

## Implementation of the GPRS S8 Terminal

### 1. Addition of support of synchronization frames:

- The device will attempt to establish a TCP connection with client server [According to the COMM settings]
- After acceptance, the device will transmit a first frame – so called „synchronization frame”
- This frame contains the ID of the device and its sequential number
- Such frame should be read and sent back to the device
- Each frame should be handled in the same way
- The device transmits a synchronization frame at a fixed time
- Full description of the synchronization frame is shown below:

		Synchronization Header (16-bit)	Synchronization ID (16-bit)	UnitID (32-bit)
Received Example	Frame	0xFA 0xF8	0x29 0x01	0x93 0x39 0x01 0x79

### 2. Data frame support:

- After sending and receiving a synchronization frame, device is ready to transmit data frames.
- The device starts transmitting data frames according to the settings of FRAME FORMAT (data frame type) for example - F4 data frame below. F4 data frame contains data from GPS + CAN + extra:

[DeviceID],[DateTime],F4,[Longitude],[Latitude],[SpeedGPS],[Heading],[Altitude],[Satellite],[EventID],[MileageGPS],[InputStatus],[VoltageAnalog1],[VoltageAnalog2],[VoltageAnalog3],[VoltageAnalog4],[VoltageAnalog5],[outputs],[total\_distance],[total\_fuel],[vehicle\_speed],[engine\_speed],[fuel\_level],[fuelconsump],[accelerator],[tachograph],[axleweight],[indicators],[DriverCode],[1WireTemp\_1],[1WireTemp\_2],[1WireTemp\_3],[1WireTemp\_4],[1WireTemp\_5],[1WireTemp\_6],[DATAFRAMESERIAL],[DATAFRAMECRC]

- In order of correct handling of the data frames, you should generate 0xFB 0xF9 package for each data frame (every format) sent by the device to the TCP server. This is confirmed by receiving a frame of data by TCP server.