Retranslators: how it works

Five questions that come up before you set up a channel

1 Why you need it

A retranslator sends your devices' points **to a second system**: Rostransnadzor, a regional navigation system, the customer of a haul. We keep receiving the data as usual; a copy goes out.

Until there is such a channel, a vehicle has to carry a second device just to report there.

2 Which protocol to choose

You do not have to guess: the receiving side sends the address, the port and, if authorisation is needed, the **dispatcher ID**.

Protocol	When it is chosen	What you need from them
EGTS	State receivers and anywhere we must be recognised. Before the data, we introduce ourselves with the dispatcher number.	Address, port, **dispatcher ID**
EGTS OID	A receiver without authorisation. A vehicle is identified only by its **object number**, and the numbers are usually set by them.	Address, port, the list of object numbers
Wialon IPS	The receiver expects Wialon devices. Our server presents itself to it as a device, one connection per vehicle.	Address, port, identifiers (usually the IMEI), password

> If the protocol is wrong, the receiver does not complain clearly: with an unnecessary authorisation it refuses, and without a required one it accepts the packets and silently throws them away. Ask them directly whether authorisation is needed. Wialon IPS and Wialon Retranslator are different protocols.

3 Object numbers

Each vehicle has its own number on the other side. By default it is the device's internal number: it is unique and works when the receiving side registers the objects under our numbers. If they have given you their own numbers, enter them in the object table in the card.

In EGTS the IMEI will not do: four bytes are set aside for the object number, and fifteen digits do not fit into them. In Wialon IPS an object is identified by a string, usually the IMEI.

4 What goes out

Time, coordinates, speed, heading, altitude, mileage and ignition; the number of visible satellites; fuel level and on-board voltage, if the device sends them. Alarms and video are not passed on.

Points without a satellite fix are not sent at all: at such moments the device repeats its last known coordinate, and on the other side this would look like a stop in the wrong place.

5 If there was no connection to the receiver

The channel recovers by itself and carries on from where it stopped: what has piled up follows. Only the time when the channel was **off** is resent by hand: the card has "Retranslation for a past period" for this.

Resent points are marked as coming from the device's memory. Without this mark, the receiver would show the dispatcher a week-old point as the vehicle's current position.