



Instruction on configuring Events in DUT-E GSM

ignition sensor and modes of onboard electrical network



1) Connect DUT-E GSM to PC using S6 SK service adapters as described in [DUT-E GSM Operation manual](#). Launch DUT-E Service software, log in and load profile from Unit.

2) In [Vehicle power supply FM](#) settings menu, enter a value of voltage, which corresponds to Vehicle's onboard network voltage (see figure 1). Onboard network operation modes boundaries can be adjusted using coefficients, if needed (see figure 2).

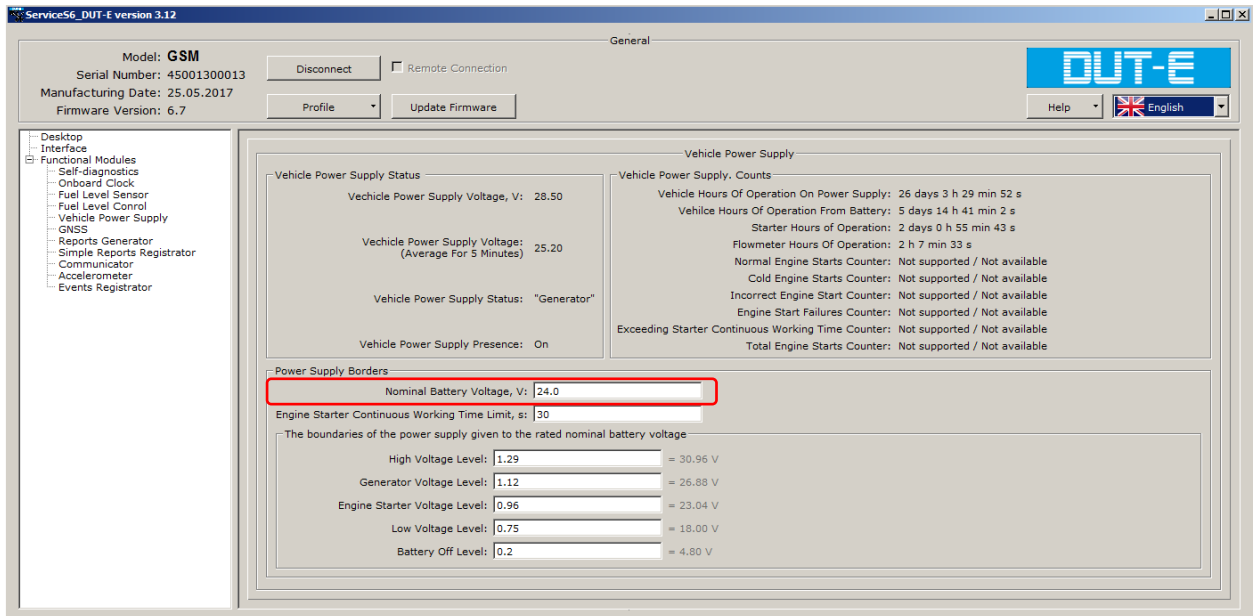


Figure 1 — Window of settings of Vehicle power supply FM in Service S6 DUT-E software

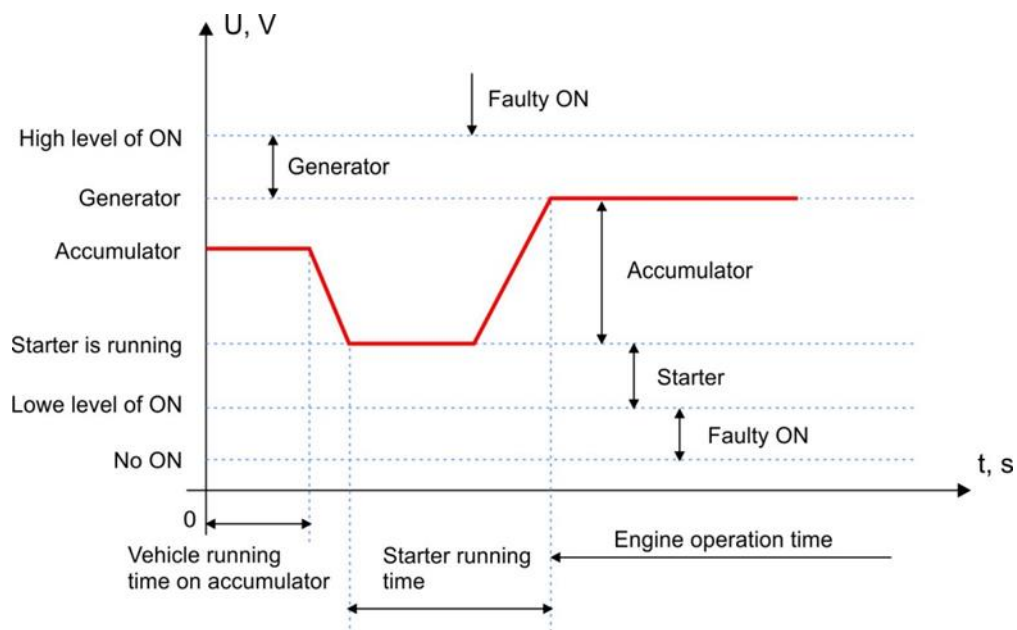


Figure 2 — Operation modes as per onboard network (ON) voltage level

3) In [Reports Generator FM](#) configure Vehicle power supply status (SPN 521056). IT is recommended to send this message on "Timer 1 min" Report (SPN 521246) (see figure 3).

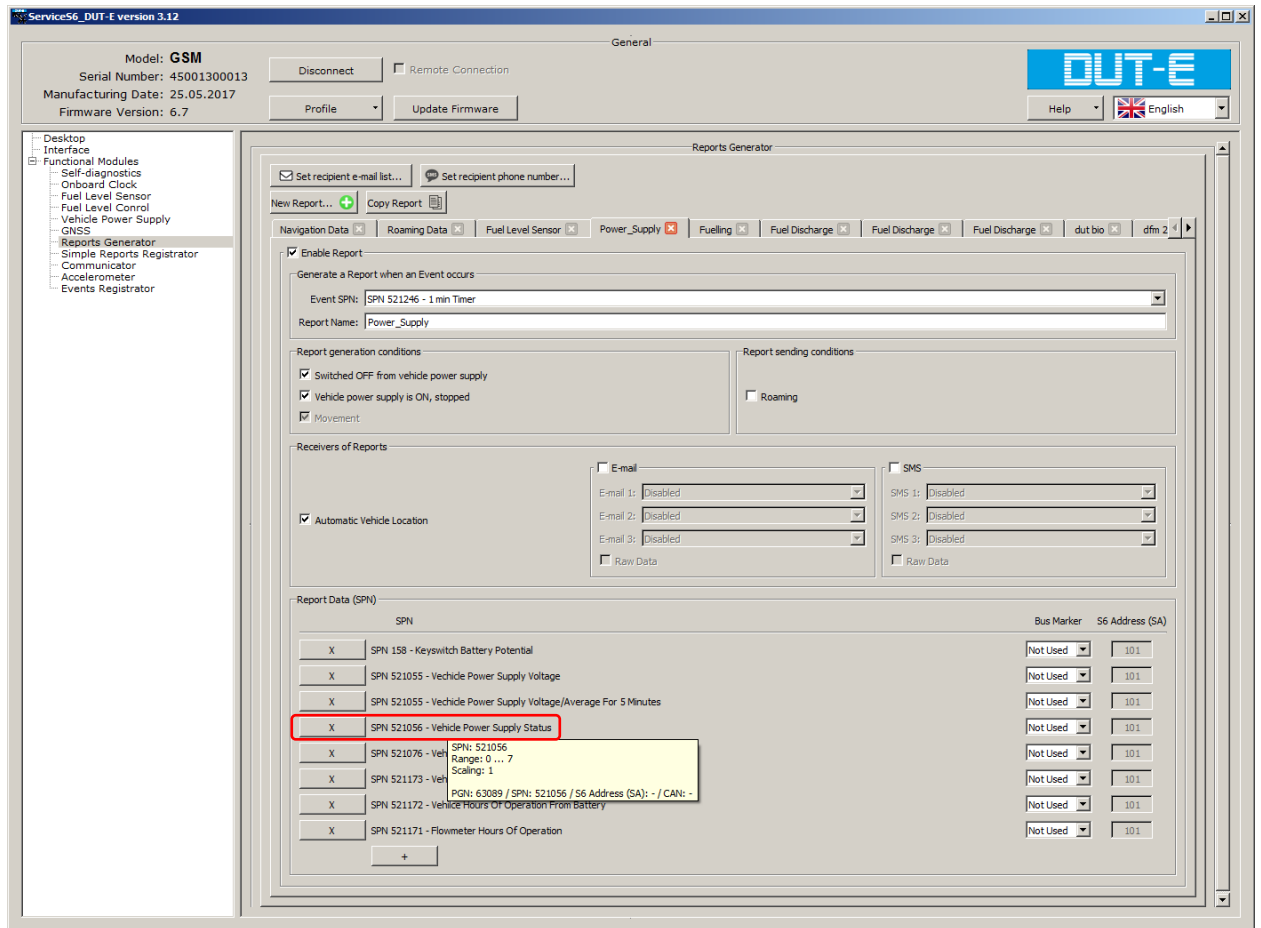


Figure 3 – Settings window of Reports Generator FM in Service S6 DUT-E software

4) Using Unit Properties menu in [ORF4 telematics service](#) or on Wialon server, create required sensors. As example – Vehicle power supply status, ignition sensor (see figure 4).

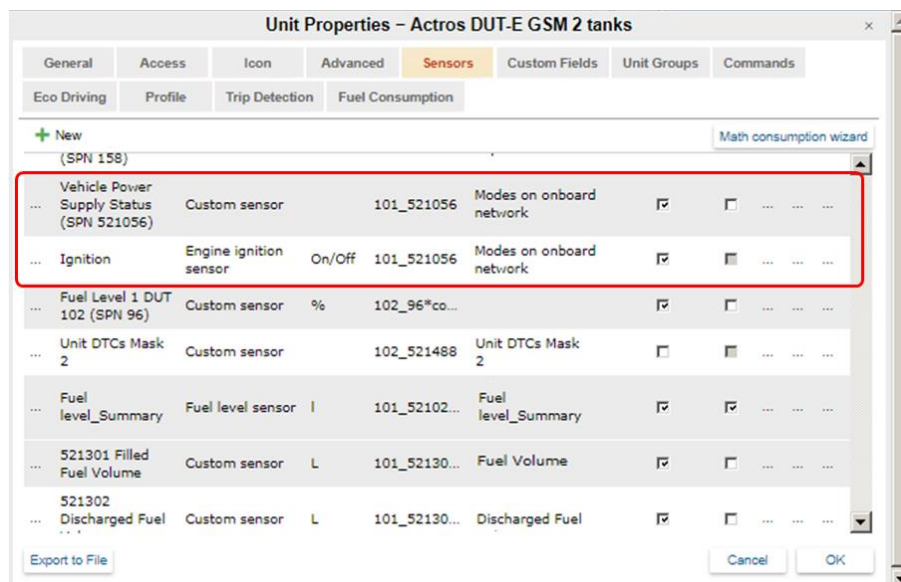


Figure 4 – Settings window of ORF 4 Unit Properties

5) Using Sensor Properties menu, enter "101_521056" value in Parameter field (see figure 5). The value corresponds to Vehicle power supply status sensor and means, that [SPN 521056](#) parameter source is a Unit, which has 101 network address (NA) i.e. DUT-E GSM.

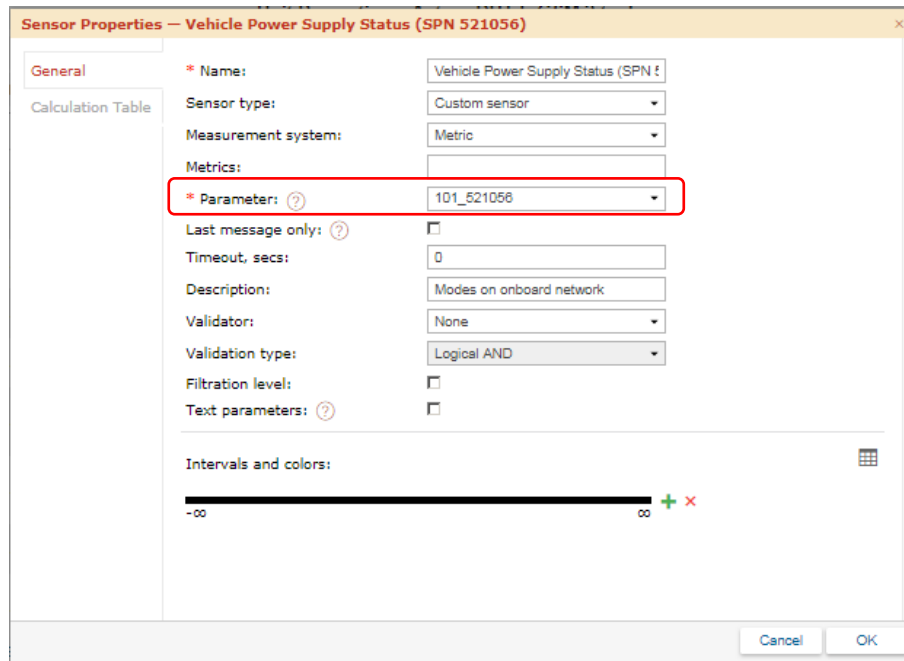


Figure 5 – Sensor Properties window, Vehicle Power Supply Status settings

6) Create Engine ignition sensor using Vehicle Power Supply Status as a template, i.e. copy and rename (see figure 6)

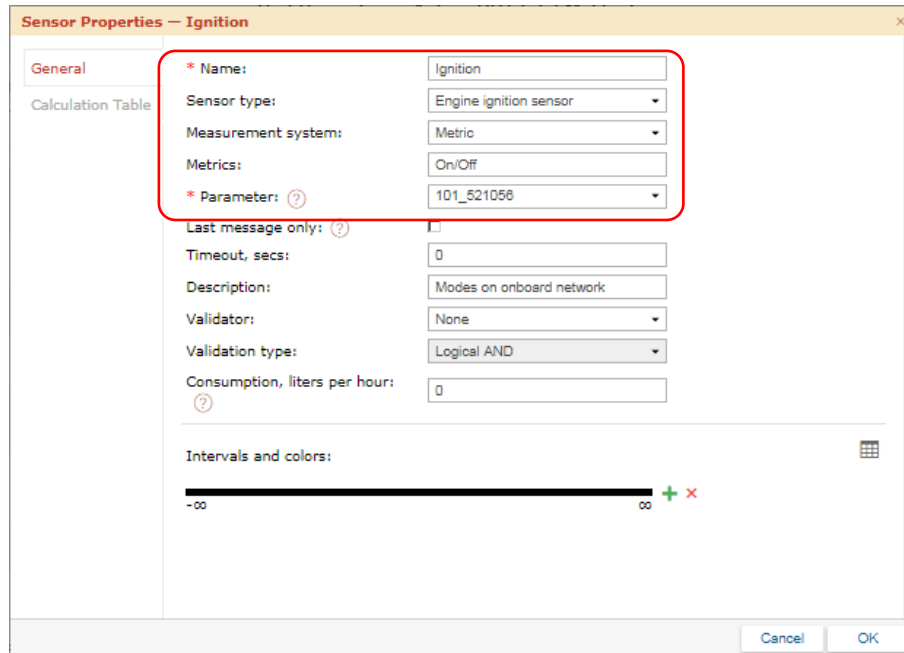


Figure 6 – Settings window of Engine ignition sensor

7) Input values in Calculation table for engine ignition sensor. Value "4" corresponds to power supplying Vehicle from generator, "1" – low level of voltage, "0" – ignition is off (see figure 7).

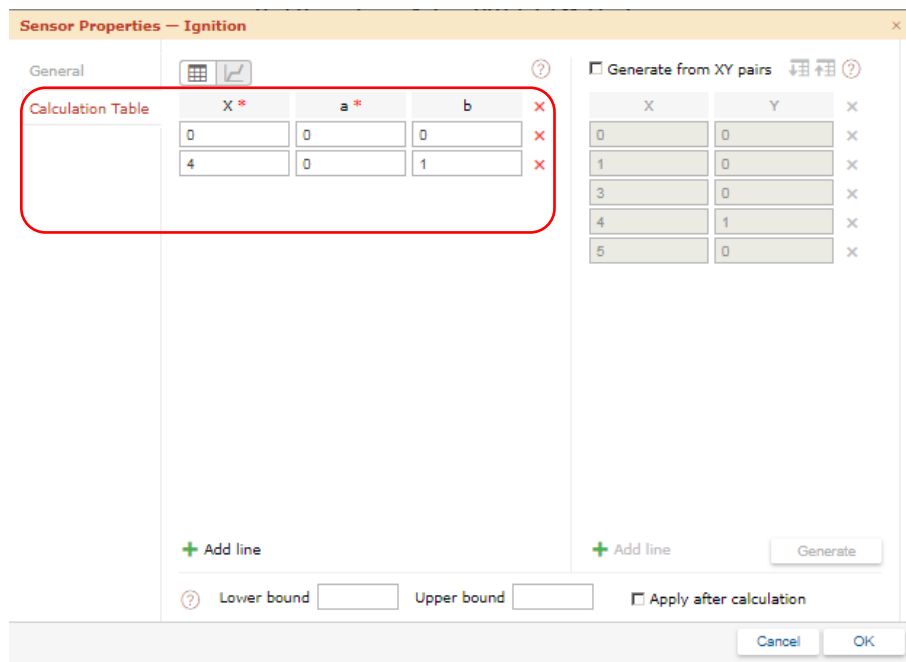


Figure 7 – Inputting values into Calculation table

8) Example of ORF 4 graphical report, where changing voltage of onboard network and vehicle power supply statuses are depicted. The charts are based on data from Engine ignition sensor and are available in Reports tab of ORF4.

The chart clearly shows, that level "3" correspond to network operation from battery, and level "4" – operation from generator (engine is running) (see figure 8).

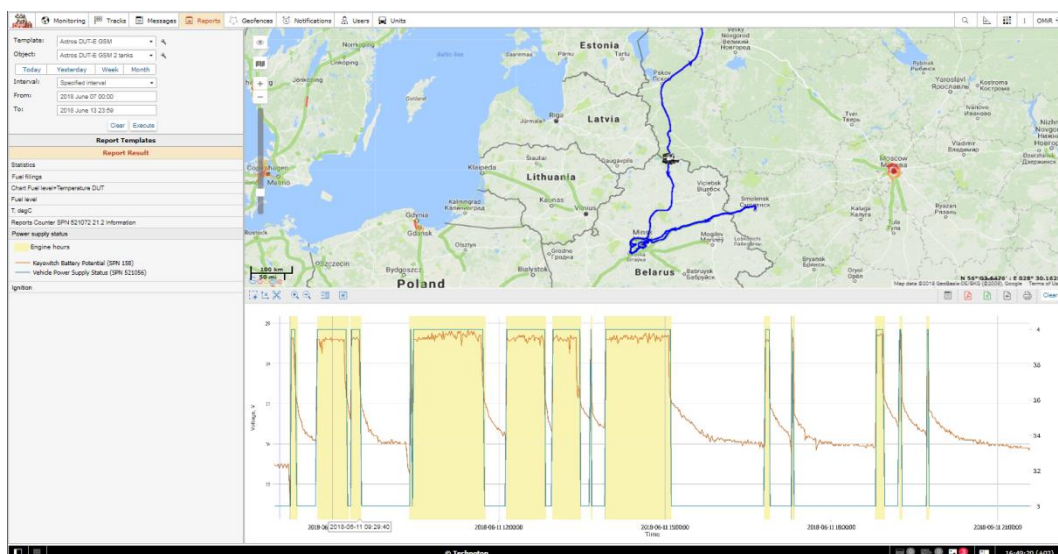


Figure 8 – ORF 4 example Report on onboard network voltage and power supply status

Created Engine ignition sensor has values of "0" (ignition OFF) and "1" (ignition ON). In example Report on figure 9 a chart of vehicle power supply status is combined with Vehicle speed chart.

Data from Engine ignitions sensor are useful for filtering geolocation coordinates of Vehicle when it's parked, for detecting trips and counting operation hours of Vehicle.

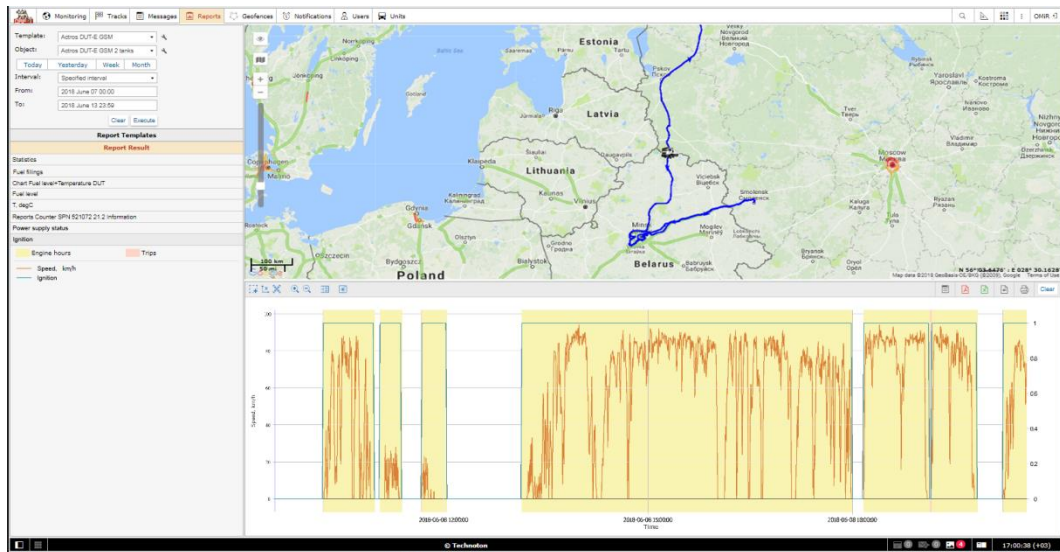


Figure 9 —ORF4 example Report on vehicle power supply status and Vehicle's speed