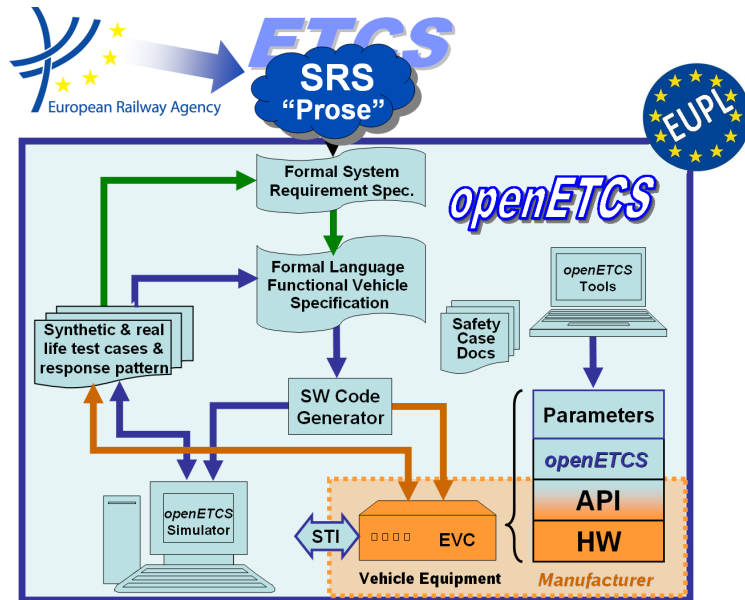
Work-Package 5: “Demonstrator”

M5.2: Data for testing

Description of scenarios use to test openETCS EVC

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November 2015



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OETCS/WP5/M5.2
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M5.2: Data for testing

Description of scenarios use to test openETCS EVC

Document approbation

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Description of work

Prepared for OpenETCS Project

Abstract: This document presents the use cases for testing openETCS EVC.

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Modification History

Version	Section	Modification / Description	Author
0.1	All parts	First draft	Alexis Julin

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1 Introduction

This document describes use cases defined in OpenETCS project in test environment scenario format

2 Scenario 1 : Use case 1, 2, 3, 4

```
# use case 1-2-3-4
[SCENARIO]
DRIVER_ACTION = MainSwitchOn
WAIT_STATUS = MODE_SB, 2, FATAL
DRIVER_ACTION = OpenCabinA, 1
DRIVER_ACTION = DriverID, 1
WAIT_RADIO_SENT = RIM_InitCommSession, 10, FATAL
RBC_RADIO = RBC_ConfigurationDetermination
WAIT_RADIO_SENT = RIM_SessionEstablished, 5, FATAL

# Position reported by onboard is valid (SRS 5.4.4.D32, 5.4.4.A33)
WAIT_RADIO_SENT = RIM_SoM_PR_Valid, 5, FATAL
WAIT_TIME = 2
DRIVER_ACTION = TrainData+TRN

WAIT_RADIO_SENT = RIM_ValidatedTrainData_PosValid, 5, FATAL
RBC_RADIO = RBC_AckTrainData_Valid

WAIT_TIME = 1
DRIVER_ACTION = StartOfMission
WAIT_TIME = 2
RBC_RADIO = RBC_MA

DRIVER_ACTION = DirectionNominal
MOVE_TRAIN

WAIT_LOCATION = 30
WAIT_RADIO_SENT = RIM_PositionReport_BG_245, 5, FATAL
RBC_RADIO = RBC_GENERAL_MESSAGE_BG_245

WAIT_LOCATION = 135
WAIT_RADIO_SENT = RIM_PositionReport_BG_247, 5, FATAL
RBC_RADIO = RBC_GENERAL_MESSAGE_BG_247

WAIT_LOCATION = 440
WAIT_RADIO_SENT = RIM_PositionReport_BG_248, 5, FATAL
RBC_RADIO = RBC_GENERAL_MESSAGE_BG_248

WAIT_LOCATION = 492
WAIT_RADIO_SENT = RIM_PositionReport_BG_249, 5, FATAL
RBC_RADIO = RBC_GENERAL_MESSAGE_BG_249

WAIT_LOCATION = 980
```

```
WAIT_RADIO_SENT = RIM_PositionReport_BG_250, 5, FATAL
RBC_RADIO = RBC_GENERAL_MESSAGE_BG_250
```

```
WAIT_LOCATION = 1038
WAIT_RADIO_SENT = RIM_PositionReport_BG_251, 5, FATAL
RBC_RADIO = RBC_GENERAL_MESSAGE_BG_251
```

```
WAIT_LOCATION = 1464
WAIT_RADIO_SENT = RIM_PositionReport_BG_252, 5, FATAL
RBC_RADIO = RBC_GENERAL_MESSAGE_BG_252
```

```
WAIT_LOCATION = 1664
WAIT_RADIO_SENT = RIM_PositionReport_BG_253, 5, FATAL
RBC_RADIO = RBC_GENERAL_MESSAGE_BG_253
RBC_RADIO = RBC_MA_2
```

```
WAIT_LOCATION = 1900
WAIT_RADIO_SENT = RIM_PositionReport_BG_255, 5, FATAL
RBC_RADIO = RBC_GENERAL_MESSAGE_BG_255
```

```
WAIT_LOCATION = 1960
WAIT_RADIO_SENT = RIM_PositionReport_BG_257, 5, FATAL
RBC_RADIO = RBC_GENERAL_MESSAGE_BG_257
```

```
WAIT_LOCATION = 2312
WAIT_RADIO_SENT = RIM_PositionReport_BG_258, 5, FATAL
RBC_RADIO = RBC_GENERAL_MESSAGE_BG_258
```

```
WAIT_LOCATION = 2367
WAIT_RADIO_SENT = RIM_PositionReport_BG_259, 5, FATAL
RBC_RADIO = RBC_GENERAL_MESSAGE_BG_259
```

```
WAIT_LOCATION = 2815
WAIT_RADIO_SENT = RIM_PositionReport_BG_260, 5, FATAL
RBC_RADIO = RBC_GENERAL_MESSAGE_BG_260
```

```
WAIT_TIME = 1
RBC_RADIO = RBC_CES, SRS="class1,v1.0"
WAIT_RADIO_SENT = RIM_ACK_CES, 5, FATAL
```

```
WAIT_STANDSTILL
```

```
# ----- RBC telegrams -----
```

```
[RBC_ConfigurationDetermination]
```

```
NID_MESSAGE = 32
```

```
NID_LRBG = 16777215
```

```
M_VERSION = 10000b
```

```
[RBC_AckTrainData_Valid]
```

```
NID_MESSAGE = 8
```


NID_LRBG = 6979828

[RBC_MA]

NID_MESSAGE = 3

NID_LRBG = 6979828

NID_PACKET = 15

V_LOA = 28

L_ENDSECTION= 1923

NID_PACKET = 27

V_STATIC = 16

N_ITER = 0

N_ITER = 1

D_STATIC = 300

V_STATIC = 50

NID_PACKET = 21

[RBC_GENERAL_MESSAGE_BG_245]

NID_MESSAGE = 24

NID_LRBG = 6979829

[RBC_GENERAL_MESSAGE_BG_247]

NID_MESSAGE = 24

NID_LRBG = 6979831

[RBC_GENERAL_MESSAGE_BG_248]

NID_MESSAGE = 24

NID_LRBG = 6979832

[RBC_GENERAL_MESSAGE_BG_249]

NID_MESSAGE = 24

NID_LRBG = 6979833

[RBC_GENERAL_MESSAGE_BG_250]

NID_MESSAGE = 24

NID_LRBG = 6979834

[RBC_GENERAL_MESSAGE_BG_251]

NID_MESSAGE = 24

NID_LRBG = 6979835

[RBC_GENERAL_MESSAGE_BG_252]

NID_MESSAGE = 24

NID_LRBG = 6979835

[RBC_GENERAL_MESSAGE_BG_253]

NID_MESSAGE = 24

NID_LRBG = 6979837

[RBC_MA_2]

NID_MESSAGE = 3

NID_LRBG = 6979837

```
NID_PACKET = 15
Q_DIR      = 0
V_LOA     = 28
L_ENDSECTION= 3587
NID_PACKET = 27
Q_DIR      = 0
V_STATIC  = 28
N_ITER    = 0
N_ITER    = 0
NID_PACKET = 21
Q_DIR      = 0
```

```
[RBC_GENERAL_MESSAGE_BG_255]
NID_MESSAGE = 24
NID_LRBG = 6979839
```

```
[RBC_GENERAL_MESSAGE_BG_257]
NID_MESSAGE = 24
NID_LRBG = 6979841
```

```
[RBC_GENERAL_MESSAGE_BG_258]
NID_MESSAGE = 24
NID_LRBG = 6979842
```

```
[RBC_GENERAL_MESSAGE_BG_259]
NID_MESSAGE = 24
NID_LRBG = 6979843
```

```
[RBC_GENERAL_MESSAGE_BG_260]
NID_MESSAGE = 24
NID_LRBG = 6979844
```

```
[RBC_CES]
NID_MESSAGE = 15
#M_ACK = 1
NID_LRBG = 6979844
NID_EM = 1
Q_DIR = 0
D_EMERGENCYSTOP = 300
```

```
# ----- RIM telegrams -----
```

```
[RIM_InitCommSession]
NID_MESSAGE = 155
```

```
[RIM_SessionEstablished]
NID_MESSAGE = 159
```

```
[RIM_SoM_PR_Valid]
NID_MESSAGE = 157
#Q_STATUS = 1
#NID_PACKET = 0
```

```
#NID_LRBG    = 1  
#D_LRBG      = 50
```

```
[RIM_ValidatedTrainData_PosValid]  
NID_MESSAGE = 129  
NID_PACKET  = 0  
#NID_LRBG   = 1  
#D_LRBG     = 50  
NID_PACKET  = 11
```

```
[RIM_PositionReport_BG_245]  
NID_MESSAGE = 136  
NID_PACKET  = 0  
NID_LRBG    = 6979829
```

```
[RIM_PositionReport_BG_247]  
NID_MESSAGE = 136  
NID_PACKET  = 0  
NID_LRBG    = 6979831
```

```
[RIM_PositionReport_BG_248]  
NID_MESSAGE = 136  
NID_PACKET  = 0  
NID_LRBG    = 6979832
```

```
[RIM_PositionReport_BG_249]  
NID_MESSAGE = 136  
NID_PACKET  = 0  
NID_LRBG    = 6979833
```

```
[RIM_PositionReport_BG_250]  
NID_MESSAGE = 136  
NID_PACKET  = 0  
NID_LRBG    = 6979834
```

```
[RIM_PositionReport_BG_251]  
NID_MESSAGE = 136  
NID_PACKET  = 0  
NID_LRBG    = 6979835
```

```
[RIM_PositionReport_BG_252]  
NID_MESSAGE = 136  
NID_PACKET  = 0  
NID_LRBG    = 6979835  
NID_PACKET  = 4  
M_ERROR     = 2
```

```
[RIM_PositionReport_BG_253]  
NID_MESSAGE = 136  
NID_PACKET  = 0  
NID_LRBG    = 6979837
```

```
[RIM_PositionReport_BG_255]
NID_MESSAGE = 136
NID_PACKET = 0
NID_LRBG = 6979839
```

```
[RIM_PositionReport_BG_257]
NID_MESSAGE = 136
NID_PACKET = 0
NID_LRBG = 6979841
```

```
[RIM_PositionReport_BG_258]
NID_MESSAGE = 136
NID_PACKET = 0
NID_LRBG = 6979842
```

```
[RIM_PositionReport_BG_259]
NID_MESSAGE = 136
NID_PACKET = 0
NID_LRBG = 6979843
```

```
[RIM_PositionReport_BG_260]
NID_MESSAGE = 136
NID_PACKET = 0
NID_LRBG = 6979844
```

```
[RIM_ACK_CES]
NID_MESSAGE = 147
NID_EM = 1
Q_EMERGENCYSTOP = 0
NID_PACKET = 0
NID_LRBG = 6979844
```

```
# ----- Balises -----
```

```
[BaliseTrackside]
30 = BG_245_0
35 = BG_245_1
```

```
135 = BG_247_0
140 = BG_247_1
```

```
440 = BG_248_0
445 = BG_248_1
```

```
492 = BG_249_0
497 = BG_249_1
```

```
980 = BG_250_1
985 = BG_250_0
```

1038 = BG_251_0

1042 = BG_251_1

1464 = BG_252_1

1469 = BG_252_0

1664 = BG_253_1

1669 = BG_253_0

1900 = BG_255_0

1905 = BG_255_1

1955 = BG_257_0

1960 = BG_257_1

2312 = BG_258_1

2316 = BG_258_0

2367 = BG_259_1

2372 = BG_259_0

2815 = BG_260_1

2820 = BG_260_0

[BG_245_0]

N_PIG = 0

N_TOTAL = 1

M_DUP = 1

M_MCOUNT = 255

NID_C = 426

NID_BG = 245

Q_LINK = 1

NID_PACKET = 255

[BG_245_1]

N_PIG = 1

N_TOTAL = 1

M_DUP = 2

M_MCOUNT = 255

NID_C = 426

NID_BG = 245

Q_LINK = 1

NID_PACKET = 255

[BG_247_0]

N_PIG = 0

N_TOTAL = 1

M_DUP = 1

M_MCOUNT = 255

NID_C = 426

NID_BG = 247

Q_LINK = 1
NID_PACKET = 255

[BG_247_1]
N_PIG = 1
N_TOTAL = 1
M_DUP = 2
M_MCOUNT = 255
NID_C = 426
NID_BG = 247
Q_LINK = 1
NID_PACKET = 255

[BG_248_0]
N_PIG = 0
N_TOTAL = 1
M_DUP = 1
M_MCOUNT = 255
NID_C = 426
NID_BG = 248
Q_LINK = 1
NID_PACKET = 255

[BG_248_1]
N_PIG = 1
N_TOTAL = 1
M_DUP = 2
M_MCOUNT = 255
NID_C = 426
NID_BG = 248
Q_LINK = 1
NID_PACKET = 255

[BG_249_0]
N_PIG = 0
N_TOTAL = 1
M_DUP = 1
M_MCOUNT = 255
NID_C = 426
NID_BG = 249
Q_LINK = 1
NID_PACKET = 137
Q_DIR = 1
Q_SRSTOP = 0
NID_PACKET = 255

[BG_249_1]
N_PIG = 1
N_TOTAL = 1
M_DUP = 2
M_MCOUNT = 255

NID_C = 426
NID_BG = 249
Q_LINK = 1
NID_PACKET = 137
Q_DIR = 1
Q_SRSTOP = 0
NID_PACKET = 255

[BG_250_1]
N_PIG = 1
N_TOTAL = 1
M_DUP = 2
M_MCOUNT = 255
NID_C = 426
NID_BG = 250
Q_LINK = 1
NID_PACKET = 255

[BG_250_0]
N_PIG = 0
N_TOTAL = 1
M_DUP = 1
M_MCOUNT = 255
NID_C = 426
NID_BG = 250
Q_LINK = 1
NID_PACKET = 255

[BG_251_0]
N_PIG = 0
N_TOTAL = 1
M_DUP = 1
M_MCOUNT = 255
NID_C = 426
NID_BG = 251
Q_LINK = 1
NID_PACKET = 255

[BG_251_1]
N_PIG = 1
N_TOTAL = 1
M_DUP = 2
M_MCOUNT = 255
NID_C = 426
NID_BG = 251
Q_LINK = 1
NID_PACKET = 255

[BG_252_1]
N_PIG = 1
N_TOTAL = 1

```
M_DUP = 2
M_MCOUNT = 255
NID_C = 426
NID_BG = 252
Q_LINK = 1
NID_PACKET = 72
Q_DIR = 0
Q_TEXTCLASS = 1
D_TEXTDISPLAY = 1
M_MODETEXTDISPLAY = 15
M_LEVELTEXTDISPLAY = 3
L_TEXTDISPLAY = 2014
T_TEXTDISPLAY = 1023
M_MODETEXTDISPLAY = 15
M_LEVELTEXTDISPLAY = 5
Q_TEXTCONFIRM = 0
L_TEXT = Let op: L/H sein$
NID_PACKET = 255
```

```
[BG_252_0]
N_PIG = 0
N_TOTAL = 1
M_DUP = 1
M_MCOUNT = 255
NID_C = 426
NID_BG = 252
Q_LINK = 1
NID_PACKET = 72
Q_DIR = 0
Q_TEXTCLASS = 1
D_TEXTDISPLAY = 1
M_MODETEXTDISPLAY = 15
M_LEVELTEXTDISPLAY = 3
L_TEXTDISPLAY = 2014
T_TEXTDISPLAY = 1023
M_MODETEXTDISPLAY = 15
M_LEVELTEXTDISPLAY = 5
Q_TEXTCONFIRM = 0
L_TEXT = Let op: L/H sein$
NID_PACKET = 255
```

```
[BG_253_1]
N_PIG = 1
N_TOTAL = 1
M_DUP = 2
M_MCOUNT = 255
NID_C = 426
NID_BG = 253
Q_LINK = 1
NID_PACKET = 255
```


[BG_253_0]
N_PIG = 0
N_TOTAL = 1
M_DUP = 1
M_MCOUNT = 255
NID_C = 426
NID_BG = 253
Q_LINK = 1
NID_PACKET = 255

[BG_255_0]
N_PIG = 0
N_TOTAL = 1
M_DUP = 1
M_MCOUNT = 255
NID_C = 426
NID_BG = 255
Q_LINK = 1
NID_PACKET = 255

[BG_255_1]
N_PIG = 1
N_TOTAL = 1
M_DUP = 2
M_MCOUNT = 255
NID_C = 426
NID_BG = 255
Q_LINK = 1
NID_PACKET = 255

[BG_257_0]
N_PIG = 0
N_TOTAL = 1
M_DUP = 1
M_MCOUNT = 255
NID_C = 426
NID_BG = 257
Q_LINK = 1
NID_PACKET = 255

[BG_257_1]
N_PIG = 1
N_TOTAL = 1
M_DUP = 2
M_MCOUNT = 255
NID_C = 426
NID_BG = 257
Q_LINK = 1
NID_PACKET = 255

[BG_258_1]
N_PIG = 1
N_TOTAL = 1
M_DUP = 2
M_MCOUNT = 255
NID_C = 426
NID_BG = 258
Q_LINK = 1
NID_PACKET = 255

[BG_258_0]
N_PIG = 0
N_TOTAL = 1
M_DUP = 1
M_MCOUNT = 255
NID_C = 426
NID_BG = 258
Q_LINK = 1
NID_PACKET = 255

[BG_259_1]
N_PIG = 1
N_TOTAL = 1
M_DUP = 2
M_MCOUNT = 255
NID_C = 426
NID_BG = 259
Q_LINK = 1
NID_PACKET = 255

[BG_259_0]
N_PIG = 0
N_TOTAL = 1
M_DUP = 1
M_MCOUNT = 255
NID_C = 426
NID_BG = 259
Q_LINK = 1
NID_PACKET = 255

[BG_260_1]
N_PIG = 1
N_TOTAL = 1
M_DUP = 0
M_MCOUNT = 255
NID_C = 426
NID_BG = 260
Q_LINK = 1
NID_PACKET = 72
Q_DIR = 1
Q_TEXTCLASS = 0

```
D_TEXTDISPLAY = 1
M_MODETEXTDISPLAY = 15
M_LEVELTEXTDISPLAY = 3
L_TEXTDISPLAY = 1729
T_TEXTDISPLAY = 1023
M_MODETEXTDISPLAY = 15
M_LEVELTEXTDISPLAY = 5
Q_TEXTCONFIRM = 0
L_TEXT = Let op: L/H sein$
NID_PACKET = 255
```

```
[BG_260_0]
```

```
N_PIG = 0
N_TOTAL = 1
M_DUP = 0
M_MCOUNT = 255
NID_C = 426
NID_BG = 260
Q_LINK = 1
NID_PACKET = 72
Q_DIR = 0
Q_TEXTCLASS = 1
D_TEXTDISPLAY = 1
M_MODETEXTDISPLAY = 15
M_LEVELTEXTDISPLAY = 3
L_TEXTDISPLAY = 1729
T_TEXTDISPLAY = 1023
M_MODETEXTDISPLAY = 15
M_LEVELTEXTDISPLAY = 5
Q_TEXTCONFIRM = 0
L_TEXT = Let op: L/H sein$
NID_PACKET = 255
```

```
# ----- Speed Profile -----
```

```
[SpeedProfile]
```

```
0 = 0
50 = 40
120 = 40
150 = 40
1600 = 40
1630 = 20
1750 = 40
2050 = 40
3000 = 40
3200 = 40
3250 = 0
```

```
# ----- configuration -----
```

```
[Config_TrainData]
```

```

ETCS_ID = 4554
RADIO_COM_AVAILABLE = 1
ETCS_PHONE1 = 1234567890123456
ETCS_PHONE2 = 6543210987654321
BALISEANTENNA_OFFSET = 10

```

```

[Config_EVCInit]
NETWORK_ID = 0FFFFFFF
LINE_LEVEL = 2
RBC_ID = 1
RBC_PHONE = 0031840880150FFF
COUNTRY_ID = 426
GROUP_ID = 244
DISTANCE = 139
DIRECTION = NOMINAL
VALIDITY = VALID
EVC_CONFIG = CFG_USE_JRU

```

```

[Config_SRSNationalDefaults]
COUNTRY_ID = 426
# Q_NVDRIVER_ADHES (0 or 1)
DRIVER_ADHESION = 1

```

3 Scenario 2 : Use case 5, 6, 7, 8

```

# STM -> Level 2 transition
[SCENARIO]

```

```

DRIVER_ACTION = MainSwitchOn
WAIT_STATUS = MODE_SB, 2, FATAL
DRIVER_ACTION = OpenCabinA, 2
DRIVER_ACTION = DriverID, 1
DRIVER_ACTION = EnterLevel, 1
DRIVER_ACTION = LevelSTM, 253, 1
DRIVER_ACTION = TrainData+TRN, 1
DRIVER_ACTION = StartOfMission, 1

```

```

WAIT_SYMBOL = MO20, C1, ACK, 2, FATAL
DRIVER_ACTION = AckModeOrLevel, 1

```

```

WAIT_STATUS = LEVEL_STM, MODE_SN, EB_OFF, SB_OFF, 5, FATAL

```

```

DRIVER_ACTION = DirectionNominal
MOVE_TRAIN

```

```

WAIT_LOCATION = 50
WAIT_RADIO_SENT = RIM_InitCommSession,5, FATAL
RBC_RADIO = RBC_ConfigurationDetermination
WAIT_RADIO_SENT = RIM_SessionEstablished,5, FATAL

```

```
WAIT_RADIO_SENT = RIM_ValidatedTrainData,5, FATAL
RBC_RADIO       = RBC_AckTrainData
```

```
WAIT_LOCATION = 800
DRIVER_ACTION = AckModeOrLevel, 1
WAIT_RADIO_SENT = RIM_PositionReport_BG_171,5, FATAL
RBC_RADIO = RBC_MA
```

```
WAIT_LOCATION = 890
WAIT_RADIO_SENT = RIM_PositionReport_BG_173,5, FATAL
```

```
WAIT_LOCATION = 1090
WAIT_RADIO_SENT = RIM_PositionReport_BG_172,5, FATAL
```

```
WAIT_LOCATION = 1753
WAIT_RADIO_SENT = RIM_PositionReport_BG_166,5, FATAL
RBC_RADIO = RBC_GENERAL_MESSAGE_BG_166
WAIT_TIME = 1
RBC_RADIO = RBC_MA_2
```

```
WAIT_STANDSTILL
```

```
# ----- RIM telegrams -----
```

```
[RIM_InitCommSession]
NID_MESSAGE = 155
```

```
[RIM_SessionEstablished]
NID_MESSAGE = 159
```

```
[RIM_Acknowledgement]
NID_MESSAGE = 146
```

```
[RIM_ValidatedTrainData]
NID_MESSAGE = 129
NID_PACKET = 0
NID_LRBG = 6979752
NID_PACKET = 11
```

```
[RIM_PositionReport]
NID_MESSAGE = 136
NID_PACKET = 0
NID_LRBG = 6979752
```

```
[RIM_PositionReport_BG_171]
NID_MESSAGE = 136
NID_PACKET = 0
NID_LRBG = 6979755
```

```
[RIM_PositionReport_BG_173]
NID_MESSAGE = 136
```

```
NID_PACKET = 0
NID_LRBG   = 6979757
```

```
[RIM_PositionReport_BG_172]
```

```
NID_MESSAGE = 136
NID_PACKET  = 0
NID_LRBG    = 6979756
```

```
[RIM_PositionReport_BG_166]
```

```
NID_MESSAGE = 136
NID_PACKET  = 0
NID_LRBG    = 6979750
```

```
# ----- RBC telegrams -----
```

```
[RBC_ConfigurationDetermination]
```

```
NID_MESSAGE   = 32
NID_LRBG      = 16777215
M_VERSION     = 10000b
```

```
[RBC_AckTrainData]
```

```
NID_MESSAGE   = 8
M_ACK         = 0
NID_LRBG      = 6979752
```

```
[RBC_MA]
```

```
NID_MESSAGE   = 3
NID_LRBG      = 6979755
NID_PACKET    = 15
Q_DIR         = 1
V_LOA         = 28
L_ENDSECTION  = 1580
NID_PACKET    = 27
Q_DIR         = 1
V_STATIC      = 26
N_ITER        = 0
N_ITER        = 1
D_STATIC      = 767
V_STATIC      = 16
NID_PACKET    = 21
```

```
[RBC_GENERAL_MESSAGE_BG_166]
```

```
NID_MESSAGE = 24
NID_LRBG = 6979750
```

```
[RBC_MA_2]
```

```
NID_MESSAGE = 3
NID_LRBG    = 6979750
NID_PACKET  = 15
Q_DIR       = 0
```

```
V_LOA      = 28
L_ENDSECTION= 1717
NID_PACKET = 27
Q_DIR      = 0
V_STATIC   = 16
NID_PACKET = 21
```

```
# ----- Balises -----
```

```
[BaliseTrackside]
```

```
50 = BG_168_0
```

```
55 = BG_168_1
```

```
800 = BG_171_0
```

```
805 = BG_171_1
```

```
860 = BG_167_0
```

```
865 = BG_167_1
```

```
891 = BG_173_1
```

```
897 = BG_173_0
```

```
1090 = BG_172_1
```

```
1095 = BG_172_0
```

```
1753 = BG_166_1
```

```
1758 = BG_166_0
```

```
[BG_168_0]
```

```
N_PIG      = 0
```

```
N_TOTAL    = 1
```

```
M_DUP      = 1
```

```
M_MCOUNT = 255
```

```
NID_C      = 426
```

```
NID_BG     = 168
```

```
Q_LINK     = 1
```

```
NID_PACKET= 42
```

```
Q_DIR      = 1
```

```
Q_RBC      = 1
```

```
NID_C      = 426
```

```
NID_RBC    = 1
```

```
Q_SLEEPSESSION= 0
```

```
NID_PACKET= 3
```

```
NID_PACKET= 46
```

```
Q_DIR      = 1
```

```
M_LEVELTR = 1
```

```
NID_NTC    = 253
```

```
N_ITER     = 1
```

```
M_LEVELTR = 3
```

```
NID_PACKET= 46
```

Q_DIR = 0
M_LEVELTR = 1
NID_NTC = 253
NID_PACKET= 41
Q_DIR = 1
D_LEVELTR = 790
M_LEVELTR = 3
L_ACKLEVELTR=65
NID_PACKET= 255

[BG_168_1]
N_PIG = 1
N_TOTAL = 1
M_DUP = 2
M_MCOUNT = 255
NID_C = 426
NID_BG = 168
Q_LINK = 1
NID_PACKET= 42
Q_DIR = 1
Q_RBC = 1
NID_C = 426
NID_RBC = 1
Q_SLEEPSESSION= 0
NID_PACKET= 3
NID_PACKET= 46
Q_DIR = 1
M_LEVELTR = 1
NID_NTC = 253
N_ITER = 1
M_LEVELTR = 3
NID_PACKET= 46
Q_DIR = 0
M_LEVELTR = 1
NID_NTC = 253
NID_PACKET= 41
Q_DIR = 1
D_LEVELTR = 790
M_LEVELTR = 3
L_ACKLEVELTR=65
NID_PACKET= 255

[BG_171_0]
N_PIG = 0
N_TOTAL = 1
M_DUP = 1
M_MCOUNT = 255
NID_C = 426
NID_BG = 171
Q_LINK = 1

NID_PACKET= 255
[BG_171_1]
N_PIG = 1
N_TOTAL = 1
M_DUP = 2
M_MCOUNT = 255
NID_C = 426
NID_BG = 171
Q_LINK = 1
NID_PACKET= 255

[BG_167_0]
N_PIG = 0
N_TOTAL = 1
M_DUP = 1
M_MCOUNT = 255
NID_C = 426
NID_BG = 167
Q_LINK = 1
NID_PACKET= 42
Q_DIR = 1
Q_RBC = 1
NID_C = 426
NID_RBC = 1
Q_SLEEPSESSION= 0
NID_PACKET= 41
Q_DIR = 0
D_LEVELTR = 15
M_LEVELTR = 1
NID_NTC = 253
L_ACKLEVELTR= 181
NID_PACKET= 46
Q_DIR = 1
M_LEVELTR = 3
N_ITER = 1
M_LEVELTR = 1
NID_NTC = 253
NID_PACKET= 255

[BG_167_1]
N_PIG = 1
N_TOTAL = 1
M_DUP = 2
M_MCOUNT = 255
NID_C = 426
NID_BG = 167
Q_LINK = 1
NID_PACKET= 42
Q_DIR = 1
Q_RBC = 1

NID_C = 426
NID_RBC = 1
Q_SLEEPSESSION= 0
NID_PACKET= 41
Q_DIR = 0
D_LEVELTR = 15
M_LEVELTR = 1
NID_NTC = 253
L_ACKLEVELTR= 181
NID_PACKET= 46
Q_DIR = 1
M_LEVELTR = 3
N_ITER = 1
M_LEVELTR = 1
NID_NTC = 253
NID_PACKET= 255

[BG_173_1]
N_PIG = 1
N_TOTAL = 1
M_DUP = 2
M_MCOUNT = 255
NID_C = 426
NID_BG = 173
Q_LINK = 1
NID_PACKET= 255

[BG_173_0]
N_PIG = 0
N_TOTAL = 1
M_DUP = 1
M_MCOUNT = 255
NID_C = 426
NID_BG = 173
Q_LINK = 1
NID_PACKET= 255

[BG_172_1]
N_PIG = 1
N_TOTAL = 1
M_DUP = 2
M_MCOUNT = 255
NID_C = 426
NID_BG = 172
Q_LINK = 1
NID_PACKET= 255

[BG_172_0]
N_PIG = 0
N_TOTAL = 1

```
M_DUP      = 1
M_MCOUNT  = 255
NID_C      = 426
NID_BG     = 172
Q_LINK     = 1
NID_PACKET= 255
```

```
[BG_166_1]
N_PIG      = 1
N_TOTAL    = 1
M_DUP      = 0
M_MCOUNT  = 255
NID_C      = 426
NID_BG     = 166
Q_LINK     = 1
NID_PACKET= 255
```

```
[BG_166_0]
N_PIG      = 0
N_TOTAL    = 1
M_DUP      = 0
M_MCOUNT  = 255
NID_C      = 426
NID_BG     = 166
Q_LINK     = 1
NID_PACKET= 41
Q_DIR      = 1
D_LEVELTR  = 916
M_LEVELTR  = 1
NID_NTC    = 253
L_ACKLEVELTR= 181
NID_PACKET= 255
```

```
# ----- Speed Profile -----
```

```
[SpeedProfile]
0      = 0
40     = 40
500    = 40
950    = 40
1900   = 40
2000   = 0
```

```
# ----- configuration -----
```

```
[Config_TrainData]
ETCS_ID = 4554
BALISEANTENNA_OFFSET = 10
BRK_PERCENTAGE = 160
```

```
SPEED_MAX = 220  
TRAIN_LENGTH = 180
```

```
[Config_EVCInit]  
LINE_LEVEL = STM  
RBC_ID = 789  
RBC_PHONE = 123
```

```
[Config_SRSNationalDefaults]  
# not a SRS value but here anyway...  
COUNTRY_ID = 0
```

4 Scenario 3 : Use case 9, 10, 11, 12

WIP

5 Scenario 4 : Use case 13, 14

WIP

6 Scenario 5 : Use case 15

WIP