Procedures for fulfilling arms transport monitoring obligations.

Arms carriers using road transport in Czech Republic have legal obligation to supply current vehicle position to the Czech Police.

Requirement to fulfilling this condition is reporting vehicle position in an exact given manner.

Explanation: To be able to automatically monitor vehicle movement, your GPS provider system need to be connected to Arms monitoring transport. This connection necessarily needs your provider cooperation.

Warning: Not every GPS provider is able to fulfill connection conditions.

Procedure:

- **I DON'T have GPS provider**

  If you didn't choose your GPS provider yet, you have two possibilities:

  1. Choose one from list of connected providers (see p. 7)
  2. Choose your own provider. If you choose provider who is not connected to Monitoring system (not listed on p. 7) we recommend, prior to signing the contract to check whether the provider is able to fulfill all connection conditions listed in this document.

- **I DO have GPS provider**

  If you already have GPS provider follow these steps:

  1. If the provider is listed in the list of connected providers (see p. 7) ask for allocation or check Transport Monitoring log-in data.
  2. If the provider isn't listed, pass on “Arms transport TranZ” document and ask for connection with Transport monitoring system.

Warning: If the provider isn't able or willing to implement the connection, you'd have to choose a different one.

Arms transport (TZ)

for Central Arms registry
(document for GPS providers)

Contents

1. Introduction

Arms carriers using road transport in Czech Republic, have legal obligation to supply current vehicle position to the Czech Police.

Requirement to fulfilling this condition is reporting vehicle position in an exact given manner. Carrier GPS-P (GPS Provider) have to fulfill all the conditions described in this document.

Responsibility to provide vehicle position is on the subject which is reporting transports to TZ. This document describes how to realize it.

Easiest way is to choose one from the verified GPS-P list. If GPS-P doesn't offer TZ connection, carrier can ask the GPS-P to implement it using this document.

For list of currently supported GPS-P see article 4.

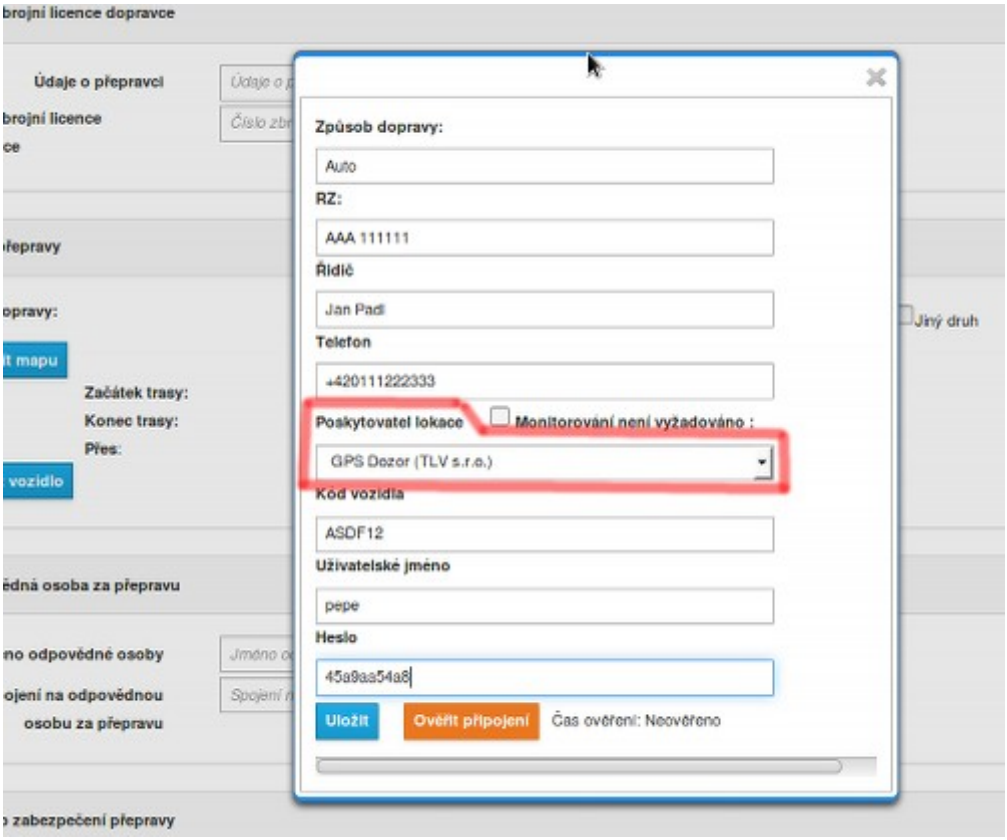
2. For carrier

Vehicle have to be equipped with unit monitoring its movement and optionally status (engine off, engine on etc.)

If not connected:

1. Contact your GPS-P.
2. Get monitoring parameters for all registration plates (you will need to fill them in in the TZ web interface). Your GPS-P will tell you what parameters you need and how to fill them in.
3. Deliver this document to your GPS-P.

Screen-shot of Vehicle description for selected “Localization provider” (GPS-P) while logged in the TZ system.



3. For GPS-P

Communication between GPS-P and Czech Police is secured by:

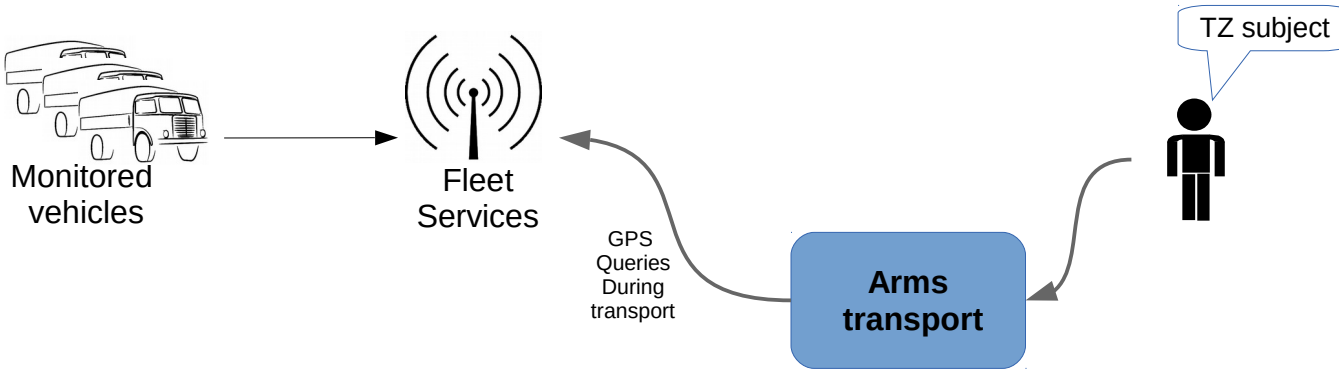
1. TZ actively acquiring current vehicle position from GPS-P (see pic.) ie GPS-P

communication interface has to be accessible on internet

2. Position data are checked only during time assigned for transport duration of the vehicle (so-called active vehicle). Transport duration is defined by the TZ user.

Communication between services is unified by defining common format, method and interface. It is possible to use different ways of communication, including secure https and connection to web services.

During active period specified by the user, GPS-P is providing vehicle position. Frequency of updates is in minutes (about 1-5 minutes) e.g. every minute.



3.1. GPS-P Communication interface for TZ

3.1.1. Data transfer security

When using ***HTTP*** all data are transferred unencrypted.

When using encrypted ***HTTPS*** channel only unencrypted connection with providers back-end (server) for exchange of cryptographic data. All further communication, including transfer of parameters and authentication data is encrypted and readable only by TZ and provider.

Using HTTPS is recommended. Furthermore providers can restrict access to limited list of IP addresses:

- ~~94.199.45.228~~ **(Czech Police server old IP address) – former IP address which was replaced by new one 24th July 2019. This address isn‘t used any more!**
- **185.17.212.196 (Czech Police server valid IP address) – IP address is used for communication since 24th July 2019!**
- 81.91.214.218 (test server of *Eago systems s.r.o.* company)

If communication from TranV system (incoming requests) for actual location

- **is filtered based on IP addreses (for example by firewall or Web Server) please inquire IP addresses above (keep OLD and add NEW one).**

IP address change is planned to 24th July 2019 12 o‘clock and it will také aprox. 30 – 60 minutes.

You can find actual information on web portal TRANZ. There will be also information if date will change.

- **is not filtered then no change is needed (you don‘t need to change anything)**

Note: even in this case we suggest to monitor situation continuously and to check news on web portal;

- **High Availability solution is used (HA – for example Round Robin)**
  - you don‘t need to revoke this solution but you will have to perform all steps mentioned above for each node.

We will need repeatedly *access to your firewall or web server logs for communication testing. We actually support only cooperation for network communication (through firewall or web server) – it is not application test from production system.*

3.1.2. Standard interface – Format of vehicle position query

Query is in form of **HTTP/HTTPS**, type **GET**, where the vehicle and possibly other parameters are specified.

Possibilities for URL construction:

- Vehicle ID (required)
- up to 5 optional parameters

Parameter name in URL is limited only by the length of up to 15 characters.

Query format of vehicle ID without any optional parameters

- e.g. http://www.ex.cz/?vehicle=12345
- e.g. https://www.ex.cz:443/?car=12345
- e.g. https://www.ex.cz:443/12345

Query format of vehicle ID with one optional parameter

- e.g. http://www.ex.cz/?vehicle=12345&customer_id=cust1

Query format of vehicle ID named “vehicle” and two optional parameters for log-in with “user“ and „password“

- e.g. https://user:password@www.ex.cz/?vehicle=12345

3.1.3. Extended interface (web services etc.)

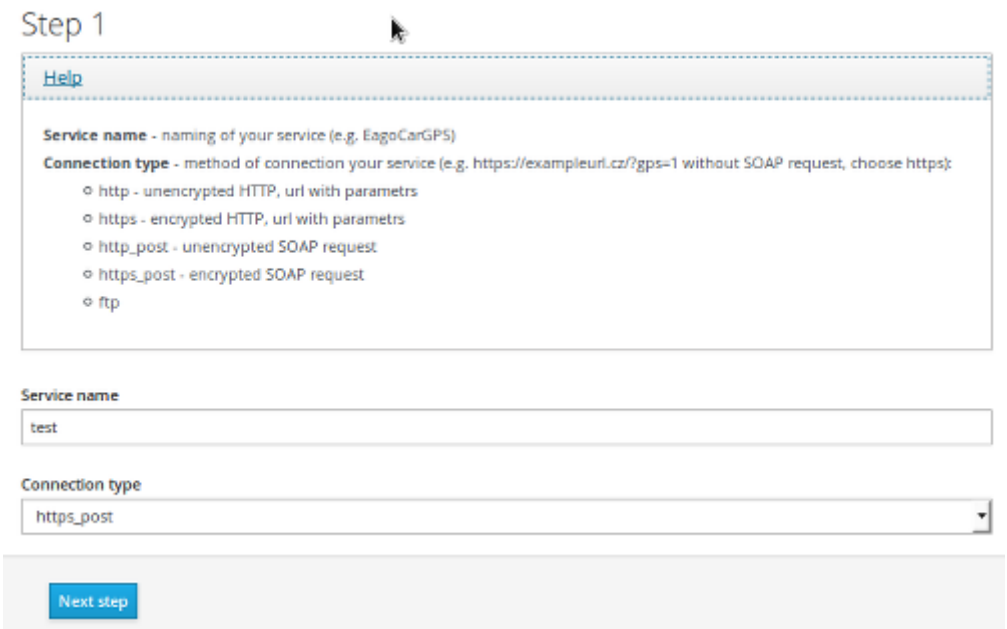
GPS-P may register on:

- https://transporty.policie.cz/gps-provider-tool-web/app/

Log-in and creating a request for adding to list of supported GPS-Ps is possible after confirming confirmation email.

Every request is added using a wizard with guide to individual steps. Request is then verified and added to TZ. The service is ready to use in 1-2 work days.

e.g.. first step after log-in



3.2. GPS-P answer format for TZ

GPS-P answer interface contains information about position, timestamp and optionaly a state.

If the vehicle in question exists, HTTP status 200 and XML data are returned to GPS-P.

XML data format:

```
<?xml version="1.0"?>
<gps
    lat="48123456"
    lng="12123456"
    time="2013-11-15T11:00:00.000Z"
    status="ONLINE"
/>
```

where

- lng = longitude × 1 000 000 and rounded to integer
- lat = latitude × 1 000 000 and rounded to integer
- time = time of measurement by XML scheme specification (xs:dateTime in UTC)
- status = status of localization device (optional)
    - ONLINE (engine is started)
    - OFFLINE
    - UNKNOWN

If the vehicle or unit in question doesn't exists, HTTP status 204 (not found) is returned.

4. List of connected GPS services providers as of 30.11.2014

Antik (kdemasauto.sk)

Arcelor Mittal Ostrava

Borjes Logistik & Spedition (www.borjes.com)

Car data system

CCS

Commander Systems

ČSAD Mělník

DHO s.r.o. (www.logbookie.eu)

GPS Dozor (TLV s.r.o.)

Hansa express logistics GmbH
LEVEL s.r.o.
Monitoring.pl
NAM system a.s.
Nitroerg (nitroerg.pl)
O2 Car control
ORBCOMM
O.S.E. Security
Oskando (oskando.ee)
Princip (webdispecink.cz)
R ALTRA spol. s r.o.
Rapas
REX SERVICES, a.s.
Sherlog Trace
STV Group a.s. (193.165.113.218)
T-Cars System
Tekom (tekom.pl)
TRONIK
Webdispečink