

## Introduction

# SkyTrack 4 Logistics

Skytrack 4 Logistics is a sophisticated and very advanced program in the SkyTrack 4 program palette. Skytrack 4 Logistics serves to optimize delivery and reduce the working time of logisticians, storekeepers and drivers. Proper use of this program reduces the number of kilometers traveled, saves fuel, and reduces the number of working hours of drivers and logisticians.

SkyTrack 4 Logistics enables:

Selection of the vehicle with which we want to make a delivery for a certain date.

Deployment of documents containing information about delivery and objects on vehicles, through automatic deployment or manually.

Overview of driving shipments by weight, volume, capacity.

An overview of the expected time of arrival at a particular object, as well as the expected time stay.

Overview of distributed and undistributed shipments by specific Distribution Centers.

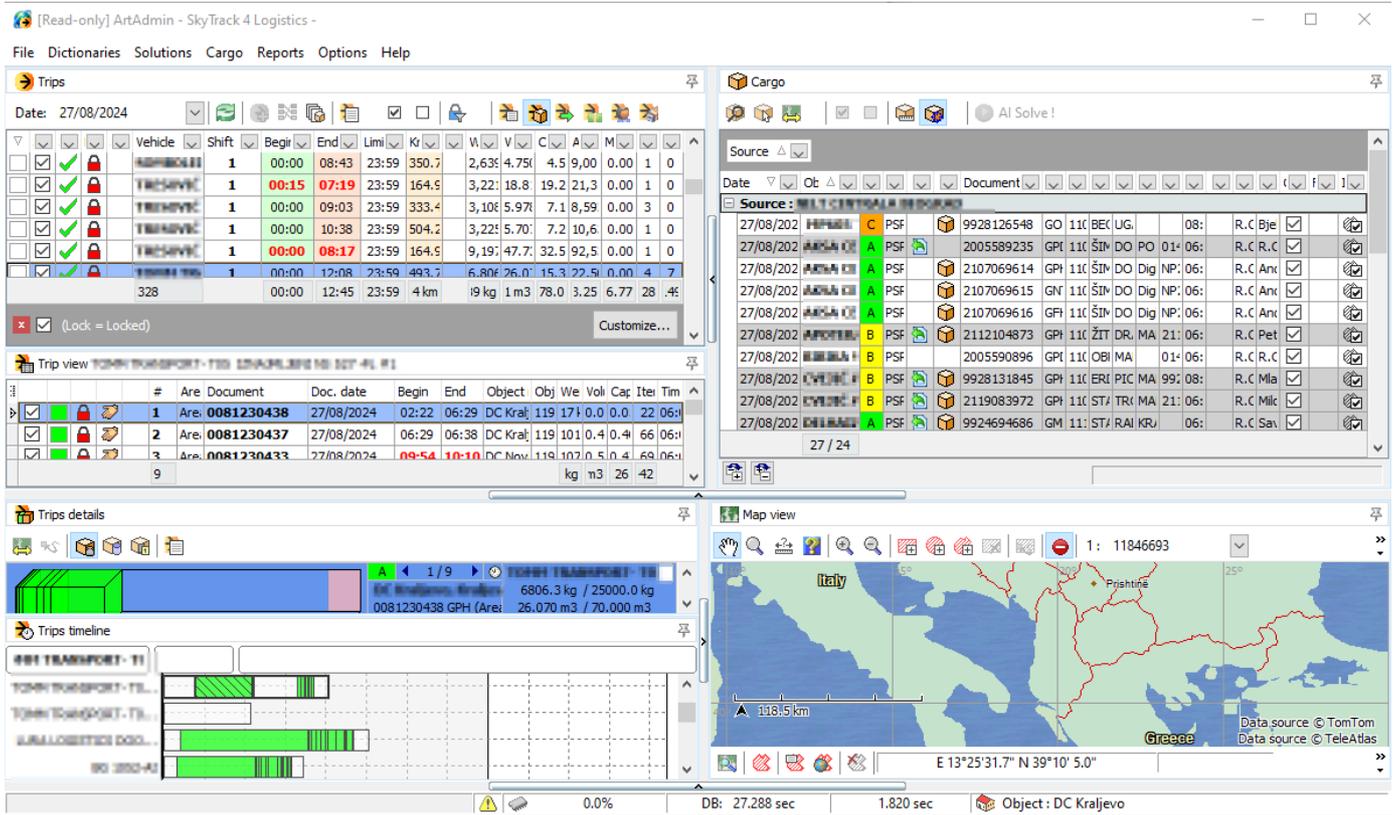
Overview of trip(s) on the map, as well as unassigned shipments on the map.

# Welcome

## Welcome to SkyTrack Logistics!

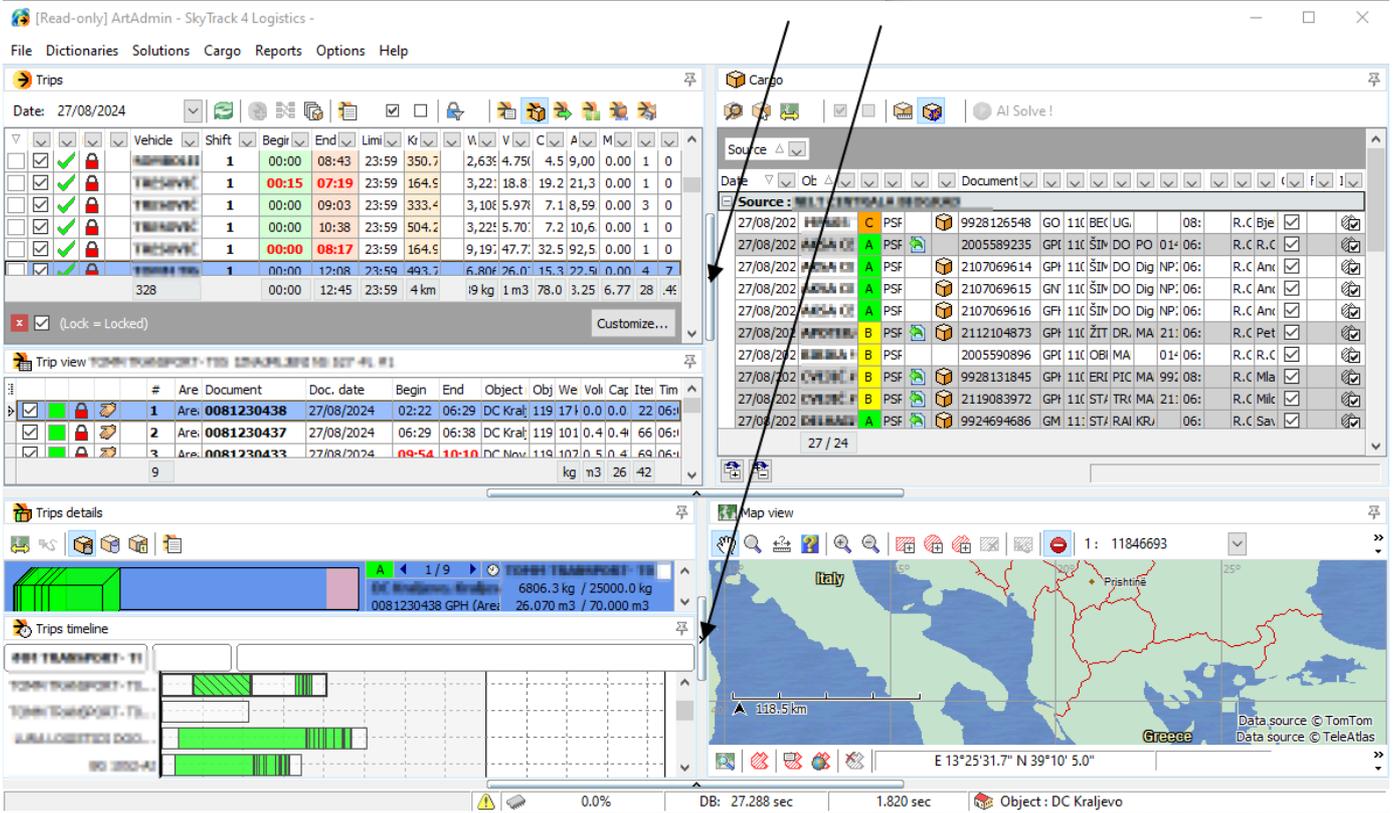
SkyTrack 4 Logistics is a software for optimization of delivery, and it is used to arrange packages by vehicles and send those vehicles to delivery points. The goods are distributed by vehicles in order to evenly distribute the load on all delivery vehicles. Advanced algorithms take into account the total mileage per individual truck and the working hours of workers, compatibility of types of goods and vehicle models are also taken into account.

## Application layout

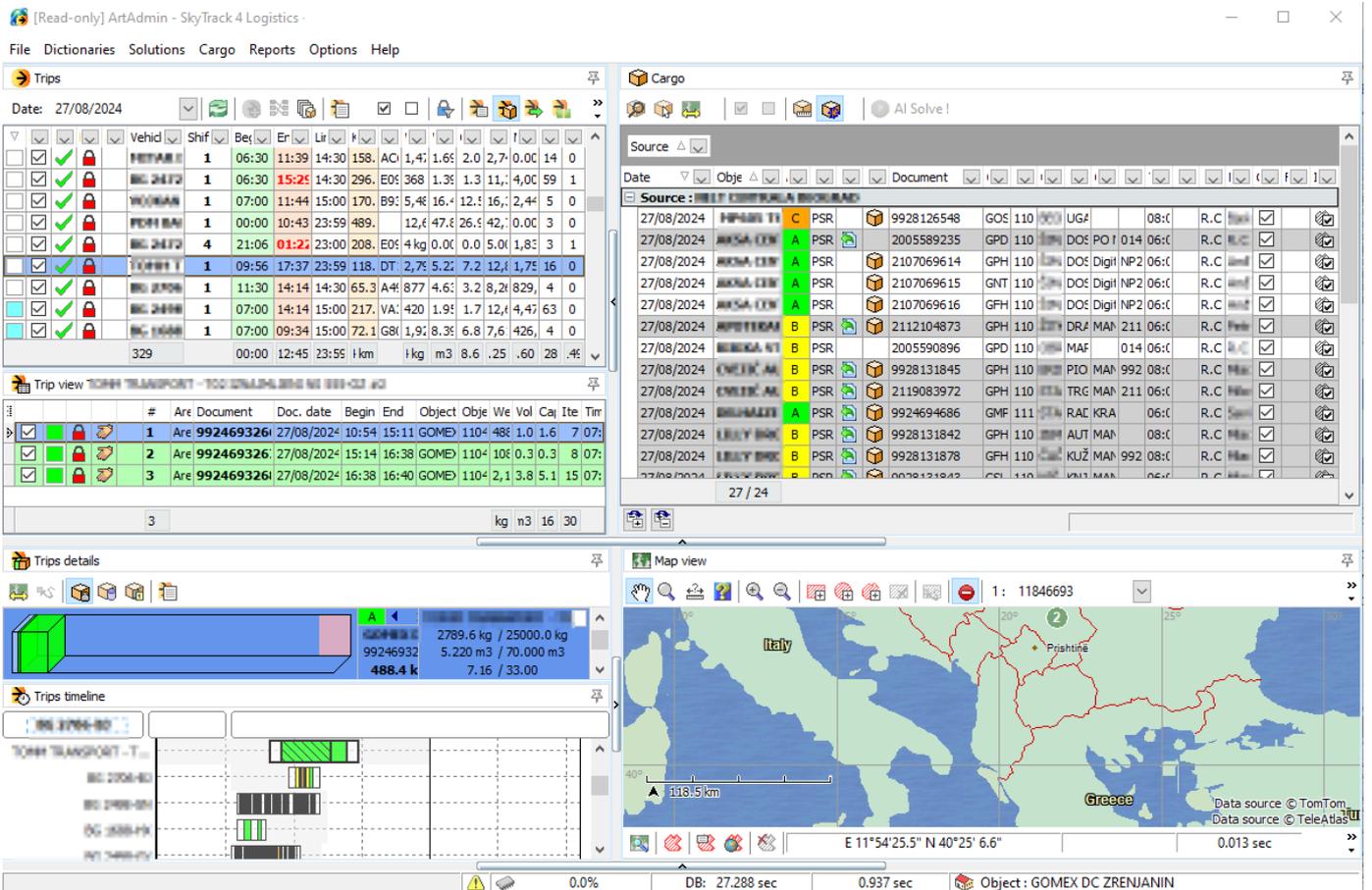


Below the application name bar is the main menu. Below the main menu are the following windows: List of trip(s), Overview of trip(s), Details of trip(s), Timescale of trip(s), Shipments, Browse maps.

Windows on the map can be expanded, reduced, as well as select a specific window and transfer it to another monitor.



When we click on the first vertical slider as in the picture above, hold it and move it to the left, we expand the view of the Shipments window, and reduce the view of the List of trip(s) and View of trip(s) window. When we click on the second vertical slider - hold it and move it to the left, we expand the view of the Map View window, and reduce the view of the Driving Details and Driving Timescale window.



It is possible to do the opposite and move the sliders to the right and expand the view of the window List of trip(s) date and View of the trip, Details of the trip and Time scale of the trip, and reduce the view of the window: Shipments and View of the map.

In addition, when we click on the horizontal slider and move for example up, we can stitch the view of the window Driving details, Driving time scale and Map overview.

[Read-only] ArtAdmin - SkyTrack 4 Logistics

File Dictionaries Solutions Cargo Reports Options Help

Trips Date: 27/08/2024

Vehicle	Shif	Bej	Enj	Lir	F	AC	1,4	1,65	2,0	2,7	0,00	14	0
BEJ 24172	1	06:30	11:39	14:30	158	AC	1,4	1,65	2,0	2,7	0,00	14	0
BEJ 24172	1	06:30	15:25	14:30	296	E05	368	1,35	1,3	11,4	4,00	59	1
BEJ 24172	1	07:00	11:44	15:00	170	B9	5,4	16,4	12,5	16,4	2,44	5	0
BEJ 24172	1	00:00	10:43	23:59	489		12,4	47,8	26,5	42,0	0,00	3	0
BEJ 24172	4	21:06	01:21	23:00	208	E05	4	0,00	0,0	5,0	1,8	3	1
BEJ 24172	1	09:56	17:37	23:59	118	DT	2,7	5,22	7,2	12,4	1,75	16	0
BEJ 24172	1	11:30	14:14	14:30	65	A4	877	4,6	3,2	8,2	829	4	0
BEJ 24172	1	07:00	14:14	15:00	217	VA	420	1,95	1,7	12,4	4,47	63	0
BEJ 24172	1	07:00	09:34	15:00	72	G8	1,9	8,35	6,8	7,6	426	4	0

329 00:00 12:45 23:59 Hkm Hkg m3 8,6 .25 .60 28 .4E

Trips details

#	Are	Document	Doc. date	Begin	End	Object	Obj	We	Vol	Ca	Ite	Tir
1	Are	992469326	27/08/2024	10:54	15:11	GOMEX DC ZRENJANIN	1104	488	1,0	1,6	7	07
2	Are	992469326	27/08/2024	15:14	16:38	GOMEX DC ZRENJANIN	1104	106	0,3	0,3	8	07
3	Are	992469326	27/08/2024	16:38	16:40	GOMEX DC ZRENJANIN	1104	2,1	3,8	5,1	15	07

3 kg m3 16 30

Map view

1: 11846693

E 11°54'25.5" N 40°25' 6.6"

0.013 sec

0.0% DB: 27.288 sec 0.937 sec Object: GOMEX DC ZRENJANIN

[Read-only] ArtAdmin - SkyTrack 4 Logistics

File Dictionaries Solutions Cargo Reports Options Help

Trips Date: 27/08/2024

Vehicle	Shif	Bej	Enj	Lir	F	G2	1,7	7,2	5,8	6,3	863	29	0
BEJ 24172	1	07:00	14:34	15:00	225	G2	1,7	7,2	5,8	6,3	863	29	0
BEJ 24172	1	00:00	08:57	23:59	235	BT	411	2,00	2,0	640	0,00	1	0

329 00:00 12:45 23:59 Hkm Hkg m3 8,6 .25 .60 28 .4E

Trips details

#	Are	Document	Doc. date	Begin	End	Object	Obj	We	Vol	Ca	Ite	Tir
1	Are	992469326	27/08/2024	10:54	15:11	GOMEX DC ZRENJANIN	1104	488	1,0	1,6	7	07
2	Are	992469326	27/08/2024	15:14	16:38	GOMEX DC ZRENJANIN	1104	106	0,3	0,3	8	07
3	Are	992469326	27/08/2024	16:38	16:40	GOMEX DC ZRENJANIN	1104	2,1	3,8	5,1	15	07

3 kg m3 16 30

Map view

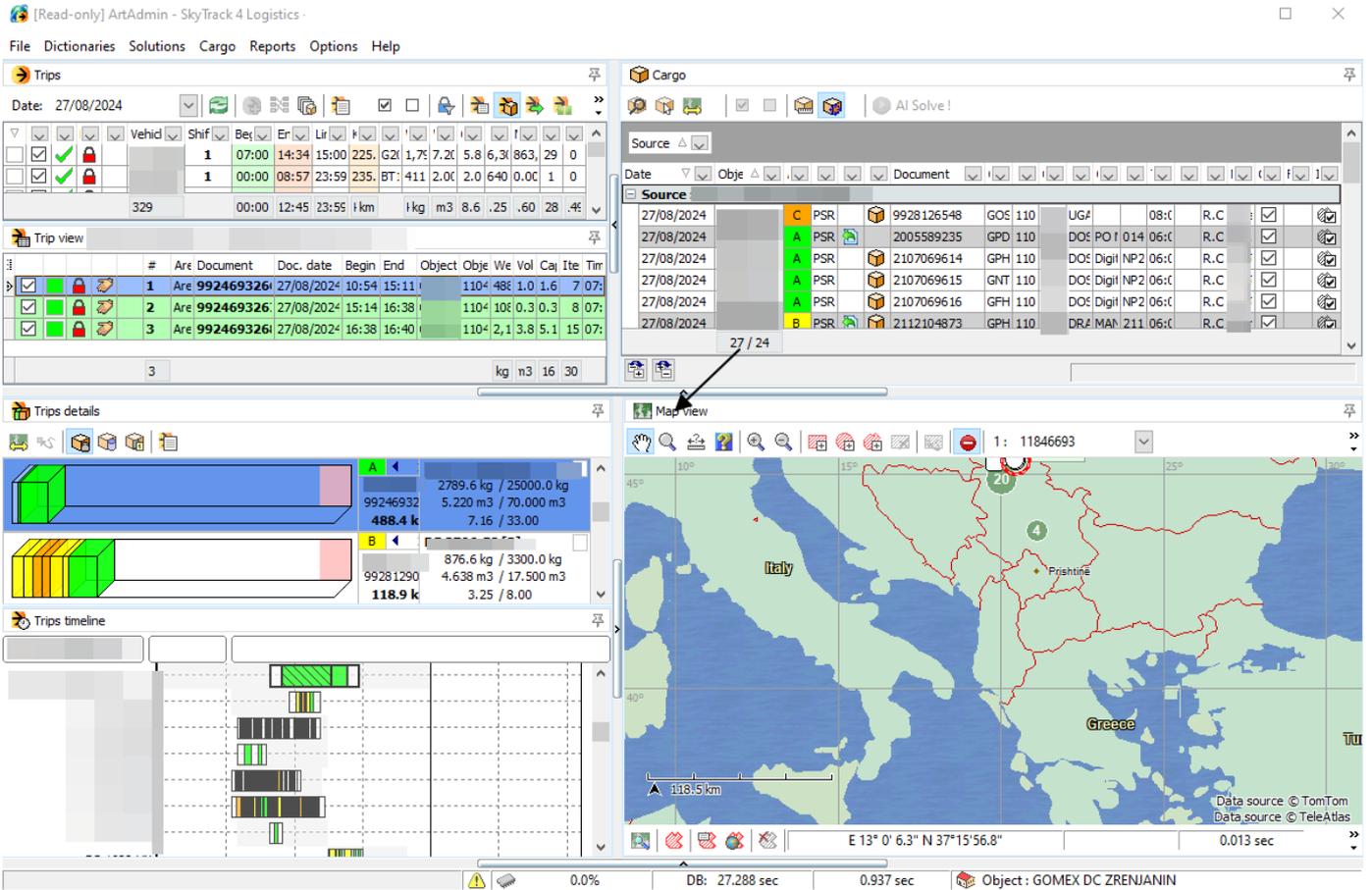
1: 11846693

E 13° 0' 6.3" N 37°15'56.8"

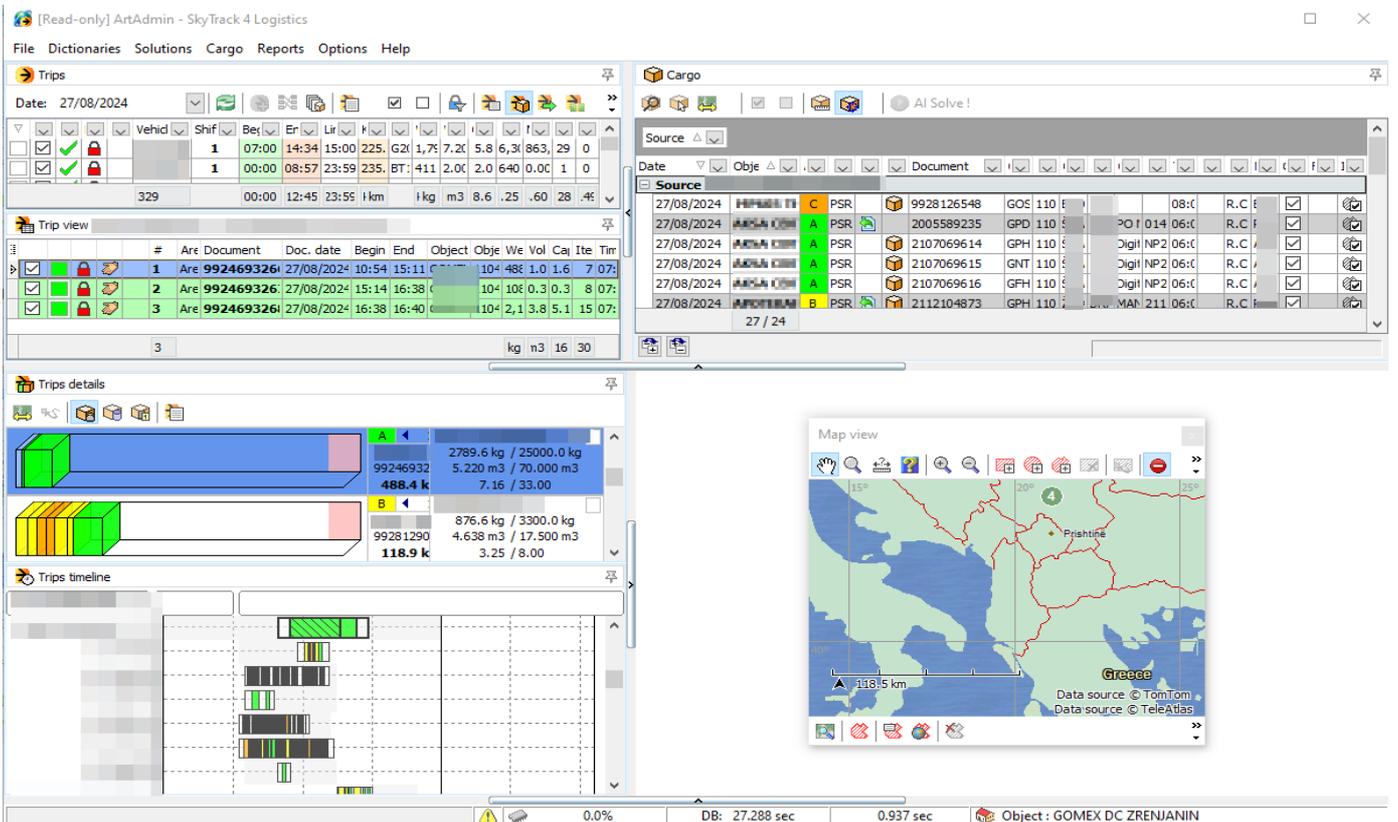
0.013 sec

0.0% DB: 27.288 sec 0.937 sec Object: GOMEX DC ZRENJANIN

We can select the window we want by clicking on that window, holding it and moving it inward.



We get a look like in the picture below. The Map View window can then be switched to another monitor if we wish. If we change our mind, we can return the window to its original position by double-clicking on Map View.



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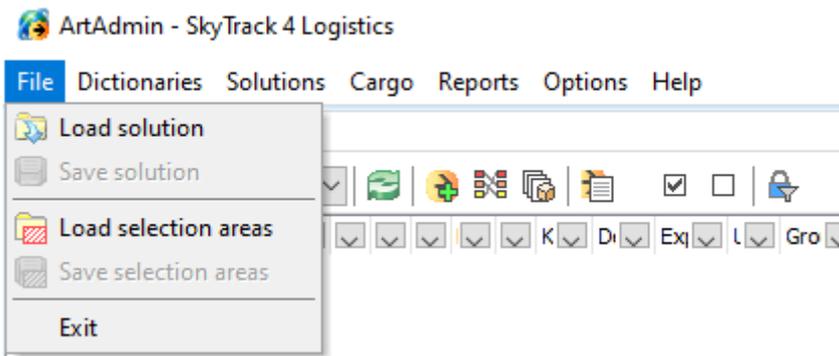
## Chapter 1 - Main menu

The main menu is located at the top of the application and consists of smaller units such as: File, Dictionaries, Solutions, Cargo, Reports, Options and Help. Through the main menu, we get to various code books and program settings.

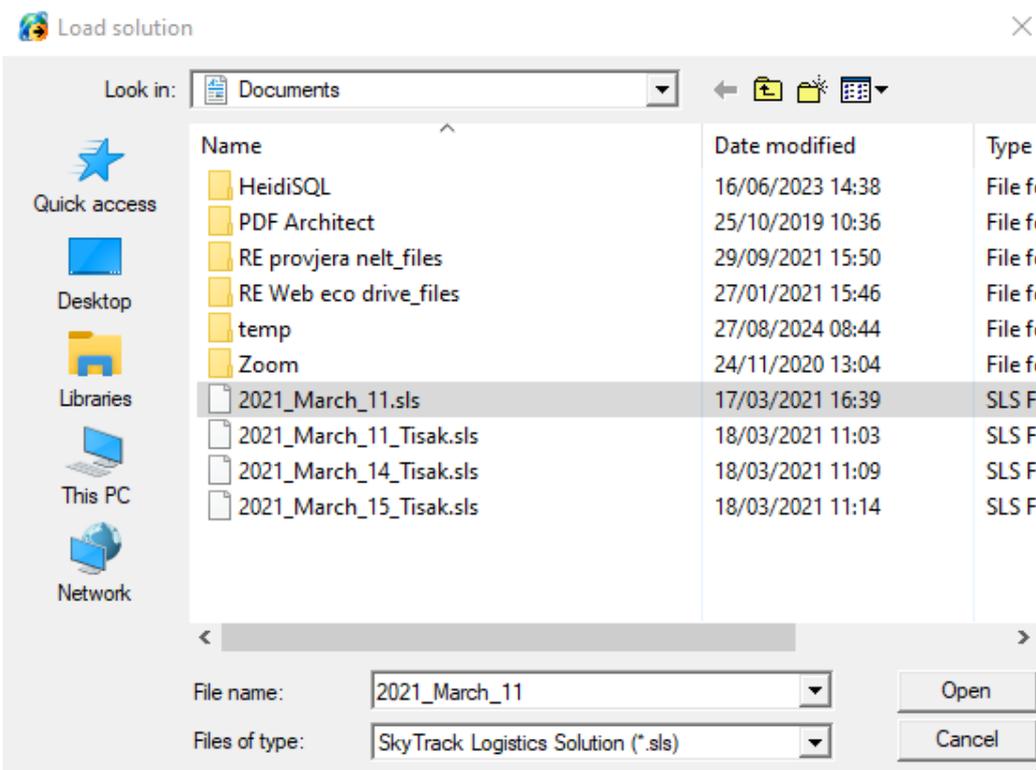


## 1.1 File

The File menu contains options: Load solution, Save solution, Load selection areas, Exit which closes the application.



When we select the Load solution option, a window opens where it is possible to load a saved solution, which is a Sky Track Logistics Solution file type.

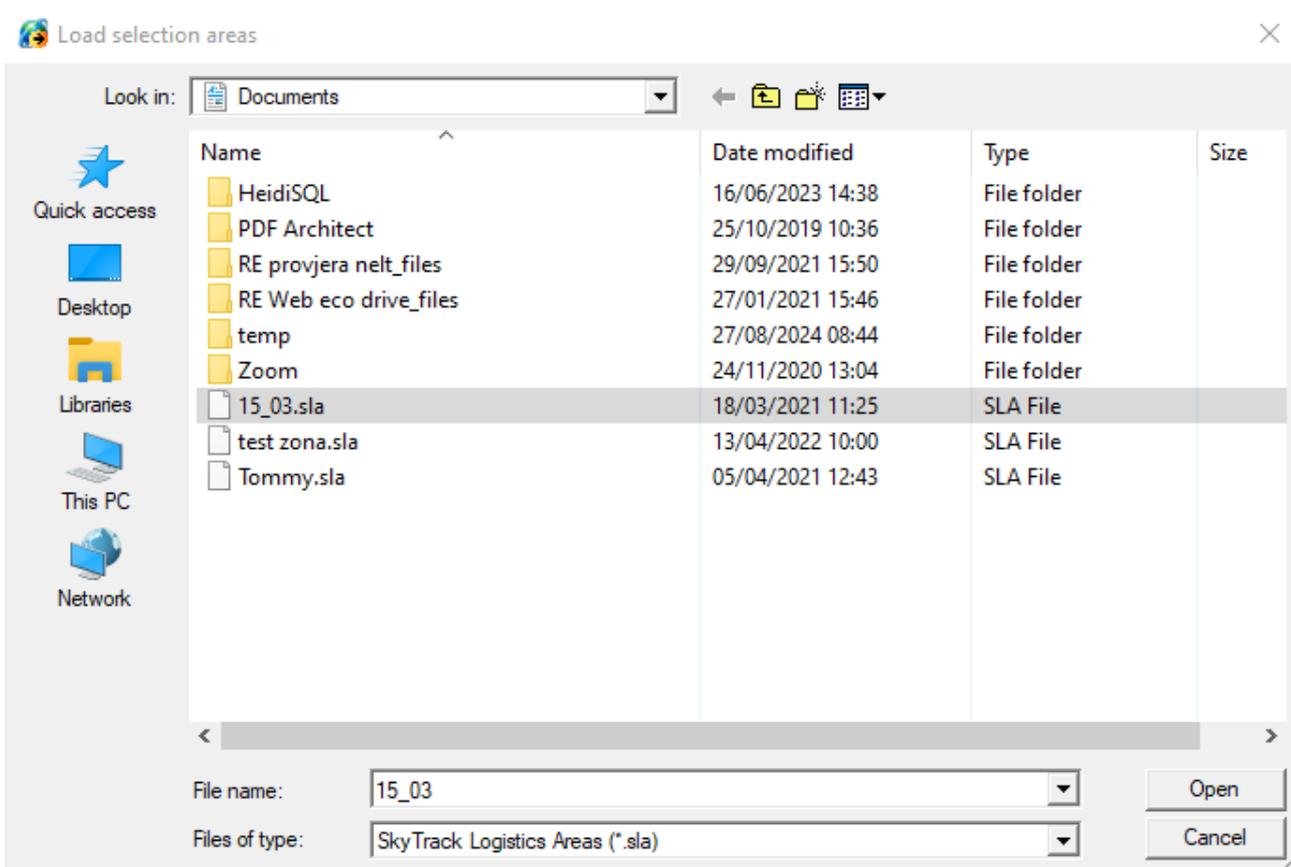


When we select the file and click Open, a window opens, as in the picture below, where it is possible to load the solution.

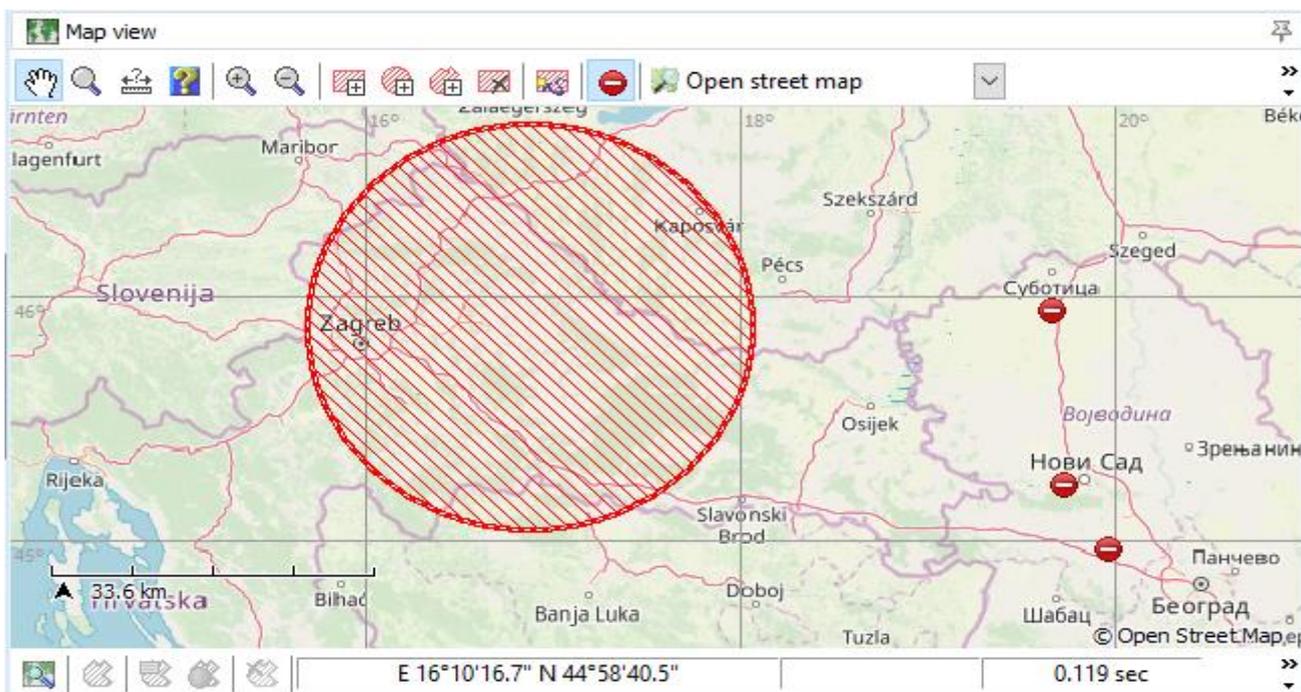


The solution is saved in a similar way. We select the Save solution option, a window opens in which it is possible to save the solution in the Sky Track Logistics Solution file type.

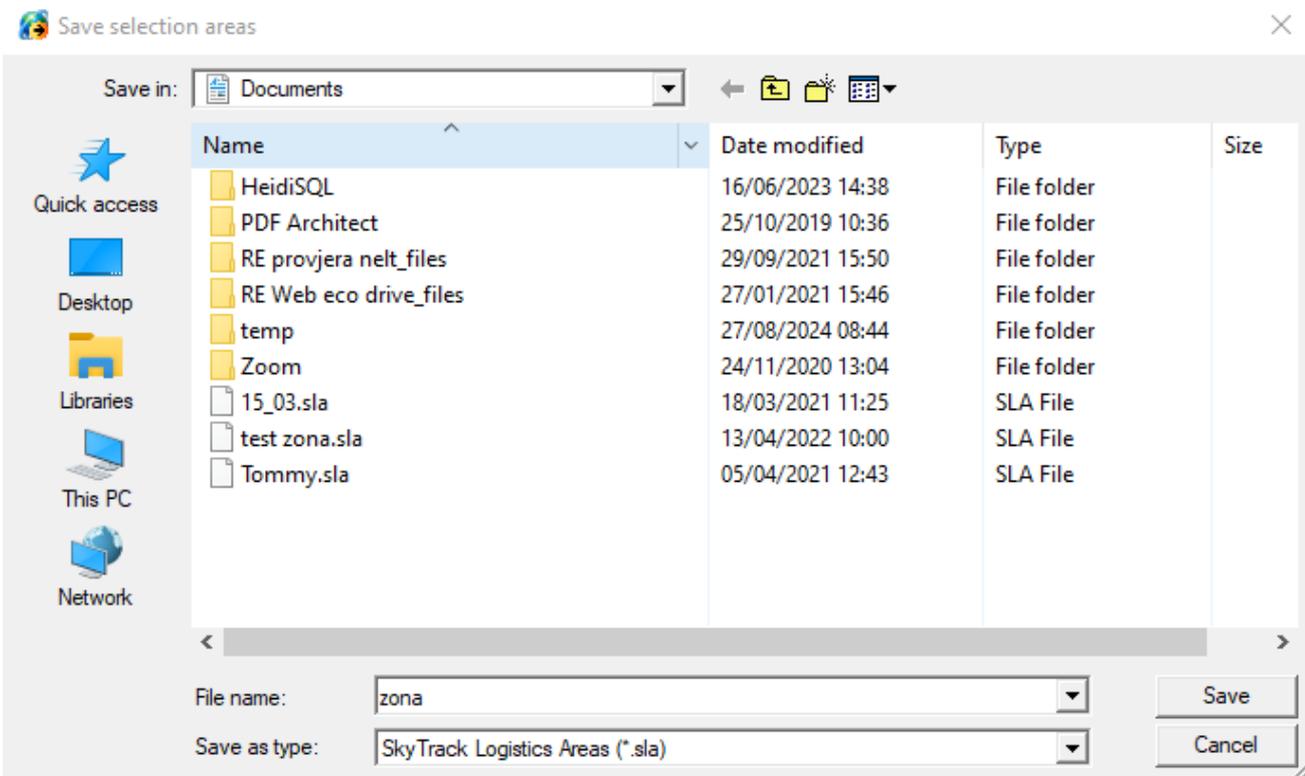
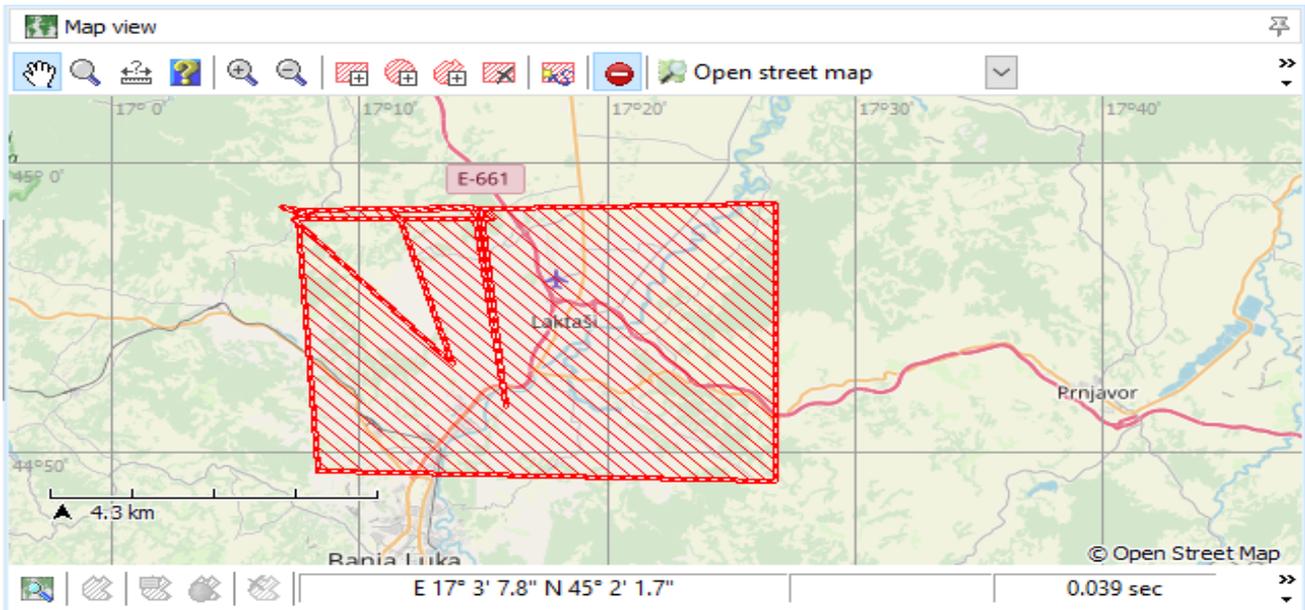
When we select the option Load selection areas, it is possible to load a saved selection area, which is a Sky Track Logistics Areas file type.



When we select a file and click Open, the selection area is loaded as shown in the image below.



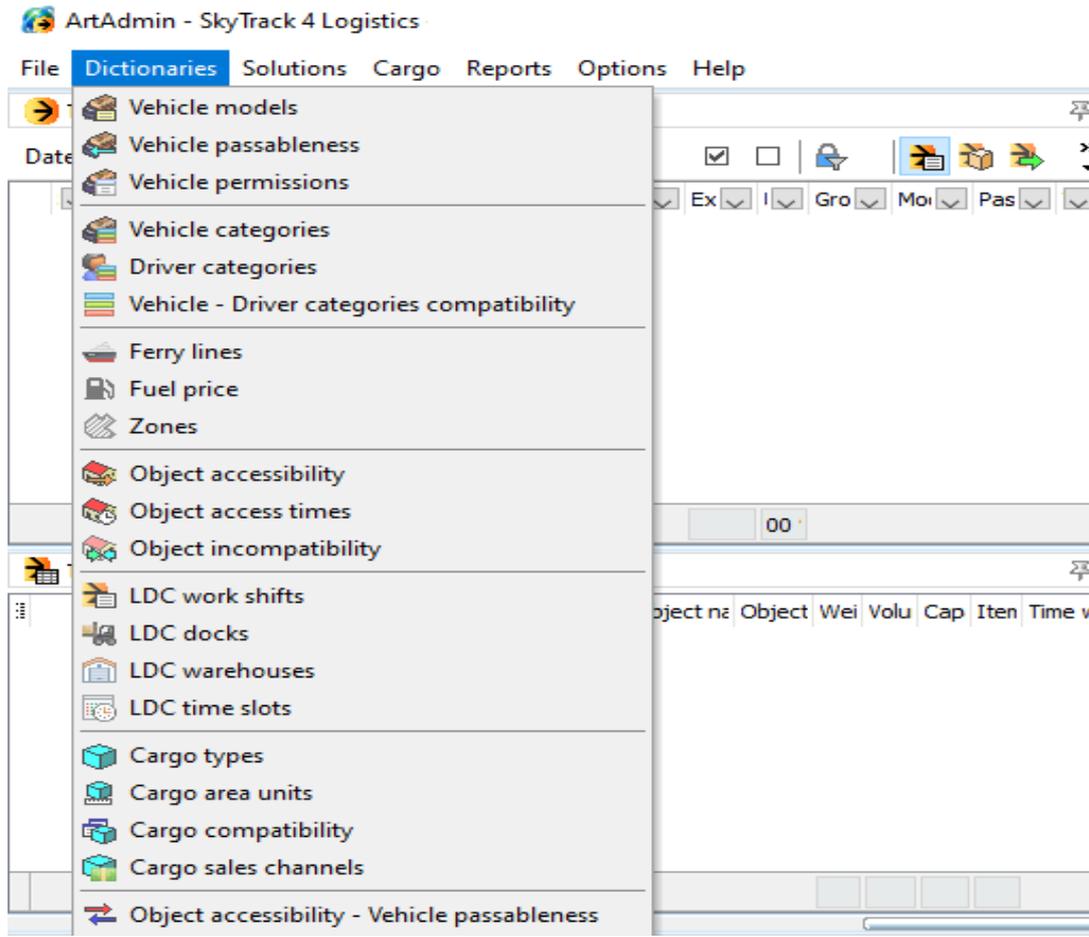
When we select the option Save selection areas, in this way we can save previously drawn areas with a rectangle, a circle or a previously drawn zone (blue arrow).



The file can be saved in the Sky Track Logistics Areas file type. When we assign a file name, say: zone, select the type of fault and click Save - the file will be saved on the disk.

## 1.2 Dictionaries

Via the Dictionaries data menu, you can access the code book in which data about the goods being transported, the vehicles carrying out the transport and the delivery points are entered. These data are crucial for the proper operation of the algorithm that distributes the goods by vehicles and sends them to delivery points.



### Vehicle models

**Vehicle models** is a code book in which data important for loading goods into that vehicle, data on the transit of the vehicle, data on the number of cargo spaces are entered for a certain model of vehicle. Data on the expenses of individual vehicle models are also entered. In addition, it is possible to define and fine-tune vehicle model limitations by maximum delivery facilities, maximum speed in km/h, duration of breaks in minutes, whether they have a ramp or not.

When we select the Vehicle models option, a window opens with the associated models as shown in the image below. Each model, in addition to the model name, contains data on vehicle passableness, vehicle routing category, weight, volume, pallet capacity, number of cargo areas, maximum delivery objects, data on whether they have a ramp or not.

Vehicle models

Main

- New (Ins)
- Edit (Ctrl+Enter)
- Delete (Ctrl+Del)

Additional

- Operation consumption

Drag a column header here to group by that column

Vehicle model	Vehicle p	Vehicle category	Vehicle routing cat	Max weight	Max vol	Max	Car	Max	Ri
*EuroCargo 180 Klimatizovan/Rampa	C+	C	Dostavno vozilo nosivc	22,000.0 kg	80.0 m3	35	1	40	
*EuroCargo ML 120E18 - Hladnjaca 38	B	C	Dostavno vozilo nosivc	4,400.0 kg	20.0 m3	10	1	100	<input checked="" type="checkbox"/>
*EuroCargo ML 180E25 - Hladnjaca 44	C	C	Dostavno vozilo nosivc	10,000.0 kg	40.0 m3	18	1	100	<input checked="" type="checkbox"/>
*EuroCargo MLC 180E28 TAPA	C	C	Dostavno vozilo nosivc	9,495.0 kg	34.0 m3	17	1	50	<input checked="" type="checkbox"/>
*Eurocargo 120 Grmeč iznajmljeni	C	C	Dostavno vozilo nosivc	5,960.0 kg	22.0 m3	14	1	50	<input type="checkbox"/>
*Eurocargo 70 Iznajmljeni KV-UE	B	C	Dostavno vozilo nosivc	3,500.0 kg	12.0 m3	8	1	50	<input type="checkbox"/>
*Eurocargo 90 iznajmljeni 1	B	C	Osobno vozilo	2,500.0 kg	8.0 m3	8	1	25	<input type="checkbox"/>
*Eurocargo 90 iznajmljeni 2	B	C	Osobno vozilo	2,250.0 kg	8.0 m3	8	1	25	<input type="checkbox"/>
*Eurocargo 90 iznajmljeni 3	B	C	Dostavno vozilo nosivc	2,500.0 kg	8.0 m3	8	1	25	<input type="checkbox"/>
*Eurocargo 90 iznajmljeni 4	B	C	Dostavno vozilo nosivc	1,300.0 kg	6.0 m3	6	1	50	<input type="checkbox"/>
*FIAT DUCATO (TAPA)	A	B	Dostavno vozilo nosivc	935.0 kg	12.1 m3	5	1	100	<input type="checkbox"/>
*Fiktivno	A	B	Dostavno vozilo nosivc	1,000,000.0 kg	1,000.0 m3	1,000	1	1000	<input checked="" type="checkbox"/>
*Fiktivno	A	B	Osobno vozilo	1,000,000.0 kg	10,000.0 m3	1,000	1	1000	<input checked="" type="checkbox"/>
*Furgon 1,2t 4pal	A	B	Dostavno vozilo nosivc	1,200.0 kg	8.0 m3	4	1	50	<input type="checkbox"/>
*Furgon 1,2t 5pal	A	B	Dostavno vozilo nosivc	1,200.0 kg	10.0 m3	5	1	50	<input type="checkbox"/>
*Furgon 1,3t 5pal	A	B	Dostavno vozilo nosivc	1,300.0 kg	10.0 m3	5	1	50	<input type="checkbox"/>
*Furgon 1,4t	A	B	Dostavno vozilo nosivc	1,400.0 kg	8.0 m3	4	1	50	<input type="checkbox"/>
*Furgon 1,5t	A	B	Dostavno vozilo nosivc	1,500.0 kg	8.0 m3	4	1	50	<input type="checkbox"/>
*Furgon 1,6t	A	B	Dostavno vozilo nosivc	1,600.0 kg	10.0 m3	5	1	50	<input type="checkbox"/>
*Furgon 1,8t 4pal	A	B	Dostavno vozilo nosivc	1,800.0 kg	8.0 m3	4	1	50	<input type="checkbox"/>
*Furgon 1.8t 4pal	A	B	Dostavno vozilo nosivc	1,800.0 kg	8.0 m3	4	1	50	<input type="checkbox"/>
*Furgon 2,2t 4pal	A	B	Dostavno vozilo nosivc	2,200.0 kg	8.0 m3	4	1	50	<input type="checkbox"/>
*Furgon 2,2t 7pal	B	C	Dostavno vozilo nosivc	2,200.0 kg	14.0 m3	7	1	50	<input type="checkbox"/>
*Furgon 2,8t	A	C	Dostavno vozilo nosivc	2,800.0 kg	10.0 m3	4	1	50	<input type="checkbox"/>
*Furgon 2t 5pal	A	C	Dostavno vozilo nosivc	2,000.0 kg	10.0 m3	5	1	50	<input type="checkbox"/>
*Furgon 3,5t	B	C	Dostavno vozilo nosivc	3,500.0 kg	20.0 m3	10	1	50	<input type="checkbox"/>
*Furgon 3t	B	C	Dostavno vozilo nosivc	3,000.0 kg	12.0 m3	6	1	50	<input type="checkbox"/>
*Furgon 4t 5pal	A	C	Dostavno vozilo nosivc	4,000.0 kg	12.0 m3	5	1	50	<input type="checkbox"/>
*Furgon 4t 6pal	B	C	Dostavno vozilo nosivc	4,000.0 kg	12.0 m3	6	1	50	<input type="checkbox"/>

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Close

When we click on New in the upper left corner of the screen, we can add a new vehicle model, if we click on Edit, we can change one of the existing vehicle models.

Vehicle models

Main

- New (Ins)
- Edit (Ctrl+Enter)
- Delete (Ctrl+Del)

Additional

- Operation consumption

Vehicle model:   Transportation unit

Common

Vehicle passableness:  ...

Vehicle category:  ...

Vehicle road toll category:

Vehicle routing category:

Vehicle has thermo chamber

Vehicle capacity

Vehicle cargo areas:

Max weight	Max volume	Max capacity
4,000.0 kg	24,000.0 m3	24

Expenses

Vehicle expenses (per km):

Vehicle expenses (per day):

Driver expenses (per day):

Helper expenses (per day):

Consumption (litres per 100 km):

Consumption (litres per hour):

Vehicle model limits

Max. delivery objects:  ⚠

Min. total trip complexity:

Max. total trip complexity:

Maximal speed:  km/h

Pause duration:  min.

Vehicle has ramp

Cargo areas parameters				G3M 3MA	SMC Actavis lekovi	SMC Aleva ambijent	GAM Ambi Pur	GAO Atomem	SMC Aleva režim	SMV Actavis vakcine	GBA Bambi
#	Area name	Max weight	Max volume	Max capacity							
1	Area 1	2,000.0 kg	10,000.0 m3	10	<input type="checkbox"/>						
2	Area 2	2,000.0 kg	14,000.0 m3	14	<input type="checkbox"/>						
		4,000 kg	24,000.000 m3	24							

Ok Cancel

Vehicle model - field in which the name of the model is entered.

## General data

**Vehicles passableness** – a drop-down list where, by selection, information is entered on the group to which the vehicle model belongs in terms of passability.

The button with three dots opens the codebook **Vehicles passableness**.

**Vehicle category** - a drop-down list where information about the vehicle category can be entered by selecting. The button with three dots opens a window where it is possible to add the vehicle category and the category code.

**Vehicle road tool category** - a drop-down list where it is possible to choose which group related to toll collection the vehicle belongs to

**Vehicle routing category** – a drop-down list where it is possible to choose which routing category the vehicle belongs to

**Vehicle has thermo chamber** - an option that provides information on whether the specified vehicle has a Thermo King or not

### Vehicle capacity

**Vehicle cargo areas** - gives information about how many cargo spaces the vehicle has, whether one or more like tow trucks.

**Max Weight** - the number specified by the manufacturer for that vehicle model in kg.

**Max Volume** - a number specified by the manufacturer for that model as volume in m3.

**Max Capacity** - a figure specified by the manufacturer for that model as a quantity in pallets.

### Expenses

**Expenses** are entered in some agreed currency, ie. the figures are only generic values and the user chooses which currency it is.

**Vehicle expenses (per km)** – depreciation expenses per kilometer

**Vehicle expenses (per day)** – vehicle depreciation expenses in a certain period

**Driver expenses (per day)** - driver expenses

**Helper expenses (per day)** - the daily wage of an auxiliary worker per day

**Consumption (liters per 100km)** - model consumption in litres/100km

**Consumption (liters per hour)** - model consumption in litres/hour

### Vehicle model limits

**Max. delivery objects** - with this option it is possible to limit the max. delivery objects by vehicle model

**Min. total trip complexity** – select a certain integer that represents the min.complexity of driving

**Max. total trip complexity** – select a certain integer that represents the max.complexity of driving

**Maximal speed** - enter the maximum speed limit according to the vehicle model

**Pause duration** - enter how long the recommended break is per vehicle model

**Vehicle has ramp** - this option turns on or off the fact that the vehicle has a built-in loading ramp.

### Cargo areas parameters

**Area name** - Area 1 appears if the number of cargo spaces is one. If there are two cargo areas, Area 1 and Area 2 appear. Area 1 and Area 2 can be renamed to desired names.

**Max weight** - in this field it is possible to enter the Payload in kilograms, which automatically changes the Weight field in the Vehicle Capacity section.

**Max Volume** - in this field it is possible to enter the Volume in m3, which automatically changes the Volume field in the Vehicle Capacity section.

**Max Capacity** - in this field it is possible to enter the capacity in pallets, which automatically changes the Quantity field in the Vehicle Capacity section.

### Types of goods

**Types of goods** - which are created and which can be included or excluded.

**Types of capacity units** – the types of pallets used and which can be selected or excluded.

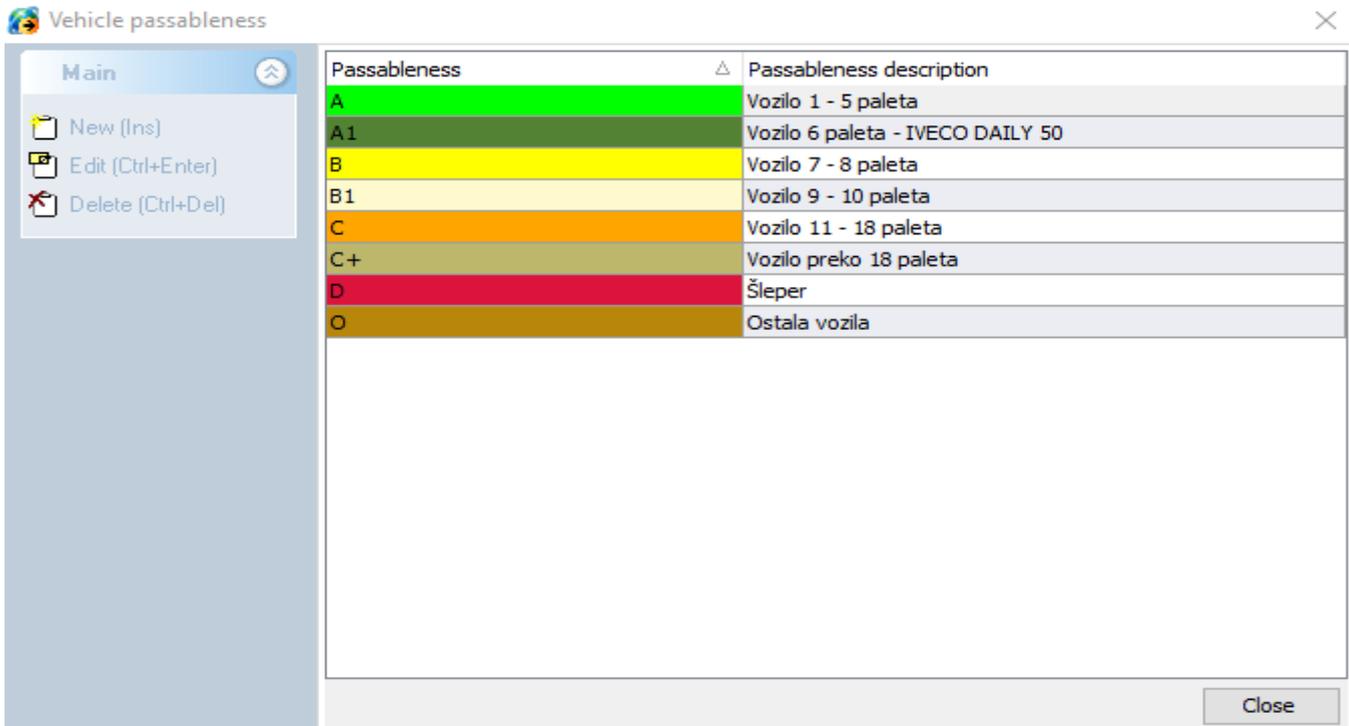
At the bottom we have a display of the weight of the goods and the occupancy in the cargo area.

	4,800 kg	24,000.000 m3	24
<			>

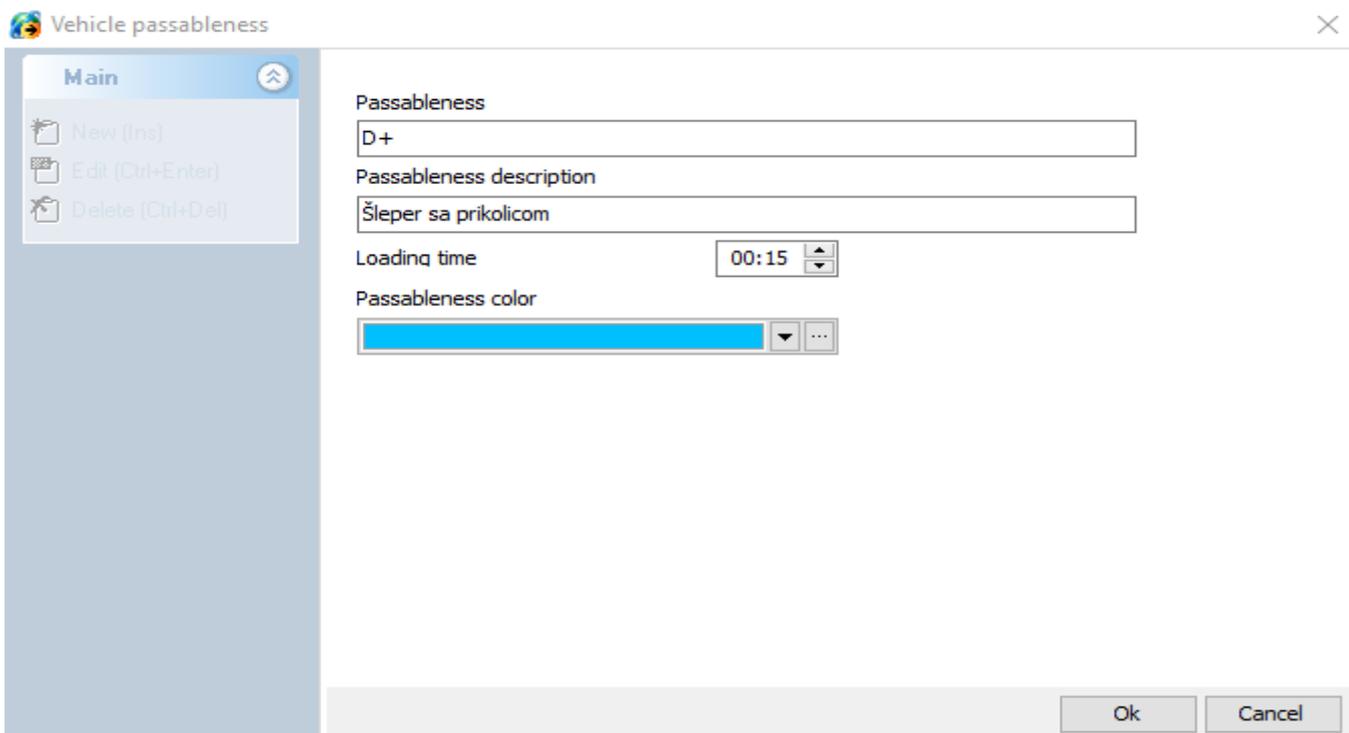
## Vehicle passableness

**Vehicle passableness** is a code that defines classes of vehicle passability. The definition is arbitrary, so it depends on local regulations or the logistician's assessment and needs to be defined internally.

Adding a new pass can be done by clicking New in the upper left corner of the window. If we want to change the existing passes, it is done by clicking on Change, or by double-clicking on the selected pass. By clicking on delete, it is possible to delete some of the existing vehicle accesses, only logisticians in the company should have that right.



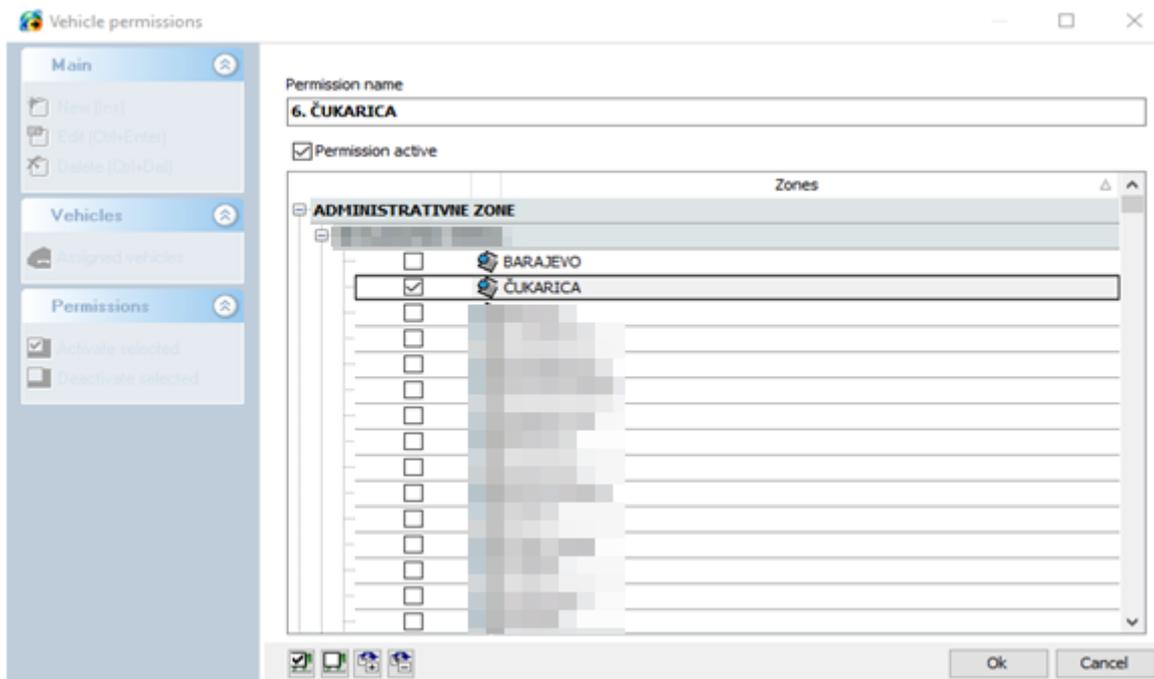
When we click on New, we get a window where we enter the name of the passage, the description of the passage and the color for the class of passage of the vehicle, as well as the loading time in minutes.



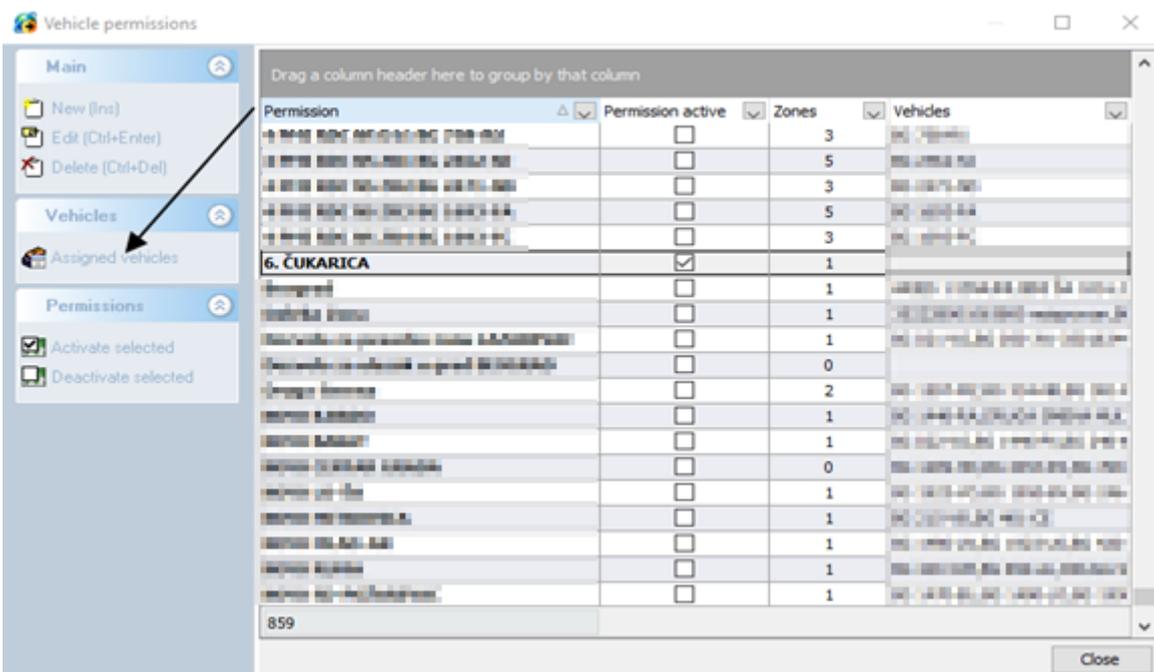
## Vehicle permissions

By selecting the Vehicle permissions option, it is possible to allow certain vehicles to enter only a certain zone or zones, previously defined.

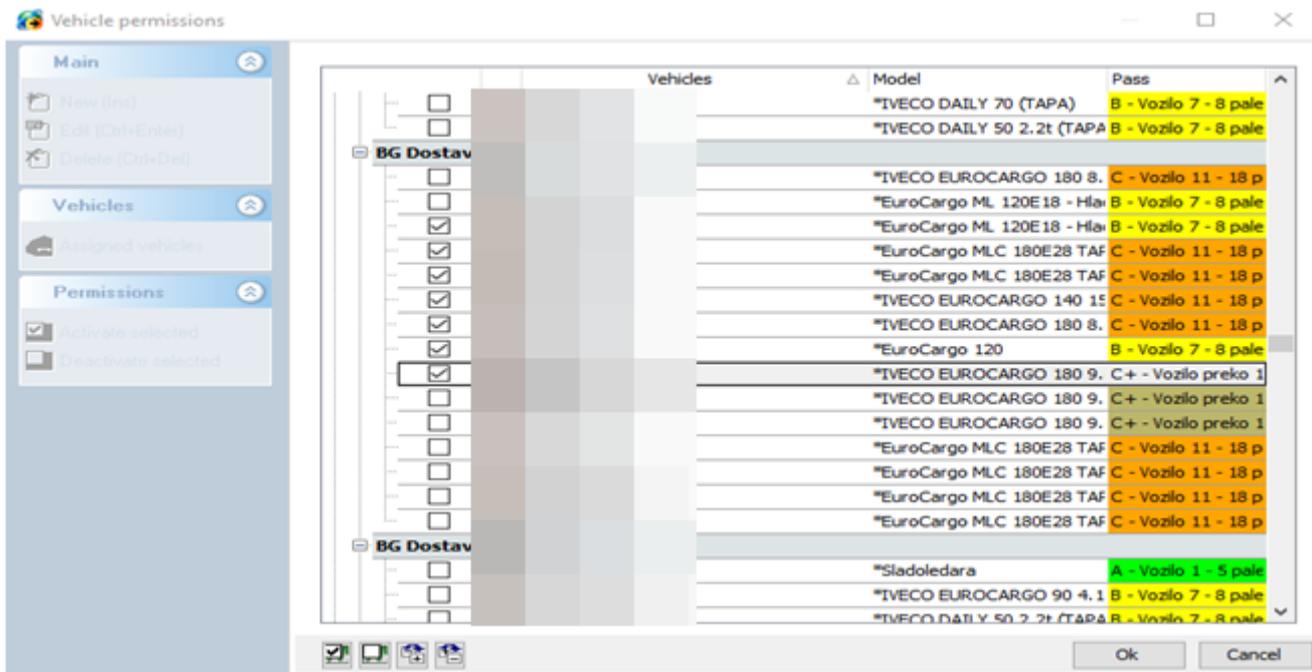
When we click on New in the upper left corner of the window, it is possible to enter the permission title, select a zone or several zones and click on Ok. This adds a new vehicle license.



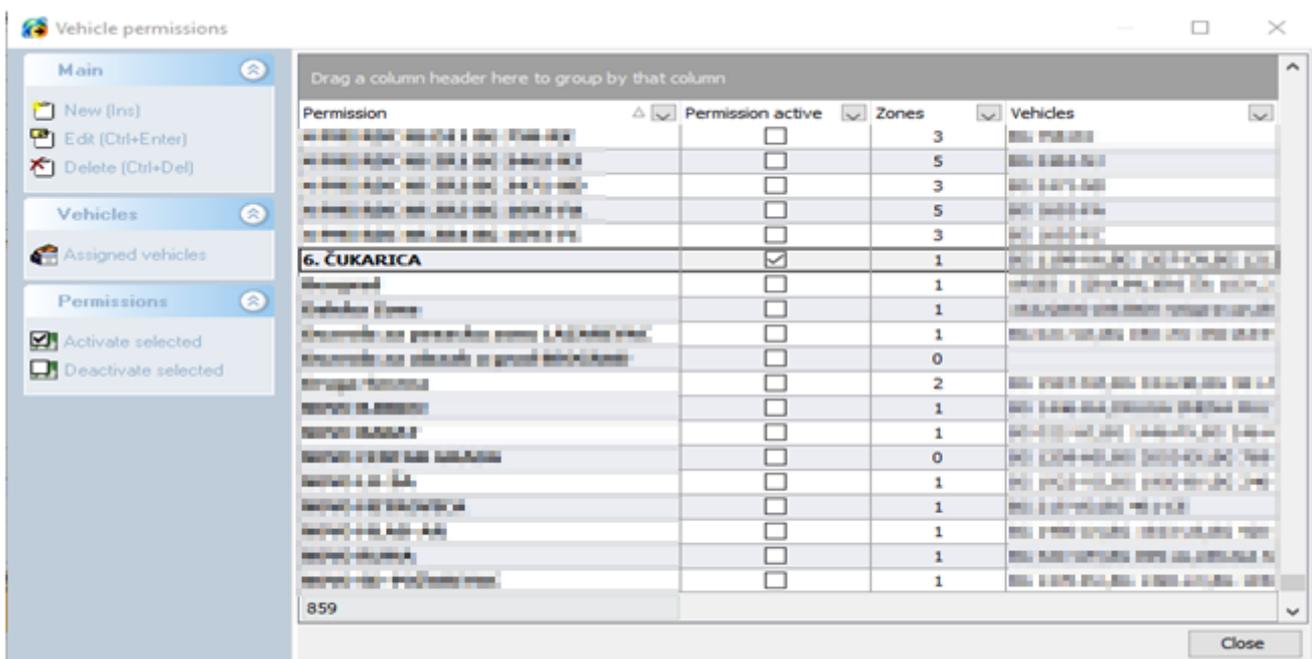
After that it is possible to include which vehicles can enter that zone or zones. This is done by clicking on the Included vehicles option, which is on the left.



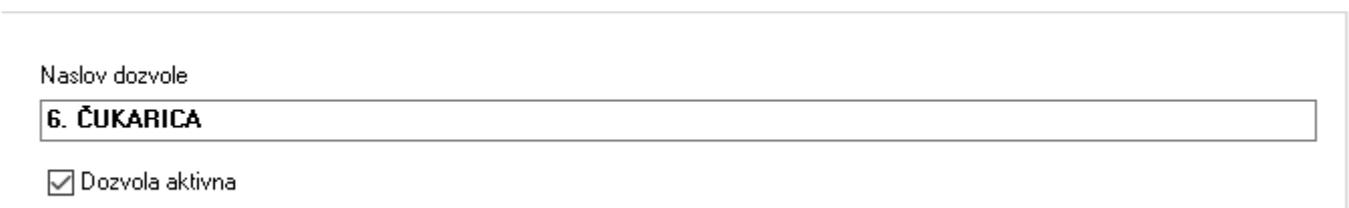
After that, the vehicles that we want to give permission to enter our zone are selected.



When we click on Ok, we get a window like the picture below. It shows that 7 vehicles have a permit for the Čukarica zone.



If we want, we can deactivate the specified permission. We select the specified permission, click in the upper left corner of the Change window. A window like the one below appears.

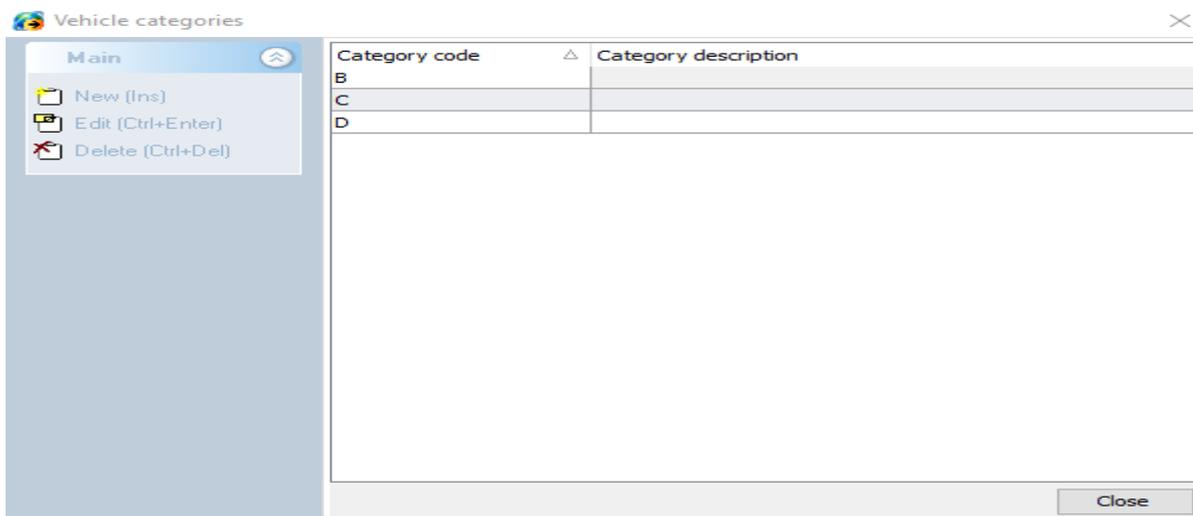


When we uncheck the Permission active option and click OK, the specified permission will not be used.

## Vehicle categories

By selecting the Vehicle categories option, it is possible to assign certain vehicle categories with the corresponding category codes.

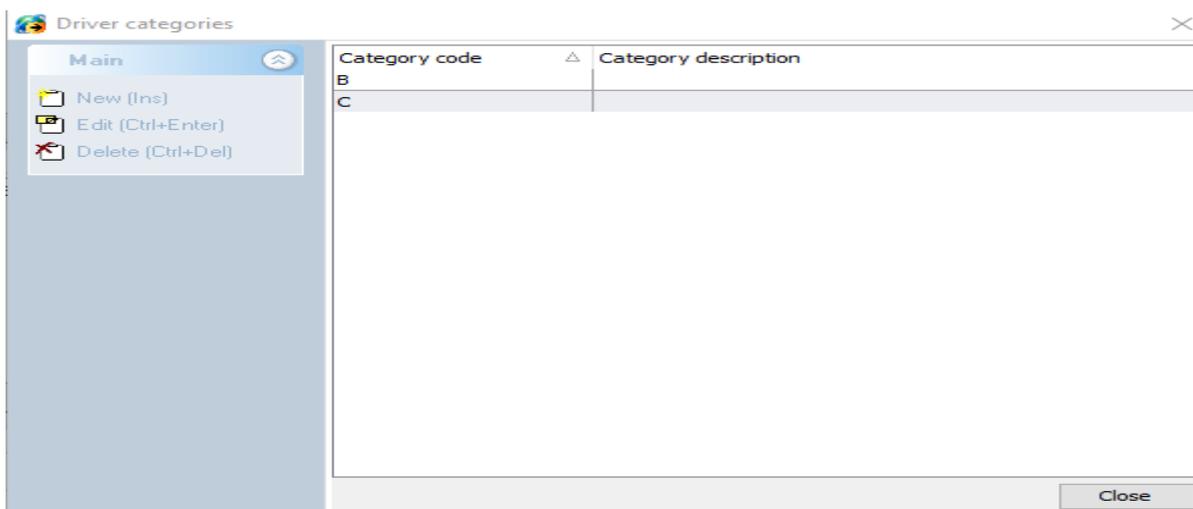
In our example, these are the categories as in the picture below:



By clicking on New it is possible to add a vehicle category, by clicking on Change it is possible to change one of the existing categories B, C, or D. Category B is for vehicles that require a category B driver's license. Category C is for vehicles that require a category C driver's license. Category D is for vehicles that have more than 8 seats in addition to the driver's seat. By clicking on Delete, it is possible to delete one of the listed categories, it would be best if the logisticians in the company have the rights for something like this.

## Driver categories

By selecting the **Driver Categories option**, it is possible to assign certain categories of drivers with the corresponding category codes.



In our example, driver categories B and C were created, because they are used.

By clicking on New it is possible to add a new driver category, by clicking on Change to change one of the existing categories, by clicking on Delete it is possible to delete one of the categories - these rights are best reserved for logisticians.

### Compatibility of vehicle and driver categories

Driver categories	Vehicle categories		
	B -	C -	D -
B -	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C -	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Ok Cancel

By selecting the Vehicle Compatibility and driver categories option, we see a clear correlation between driver categories and vehicle categories. Thus, a category B driver can only drive a vehicle that requires a category B driver's license, while a category C driver can drive all vehicle categories.

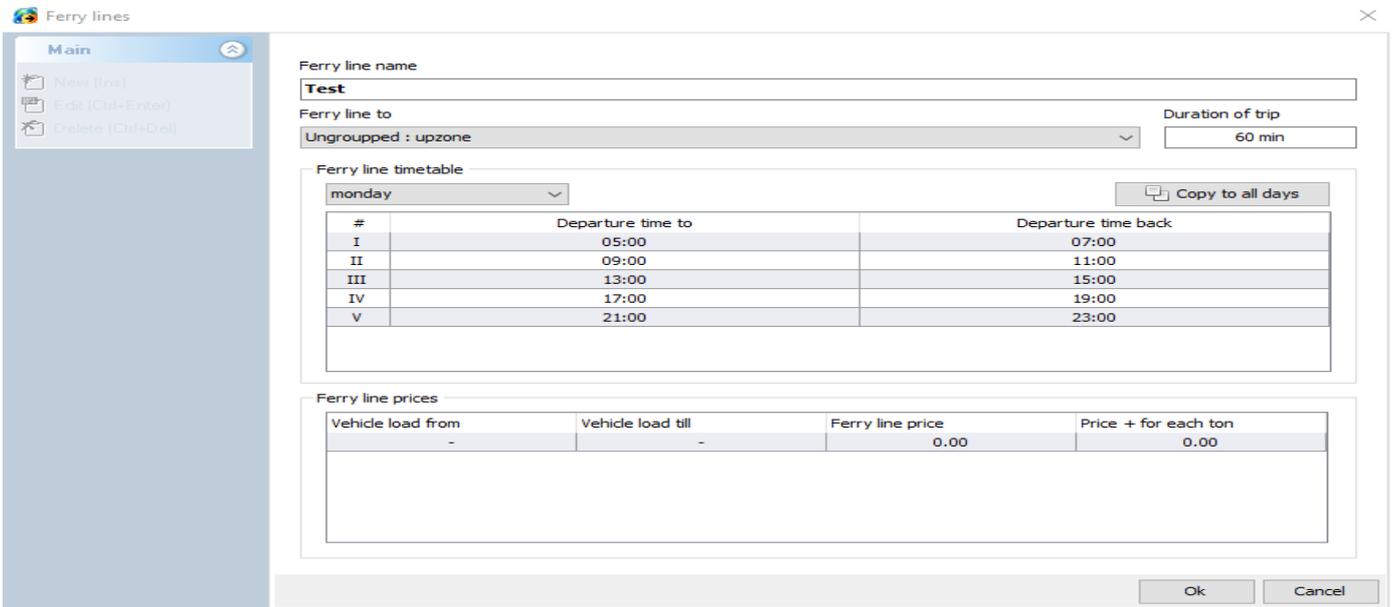
### Ferry lines

By selecting the option Ferry Lines, it is possible to add a Ferry Line for transporting vehicles by clicking on New in the upper left corner of the screen.

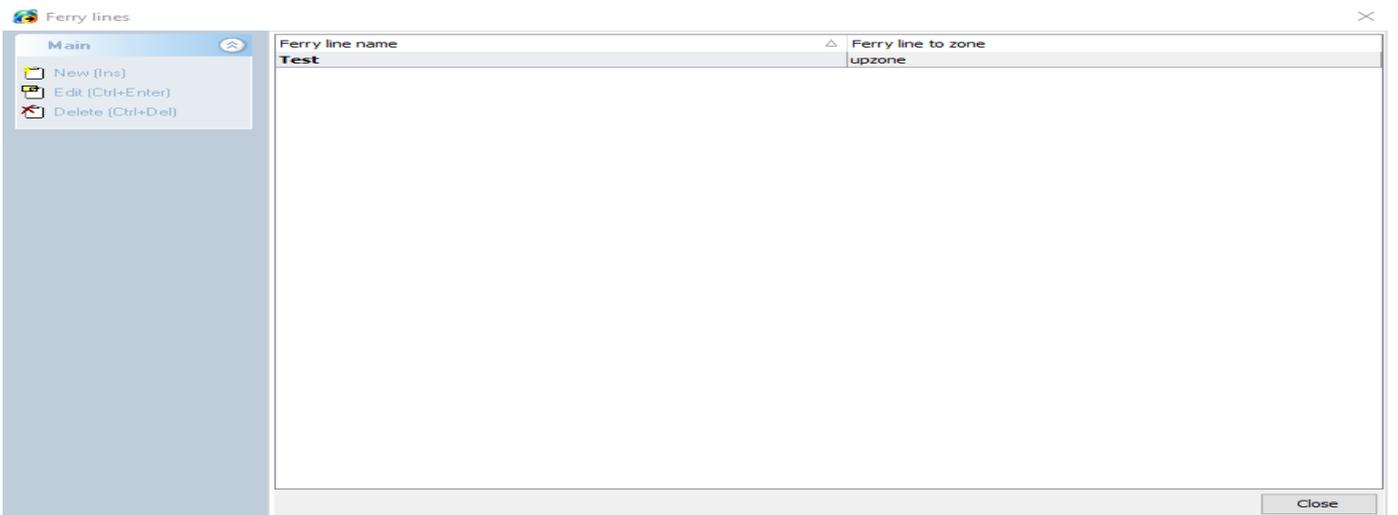


After that, the name of the ferry line is entered, the ferry line is selected according to the previously defined zone. Then enter the duration of the voyage in minutes. After that, the order of departure and return under the anima is defined.

Then enter the carrying capacity of vehicles that can be transported on the ferry line in the fields vehicle carrying capacity from and vehicle carrying capacity to. After that, the transportation price per vehicle and price + per each ton is defined.

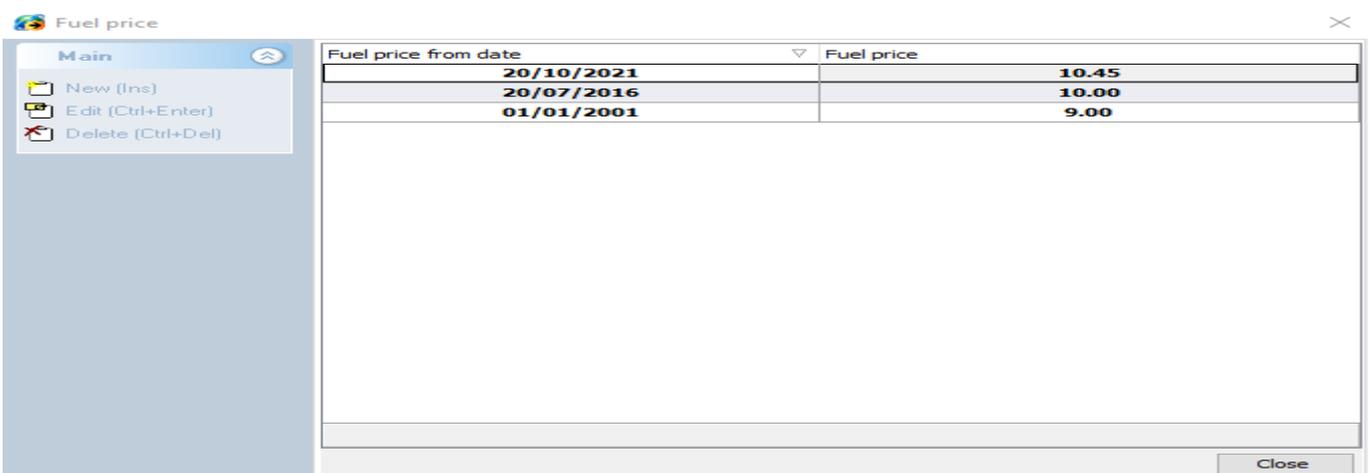


When we click OK after that, we get the ferry line as in the window below.



## Fuel price

When we select the **Fuel price option**, we get the option of entering the fuel price, the change of which has occurred since a certain date.



When we click on New in the lower left corner, the window below appears where it is possible to select the date from which the fuel price change occurred and enter the fuel price in any currency.

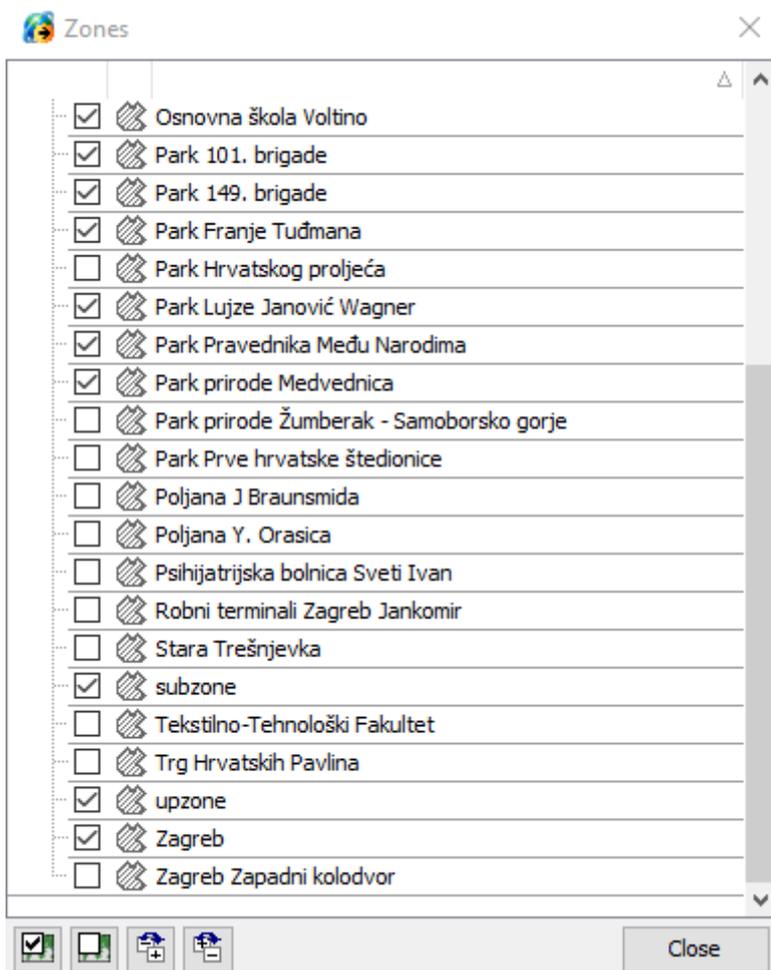


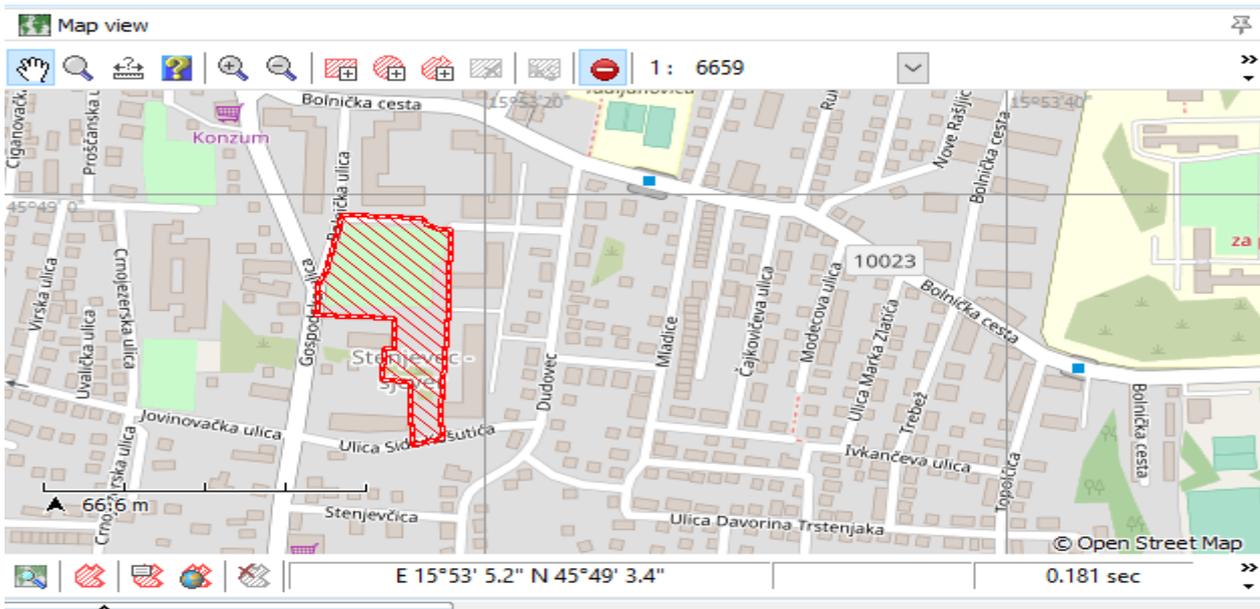
By clicking on Ok, the specified price is added.

## Zones

By selecting the **Zone option**, it is possible to review previously created zones, change zone properties and groups to which the zones belong.

When we select the Zones option, then double-click on a specific zone - it appears in the Map View window.

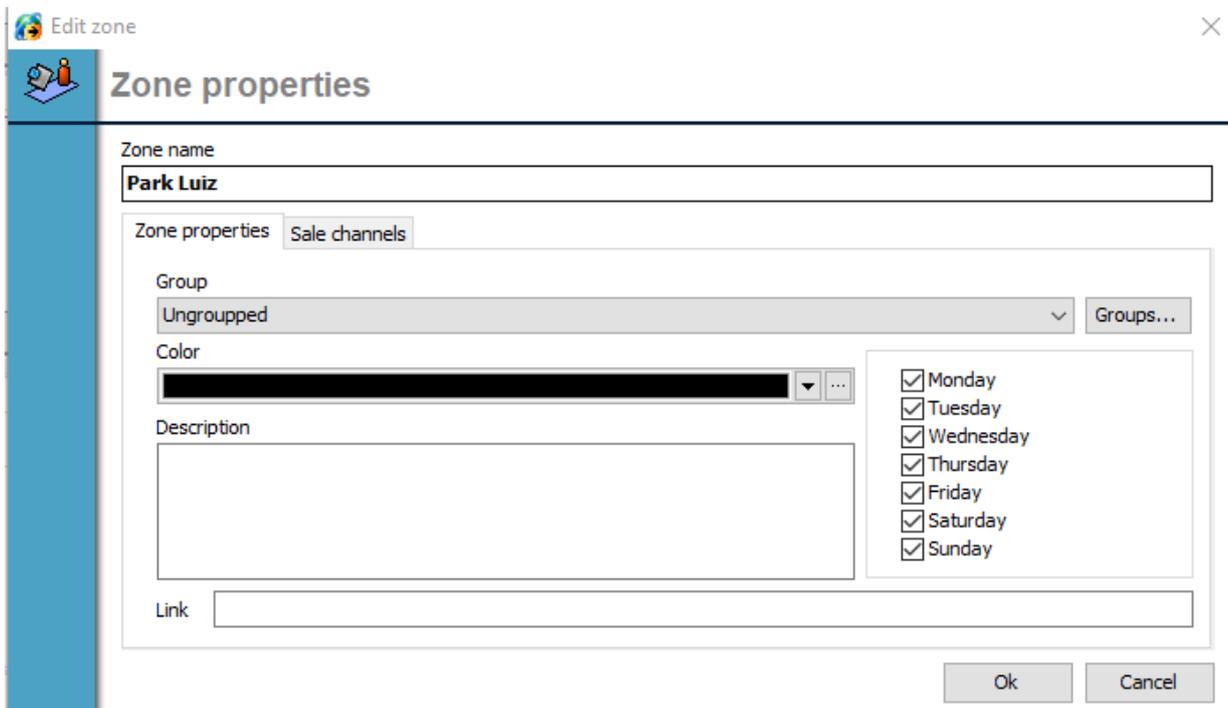


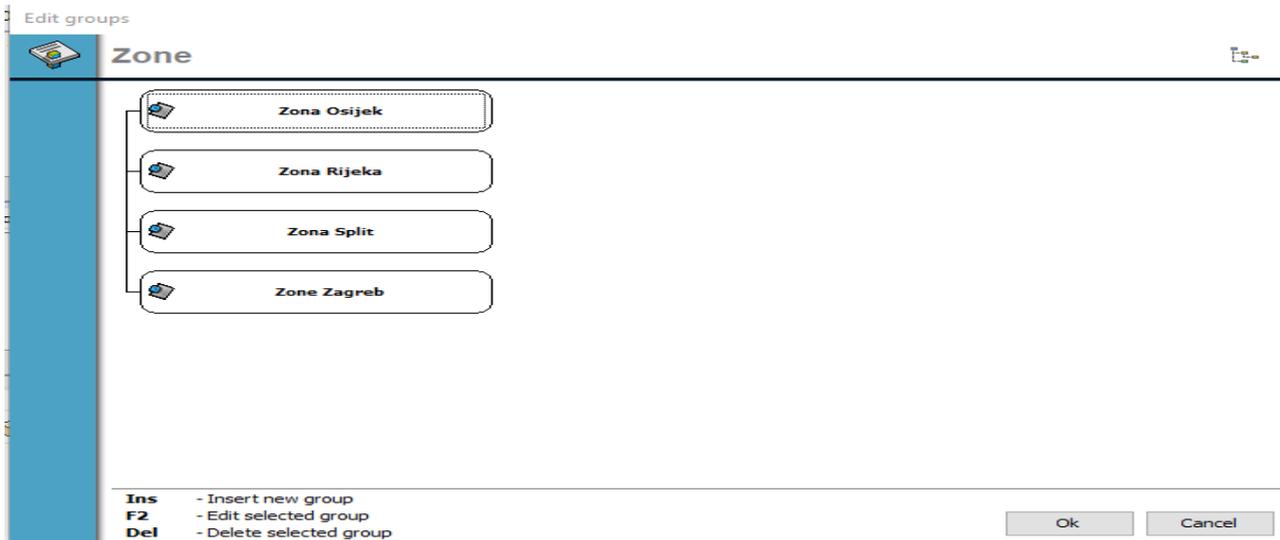


When we right-click on the same zone, then Zone Properties, a window appears as in the image below:

On the Zone Settings tab, it is possible to change the affiliation of the group to which the Zone belongs, by selecting it from the Group drop-down menu.

In addition, by clicking on the Groups option, it is possible to edit the groups to which the zones belong, add a group, delete a group.



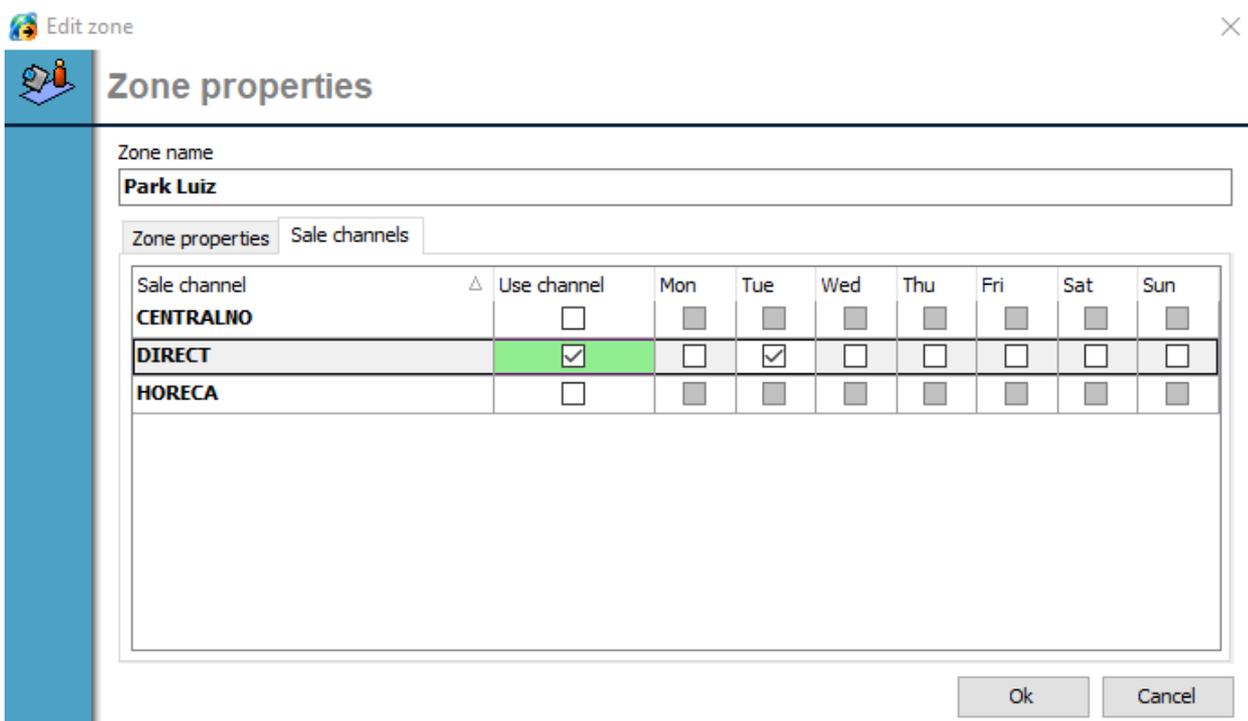


By clicking on Ins on the keyboard, we add a new group, which we click on Ok to add, and which can then be assigned to a specific zone.

By clicking on F2 on the keyboard, it is possible to change the name of a specific group, and then by clicking on Ok, we confirm the change.

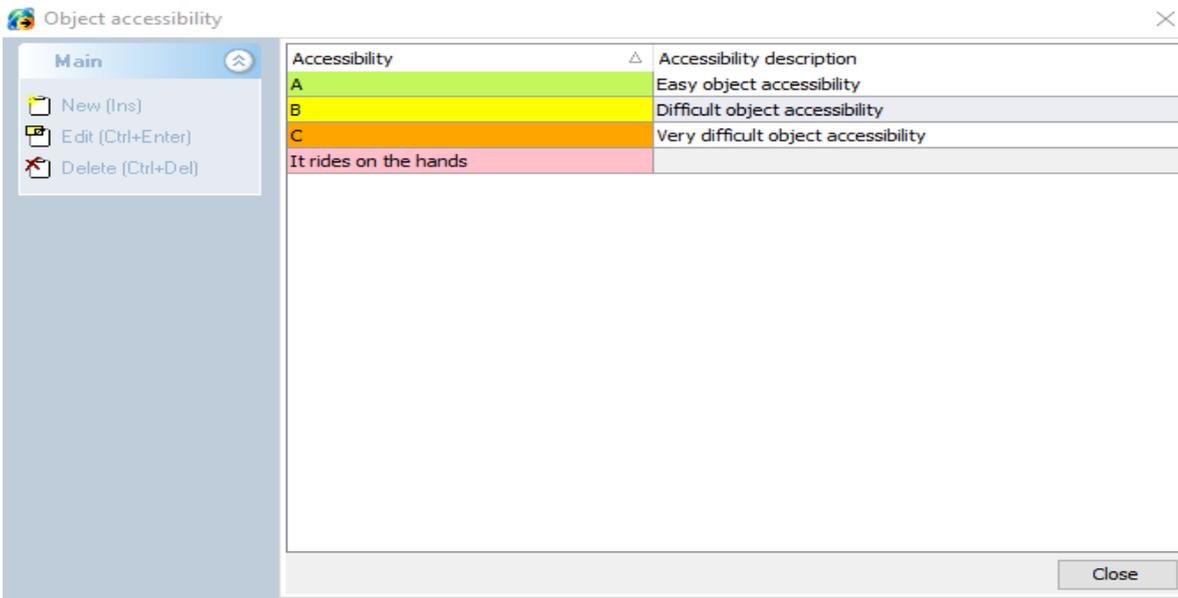
By clicking on Del on the keyboard, it is possible to delete a certain group and then by clicking on Ok to confirm the changes. If we change our mind, we can click Cancel.

After that, on the Sales channels tab, it is possible to set which sales channel is used on which day of the week.



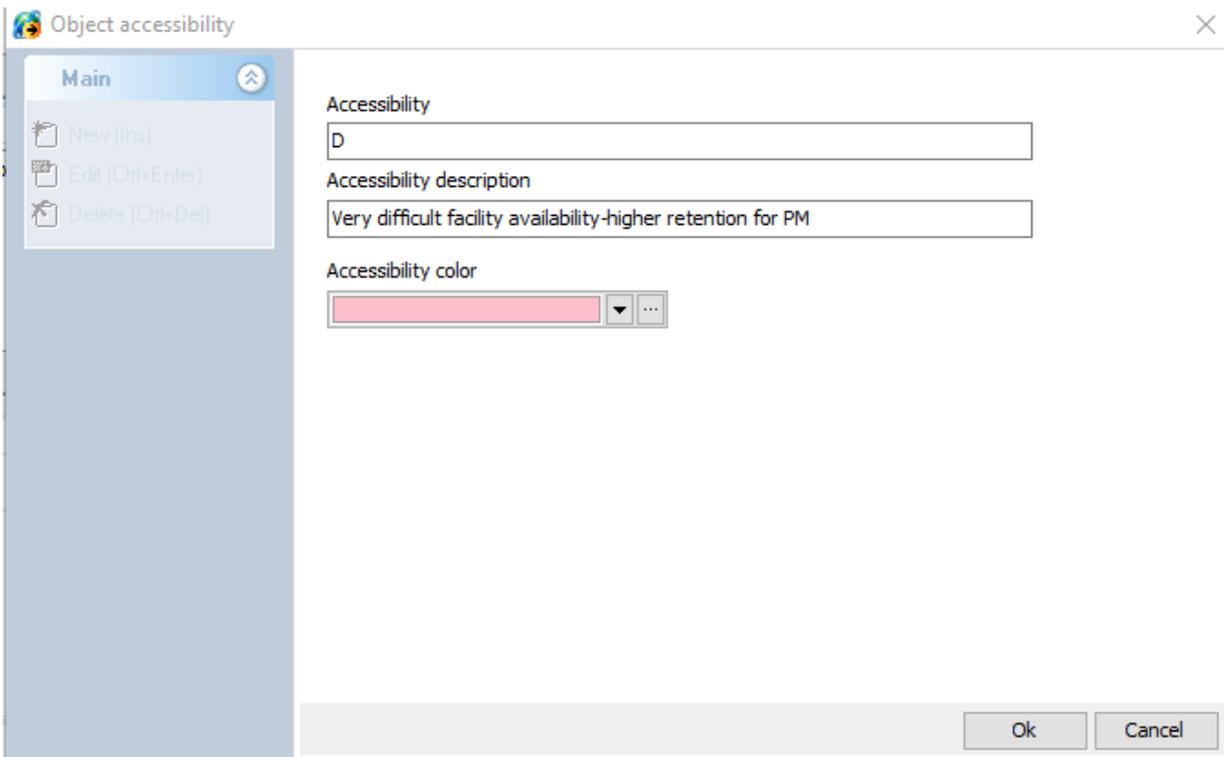
## Object accessibility

**Object accessibility** is a codebook that defines object availability classes. The definition is arbitrary and depends on the judgment of the driver or logistician, so it is necessary for the logistics service to define it itself.



It is possible to add new object accessibility by clicking on New in the upper left corner of the window. By clicking on edit, we change the selected object accessibility. By clicking on delete, some accessibility of the object is deleted, only logisticians in the company should have that right.

When we click on New, a window opens in which it is possible to enter the name of the object's new availability, description and color of the accessibility. By clicking on OK, we add new object accessibility.



Changing the existing object availability is done by clicking on Edit in the upper left corner of the window.

The right to delete the availability of the object would be best if only the logisticians in the company have it, and it is done by clicking on Delete in the upper left corner of the window.

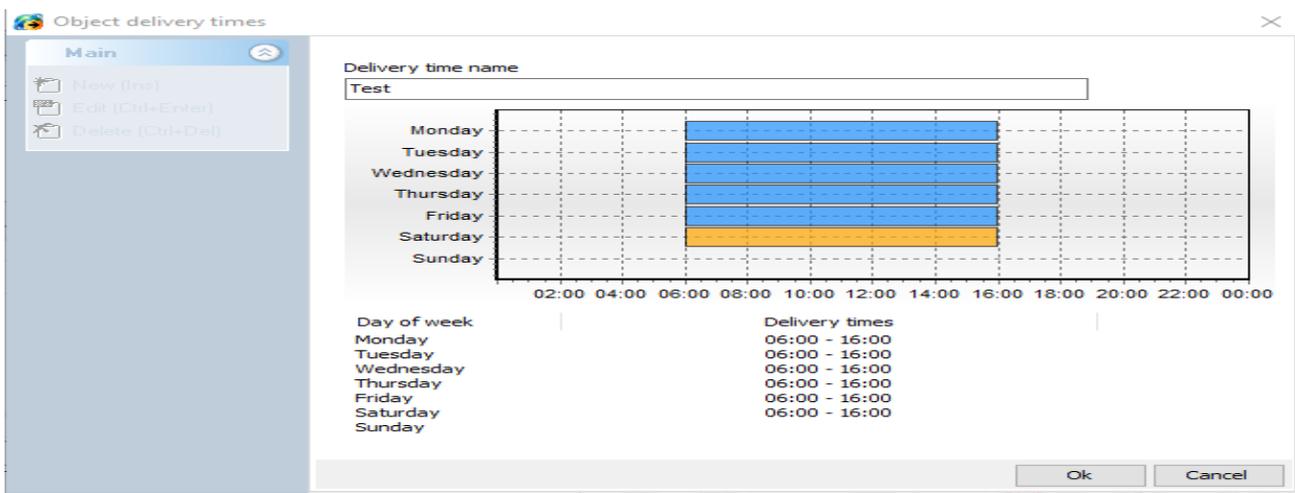
## Object delivery time

Object access times is a codebook in which data is entered about the time when a particular object or a group of facilities receives goods for each day of the week.

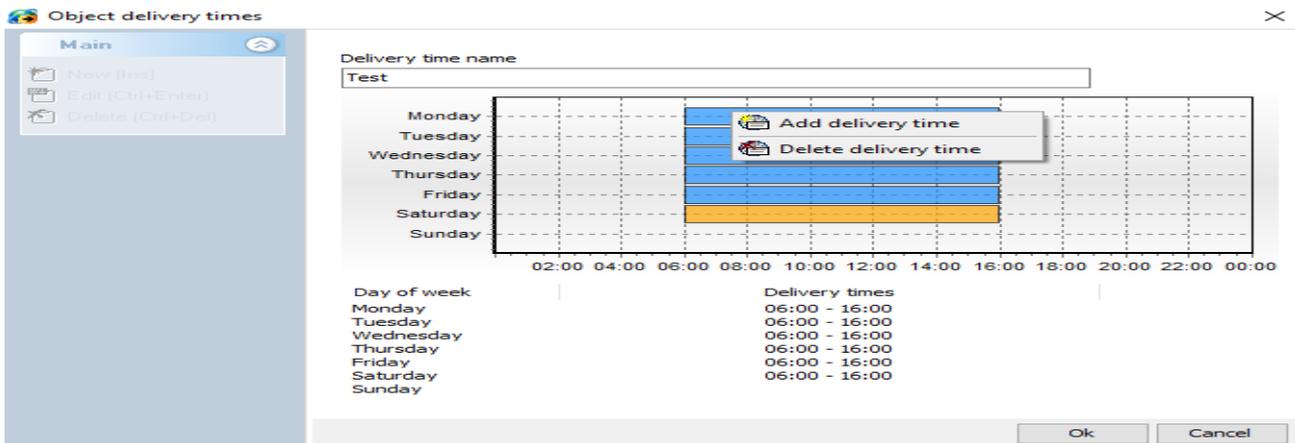
By selecting the option **Object delivery time**, it is possible to add a new time of receipt of the object's goods, modify the existing ones, and delete some time of the object's goods receipt.

When we click on New in the upper left corner of the window, a window opens as in the picture below.

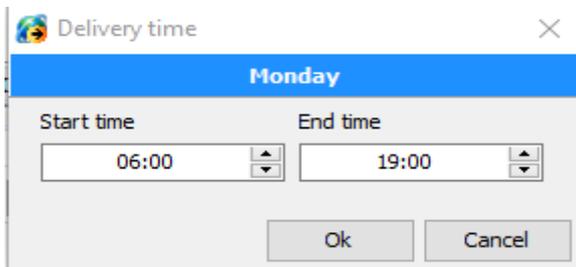
The time of receipt of goods is entered for each day separately by clicking with the right mouse button on the graph in the plane of the day for which we want to enter the time of receipt of goods. By clicking on Ok, we confirm the addition of the object's goods receipt time. After that, in a later phase, it is possible to choose the time of receipt of goods by name for an individual object.



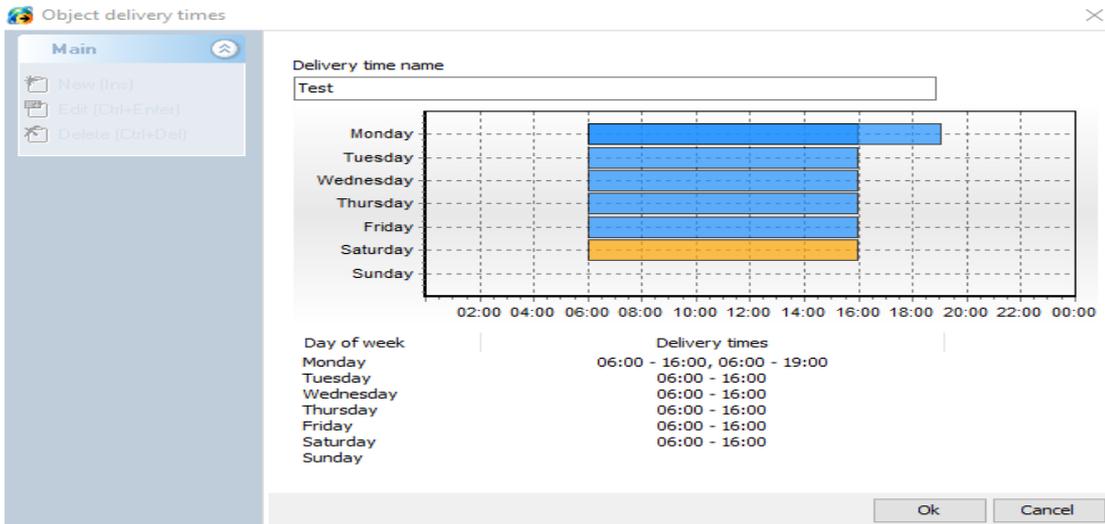
After that, if we want to change some of the object's goods receipt time, we select the specified goods receipt time, click on Edit in the upper left corner of the window, and a window opens as shown in the picture below.



If we want to change the working hours of the object for a specific day, we click with the right mouse button on the day for which we want to change, after that we click on Delete goods receipt time and the working hours for that day will be deleted. After that, we click on Add goods receipt time for that day and the window below opens where we can enter a new goods receipt time.



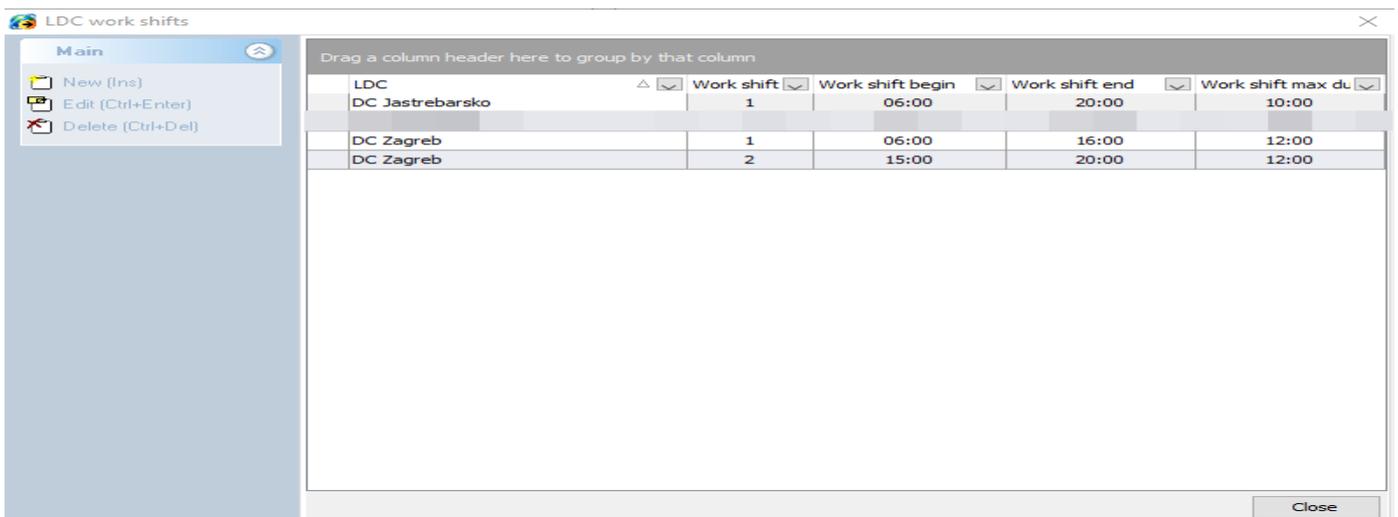
When we click on OK, we confirm the addition of the new goods receipt term, which can be seen in the image below.



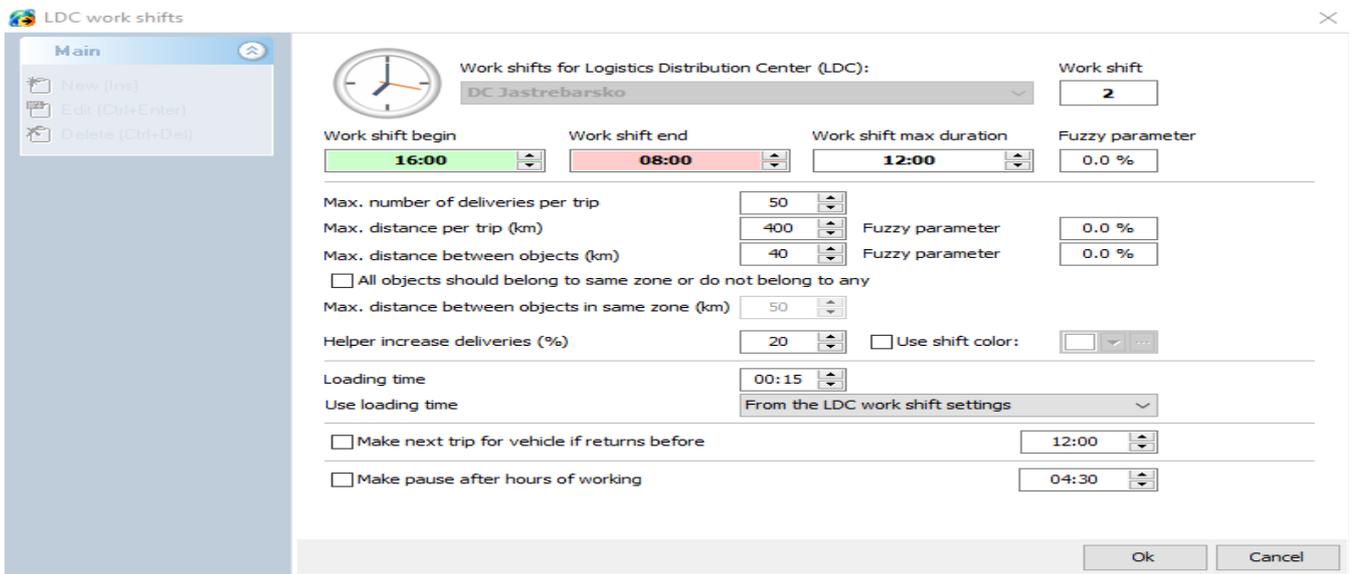
In the picture you can see that the time for receiving goods for Monday is now from 06:00 to 19:00. If we click on Ok again, the change will be prevented for the specified name of the time of receiving the goods.

## LDC work shifts

In this section, we can add and change the parameters of the Distribution Centers.



If we click on New, it is possible to add a new shift for the selected DC, add a work shift in this case 2 shifts, change the start and end of the DC shift, the maximum duration of the shift, the maximum number of delivery objects per drive, the maximum distance traveled per drive, as well as maximum distance between objects, loading time and other parameters.



From the drop-down list, select the DC for which we want to add a new shift. If there was only 1 shift for a certain DC, the program automatically adds a 2nd shift. After that, the start of the work shift and the end of the work shift, the maximum duration of the shift, are set.

In the fuzzy parameter field, the permitted deviation of the duration of the work shift, which is taken into account during routing, is entered.

Maximum number of delivery facilities per drive - in the specified field, enter how many delivery facilities the vehicle can drive around.

The maximum distance traveled per drive - in the given field, enter the maximum number of kilometers per drive the vehicle can travel. The fuzzy parameter determines how much deviation is allowed in percentages from the maximum distance traveled per drive.

Maximum distance between objects - in the specified field, information about how many kilometers can be the distance between two objects can be entered, and this information can be used during routing. The Fuzzy parameter determines how much is allowed to deviate in percentage from the maximum.

All objects must belong to the same zone or not belong to any - zone grouping for a specific DC is enabled. Checking this option brings up the option below about the maximum distance between objects in the same zone. Maximum distance between objects in the same zone - in this field it is possible to determine the maximum distance between two objects in the same zone.

Auxiliary worker increases (%) - in this field, enter the percentage by which the auxiliary worker increases the realization.

Loading time - this field defines how many minutes are needed for loading in a certain DC.

Use loading time - in this field it is possible to choose whether the time is used according to the LDC work shift settings or according to the vehicle transit settings.

Creates the following trips for vehicles that return before: 12:00 - by checking this option, a new trip is created for vehicles that return before 12:00 from delivery.

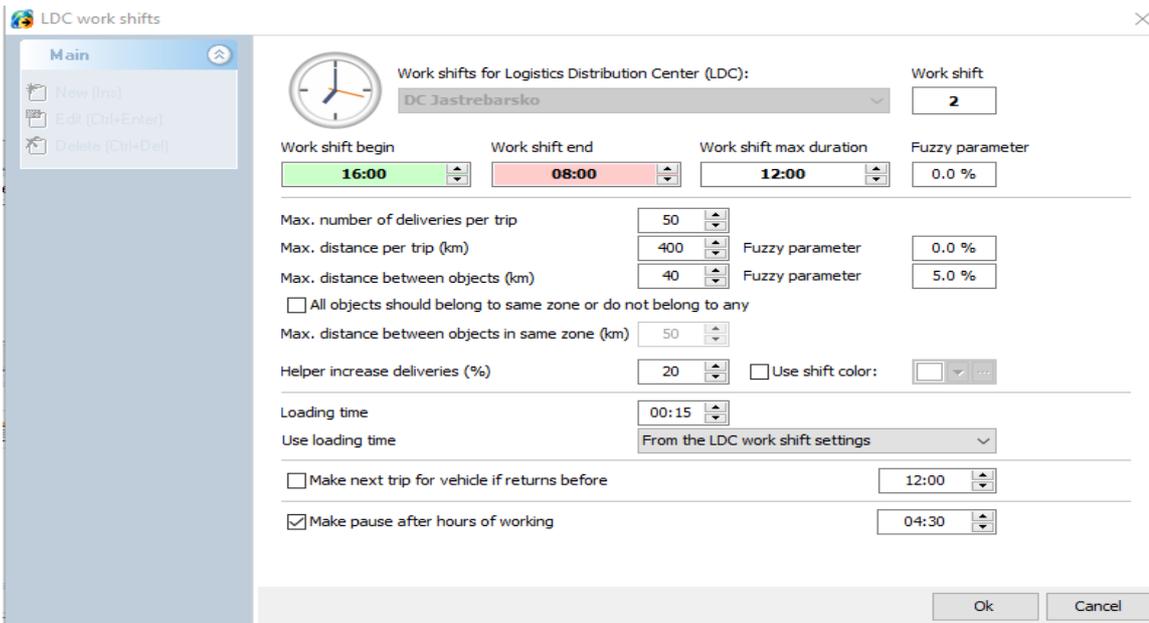
Take a break after working more than (hours) - by checking this option, taking a break after working more than the entered number of hours is enabled.

By clicking on Ok, the specified parameters are added.

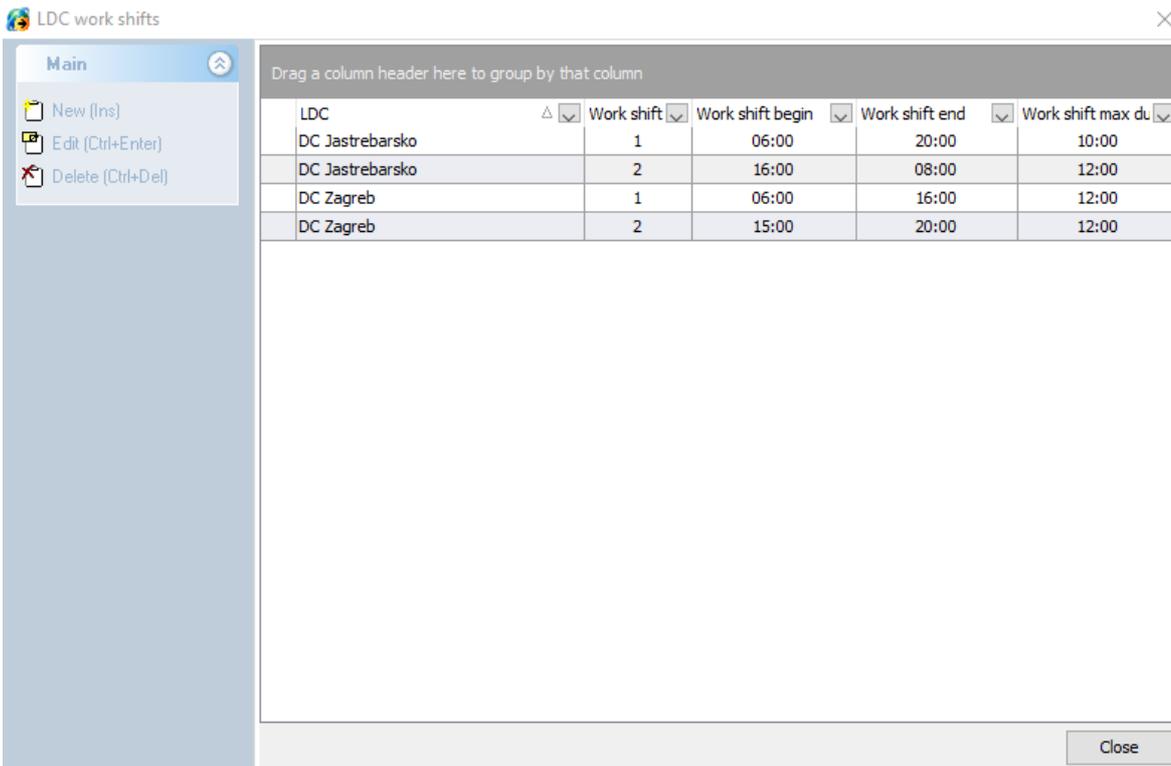
LDC	Work shift	Work shift begin	Work shift end	Work shift max du
DC Jastrebarsko	1	06:00	20:00	10:00
DC Jastrebarsko	2	16:00	08:00	12:00
DC Zagreb	1	06:00	16:00	12:00
DC Zagreb	2	15:00	20:00	12:00

If we want to change the parameters for the second shift DC Jastrebarsko, click on Edit in the upper left corner.

A window opens as in the picture below where we can change the parameters for this shift.



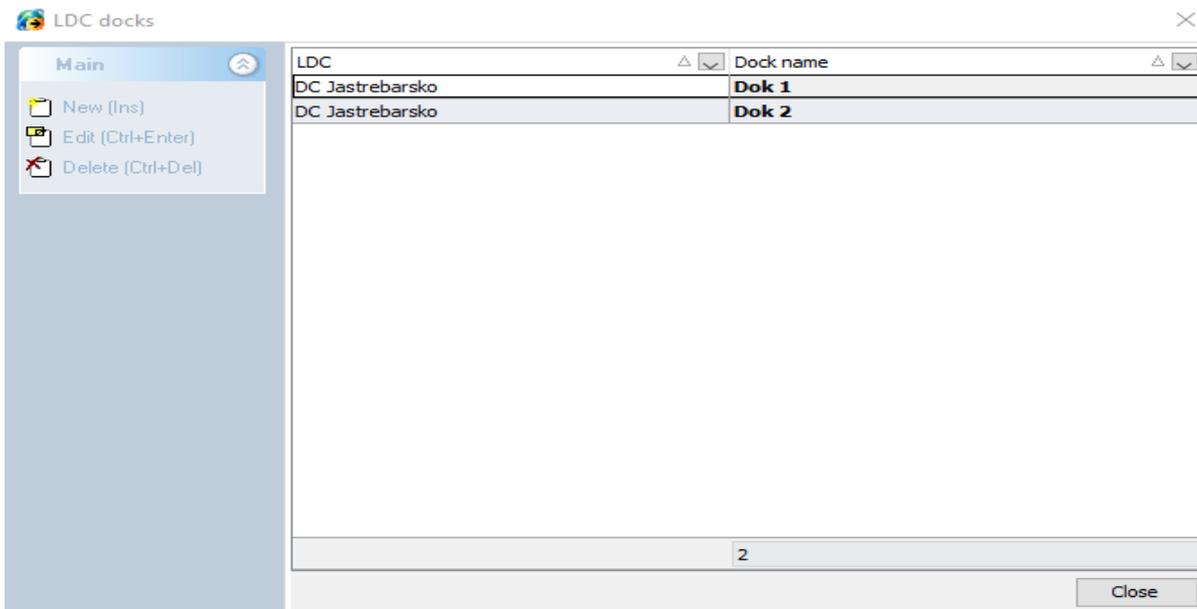
When we click OK after that, the changes will be saved.



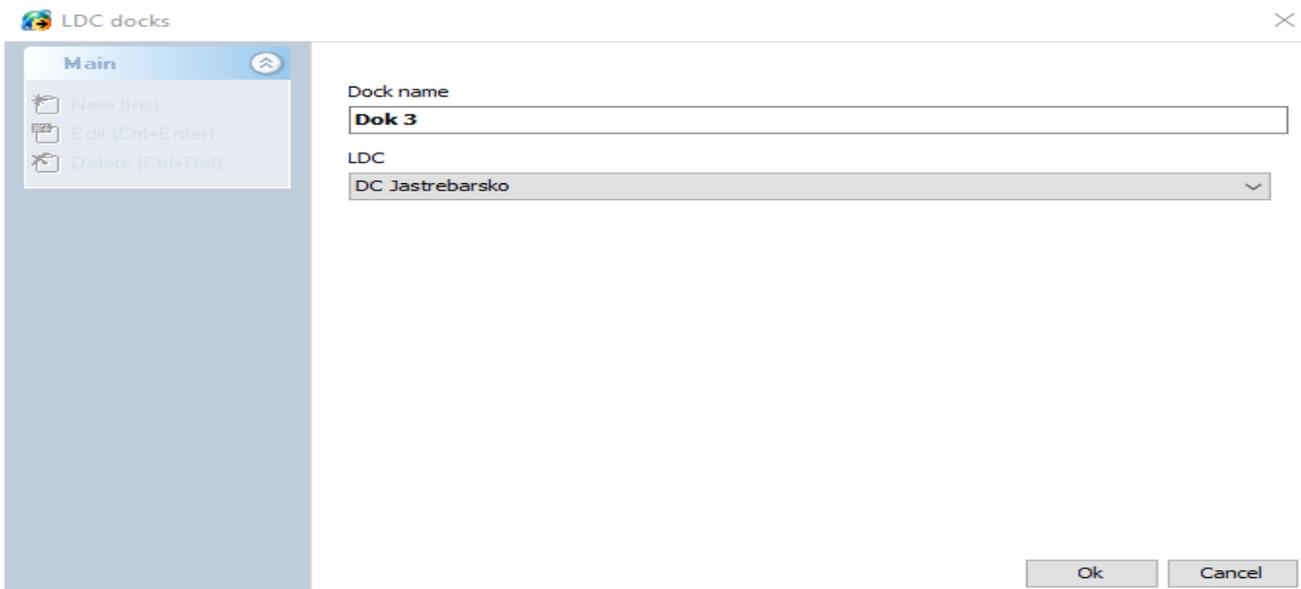
If we want to delete the specified shift after that, click on Delete in the lower left corner. It would be best if only logisticians had this right.

## LDC docks

By selecting the **LDC docks** option, it is possible to add new dock names for existing departure warehouses, change dock names for existing departure warehouses, or possibly delete a dock name for an existing departure warehouse.



If we want to add a new dock name, click on New, in the upper left corner of the window. A window opens as shown in the picture below.

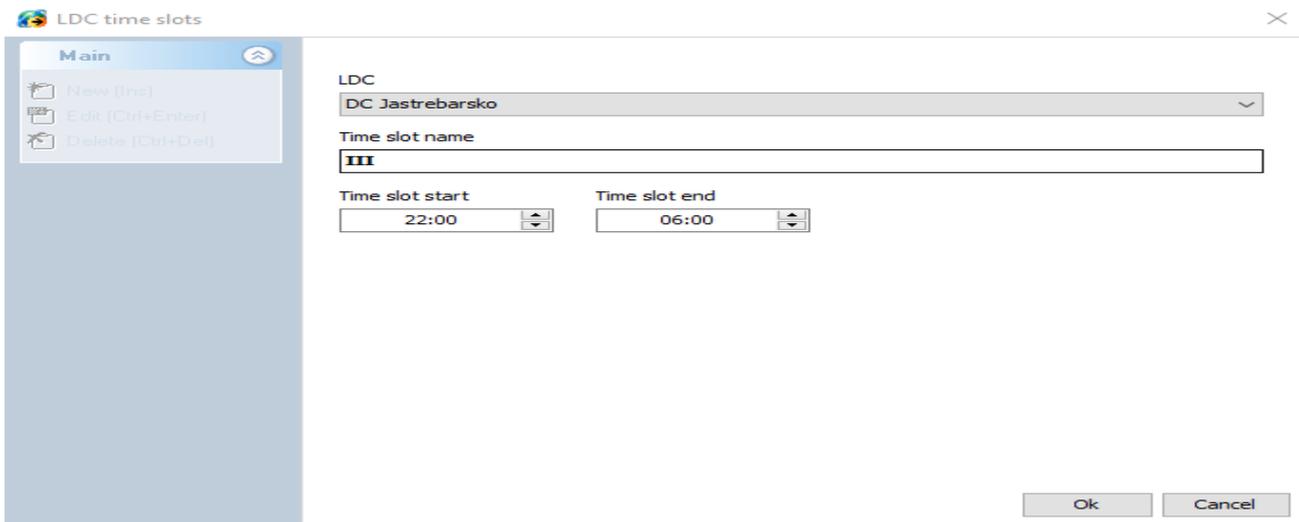


After creating a new dock name, we select the Source storage, by clicking OK we add a new dock name.

## LDC time slots

By selecting this option, it is possible to add a new time slot for a specific source storage, modify existing time slots, as well as delete a specific time slot.

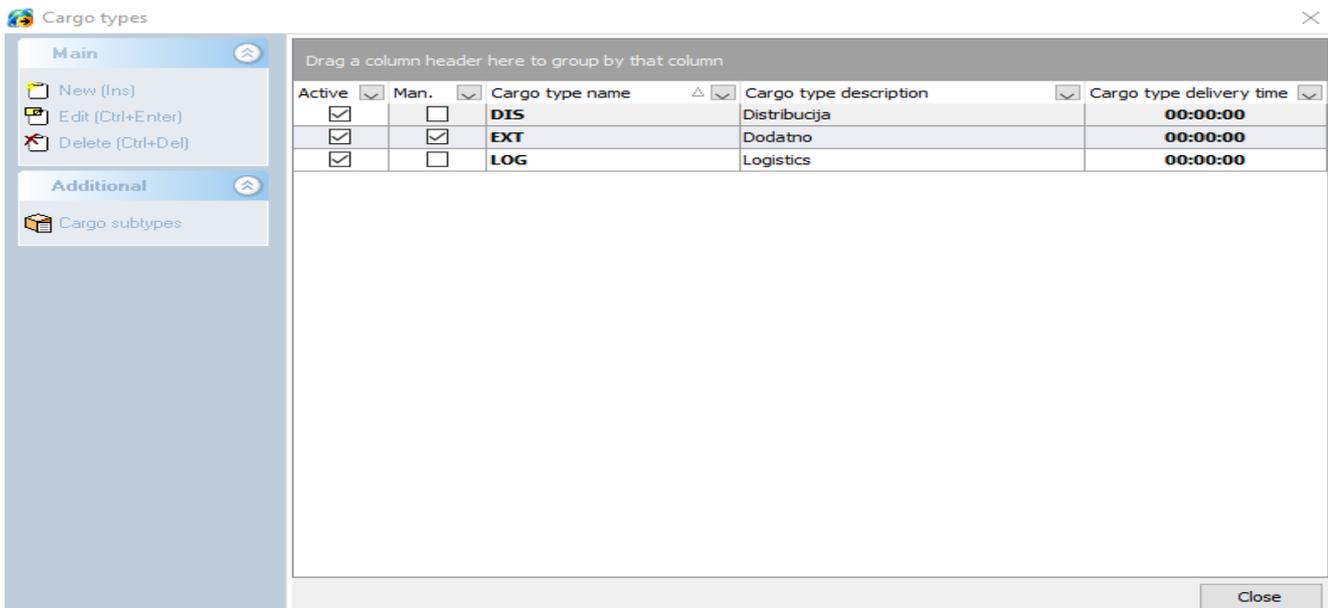
When we click on new in the upper left corner of the window, a window appears as in the picture below.



When we enter the time slot, select the starting warehouse, enter the beginning and end of the slot, click OK to add a new time slot for a specific crossdock.

## Cargo types

Cargo types is a code book in which all relevant data for a certain type of goods are entered. It is possible to add a type of goods, change an existing one and delete cargo types.



If we want to change the parameters for a certain type of goods, click on that type of goods, then on Change in the upper left corner of the window. A window like the one below appears.

Cargo types

**Main**

- New (Ins)
- Edit (Ctrl+Enter)
- Delete (Ctrl+Del)

**Additional**

- Cargo subtypes

Cargo type name:

Cargo type description:

Cargo type delivery duration:

Total delivery duration:

Cargo type delivery waiting duration

Customer type	Delivery waiting duration	
KAM		<input type="button" value="X"/>
OST		<input type="button" value="X"/>
PSR		<input type="button" value="X"/>

Max. delivery objects:

**Cargo type active**

Cargo type allowed for manual creation of cargo

Enabled small package

Small package weight less then:

Small package volume less then:

Small package amount less then:

Temperature range while delivering (C°):

Min.:

Max.:

Ok Cancel

It is possible to change the name of the cargo type, Cargo type description.

**Cargo type delivery duration** - depending on the type of cargo, it is possible to change and set another value.

In addition, it is possible to change the value of **max. delivery points** by type of goods.

**Cargo type active** - by checking this option, we mark the selected type of goods as active or inactive.

**Cargo type allowed for manual creation of cargo** - by checking this option, we mark this type as active or inactive for manual entry of delivery orders.

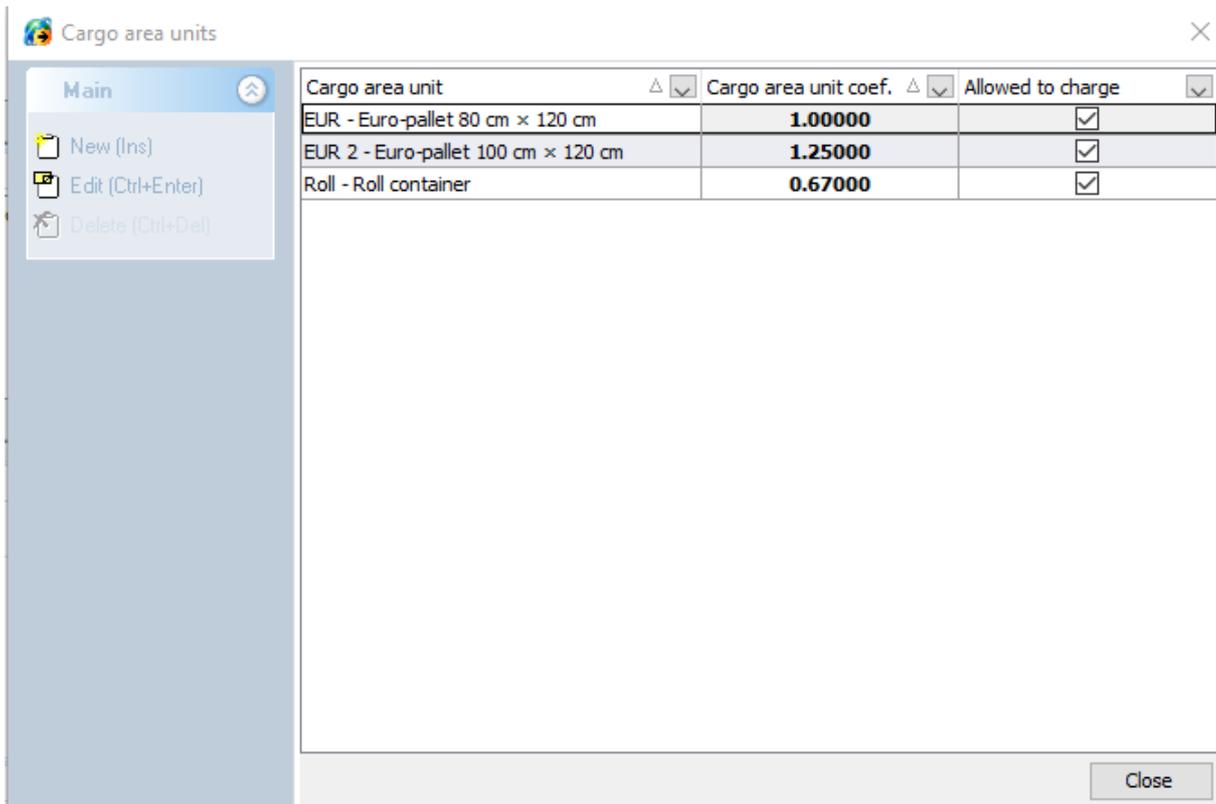
**Enabled small package** - with this option, we enable small packages, according to the criteria that a package is small if the weight is less than the entered number of kilograms, the volume is less than the entered number in m3, as well as the capacity is less than the entered number of pallets.

**Temperature range while delivering** - enter the minimum and maximum in degrees C during delivery.

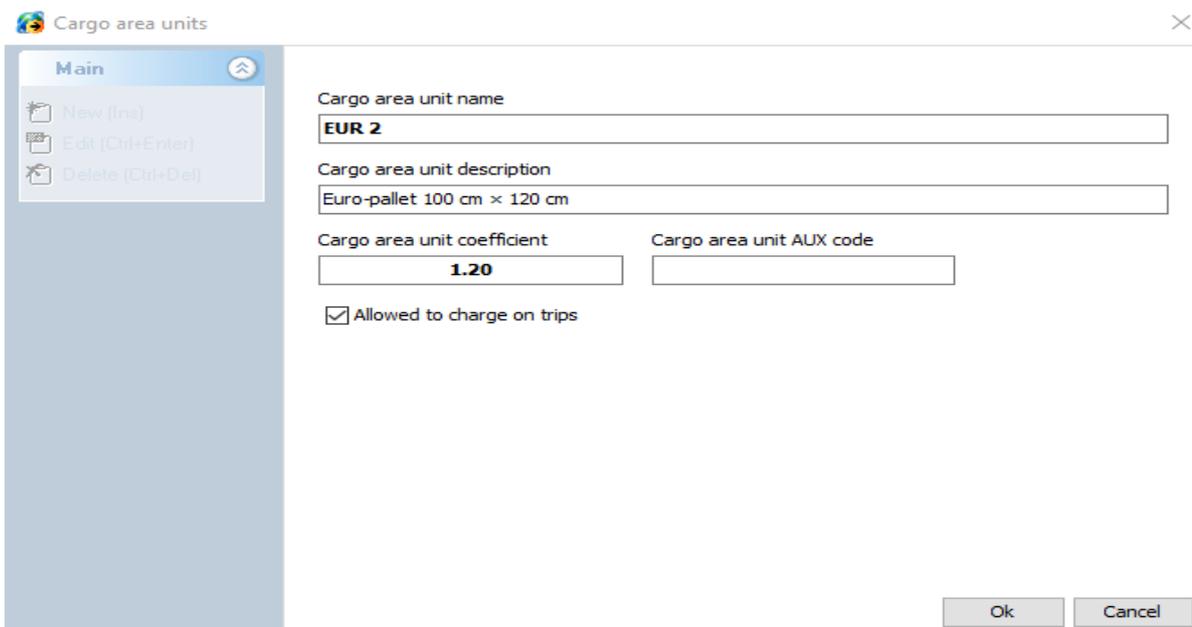
When we click on Ok, the changes for the specified type of goods will be saved.

## Cargo area units

By selecting the option Types of capacity units, it is possible to add a type of capacity, change a type of capacity, and logisticians in the company should only have the option of deleting types of capacity.



If we select the type of capacity, then click on Edit in the upper left corner of the window, a window opens as in the picture below.



It is possible to change the name of all capacity units, the description of the type of capacity unit, as well as the coefficient. It is possible to save the changes by clicking on Ok, or cancel the changes by clicking on Cancel.

## Cargo compatibility

Compatibility needs to be precisely defined for each type of goods. Some types of goods are incompatible and must not be together in the cargo area. The image below shows an example of goods that are incompatible with another type of goods, it is marked in red and that field is not checked.

Cargo compatibility

Cargo type 1	LOG Logistics	Cargo type 2 EXT Dodatno	DIS Distribucija
LOG Logistics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
EXT Dodatno	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
DIS Distribucija	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Ok Cancel

## Cargo sales channels

By selecting the **Cargo sales channels** option, it is possible to add a new sales channel, change the existing one, or delete it if the user has the right to do so.

Cargo sales channels

Cargo sales channel name	Cargo sales channel code
CENTRALNO	003
DIRECT	001
HORECA	002

Close

By clicking on Edit in the upper left corner of the window, the window below opens where it is possible to make changes for the selected channel. When you click OK, the changes will be saved.

Cargo sales channels

Main

- New (Ins)
- Edit (Ctrl+Enter)
- Delete (Ctrl+Del)

Cargo sales channel name  
**CENTRALNO**

Cargo sales channel code  
**003**

Cargo sales channel description

Cargo sales channel address

Cargo sales channel email

Required signature at delivery

Use cargo sales channel color

Color selection bar (green)

Ok Poništi

## Object accessibility-Vehicle passableness

The relationship between object accessibility and vehicle throughput is key to scheduling deliveries by vehicle, and the table depends on the data in the **object availability and vehicle throughput data**. It is crucial to precisely define these relationships.

Object accessibility - Vehicle passableness ✕

Object accessibility	Vehicle passableness					
	[ 24 pal vehicle ]	[ A ] without passableness	[ B ] Medium vehicle, limited	[ C ] Large vehicle, very	[ Caddy vehicle + cart ]	[ Very tall vehicle ]
[ A ] Easy object accessibility	<input checked="" type="checkbox"/>					
[ B ] Difficult object accessibility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[ C ] Very difficult object accessibility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
[ It rides on the hands ]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

If an object is not available for a certain vehicle passableness, that field will be marked in red and will not be checked.

### 1.3. Solutions

The Solutions menu contains a menu with: Show solution statistics, Loading lists for trips, Add vehicles to solution, Finalize trips, Show solution vehicle information, Show solution usage information, Show solution route information, Show solution expenses, Show solution drivers, Show solution vehicle capacity, Setup trips view columns.

#### Show solution statistics

In the Solution Statistics, when we click on the General tab, we see data on the total number of vehicles used during routing, the total number of drives-trips, the total number of auxiliary workers-helpers, the total number of kilometers, the average kilometers per vehicle, the average kilometers per trip. In addition, there are data on the total duration of the trip, the duration of the shortest trip, the duration of the longest trip, as well as the average duration of the trip.

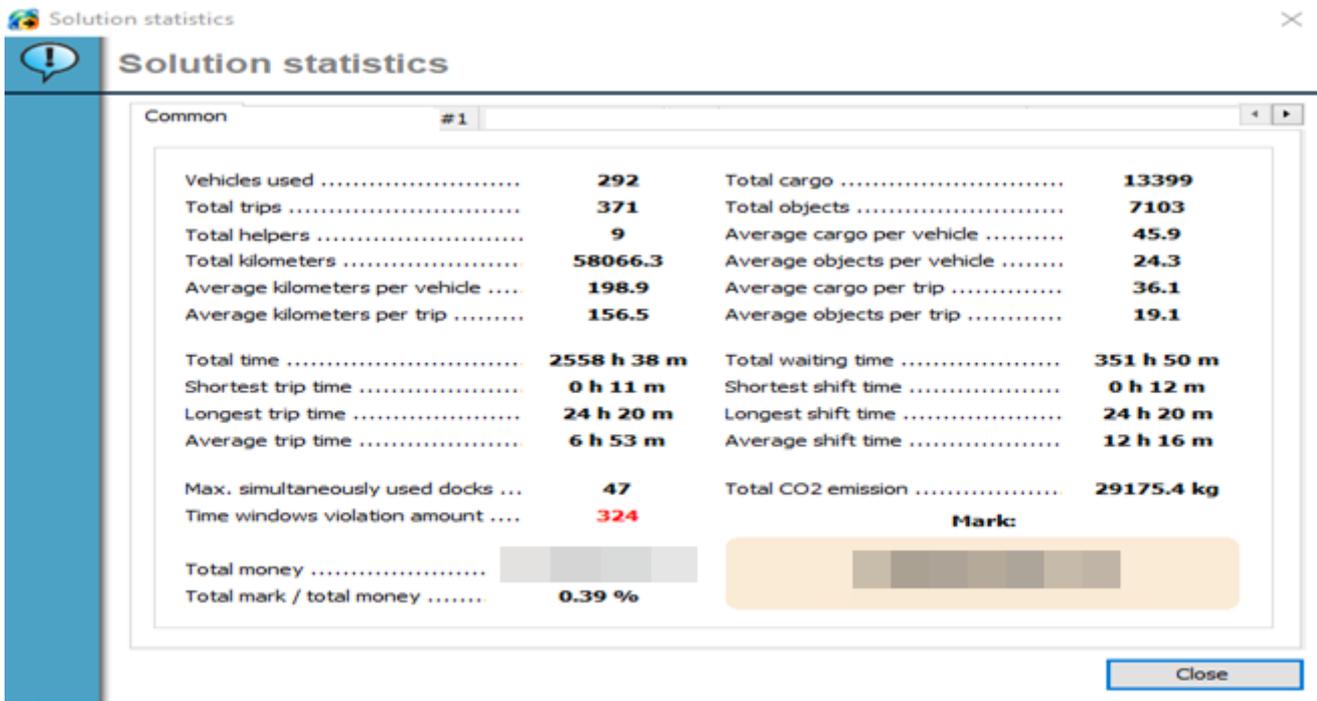
We also see data on the maximum number of simultaneously used docks, the number of deliveries outside working hours.

In addition to this data, you can see data on the total number of distributed shipments for that day, total routed objects, average routed shipments per vehicle, average routed objects per vehicle, average shipments per trip, average objects per trip.

You can see data on waiting time, the shortest shift duration, the longest shift duration, as well as the average shift duration.

In addition to this data, we can see data on the total amount of money for all trip(s), the rating for all trip(s), as well as the rating/total money ratio in percentages.

All this information can also be seen for individual LDCs, when we click on the LDC tab in Solution Statistics. In this case, you should click on the #1 card.



When we click on the close option or on the icon in the upper left window, we can close the Solution Statistics display.

## Loading lists for trips

Loading lists for trips contain data on the vehicle name, vehicle code, maximum vehicle load capacity, maximum vehicle volume, maximum vehicle capacity, driving code, serial number of the document, type of document - whether it is a delivery note or a return note. If it is a shipping slip, the field is marked empty, and if it is a return slip, an icon indicating a return appears. The document is marked in bold, for easy retrieval. The storage location contains information about the storage location for each document, sales channel as well. The name of the object contains the exact name of the object, along with the corresponding code of the object. The original destination generally matches the object name, and the destination code generally matches the object code. The address contains data for the street and object number, the place contains data to which place the object belongs. Customer type contains information about the type of customer of the goods. The type of goods contains information about which goods are transported, the method of delivery - orange cubes indicate that it is regular.

The time window indicates the time of receipt of the object's goods. Weight of goods on individual packing slip, volume of goods in m3, capacity of goods expressed in EUR pallets or others, quantity of items on packing slip, items on packing slip, amount per packing slip, date and time when the packing slip was sent to WMS.

Vehicle	Vehicle max	Vehicle	Vehicle r	Trip	Document	Wa	Objec	Obj	Object e	Objc	Car	Tim	Car	Car	Car	Cor	WM	WMS sei	
Vehicle trip : 001. AP JOVANOVIĆ 1 IZNAJMLJENI BG 2093-PT ( #1 ) 06:30																			
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	1	<b>9928135415</b>	JDE,ME	AMAN 75	110147	PASTEROVA	BEOGRA	GML	08:00-	17 kg	0.067 n	0.08	Digital		29/08/2024	
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	2	<b>2005596949</b>	3PL BA	INTERME:	111105	DOKTORA S	BEOGRA	GBA	09:00-	8 kg	0.040 n	0.05	Digital		29/08/2024	
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	3	<b>9928136563</b>	Nestle	INTERME:	111105	DOKTORA S	BEOGRA	GHR	09:00-	16 kg	0.025 n	0.03	Digital		29/08/2024	
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	4	<b>2005596862</b>	3PL BA	TSV DISKI	113762	JUG BOGDA	BEOGRA	GBA	06:00-	6 kg	0.030 n	0.03	Digital		29/08/2024	
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	5	<b>9928136137</b>	BFF,NL	QVATTRC	110077	JUG BOGDA	BEOGRA	GFH	08:00-	4 kg	0.031 n	0.02	ISTEKAI		29/08/2024	
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	6	<b>2005595937</b>	3PL PO	QVATTRC	110077	JUG BOGDA	BEOGRA	GPD	08:00-	8 kg	0.037 n	0.05			29/08/2024	
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	7	<b>9928138400</b>	MCH,W	QVATTRC	110077	JUG BOGDA	BEOGRA	GWR	08:00-	2 kg	0.003 n	0.00	Digital		29/08/2024	
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	8	<b>9928138399</b>	MPC	QVATTRC	110077	JUG BOGDA	BEOGRA	GMP	08:00-	20 kg	0.074 n	0.04	Digital		29/08/2024	
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	9	<b>9928137109</b>	PG	BB TRADE	110521	LOMINA 4	STARI G	GHB	09:00-	14 kg	0.053 n	0.04	Digital		29/08/2024	
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	10	<b>2005588649</b>	3PL BA	INTERME:	111105	SVETOZARA	BEOGRA	GBA	06:00-	4 kg	0.031 n	0.03	POVRAK		29/08/2024	
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	11	<b>9928136232</b>	BFF	AMAN 84	110147	BRAČE NED:	BEOGRA	GFH	06:00-	3 kg	0.003 n	0.00	Digital		29/08/2024	
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	12	<b>9928136230</b>	Chips V	AMAN 84	110147	BRAČE NED:	BEOGRA	GCP	06:00-	6 kg	0.206 n	0.05	Digital		29/08/2024	
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	13	<b>2005596619</b>	3PL BA	INTERME:	111105	KIČEVSKA 6	BEOGRA	GBA	06:00-	6 kg	0.089 n	0.04	Digital		29/08/2024	
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	14	<b>2149070363</b>	Chips V	AMAN 164	110147	KOČE KAPE	BEOGRA	GCP	07:00-	4 kg	0.134 n	0.04	Digital		29/08/2024	
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	15	<b>2005596824</b>	3PL BA	AMAN 164	110147	KOČE KAPE	BEOGRA	GBA	07:00-	11 kg	0.046 n	0.06			29/08/2024	
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	16	<b>2808072236</b>	Polimar	AMAN 164	110147	KOČE KAPE	BEOGRA	GP2	07:00-	14 kg	0.017 n	0.02	Digital		29/08/2024	
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	17	<b>9928136525</b>	REK-Ne	AROMA 0	112275	MEKENZIJEV	BEOGRA	GOS	06:00-	4 kg	0.048 n	0.01	Digital		29/08/2024	
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	18	<b>2012071300</b>	MCH,W	AROMA 0	112275	MEKENZIJEV	BEOGRA	GWR	06:00-	4 kg	0.006 n	0.01	Digital		29/08/2024	
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	19	<b>9928135781</b>	Chipita	AROMA 0	112275	MEKENZIJEV	BEOGRA	GBR	06:00-	5 kg	0.046 n	0.03	Digital		29/08/2024	
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	20	<b>2012071301</b>	Chips V	AROMA 0	112275	MEKENZIJEV	BEOGRA	GCP	06:00-	7 kg	0.176 n	0.05	Digital		29/08/2024	
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	21	<b>9928135782</b>	Kras	AROMA 0	112275	MEKENZIJEV	BEOGRA	GHR	06:00-	12 kg	0.038 n	0.05	Digital		29/08/2024	
AP JOVANOVIĆ 1 IZA	1,200 kg	8.000 m3	4.00	22	<b>2005596913</b>	3PL BA	AROMA 0	112275	MEKENZIJEV	BEOGRA	GBA	06:00-	12 kg	0.086 n	0.09			29/08/2024	
						134				7104				951 kg	302 m3	71.15			

The loading lists can be printed by clicking on Print in the upper left corner of the window or exported to Excel by clicking on the Excel option.

After that, it is possible to print the loading list by clicking on Print, export to EXCEL table (OLE), CSV file, export to PDF.

Utopovna lista  
BEOSTARLINE 1 IZNAJMLJENI BG 1045-NP (#1) MULTI utovarni dok: A94  
Kapacitet vozila: 1000 kg / 12,00 m<sup>3</sup> / 8

K	Kod vozila	Dnevnica	Naziv tvrtke	Adresa	Grad	ID vozila	Status	Tip	Voznica	Volumen	Maksimalni	Polje (kg)			Maksimalni	Status	Maksimalni	
												Max. (kg)	Max. (m <sup>3</sup> )	Max. (m <sup>3</sup> )				
1	DA 522-CK*	2 13 702 24 8 1	VLAKA 91 FIK	BULEVAR VUKOVIDA, MRŠICA, 33	BEČO GRAD	1 101448	-	GL.HM	1 14	0 220	0 17	0 LPH	1 110	1 4	20 000	2	06:30	20:00
2	DA 523-CK*	2 08 188 98 7 8	FRANJO UDO	KOŠE E. GLAVINE CA 3A	BEČO GRAD	1 101221014	-	GLBA	70	0 180	0 13	0 LPH	310	18	1	0	0	0
3	DA 548-CK*	2 08 188 98 4 2	3M 7	FRANJA GUPČEVA 33	BEČO GRAD	1 10124 10104	-	GLBA	20	0 120	0 10	0 LPH	1 40	18	1	0	0	0
4	DA 522-CK*	2 07 404 07 2 2	QVAT FRED COMPANY 24	VITKUGRAĐSKA 6	BEČO GRAD	1 10107730 7 7	-	GLM*	4	0 101	0 10	0 LPH	43	2	2 160	7 4	0	0
5	DA 522-CK*	2 08 188 98 2 2	QVAT FRED COMPANY 24	VITKUGRAĐSKA 6	BEČO GRAD	1 10107730 7 7	-	GLBA	4	0 101	0 10	0 LPH	24	1	0	0	0	0
6	DA 522-CK*	2 08 188 98 1 1	QVAT FRED COMPANY 24	VITKUGRAĐSKA 6	BEČO GRAD	1 10107730 7 7	-	GLBA	40	0 100	0 10	0 LPH	1 04	18	1	0	0	0
7	DA 522-CK*	2 02 200 01 1 3	AROMA 16	BRICANOVICA 34-36	BEČO GRAD	1 12270 10 1 4	-	GLV1	30	0 100	0 10	0 LPH	2 00	1 4	22 000	2 3	0	0
8	DA 522-CK*	2 02 200 01 1 2	AROMA 16	BRICANOVICA 34-36	BEČO GRAD	1 12270 10 1 4	-	GLML	40	0 100	0 10	0 LPH	3 17	1 7	40 000	2 3	0	0
9	DA 522-CK*	2 02 200 01 2 2	AROMA 16	BRICANOVICA 34-36	BEČO GRAD	1 12270 10 1 4	-	GLHM	24	0 100	0 10	0 LPH	4 3	1 4	8 000	1 0	0	0
10	DA 522-CK*	2 08 188 98 1 2	NDM BISTEČKA 004	VITKUGRAĐSKA 36	BEČO GRAD	1 10100401 0	-	GLBA	20	0 104	0 10	0 LPH	1 74	1 7	0	0	0	0
11	DA 522-CK*	2 08 188 98 1 1	QVAT FRED COMPANY 8	LIST ANEČKA 84	BEČO GRAD	1 10107730 0 0	-	GLBA	50	0 104	0 10	0 LPH	4 40	1 7	0	0	0	0
12	DA 522-CK*	2 01 200 19 7 8	QVAT FRED COMPANY 8	LIST ANEČKA 84	BEČO GRAD	1 10107730 0 0	-	GLML	16	0 101	0 10	0 LPH	3 0	1 4	7 000	2 4	0	0
13	DA 522-CK*	2 08 202 08 2 8	QVAT FRED COMPANY 8	LIST ANEČKA 84	BEČO GRAD	1 10107730 0 0	-	GLPH	13	0 100	0 10	0 LPH	1 70	1 0	7 100	2 1	0	0
14	DA 522-CK*	2 07 404 07 2 4	QVAT FRED COMPANY 8	LIST ANEČKA 84	BEČO GRAD	1 10107730 0 0	-	GLM*	12	0 100	0 10	0 LPH	1 00	1 0	8 000	1 0	0	0
15	DA 522-CK*	2 08 188 98 2 2	ARMY D. 03. 12	LIST ANEČKA 84	BEČO GRAD	1 10140730 7 7	-	GLBA	21	0 100	0 10	0 LPH	3 1	1 4	0	0	0	0
16	DA 522-CK*	2 13 702 24 8 2	MARJET JELENA 0000	KUPOVAČKA 36	BEČO GRAD	1 12081 1 8	-	GLHM	20	0 100	0 10	0 LPH	2 1	1 0	8 000	2 0	0	0
17	DA 522-CK*	2 13 702 24 8 3	SLAVKA NAJFELJ 25	FRANJA KALODROVICA 27A	BEČO GRAD	1 10100401 2 2	-	GLD1	2	0 100	0 10	0 LPH	1 0	1	1 100	2 0	0	0
18	DA 522-CK*	2 02 200 19 2 2	SLAVKA NAJFELJ 25	LUK. KOŠ. BEOGRADSKA 34	BEČO GRAD	1 10100401 0 0	-	GLPH	8	0 100	0 10	0 LPH	3 00	1	1 100	2 0	0	0
19	DA 522-CK*	2 02 200 19 2 1	AROMA 16	NAJFELJ 25	BEČO GRAD	1 12270 10 1 3	-	GLV1	10	0 100	0 10	0 LPH	2 2	1 1	8 000	2 0	0	0
20	DA 522-CK*	2 07 404 07 2 3	AROMA 16	NAJFELJ 25	BEČO GRAD	1 12270 10 1 3	-	GLM*	9	0 100	0 10	0 LPH	2 0	1 1	8 000	2 0	0	0
21	DA 522-CK*	2 14 004 00 0 0	BEČO GRAD 16	VUKA ŽIGARJE 11	BEČO GRAD	1 10104 10 1 4	-	GLM*	20	0 100	0 10	0 LPH	1 0	1 1	4 000	2 0	0	0
22	DA 522-CK*	2 02 200 19 2 1	BEČO GRAD 16	KAJANA ČALABRKA 26	BEČO GRAD	1 111 180184	-	GLD1	4	0 100	0 10	0 LPH	1	1	0	0	0	0
23	DA 522-CK*	2 01 200 19 2 1	SLAVKA NAJFELJ 25	VUKA ŽIGARJE 11	BEČO GRAD	1 10100401 0 0	-	GLM*	9	0 100	0 10	0 LPH	2 2	1 1	3 000	2 0	0	0
24	DA 522-CK*	2 01 200 19 2 0	FRANJA UDO 9 16	FRANJA UDO 9 16	BEČO GRAD	1 11070 10 0 0	-	GLM*	8	0 100	0 10	0 LPH	1 0	1 1	3 000	2 0	0	0

If we do not want any of the above, by clicking on the Close option, we return to the window with the loading list.

### Add vehicles to solution

Vehicles can be selected that will drive the goods to the delivery points.

Add vehicles to solution consists of 4 steps: selecting an LDC, selecting a work shift, selecting a vehicle, adding a vehicle for a trip. If we want to add more vehicles, check them and click Add.

Add vehicles to solution

1 Logistics Distribution Center (LDC): **DC Jastrebarsko**

2 Work shift: **1 (06:00-20:00)**

3 Pick vehicles to add to solution:

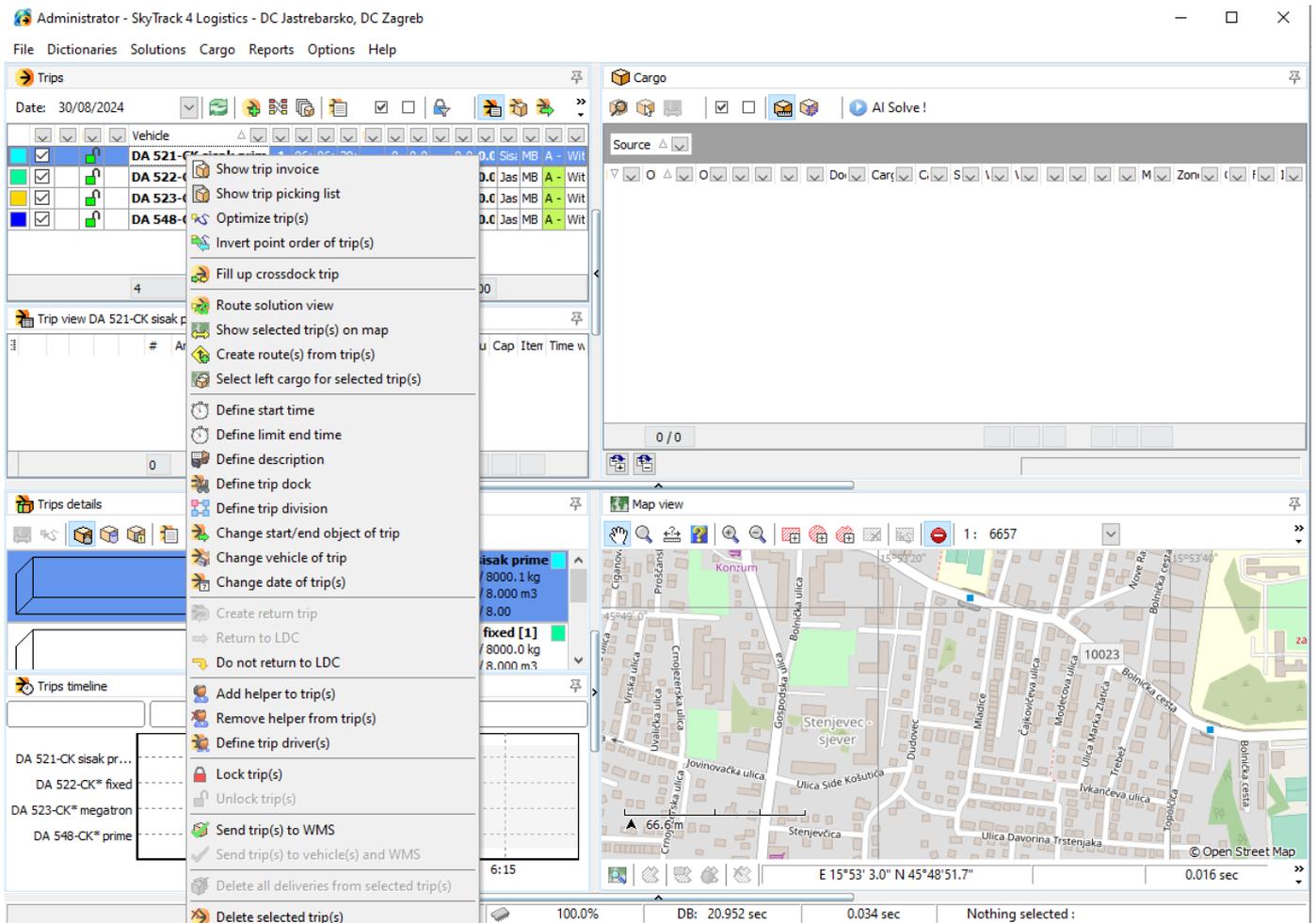
Vehicle	Vehicle...	Vehicle...	Driver	Start from L...	Finish at LDC	Trans...	Weight	Volume	Cap...	Pass	Categ...	...	Start	End
<b>Sekundarno vozilo</b>														
<b>PR Zagreb</b>														
<b>PC Zagreb</b>														
<b>Jastrebarsko</b>														
<input checked="" type="checkbox"/>	DA 522-CK*	S13-195	Artronic d.	Bencetić Mij	DC Jastreb.	DC Jastreba	8,000 kg	8.0 m <sup>3</sup>	8	A - withou	Without c	2	06:30	20:00
<input checked="" type="checkbox"/>	DA 523-CK*	S13-196	Jamnica d.	Hajduk Veljko	DC Jastreb.	DC Jastreba	8,000 kg	8.0 m <sup>3</sup>	8	A - withou	Without c	2	06:30	20:00
<input checked="" type="checkbox"/>	DA 548-CK*	S13-203	Artronic d.	Canjuga Go	DC Jastreb.	DC Jastreba	8,000 kg	8.0 m <sup>3</sup>	8	A - withou	Without c	2	06:30	20:00
<b>Sisak</b>														
<input checked="" type="checkbox"/>	DA 521-CK*	S13-194	Own comp.		DC Jastreb.	DC Jastreba	8,000 kg	8.0 m <sup>3</sup>	8	A - withou	Without c	2	06:30	20:00

Buttons: Add 4, Cancel

- Select all vehicles
- Deselect all vehicles
- Expand view
- Expensive view

After adding vehicles, they appear in Trips window

When we right-click on a vehicle/ trip, a menu with more options opens.



**Show trip invoice** - opens a window with a list of goods that should be loaded into the truck. From this window it is possible to print the loading and delivery list.

**Show trip picking list** - opens a window with pallets, products, PHC for the selected vehicle.

**Optimize trip(s)** – optimizes the selected run.

**Invert point order of trip(s)** - changes the order of selected trip(s)

**Fill up crossdock trip** - filling option, if crossdock trip is selected.

**Route solution view** - routes the driving display on the map, according to aerial distances or according to values from the knowledge base, which are previously set.

**Show selected trip(s) on map** - centers and displays the selected trip on the map

**Create route(s) from trip(s)** - creates routes based on selected trip(s).

**Select left cargo for selected trip(s)**- marks unassigned shipments

**Define start time** - changes the start of the selected trip

**Define limit and time**- changes the end of the selected trip

**Define description** - serves to add a comment for the selected trip(s)

**Define trip dock** - serves to select a loading dock for driving

**Changing start/end object of drive**- changes the start and end point of the drive

**Return to the original warehouse** - means that the priority is to return to the original warehouse

**No return to the original warehouse** - means that the return to the original warehouse is not a priority

**Add helper for selected trip(s)** - adds helper to the trip

**Remove support worker for selected trip(s)** - removes the support worker from the trip

**Driver selection for a trip** - adds a driver AND co-driver/helper to the trip

**Lock selected trip(s)** - locks the trip and after this it is not possible to do anything on the trip

**Unlock selected trip(s)** - unlocks a trip, only certain users have this privilege

**Send selected runs to WMS** - sends data for selected runs to the warehouse management system and there it generates lists for loading onto the truck

**Send selected trips to vehicles AND WMS** - sends data to vehicles AND to WMS

**Delete all deliveries for selected runs empty the selected trucks of the cargo intended for them and the destination where the cargo is to be transported**

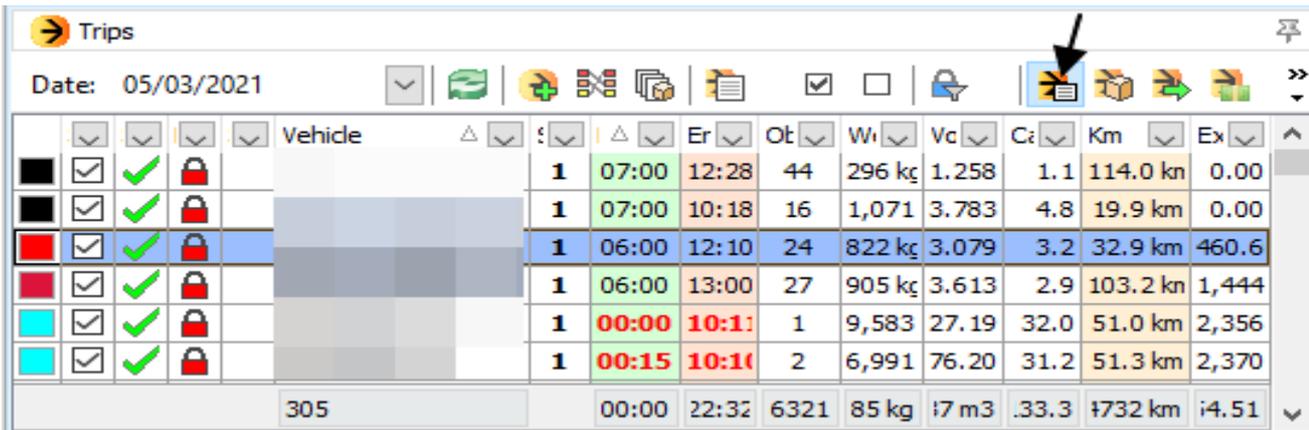
**Delete selected trip(s)** - deletes selected trip(s) from the list

### Finalize trips

By selecting this option, it is possible to redistribute one trip to another with all documents and objects, goods, and at the same time, the second trip will be reassigned to the first trip.

### Show solution vehicle information

It provides information about the selected vehicle in the Drive List window, according to the previously defined layout in the Drive List View Column Layout option - which will be explained in a later part of the chapter.



	Vehicle	Er	Ot	Wt	Vc	Ct	Km	Ex	
1		07:00	12:28	44	296 kg	1.258	1.1	114.0 km	0.00
1		07:00	10:18	16	1,071	3.783	4.8	19.9 km	0.00
1		06:00	12:10	24	822 kg	3.079	3.2	32.9 km	460.6
1		06:00	13:00	27	905 kg	3.613	2.9	103.2 km	1,444
1		00:00	10:11	1	9,583	27.19	32.0	51.0 km	2,356
1		00:15	10:11	2	6,991	76.20	31.2	51.3 km	2,370
305		00:00	22:32	6321	85 kg	17 m3	.33.3	1732 km	14.51

### Show solution usage information

It gives information about the occupancy of the trip in the window List of trip(s), in most cases there are parameters of weight, volume and capacity.

Trips

Date: 05/03/2021

	Vehicle	Obj	Wei	Volume	Ca	Ex		
1		07:00	12:28	44	296 kg	1.258 m3	1.1	0.00
1		07:00	10:18	16	1,071 kg	3.783 m3	4.8	0.00
1		06:00	12:10	24	822 kg	3.079 m3	3.2	460.6
1		06:00	13:00	27	905 kg	3.613 m3	2.9	1,444
1		00:00	10:11	1	9,583 kg	27.195 m3	32.0	2,356
1		00:15	10:10	2	6,991 kg	76.203 m3	31.2	2,370
305		00:00	22:32	6321	.185 kg	4.237 m3	133.3	14.51

### Show route information

Gives information about routes in the window List of trip(s), in most cases there are the parameters starting point, ending point and data about the driving directions.

Trips

Date: 05/03/2021

	Vehic	Begin	End	Lim	Start	End object	Direction
1		07:00	12:28	16:00	1	CROSSDOCK	CROSSDOCK \ DIVCI,SLOV
1		07:00	10:18	16:00	1	CROSSDOCK	CROSSDOCK \ VALJEVO
1		06:00	12:10	15:00	1	NELT CEP	NELT CENTRA SURČIN,BEC
1		06:00	13:00	15:00	1	NELT CEP	NELT CENTRA ZEMUN-PLA
1		00:00	10:11	23:59	1	NELT X1C	NELT X1010 STARA PAZC
1		00:15	10:10	23:59	2	NELT X1C	NELT X1010 STARA PAZC
1		00:00	16:38	23:59	1	NELT X1C	NELT X1010 KRNJEVO
305		00:00	22:32	23:59			

### Show solution expenses

It provides information about the expenses of the trip, the value of the goods on the trip, as well as the share of the expenses in the total value of the goods in the List of trips window.

Trips

Date: 05/03/2021

	Vehicle	Shir	Begin	End	Limit er	Money	Expen	Us
1		1	07:00	12:28	16:00	2,890,429.	0.00	0.00
1		1	07:00	10:18	16:00	161,013.7!	0.00	0.00
1		1	06:00	12:10	15:00	228,743.3!	460.60	0.20
1		1	06:00	13:00	15:00	306,566.5!	1,444.80	0.47
1		1	00:00	10:11	23:59	0.00	2,356.20	0.00
1		1	00:15	10:10	23:59	1,588,249.	2,370.06	0.15
1		1	00:00	16:38	23:59	1,344,458.	10,297.96	0.77
305			00:00	22:32	23:59	56,858.91	9,354.51	.95 %

### Show solution drivers

Gives information about the driver and assistant of the selected trip in the Trip List window.

Trips

Date: 05/03/2021

Vehicle	Begin	End	Limit	Driver	Helper/Subdr
1	07:00	12:28	16:00	Žarko Marković	
1	07:00	10:18	16:00	Željko Bajić	
1	06:00	12:10	15:00	ARIES TRANSPORT	
1	06:00	13:00	15:00	BEOSTARLINE	
1	00:00	10:11	23:59	Dragan Vulić	
1	00:15	10:10	23:59	Dragan Vulić	
1	00:00	16:38	23:59	Mirko Vujović	
305	00:00	22:32	23:59		

### Show solution vehicle capacity

Provides information about vehicle capacity in the Trip List window. Mainly there are data on vehicle load capacity, vehicle volume and vehicle capacity.

Trips

Date: 05/03/2021

Vehi	Beg	End	Limit	Vehicle wt	Vehicle vo	Vehicle an	Vehicle co
1	07:00	12:28	16:00	0 kg	0.000 m3	0.0	
1	07:00	10:18	16:00	0 kg	0.000 m3	0.0	
1	06:00	12:10	15:00	1,200 kg	8.000 m3	4.0	111220
1	06:00	13:00	15:00	1,000 kg	12.000 m3	6.0	114786
1	00:00	10:11	23:59	25,000 kg	70.000 m3	33.0	107689
1	00:15	10:10	23:59	25,000 kg	70.000 m3	33.0	107689
1	00:00	16:38	23:59	25,000 kg	70.000 m3	33.0	107688
305	00:00	22:32	23:59	1,967,875 kg	7,949.400 m3	3,566.0	

### Setup trips view column

By selecting this option, it is possible to edit the list of trips, possibly add a column from the available columns on the right to one of the views on the left: View vehicle information, View information about driving occupancy, View route information, View expenses information, View driver's driving, display of vehicle capacity. In addition, if we want, we can remove the specified column from a certain display, by dragging it to the right in the Available columns.

Setup trips view columns

- End
- Objects
- Weight
- Volume
- Capacity
- Expense
- Show solution usage information
  - Vehicle
  - Shift
  - Begin
  - End
  - Km
  - Weight
  - Volume
  - Capacity
  - Money
  - Complexity
- Show solution route information
  - Vehicle
  - Shift
  - Begin
  - End
  - Limit end
  - Trip
  - Start object
  - Return to LDC
  - End object
  - Directions

Available columns

- Amount
- Begin
- Boxes
- Capacity
- Complexity
- Description
- Directions
- Dock
- Driver
- End
- End object
- Expense
- Group
- Helper
- Helper/Subdriver
- Km
- Limit end
- Loading driver
- Model
- Money
- Objects
- Pass
- Pause from
- Pause till
- Return to LDC

Drag and drop columns to adjust views

Apply Cancel

For example, when we want to add a column Km (kilometers) to the show solution usage information, we click on the Km column on the right-hand side and drag it to the place where we want it to be in the display of driving information.

After that, when we click on Apply in the lower part of the window, the Km column will be arranged where we placed it.

When we select the option Display information about driving occupancy, we see the Km column exactly where we put it, behind the End column.

Vehicle	S	Begin	End	Km	Weigh	Volume	Cap	Mone	C
1	1	07:00	12:28	114.0 km	296 kg	1.258 m3	1.1	2,890,42	61
1	1	07:00	10:18	19.9 km	1,071 kg	3.783 m3	4.8	161,013.	25
1	1	06:00	12:10	32.9 km	822 kg	3.079 m3	3.2	228,743.	51
1	1	06:00	13:00	103.2 km	905 kg	3.613 m3	2.9	306,566.	35
1	1	00:00	10:11	51.0 km	9,583 kg	27.195 m3	32.0	0.00	9
1	1	00:15	10:10	51.3 km	6,991 kg	76.203 m3	31.2	1,588,24	10
1	1	00:00	16:38	222.9 km	3,642 kg	21.620 m3	19.3	1,344,45	18
305		00:00	22:32	4732 km	7,185 kg	084.237 m3	,133.3	5,858.91	1225

In the manner described above, we can add any of the listed available columns to one of the displays: Display vehicle information, Display information about driving occupancy, Display information about the route, Display information about expenses, Display driving drivers, Display vehicle capacity.

By starting the display that we choose - we see the data in the window List of trip(s).

Vehicle	Shi	Begin	End	Limit er	Objects	Grou	Mode	Vehi
1	1	12:36	14:28	15:00	1		*IVECO E	C - Voza
1	1	06:00	13:02	15:00	17		*IVECO E	C - Voza
1	1	07:00	14:17	16:00	26		*IVECO E	C - Voza
1	1	07:00	14:40	16:00	25		*IVECO E	C - Voza
1	1	00:00	06:34	23:59	1		*Tegljač	Without
1	1	07:00	11:59	16:00	24		*EuroCar	C - Voza
1	1	06:00	10:57	15:00	10		*EuroCar	C - Voza
305		00:00	22:32	23:59	6321			

## 1.4 Cargo

This part contains **Scheduling, Searching Shipments, Checking Shipments According to Auto Date Rules, Selecting Shipments According to Conditions, Viewing Parameters, Displaying Destinations, Viewing Columns for Unscheduled Shipments.**

### All solve

By selecting this option, it is possible to automatically distribute shipments to available vehicles.

Solve deliveries

**Input parameters**  
 Amount of available trips for supplementing: 0  
 Amount of cargo to solve: 12 (12)

3 Start

Close

1 Select available vehicles for new trips for each work shifts:

Group	Vehicle	St	Finish	Trans	We	Vol	Capacit	Pass	Category	#1	#2	#3	#4				
<b>Start from LDC : NELT FILIJALA NIŠ</b>										<b>07:00-15:00</b>	<b>14:00-22:00</b>	<b>15:00-20:00</b>	<b>15:00-23:00</b>				
KG Dost	BG 1610-RM [1]	NE	CF	---	6,9	38,	17	C - Vozilo 11 - 18	C - Vozačka dozvola C kategorije	1	13:03	15:00	14:00	22:00	15:00	20:00	15:23
KG Dost	BG 2462-JA [1]	NE	CF	---	3,3	17,	8	B - Vozilo 7 - 8 p.	C - Vozačka dozvola C kategorije	1	13:32	15:00	14:00	22:00	15:00	20:00	15:23
NI Dost	VOJKAN R. 1 IZNA	NE	NE	---	1,6	6,0	3	A - Vozilo 1 - 5 p.	B - Vozačka dozvola B kategorije	1	07:00	15:00	14:00	22:00	15:00	20:00	15:23
NI Dost	VOJKAN R. 8 IZNA	NE	NE	---	1,6	6,0	3	A - Vozilo 1 - 5 p.	B - Vozačka dozvola B kategorije		07:00	15:00	14:00	22:00	15:00	20:00	15:23
NI Dost	VOJKAN R. 4 IZNA	NE	NE	---	7,7	32,	16	C - Vozilo 11 - 18	C - Vozačka dozvola C kategorije		07:00	15:00	14:00	22:00	15:00	20:00	15:23
NI Dost	VOJKAN R. 5 IZNA	NE	NE	---	7,7	32,	16	C - Vozilo 11 - 18	C - Vozačka dozvola C kategorije		07:00	15:00	14:00	22:00	15:00	20:00	15:23
NI Dost	VOJKAN R. 7 IZNA	NE	NE	---	8,0	30,	15	C - Vozilo 11 - 18	C - Vozačka dozvola C kategorije		07:00	15:00	14:00	22:00	15:00	20:00	15:23
NI Dost	STEFAN-TRANSPC	NE	NE	---	1,7	14,	7	B - Vozilo 7 - 8 p.	C - Vozačka dozvola C kategorije		07:00	15:00	14:00	22:00	15:00	20:00	15:23
NI Dost	ZEMAXPRO 6 IZNA	NE	NE	---	2,2	14,	7	B - Vozilo 7 - 8 p.	C - Vozačka dozvola C kategorije		07:00	15:00	14:00	22:00	15:00	20:00	15:23
NI Dost	ZEMAXPRO 7 IZNA	NE	NE	---	1,4	14,	7	B - Vozilo 7 - 8 p.	C - Vozačka dozvola C kategorije		07:00	15:00	14:00	22:00	15:00	20:00	15:23
NI Dost	BG 2022-UF [1]	NE	NE	---	2,2	14,	6	B - Vozilo 7 - 8 p.	C - Vozačka dozvola C kategorije		14:14	15:00	14:2	22:00	15:00	20:00	15:23
NI Dost	BG 2472-IG	NE	NE	---	85,	12,	5	A - Vozilo 1 - 5 p.	B - Vozačka dozvola B kategorije		07:00	15:00	14:00	22:00	15:00	20:00	15:23
NI Dost	BG 589-KA [1]	NE	NE	---	6,9	42,	17	C - Vozilo 11 - 18	C - Vozačka dozvola C kategorije		09:12	15:00	14:00	22:00	15:00	20:00	15:23
NI Dost	BG 1548-JB [1]	NE	NE	---	3,3	17,	8	B - Vozilo 7 - 8 p.	C - Vozačka dozvola C kategorije		14:01	15:00	14:1	22:00	15:00	20:00	15:23
NI Dost	BG 1553-HB	NE	NE	---	2,1	16,	6	B - Vozilo 7 - 8 p.	C - Vozačka dozvola C kategorije		07:00	15:00	14:00	22:00	15:00	20:00	15:23
NI Dost	BG 1553-HF [1]	NE	NE	---	2,1	16,	6	B - Vozilo 7 - 8 p.	C - Vozačka dozvola C kategorije		14:21	15:00	14:3	22:00	15:00	20:00	15:23
NI Dost	BG 1573-RH [1]	NE	NE	---	6,1	20,	10	B - Vozilo 7 - 8 p.	C - Vozačka dozvola C kategorije		10:44	15:00	14:00	22:00	15:00	20:00	15:23
NI Dost	BG 1640-RV [1]	NE	NE	---	3,3	17,	8	B - Vozilo 7 - 8 p.	C - Vozačka dozvola C kategorije		14:06	15:00	14:2	22:00	15:00	20:00	15:23
NI Dost	BG 2037-MP [1]	NE	NE	---	2,2	14,	6	B - Vozilo 7 - 8 p.	C - Vozačka dozvola C kategorije		17:30	15:00	17:4	22:00	17:45	20:00	17:23
NI Dost	BG 2528-KP	NE	NE	---	3,3	17,	8	B - Vozilo 7 - 8 p.	C - Vozačka dozvola C kategorije		07:00	15:00	14:00	22:00	15:00	20:00	15:23
595										3	0	0	0				

2 Adjust maximal amount of available drivers and workers per work shifts:

LDC	Shift	Docks available	Used drivers	New drivers (Without c	New drivers (B - Kateg	New drivers (C - Kateg	Used helpers	New helpers
CHIPS WAY D.O.O.	1 (00:00-23:59)	0	0	0	0	0	0	0
CROSSDOCK BOR	1 (06:00-15:00)	0	6	0	0	0	2	0
CROSSDOCK BOR	2 (14:00-22:00)	0	0	0	0	0	0	0
CROSSDOCK BOR	3 (14:00-20:00)	0	0	0	0	0	0	0
CROSSDOCK BOR	4 (14:00-20:00)	0	0	0	0	0	0	0

Waiting for start

0 % Break

Distribution of shipments consists of 3 parts:

1. Selects available vehicles for new runs for each work shift. In this example, there are 3 vehicles for the first shift.
2. Selects the number of available drivers and assistant drivers
3. Selects the Go option, which starts the distribution of shipments to vehicles, creating trips for selected vehicles with a routed schedule of delivery of shipments to objects.

After clicking on the Go option, the process of optimization, reporting, top-up preparation and top-up for all runs is started. This is a process that can take a few minutes and you should wait until the process is completed. The bottom bar shows the percentage the deployment process has reached.

After the deployment process is completed, the Solution Statistics window appears, which provides detailed insight into the automatic deployment solution.

## Search cargo

By entering the appropriate shipment or object name in the Search field, it is possible to search for shipments and find them.

Search cargo description or object name:

Search cargo in: **Loaded** Global

Drag a column header here to group by that column

Document	W	Vc	Cc	A	M	Source	Object nar	O	T	Vehid	V	B	E	Cargc	Comm	Ce	W	
2195005632	26/C	1 kg	0.001	0.00	EUR 34.0	2	1,595 NELT FILIJA TRGOVINA C	1105	Dark	BG 1553-	1100	05/C	1	10:0	10:0		04/03	04/03
2195005596	20/C	3 kg	0.004	0.01	EUR 108.0	6	5,152 NELT FILIJA QS BENZINSI	1135	Gora	BG 879-L	1060	05/C	1	13:4	13:4		04/03	04/03
9924313242	12/C	1 kg	0.001	0.00	EUR 16.0	1	719.5 NELT X1010 DELHAIZE SI	1111	Drag	BG 1052-	1070	05/C	2	07:3	07:3		03/03	04/03
2195005691	11/C	1 kg	0.001	0.00	EUR 66.0	2	3,168 CROSSDOC MERIDIJAN	1107	Milar	BG 1674-	1100	05/C	1	08:0	08:1		04/03	04/03
0080557738	11/C	200 kg	0.005	2.00	EUR 2.00	1	0.00 NELT FILIJA MP134 HORI	1101	Gora	BG 769-R	1040	05/C	1	12:5	13:0	VZT:1000	04/03	04/03
9924313356	10/C	6 kg	0.021	0.02	EUR 6.22	1	9,360 NELT CENTR MP341 HIPE	1101	M_LC	M-LOGIC	1120	05/C	1	07:3	08:4	341/410	03/03	04/03
2001859748	10/C	5 kg	0.020	0.02	EUR 72.0	2	0.00 NELT CENTR MP341 HIPE	1101	M_LC	M-LOGIC	1120	05/C	1	08:4	08:4	DRO:801	03/03	04/03
2128087849	10/C	0 kg	0.000	0.00	EUR 1.00	1	0.00 CROSSDOC FILLY FARM	1100	Laza	BG 1695-	1110	05/C	1	11:0	11:1		03/03	03/03
2195005667	10/C	0 kg	0.000	0.00	EUR 10.0	1	633.7 CROSSDOC OAZA MARK	1137	Dušak	BG 758-N	1040	05/C	1	11:1	11:1		04/03	04/03
0080555193	09/C	20 kg	0.001	0.50	EUR 2.00	1	0.00 NELT CENTR MP237 ROD	1101	DINA	DINARA	1140	05/C	1	08:2	08:4	VZT:5000	01/03	04/03
2109292081	09/C	0 kg	0.000	0.00	EUR 2.00	2	2,622 NELT CENTR LILLY DROGI	1100	Dark	BG 879-L	1060	05/C	1	07:3	07:3	2343040	02/03	04/03
2001858239	09/C	12 kg	0.067	0.08	EUR 48.0	1	0.00 NELT CENTR VP808 LDC E	1101	Miod	BG 1688-	1100	05/C	1	06:1	06:3	DRO:840	02/03	04/03
2135023863	09/C	20 kg	0.100	0.11	EUR 118.1	21	38,68 NELT CENTR STR DŽASMI	1141	EKOF	EKOPROJ	1140	05/C	1	07:2	07:2		02/03	04/03
9920466200	09/C	9 kg	0.015	0.02	EUR 187.0	17	9,513 NELT FILIJA ANDMARK T	1135	Gora	BG 769-R	1040	05/C	1	06:1	06:1		02/03	04/03
2854045604	09/C	442 kg	0.845	0.89	EUR 1,58	45	159,4 NELT FILIJA VIVA AND GI	1113	Jovic	BG 1649-	1100	05/C	1	14:0	14:1		02/03	04/03
2010056216	09/C	1 kg	0.001	0.00	EUR 5.00	1	0.00 NELT CENTR FILLY FARM	1100	Dark	BG 879-L	1060	05/C	1	12:4	12:5		02/03	04/03
2107048290	09/C	1 kg	0.002	0.00	EUR 20.0	1	0.00 NELT FILIJA AU DR.MAX	1101	Saša	BG 769-P	1040	05/C	1	12:2	12:2		03/03	03/03
10301		37 kg	0 m3	6.39	4.21	390	17.66											

0.753 sec

When we enter the shipment (document) and click on the Search option, the specified shipment will be found.

Shipments can also be searched Globally for a longer period. When the Global tab is selected, enter the document or the name of the object in the Search field, set the period in days for which we are doing the search, and when we click on the Search option, the shipment will be found.

Search cargo description or object name:

Search cargo in: **Loaded** Global

Drag a column header here to group by that column

Document	W	Vc	Cc	A	M	Source	Object nar	O	T	Vehid	V	B	E	Cargc	Comm	Ce	W	
9920467496	05/C	34 kg	0.133	0.10	EUR 160.0	10	15,19 NELT CENTR MP455 ZEM	1101	Dalb	BG 1199-	1087	05/C	1	10:1	10:2	455/633	03/03	04/03
1		34 kg	13 m3	0.10	0.00	10	33.64											

0.039 sec

## Check cargo date by date by date rules

Check shipments according to a previously set date.

## Conditional select cargo

It is possible to select a shipment according to the parameters of weight, volume, capacity, by selecting the type and subtype of goods.

### Conditional select cargo

Select all objects where sum of all cargo is less or equal then (zero if not used)

Weight  Volume  Capacity  Items

ALL  AT LEAST ONE  cargo items has the followings cargo subtypes:

Cargo type name

Cargo subtype code   Cargo subtype name

0

If, for example, we enter the weight: 37kg and then click on the Selection option, it will show us all objects for which each shipment has a weight less than or equal to 37kg in the Shipments window.

### Show cargo parameters

By selecting the **Display parameters** option, the shipment parameters are displayed in the Shipments window. Mainly there are data about the object, document, type of goods, weight, volume, capacity. The parameters that will appear in the Parameter View can be defined in the Schedule of Unassigned Shipments View Columns.

Da	Object	Access	Object ID	Cur	Document	Cc	We	Vol	C	A	It	Z	l	f	l
05/03/		B	1100724	PSR	2001860831	GBA	0 kg	0.000	0.00	0.00	1	XD Kf			
05/03/		B	1108075003	PSR	9920466178	GWR	3 kg	0.004	0.00	114.0	6	RDC			
05/03/		B	1108917	PSR	2001860481	GBA	0 kg	0.000	0.00	0.00	1	XD Kf			
05/03/		B	1101596002	PSR	2001860825	GBA	0 kg	0.000	0.00	0.00	1	XD Kf			
05/03/		B	1124056006	PSR	2001860602	GBA	0 kg	0.000	0.00	0.00	1	XD Š			
05/03/		B	1120458002	PSR	2001861019	GBA	0 kg	0.000	0.00	0.00	1	CDC			
05/03/		B	3270578	PSR	2001861051	GBA	0 kg	0.000	0.00	0.00	1	CDC			
05/03/		B	1104404234	PSR	2198003914	GBR	0 kg	0.000	0.00	0.00	2	CDC			
05/03/		B	1101208008	PSR	2001860894	GBA	0 kg	0.000	0.00	0.00	1	CDC			
05/03/		B	1117269004	PSR	2117080010	GHB	0 kg	0.000	0.00	0.00	1	RDC			
05/03/		DS	1134192007	PSR	2110039120	GHB	0 kg	0.000	0.00	0.00	1	RDC			
05/03/		B	1103571007	PSR	2110039121	GHB	0 kg	0.000	0.00	0.00	1	RDC			

12 / 12      3 kg   04 m3   1.00   4.00   18

### Show cargo location

By selecting the **Show destination** option, the destination parameters are displayed in the Shipments window. Mainly there are data about objects, documents, type of goods, place, address of the object, as well as the time of receipt of the object's goods. The parameters that will appear in the View of Destinations can be defined in the Schedule of Unassigned Shipments View Columns.

Cargo

AI Solve!

Source: CROSSDOCK KRAGUJEVAC

Date	Object	Access	Document	C#	Object ID	Object town	Object address	Time window	Check	Print
05/03/2018		B		2001860831	1100724			06:00-21:00	<input type="checkbox"/>	
05/03/2018		B		9920466178	1108075003			06:00-21:00	<input type="checkbox"/>	
05/03/2018		B		2001860481	1108917			06:00-21:00	<input type="checkbox"/>	
05/03/2018		B		2001860825	1101596002			06:00-21:00	<input type="checkbox"/>	
Source: IRAD										
05/03/2018		B		2001860602	1124056006			06:00-21:00	<input type="checkbox"/>	
Source: EVO										
05/03/2018		B		2117080010	1117269004			06:00-21:00	<input type="checkbox"/>	
05/03/2018		DS		2110039120	1134192007			06:00-21:00	<input type="checkbox"/>	
05/03/2018		B		2110039121	1103571007			06:00-21:00	<input type="checkbox"/>	

## Setup cargo view columns

In this section, it is possible to create a schedule for viewing unscheduled shipments, and possibly add available columns on the right to Display parameters on the left.

We do this by clicking on a certain column, holding it down and switching it to the Parameter View on the left.

Setup cargo view columns

Show cargo parameters

- Date
- Object
- Object address**
- Access
- Object ID
- Document
- Cargo type
- Weight
- Volume
- Capacity
- Amount
- Items
- Zone

Show cargo location

- Date
- Object
- Access
- Document type
- Document
- Cargo type
- Object ID
- Object town
- Object address
- Time window(s)

Available columns

- Cargo digital
- Cargo oversized
- Cargo received
- Cargo regular
- Cargo type
- Comment
- Cross-docking
- Cross-docking step
- Customer type
- Date
- Demand ramp
- Document
- Document type
- Items
- Merchant's code
- Merchant's name
- Money
- Money ext.
- Money tert.
- Object
- Object ID
- Object PTT
- Object address**
- Object priority
- Object town

Drag and drop columns to adjust views

Apply Cancel

When we click on the Apply option in the lower right part of the window, the specified column will be added in the Parameter View, right after the Object column. In the same way, we add the available columns to the Display destination.

Source	Object	Object address	Acces	Object	Documer	C	Wt	Vc	I	I	z	c	f	I
05/03	B	1100724	2001860831	GBA	0 kg	0.000	0.00	0.00	0.00	1	XD K			
05/03	B	11080750C	9920466178	GWR	3 kg	0.000	0.00	114.	6	RDC				
05/03	B	1108917	2001860481	GBA	0 kg	0.000	0.00	0.00	1	XD K				
05/03	B	11015960C	2001860825	GBA	0 kg	0.000	0.00	0.00	1	XD K				
05/03	B	11240560C	2001860602	GBA	0 kg	0.000	0.00	0.00	1	XD Š				
05/03	B	11204580C	2001861019	GBA	0 kg	0.000	0.00	0.00	1	CDC				
05/03	B	3270578	2001861051	GBA	0 kg	0.000	0.00	0.00	1	CDC				
05/03	B	11044042C	2198003914	GBR	0 kg	0.000	0.00	0.00	2	CDC				
05/03	B	11012080C	2001860894	GBA	0 kg	0.000	0.00	0.00	1	CDC				
05/03	B	11172690C	2117080010	GHB	0 kg	0.000	0.00	0.00	1	RDC				
05/03	DS	11341920C	2110039120	GHB	0 kg	0.000	0.00	0.00	1	RDC				
05/03	B	11035710C	2110039121	GHB	0 kg	0.000	0.00	0.00	1	RDC				

## 1.5 Reports

From the Reports menu, it is possible to select a report from the list of Logistics reports.

After we click on the report we want, the window below opens.

In it, when we click again on the desired report, in the lower left corner - below the list of reports, the program gives us a description of what the selected report does. In this example, the selected report Overview of deliveries by tours, provides an overview of deliveries by tours for the selected LDC AND the selected vehicle groups - if no vehicle groups are selected, then it provides for all vehicles.

After selecting the report we want, we select the period in which we want to see the display, then we select the LDC for which we want to see an overview of deliveries by rounds and click OK. After that, the mentioned report is opened.

Pregled dostave po turama za period 13.07.2020 - 13.07.2020

Drag a column header here to group by that column

LDC	Datum	Grupa vozila	Prijevoznik	Vozilo		Vožnja					Dostava			
LDC	Datum	Grupa vozila	Prijevoznik	Vozilo	Model vozila	Tura	Šifra	Plan poč.	Plan kraj	Plan traj.	Plan km	Objekata	Težina kg	Količina
Benkovac	13/07/2020	Benkovac	Vlastita tvrtka	Čerina C	kombi C kategorija 3500 kg 6	1	1000003	07:00	09:39	02:39	99.6	2	2,159.0	3.0
Benkovac	13/07/2020	Benkovac	Vlastita tvrtka	Čerina C	kombi C kategorija 3500 kg 6	2	1000004	09:55	17:23	07:28	190.1	15	787.8	16.0
Benkovac	13/07/2020	Benkovac	Vlastita tvrtka	Žižić	kombi 1500 kg 2 pal	1	1000001	07:00	10:48	03:48	163.7	1	2.1	1.0
Benkovac	13/07/2020	Benkovac	Vlastita tvrtka	Žižić	kombi 1500 kg 2 pal	2	1000002	11:04	18:16	07:12	294.0	4	939.9	4.0

## 1.6 Options

The Options menu contains the **Settings** menu and the **Shipment Data Integrity Check**.

### Settings

**Settings** - a menu with options that define the operation of the shipment scheduling algorithm.

### Options

When we click on the Options tab belonging to the Settings menu, the window below opens.

Settings

**Settings**

Options Routing options Solving options Map Miscellaneous

**Solution options**

Threshold of capacity

By weight	10 %	Reserve
By volume	30 %	Reserve
By capacity	0 %	Reserve

**Cargo options**

Append "-1" to new cargo description on splitting

Change comment on crossdock

Crossdock cargo description Append "-1"

**View options**

**Solution view option**

Never route solution view

Ask for route solution view

Always route solution view

Indicate non-calculated distances on map

Show labels of the trip delivery places on map

**Trips timeline view options**

Show limits of selected trip on the timeline

Show loadings on the timeline

Show LDC shifts on the timeline

**Cargo view**

Grouped view of cargo on map

Dynamic cargo badge size on map

Use week day information of zones

Show zones on map

Highlight cargo from past

Load regular cargo from past (days) 0

Load return cargo from past (days) 0

**Color of cargo on map**

Color of object accessibility

Color of cargo sale channel

Color range by total weight

Color range by total volume

Color range by total area

Color range by object priority

Ok Cancel

## Solution options

**Threshold of capacity** - select the percentage that must remain empty in the cargo space in three categories: weight, volume and capacity.

**Cargo options** - by including one of the existing options, it is possible to enable: adding "-1" to the document number when sharing, adding "-1" to the document number for crossdocking, changing the shipment comment when crossdocking.

## View options

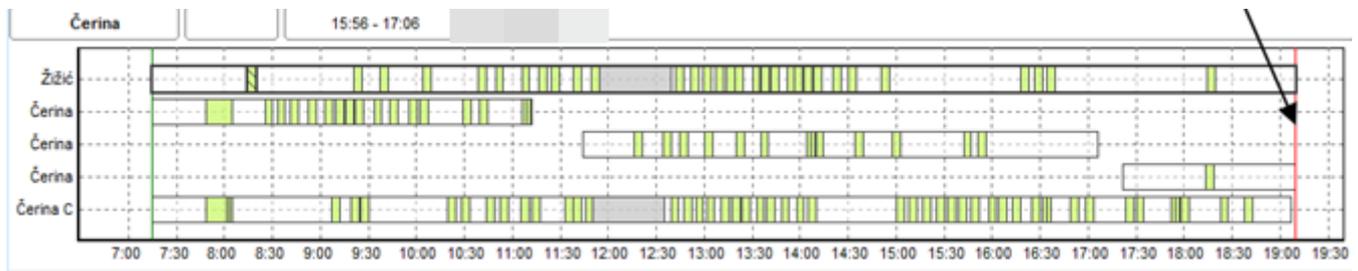
**Solution view option** - select one of the options related to the routing method: never route a trip, ask for routing a drive, always route a drive display. If we select the option never route the trip - the view of the trip on the map will not be routed, if we select ask for routing the trip - when selecting the trip, the program will ask us if we want to route. If we choose always route trip(s) - the program will route the trip we choose.

**Show aerial distances of trip(s) on the map** – shows aerial distances of trip(s) on the map.

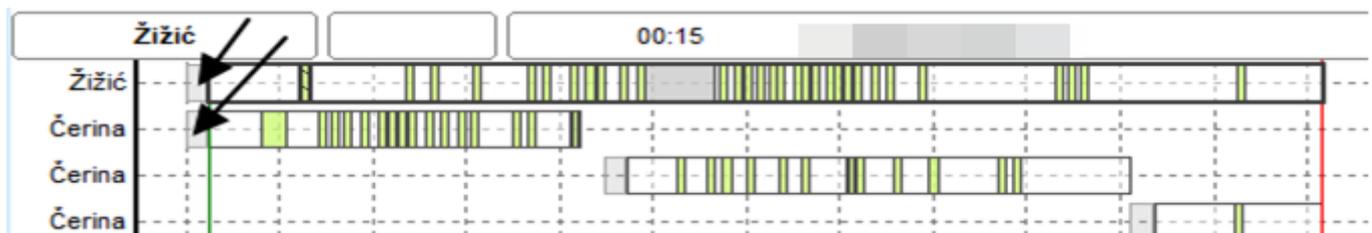
Displaying the names of delivery points for driving on the map - shows the names of delivery points on the map.

## Postavke pregleda vremenske skale

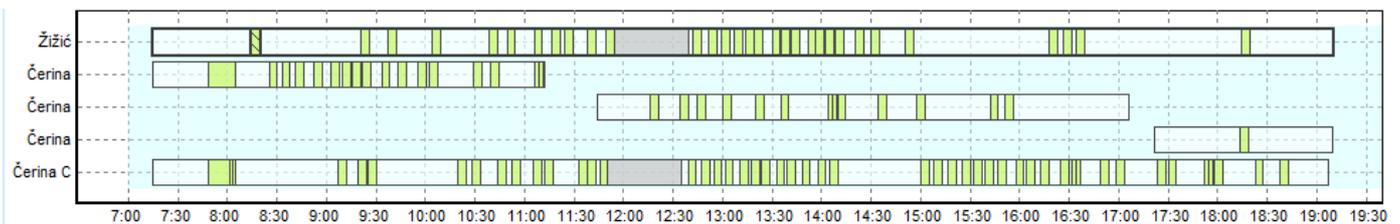
Display of the time limit of the selected drive - provides an overview of the end time of the drive for the drive we select, in the Drive Time Scale window marked with a red vertical line.



Display of loading time on the time scale – provides an overview of the loading time for each run that we select on the Time Scale of the run marked gray. In our case, the loading time was previously set to 15 min in the LDC work shift settings and in the vehicle transit settings.



Display of the work shift on the time scale - marks the background in the window Time scale of driving, for a specific work shift, with a blue transparent color.



## Cargo view

Grouped view of cargo on map - groups shipments by groups on the map.

Dynamic cargo badge size on map - turns on or off the dynamic display size of shipments on the map.

Use week day information of zones - includes zone day of week information.

Show zones on map - turns on or off the display of zones on the map.

Highlight cargo from past - enter a limit in the number of days, for which we want to see loaded shipments

Highlight old shipments with a different color - turning on this option marks old shipments with a different color  
Loading returns not older than (days) - enter a limit in the number of days, for which we want to see loaded returns.

### Color of cargo on map

- Color of object accessibility - Displays an unallocated object in the previously defined object availability color.
- Color of cargo sale channel - Displays the unassigned object in the previously defined sales channel color
- Color range by total weight - Displays unspaced objects ranged by total weight
- Color range by total volume - Displays unspaced objects ranged by total volume
- Color range by total capacity - Displays unassigned objects in range by total capacity

When we click on Ok in the lower right corner of the window, the settings made in the Options tab will be activated.

If you change your mind about the changes you made, you can also click Cancel in the lower right corner of the window.

## Routing settings

### Knowledge base

**Do not use real distances and times** - the application then works according to aerial distances.

**Fetch from database** - retrieves data for trip(s) directly from the knowledge base.

**Calculate on refresh** - when we select this option and confirm with Ok, during the next refresh of the application, data from the knowledge base is loaded. When we right-click on a trip -Routing show trip(s), the map shows us the trip according to road distances.

**Host** - enter the IP address or domain name of the server

**Database** - enter the name of the database

**Login** - enter the user name

**Password** - enter the password from the user

**Port** - enter the port for connecting to the knowledge base

Air distance operation warning - when this option is turned on, a notification appears when the application operates according to air distance.

The screenshot shows the 'Settings' window with the 'Options' tab selected. The 'Knowledge base' section is active, showing the following settings:

- Do not use real distances and times
- Fetch from database
- Calculate on refresh

Fields for database connection:

- Host: 10.0.1.159
- Database: apos4training
- Login: skytrack4user
- Password: ++++++
- Port: 3306

Show warning while working with air distances

Other sections visible in the window include:

- Driving distance and time options:** Driving time coef. (100 %), Vehicle speed without knowledge base (45 km/h)
- Delivery duration options:** Delivery duration by items count, Calculation of delivery duration (By cargo type properties selected), Group transport mode coef. (100 %)
- Route optimization options:** Optimization mode (Optimal time/distance selected), Minimal drive with cargo for delivery/pickup, Use week day settings of zones for permissions (unchecked)
- Optimization limits:** Disable work shift duration and trip end limit, Disable object access times limit, Use trip end time within same shift only (unchecked)
- Routing warnings:** Object exists on another trip while adding, Adding oversized cargo (unchecked)

Buttons: Ok, Cancel

## Driving distance and time options

**Driving time coef.** – enter the percentage that defines the driving time

**Vehicle speed without knowledge base** - enter the speed value in km/h, which represents the speed of the vehicle without using the knowledge base.

## Calculation of delivery time

By delivery object properties – calculates delivery time according to object settings

By cargo type properties - calculates the duration of delivery according to the settings of the type of goods

**Group transport mode coef.** - enter the value in percentages for the group delivery method

## Route optimization options

### Optimization mode

Optimal distance/time - the program optimizes the minimum driving distance

Optimal time/distance - the program optimizes so that the driving duration is minimal

Minimal drive with cargo for delivery - the program optimizes so that there is a minimum driving with the load in the delivery

Minimal drive with cargo for pickup - the program optimizes so that there is a minimal driving with cargo in pickup

### Optimization limits

Disable work shift duration and trip end limit - by selecting this option, it is possible to turn off and enable the limitation of the duration and end of the journey when routing

Disable object access times limit - by selecting this option, it is possible to turn off AND enable the limitation of working hours of the object when routing

Use trip end time within same shift only -

### Routing warnings

Object exists on another trip while adding - by selecting this option, it is possible to turn on and off the warning when routing or manually adding shipments to the trip - that delivery to the object also exists in other trips

Adding oversized cargo - by selecting this option, it is possible to turn on and off the warning during routing or manually adding shipments to the drive - about the addition of oversized goods.

When we click on Ok in the lower right corner of the Routing Settings tab, the settings we make will be saved and used during routing. If we change our mind, we can click Cancel.

## Solving options

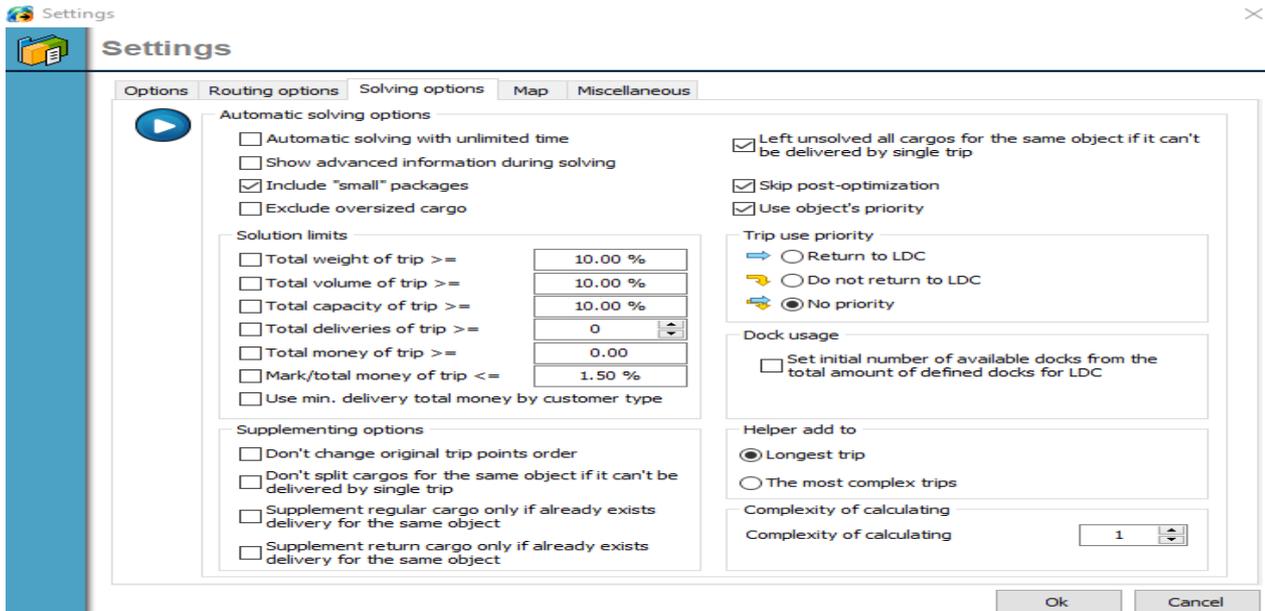
### Automatic solving options

Automatic solving with unlimited time - turn on or off the option of unlimited automatic scheduling of shipments

Show advanced information during solving - toggles the option of additional information on or off

Include Small packages - Enables or disables the deployment of small packets

Exclude oversized cargo - excludes or includes deployment of oversized goods



Leave all shipments for the delivery location

Left unsolved all cargos for the same object if it can't be delivered by single trip - Shipments remain unassigned if they cannot be delivered in one run

Skip post-optimization - turn post-optimization on or off during automatic deployment

Use object's priority - turns object priorities on or off when routing. Object priorities are defined in advance in Object Settings.

### Solution limits

Total weight of trip - includes or excludes the driving weight limit in relation to the weight of the vehicle model, which should be equal to or above a certain value in percentage - for automatic assignment to driving to be possible

Total volume of trip - turns on or off the limitation of the driving volume in relation to the vehicle volume, which should be equal to or above a certain value in percentage - so that automatic assignment to driving is possible.

Total capacity of trip - includes or excludes the limitation of driving capacity in relation to the vehicle capacity, which should be equal to or above a certain percentage value - for automatic scheduling to be possible

Total deliveries of trip - the limit on how many objects should be on the trip is turned on or off

Total money of trip - includes or excludes a limit on how much the total value of the goods should be in order for the trip to be realized

Mark/total money of trip - includes or excludes the limit on the value of the grade/total money in percentages

Use minimum delivery total money by customer type - turns on or off the minimum shipping amount by customer type

## Trip use priority

Return to the LDC - sets the driving priority to return to the original warehouse

Do not return to LDC - sets the priority of driving without returning to the original warehouse

No priority - sets no priority

## Dock usage

Set the initial number of available docks according to the total number of defined docks for LDC - uses information about the total number of defined docks for LDC

## Supplementing options

Don't change original trip points order -

Don't split cargos for the same object, if it can't be delivered by single trip - by enabling this option, it is impossible to top up with a shipment for a particular delivery point, if it cannot be delivered in one trip

Supplement regular cargo only if already exists delivery for the same object- by enabling this option, it is possible to replenish with shipments for tours, where there is already a delivery for the same delivery point

Supplement return cargo only if already exists delivery for the same object- this option allows for top-up of returns for tours where there are already deliveries for the same delivery point

## Helper add to

It is possible to add a support worker:

The longest trip

The most complex trip(s)

## Calculation complexity

Calculation complexity - the integer value of the calculation complexity is entered

## Map

### Common map rendering rendering options

**Fill Background** – fills the background on the map

**Transparent Info Tool** – displays a transparent Info Tool (yellow question mark) on the map

**Use hardware acceleration for 2D display** - hardware acceleration option used for 2D map display

**Use hardware acceleration for 3D display** - hardware acceleration option used for 3D display on the map

**Detail level** – the slider is set to a number from 1-100, which represents the level of detail on the map

**Zone's transparency** - the slider is set to a value that represents the transparency of the zone display

**Color scheme** – one of the 3 existing schemes is selected, which changes the color scheme on the map

**Enable on-line maps** - pulls maps from the Internet

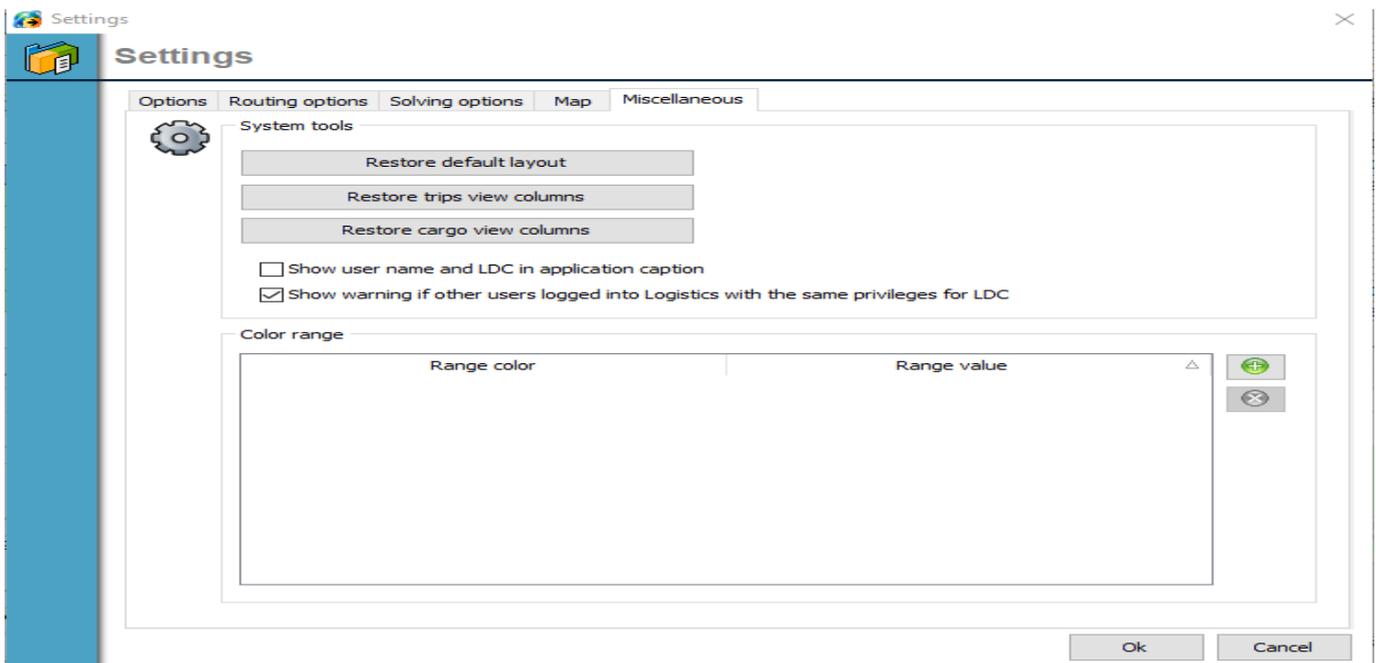
## Open street maps options

**Disk space usage** - number in MB

**Clear disk cache** - clears the disk cache

## Miscellaneous

By selecting the Miscellaneous option, it is possible to restore the initial layout of the window, restore the initial layout of the columns of the driving list, restore the initial layout of the shipment review, turn on/off the display of the user's name and LDC in the header, display of warnings when working simultaneously with other users on the same days and LDC.



**Restore default layout** - returns all settings to initial values. Requires program restart.

**Restore trips view columns** - restores the arrangement of the columns of the list of trip(s) to the initial values

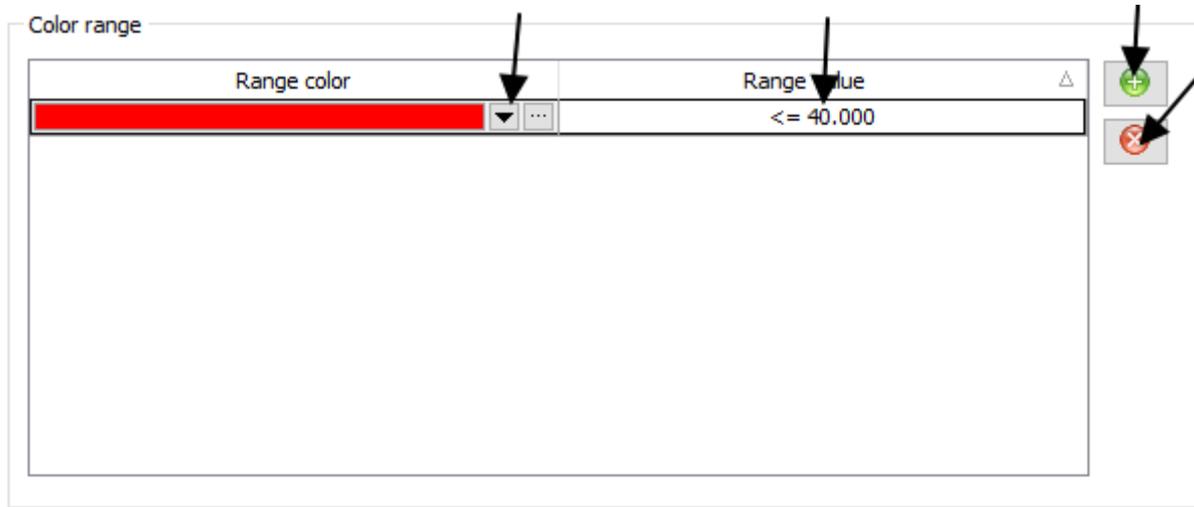
**Restore cargo view columns** - restores the shipment review schedule to its initial values

**Show user name and LDC in application caption** - turns on or off the display of I LDC user information in the application header

**Show warning in other users logged into logistics with the same privileges for LDC** - turn on or off the warning of simultaneous work with other users on the same days I LDC.

### Color range

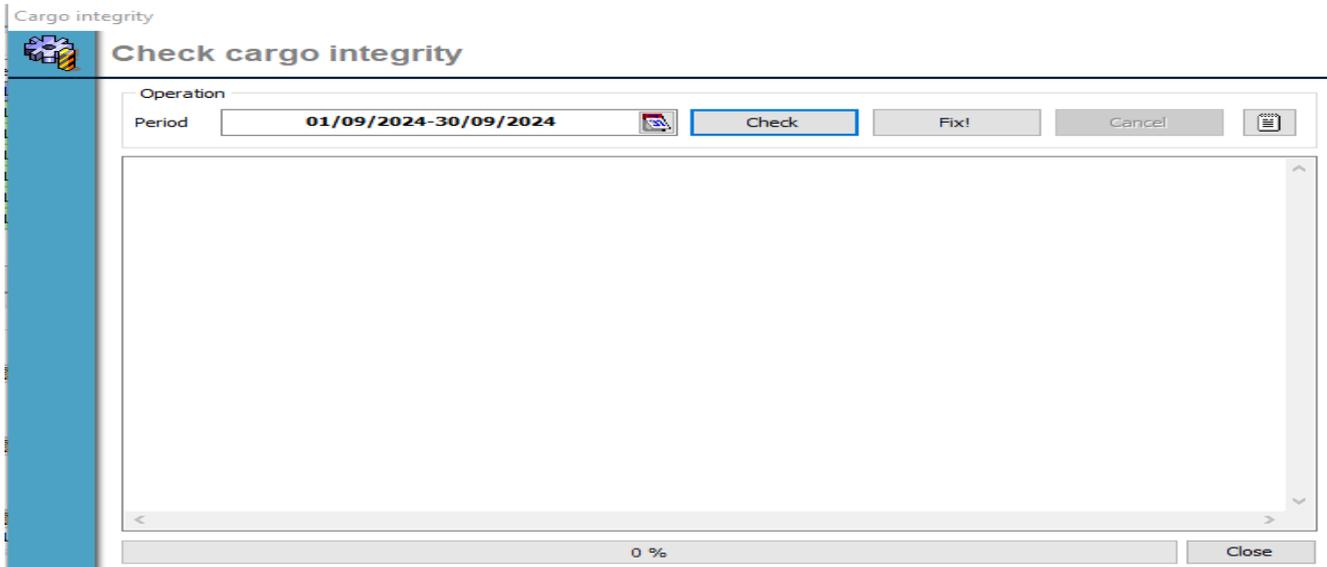
It is possible to add color and value by clicking on the green plus sign in the upper left corner of the color range window. By clicking on the red icon, the specified color and value are deleted.



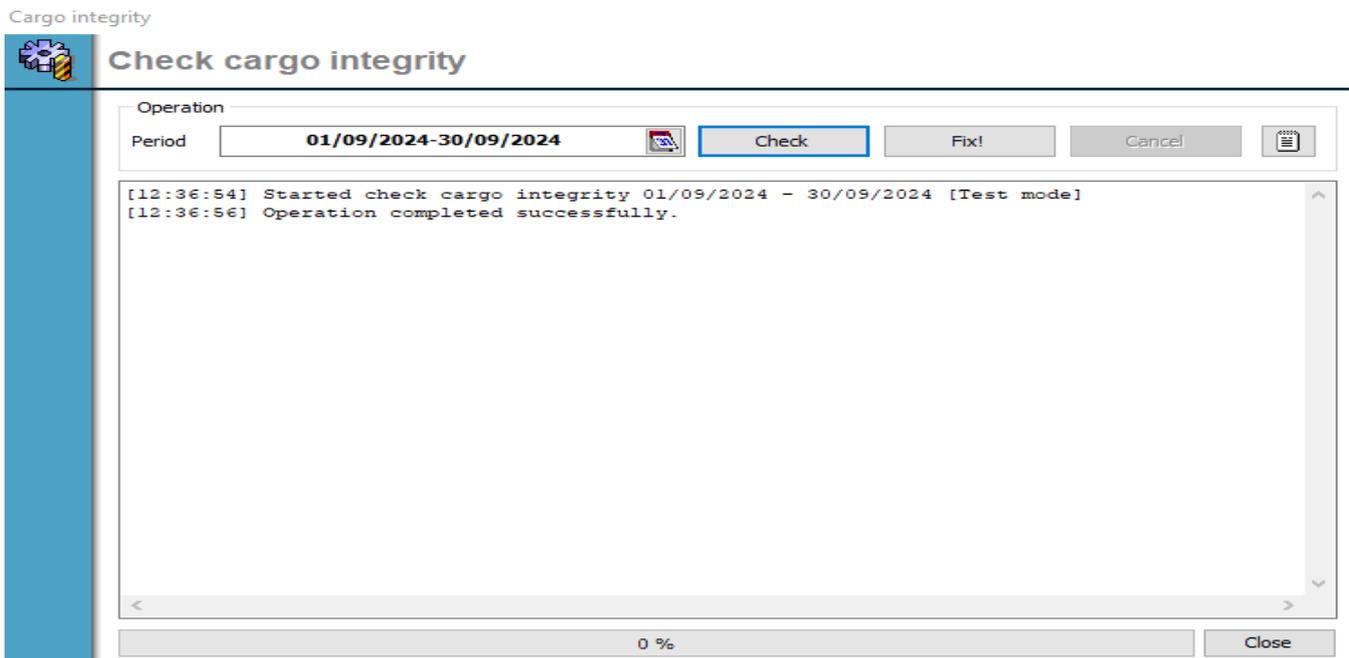
## Check cargo integrity

With this option, it is possible to check the integrity of the data about shipments loaded into the application.

When we select this option, the window below opens.



We need to select the date for which we want to check, then click on the Check option and the window below opens.



In this case, the check was successful and the shipment data is correct. If they were not, they would click on the Correction option.

By clicking on the Show log option in the upper right corner of the window, a notepad file is opened in which all the activities we have done in this window are recorded.

If we want to close the Shipment data integrity check window, click on Close.

## 1.4 Help

Help contains a manual for working with the program and a window with basic information about the program.

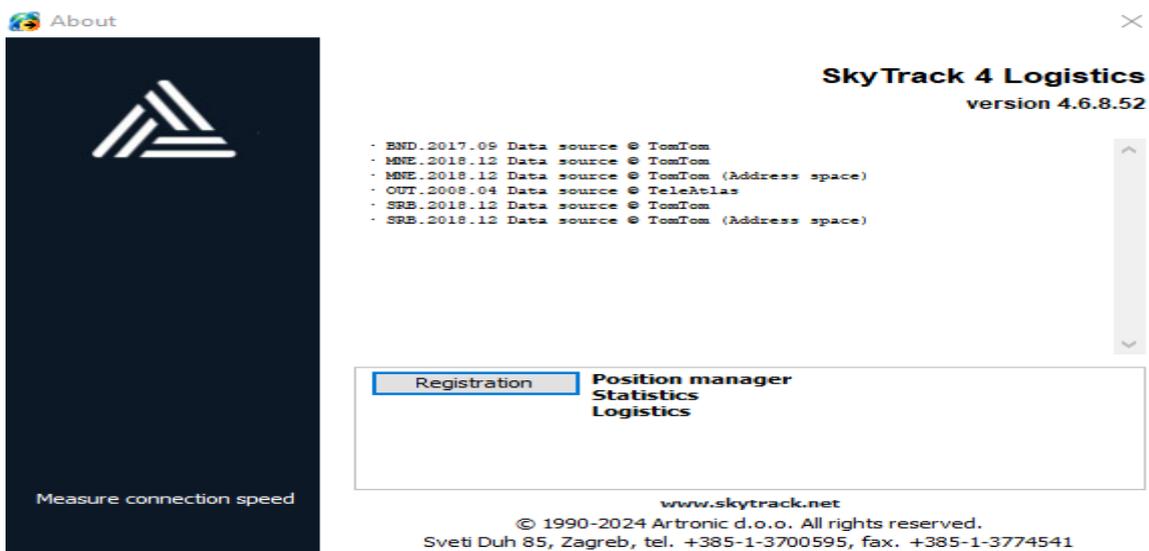
### Help

Help for working with the program.

### About the program

A window with basic information about the program.

Below the name Sky Track 4 Logistics is written the version of the application



When the Registration option is clicked, the window below opens, through which it is possible to register Sky Track 4 applications if they are not registered, by sending the specified registration code to registration@skytrack.net.



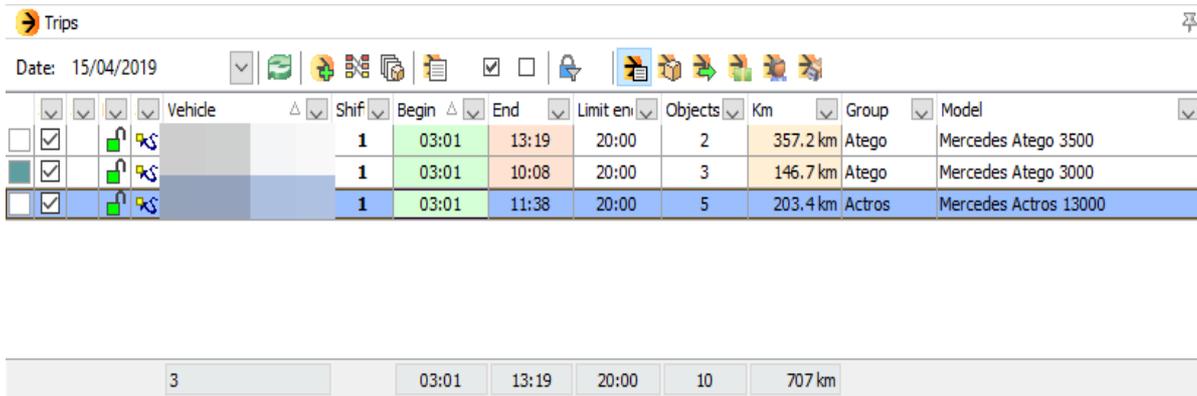
When you click on Measure connection speed, the application gives us information about the connection speed in Mbps.

## Chapter 2 - Trips

This chapter talks about shipment drives, which are located in the windows on the main screen in the program.

## 2.1 Trips

The **Trips** window is used to view general data about trips and vehicles.



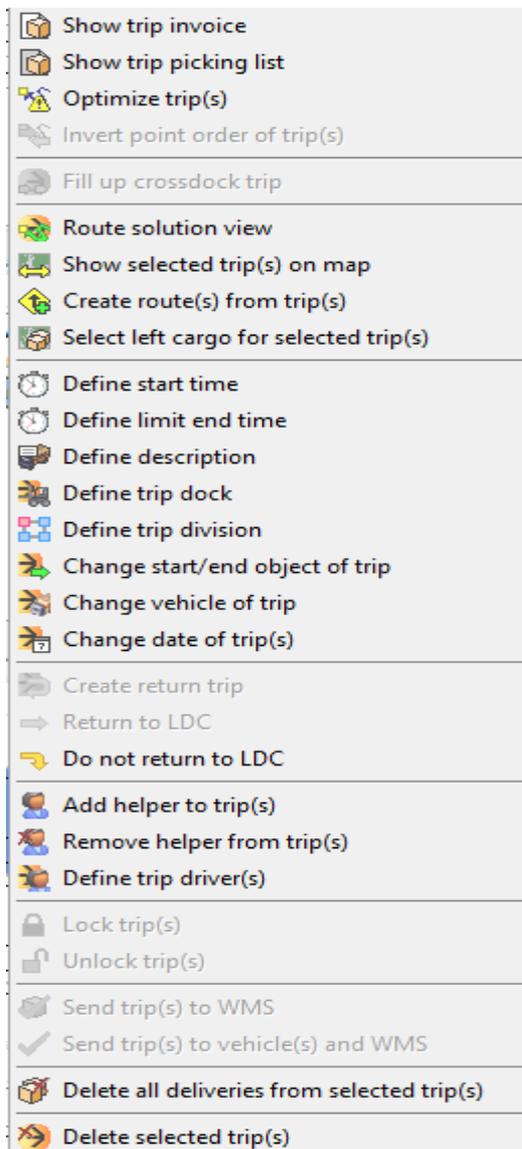
The screenshot shows the 'Trips' window interface. At the top, there is a title bar with a 'Trips' icon and a close button. Below the title bar is a toolbar with various icons for actions like refresh, add vehicle, and locking. A date field shows '15/04/2019'. The main area contains a table with columns: Vehicle, Shift, Begin, End, Limit en, Objects, Km, Group, and Model. Three rows of trip data are visible, with the third row selected. A summary row at the bottom shows totals for the selected rows.

Vehicle	Shif	Begin	End	Limit en	Objects	Km	Group	Model
	1	03:01	13:19	20:00	2	357.2 km	Atego	Mercedes Atego 3500
	1	03:01	10:08	20:00	3	146.7 km	Atego	Mercedes Atego 3000
	1	03:01	11:38	20:00	5	203.4 km	Actros	Mercedes Actros 13000
3		03:01	13:19	20:00	10	707 km		

### Toolbar:

- **Date of solution:** it is possible to select the date on which we want to work
- **Refresh:** retrieves fresh data from the database
- **Add vehicle to solution:** add vehicles to solution manually
- **Finalize trip(s):** redistributes trip(s) from one to another
- **Show loading lists for selected trips:** loading lists for selected trips can be viewed
- **Display of solution statistics:** displays solution statistics for selected trips
- **Check all:** includes the selection of all vehicles
- **Uncheck all:** deselects all vehicles
- **Change filter by locking status:** it is used to quickly switch from viewing locked trip(s) to viewing unlocked trip(s).
- **Show solution vehicle information:** while this option is on, the table shows the previously defined vehicle information display data.
- **Show solution usage information:** while this option is turned on, information about driving occupancy is displayed in the table
- **Show solution route information:** while this option is on, the data about driving routes is visible in the table
- **Show solution expenses:** while this option is turned on, the table shows data about driving **expenses**
- **Show solution drivers:** while this option is turned on, data about drivers and assistants/passengers can be seen in the table
- **Show solution vehicle capacity:** while this option is turned on, the table shows data on vehicle capacity, vehicle load capacity and vehicle volume.

**Options per vehicle/ solution:** right-clicking on a vehicle/ solution opens a menu with more options.



**Show trip invoice** - opens a window with a list of goods that should be loaded into the truck. From this window it is possible to print the loading and delivery list.

**Show trip picking list** - opens a window with pallets, products, PHC for the selected vehicle.

**Optimize trip(s)** – optimizes the selected trip, this is usually used when a trip is manually loaded

**Invert point order of trip(s)** - changes the order of selected trip(s)

**Fill up crossdock trip** - filling option, if crossdock trip is selected.

**Route solution view** - routes the driving display on the map, according to aerial distances or according to values from the knowledge base, which are previously set.

**Show selected trip(s) on map** - centers and displays the selected trip on the map

**Creating user routes from selected trip(s)** - creates routes based on selected trip(s).

**Mark other unassigned shipments for delivery points for driving** - marks unassigned shipments

**Define start time** - changes the start of the selected trip

**Define limit end time** - changes the end of the selected trip

**Define description** - serves to add a comment for the selected trip(s)

**Define trip dock** - serves to select a loading dock for driving

**Chang start/end object of trip** - changes the start and end point of the drive

**Return to LDC** - means that the priority is to return to the original warehouse

**Do not return to LDC** - means that the return to the original warehouse is not a priority

**Add helper to trip(s)** - adds helper to the trip

**Remove helper from trip(s)** - removes the support worker from the trip

**Define trip driver(s)** - adds a driver AND co-driver/helper to the trip

**Lock trip(s)** - locks the trip and after this it is not possible to do anything on the trip

**Unlock trip(s)** - unlocks a trip, only certain users have this privilege

**Send trip(s) to WMS** - sends data for selected runs to the warehouse management system and there it generates lists for loading onto the truck

**Send trip(s) to vehicle(s) and WMS** - sends data to vehicles AND to WMS

**Delete all deliveries for selected trip(s)** - empty the selected trucks of the cargo intended for them and the destination where the cargo is to be transported

**Delete selected trip(s)** - deletes selected trip(s) from the list

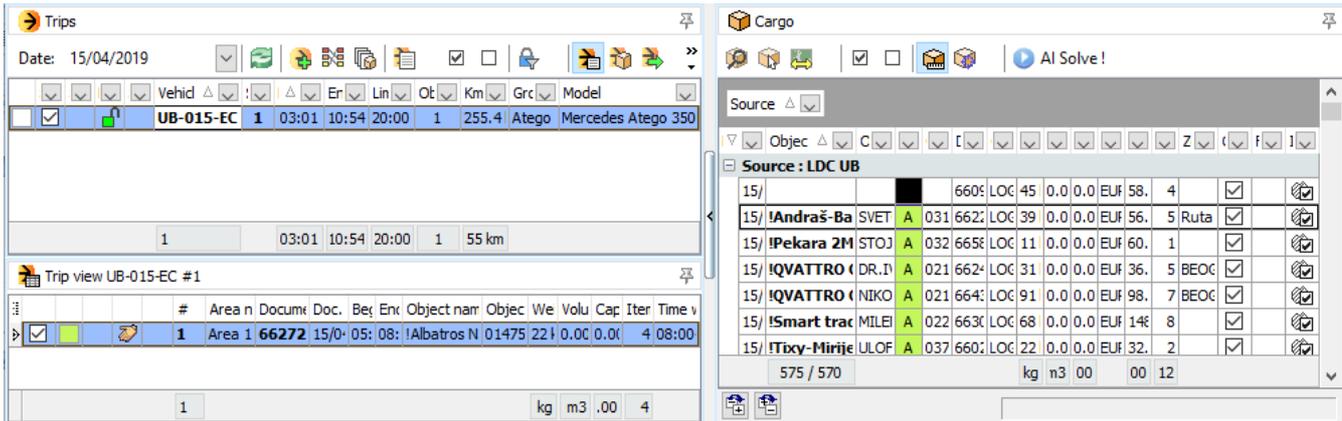
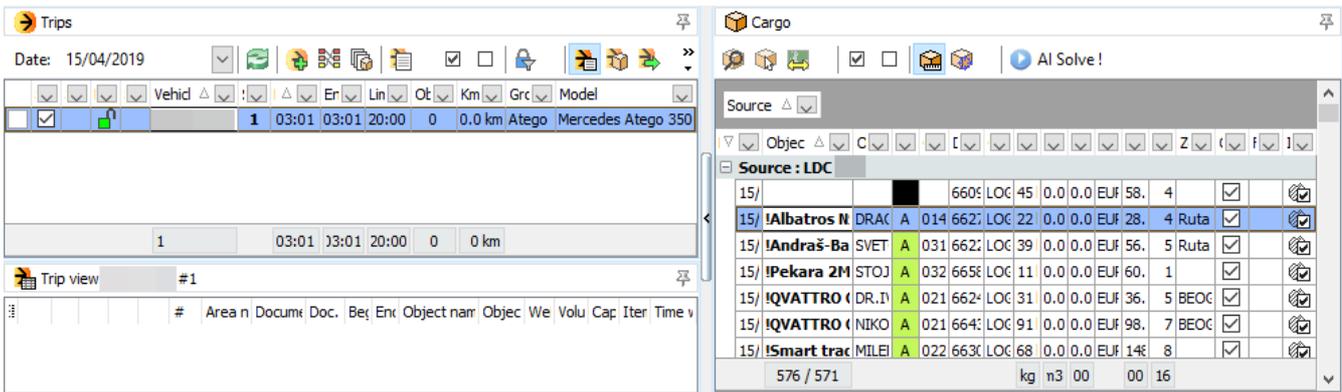
## 2.2 Trip view

Review of a trip is a review of all documents for that trip. The items on the documents are the date of the document, estimated delivery time, type of goods, weight, volume, capacity, quantity, value of a shipment, and to which object the goods are delivered.

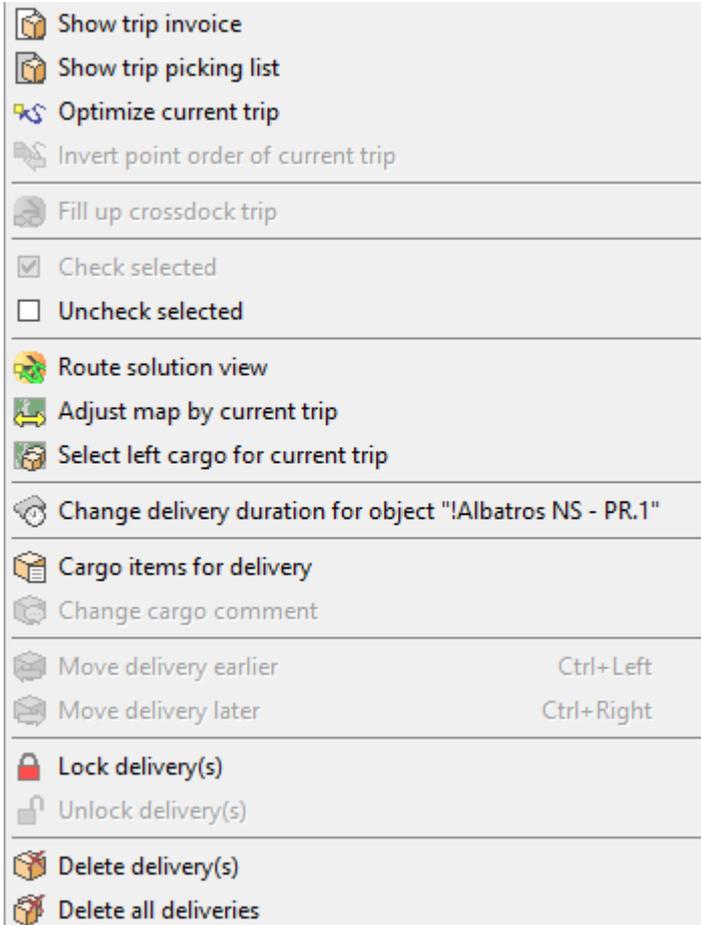
Trip view		#1														
		#	Area name	Document	Doc. date	Begin	End	Object name	Object ID	Weight	Volume	Capacit	Items	Time window		
<input checked="" type="checkbox"/>		1	Area 1	66235/19	15/04/201	04:23	08:05	Alex team Barajevo -	01630002	53 kg	0.000 m	0.00	7	08:00-20:00		
<input checked="" type="checkbox"/>		2	Area 1	66233/19	15/04/201	08:31	08:40	Alex team Barajevo -	01630001	89 kg	0.000 m	0.00	10	08:00-20:00		
<input checked="" type="checkbox"/>		3	Area 1	66176/19	15/04/201	09:02	09:06	Aman doo - PR. 117		26 kg	0.000 m	0.00	3	08:00-20:00		
<input checked="" type="checkbox"/>		4	Area 1	66539/19	15/04/201	09:37	09:42	Aman doo - PR. 135		40 kg	0.000 m	0.00	3	08:00-20:00		
<input checked="" type="checkbox"/>		5	Area 1	66397/19	15/04/201	10:12	10:19	Aman doo - PR. 48		22 kg	0.000 m	0.00	2	08:00-20:00		
		5								230 kg	000 m3	0.00	25			

It is also possible to manually transfer documents from the list of unassigned documents to the drive.

This is done in the following way: We select the document we want from the Shipments window, hold it and drag it into the Drive Overview window.



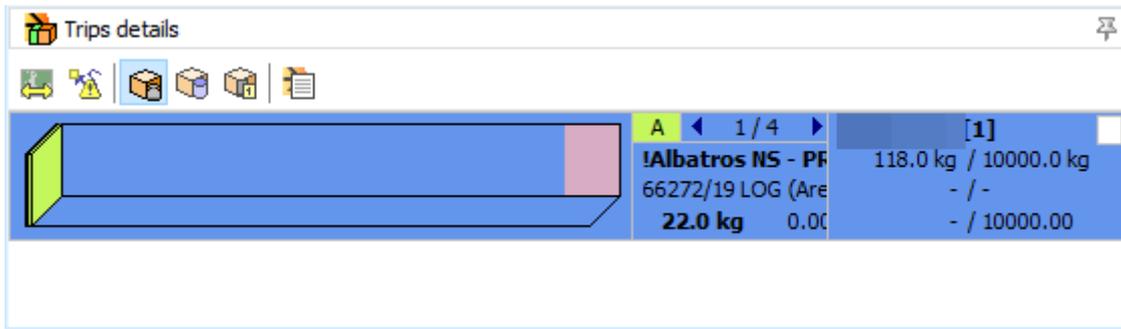
Options after driving review: right-clicking on an item opens a menu with more options.



- **Show trip invoice:** opens a window with a list of goods to be loaded into the truck with their value and the total value of all goods.
- **Show trip picking list:** opens a window with pallets, products, PHC for the selected vehicle.
- **Optimize current trip:** optimizes the order of deliveries and shortens the driving distance.
- **Invert point order of current trip:** changes the order of the selected trip
- **Fill up crossdock trip** - option for filling, if crossdock trip is selected.
- **Check selected:** Enable selection selects the specified document
- **Uncheck selected:** deselects the specified document
- **Route solution view:** routes the driving view on the map, according to air distances or according to values from the knowledge base, which are previously set.
- **Adjust the map cargo for current trip:** according to the selected drive centers and marks the object on the map
- **Select left cargo for current trip:** Indicate other unassigned shipments for delivery points for driving indicates unassigned shipments
- **Change delivery duration for object “!Albatros NS – PR.1”:** allows you to change the duration of delivery and the duration of waiting at the object
- **Cargo items for delivery:** gives an overview of the shipment items. Items are the type of goods, weight, volume, capacity, quantity, items, value of a shipment and to which object it is delivered.
- **Change cargo comment:** adds or changes a comment to a specific shipment
- **Move delivery early:** move the specified delivery to drive earlier
- **Move delivery later:** move the specified delivery to drive later
- **Lock selected delivery(s):** locks selected delivery And after that there is no more work with that delivery
- **Unlock delivery(s):** unlocks delivery, only certain users have this privilege
- **Delete selected delivery(s)** - unloads the selected goods from the truck
- **Delete all deliveries** - unloads all goods from the truck

## 2.3 Driving details

**Details of the trip** is a window in which you can see a graph showing the occupancy of the cargo space, the order number of the selected document on the trip/number of deliveries on the trip. You can also see the figures related to individual deliveries and the occupancy of the cargo area.



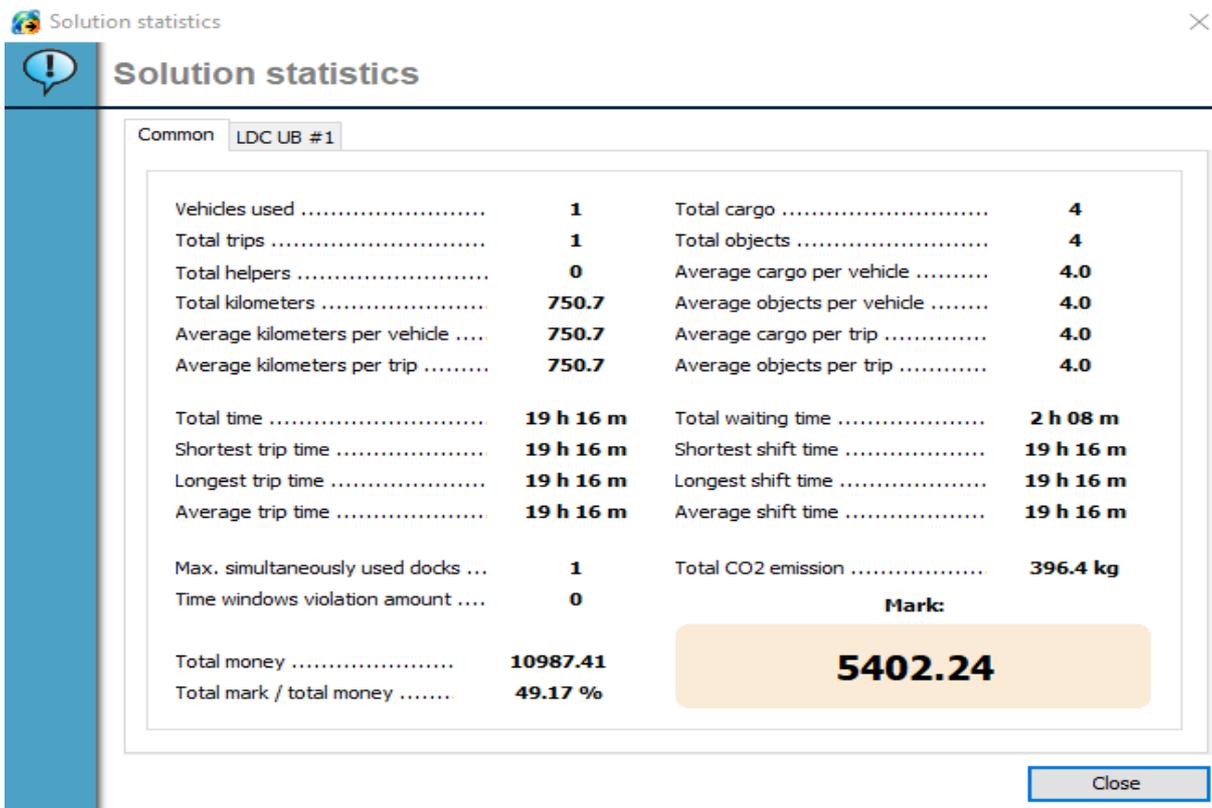
At the top of the window is a toolbar with options:

**Adjust the map according to the selected route** zooms the map so that you can see the entire route and the names of the delivery points to which the truck delivers the goods.

**Optimize current driving** optimizes the order of deliveries and shortens the driving distance.

**View by weight/volume/capacity** displays a graph showing data by weight, volume, capacity.

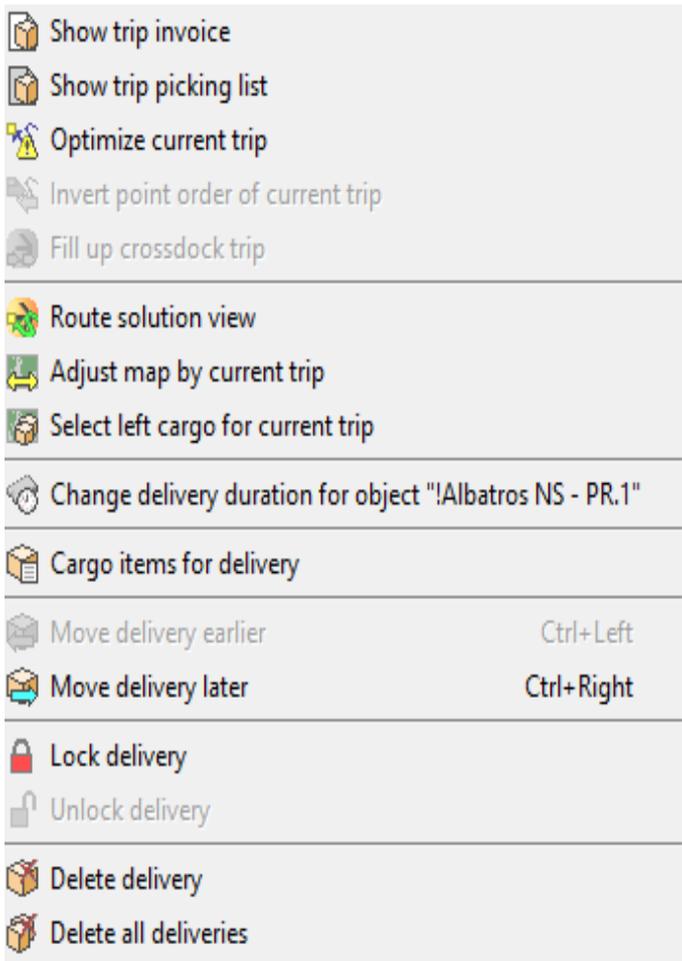
**Display of solution statistics** opens a window with statistical data summarized for all runs, as well as for individual LDCs.



In the mentioned window, you can see the total number of vehicles used, the total number of trips created, the total number of shipments, as well as the total number of objects, etc. When you click on the LDC card, you can see these data for individual LDCs as well.

If we want to close the specified window, click on the Close option in the lower right corner of the window, or click on the x in the upper left corner of the window.

**Options after driving review:** right-clicking on an item opens a menu with more options.



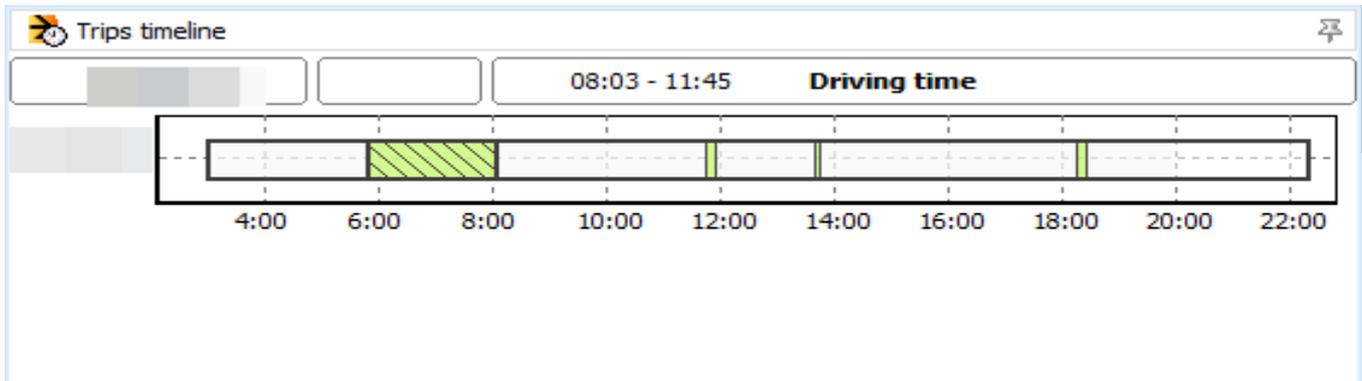
- **Show trip invoice** opens a window with a list of goods to be loaded into the truck with their value and the total value of all goods.
- **Show trip picking list** opens a window with pallets, products, PHC for the selected vehicle.
- **Optimize current trip** optimizes the delivery order and shortens the driving distance.
- **Invert point order of current trip** - changes the order of the selected trip
- **Fill up crossdock trip** - option for filling, if crossdock trip is selected.
- **Route solution view** - according to air distances or according to values from the knowledge base, which are previously set.
- **Adjust map by current trip** - according to the selected drive centers and marks the object on the map
- **Select left cargo for current trip** - for delivery points for driving indicates unassigned shipments
- **Change delivery duration for object "Albatros NS – PR.1** - allows you to change the duration of delivery and the duration of waiting at the object
- **Cargo items for delivery** - gives an overview of the shipment items. Items are the type of goods, weight, volume, capacity, quantity, items, value of a shipment and to which object it is delivered.
- **Move delivery earlier** - early switches the specified delivery to drive earlier
- **Move delivery later** - later switches the specified delivery to drive later

- **Lock delivery** - locks the selected delivery and after that there is no more work with that delivery
- **Unlocks delivery** - unlocks delivery, only certain users have this privilege
- **Delete deliveries** - unloads the selected goods from the truck
- **Delete all deliveries** - unloads all goods from the truck

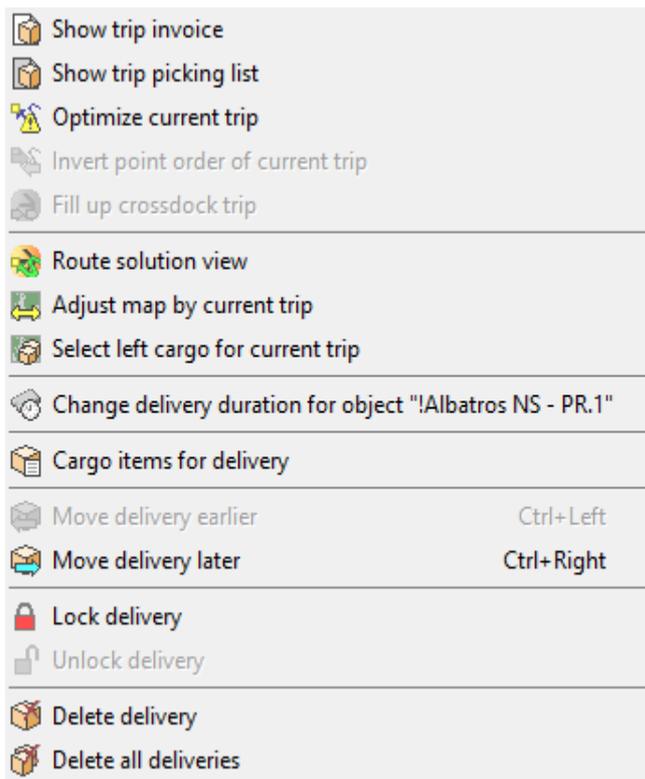
## 2.4 Trips timeline

The **trip timeline** is a window in which there is a graphical display of driving in time.

By clicking on one of the rectangles representing the delivery, the delivery location is marked on the map and at the top of the window you can see the expected delivery time and the name of the delivery location.



Right-clicking on a trip opens a menu with more options.



- **Show trip invoice** - opens a window with a list of goods to be loaded into the truck with their value and the total value of all goods.
- **Show trip picking list** - opens a window with pallets, products, PHC for the selected vehicle.
- **Optimize current trip** optimizes the delivery order and shortens the driving distance.
- **Invert point order of current trip** - changes the order of the selected trip.
- **Fill up crossdock trip** - option for filling, if crossdock trip is selected.
- **Rout solution view** - routes the driving view on the map, according to air distances or according to values from the knowledge base, which are previously set.
- **Adjust map by current trip** - according to the selected drive centers and marks the object on the map

- **Select left cargo for current trip**, the drive indicates unassigned shipments
- **Change delivery duration for object “!Albatros NS – PR.1”** - allows you to change the duration of delivery and the duration of waiting at the object
- **Cargo items for delivery** - provides an overview of shipment items. Items are the type of goods, weight, volume, capacity, quantity, items, value of a shipment and to which object it is delivered.
- **Move delivery earlier** - move the specified delivery to be driven earlier
- **Move delivery later** - move the specified delivery to drive later
- **Lock delivery** - locks the selected deliveries and after that there is no more work with that delivery
- **Unlock delivery** - unlocks delivery, only certain users have this privilege
- **Delete delivery** - unloads the selected goods from the truck
- **Delete all deliveries** - unloads all goods from the truck

## 2.5 Cargo

The **Cargo window** contains a list of unassigned documents. Near the top is a toolbar that contains:

D:	Object	Object address	Ao	Object ID	Document	Cargo t	Weight	Volum	Capa	C	Amc	Iter	Zone			
15/04			A	03703001	66025/19	LOG	22 kg	0.000 m3	0.00	EUR	32.00	2		<input checked="" type="checkbox"/>		
15/04			A	03543001	66059/19	LOG	18 kg	0.000 m3	0.00	EUR	12.00	1		<input checked="" type="checkbox"/>		
15/04			A	02962001	66604/19	LOG	81 kg	0.000 m3	0.00	EUR	140.00	9		<input checked="" type="checkbox"/>		
15/04			A	03101001	66192/19	LOG	34 kg	0.000 m3	0.00	EUR	64.00	5		<input checked="" type="checkbox"/>		
15/04			A	02026001	66200/19	LOG	44 kg	0.000 m3	0.00	EUR	114.00	8		<input checked="" type="checkbox"/>		
15/04			A	02090002	66157/19	LOG	38 kg	0.000 m3	0.00	EUR	42.00	6		<input checked="" type="checkbox"/>		
15/04			A	02090002	66184/19	LOG	4 kg	0.000 m3	0.00	EUR	20.00	1		<input checked="" type="checkbox"/>		
15/04			A	02262001	66329/19	LOG	36 kg	0.000 m3	0.00	EUR	36.00	2		<input checked="" type="checkbox"/>		
15/04			A	00747001	66260/19	LOG	61 kg	0.000 m3	0.00	EUR	188.00	13		<input checked="" type="checkbox"/>		
15/04			A	02279001	66030/19	LOG	37 kg	0.000 m3	0.00	EUR	68.00	8		<input checked="" type="checkbox"/>		
15/04			A	01844001	66131/19	LOG	69 kg	0.000 m3	0.00	EUR	148.00	8		<input checked="" type="checkbox"/>		
15/04			A	03249002	66596/19	LOG	16 kg	0.000 m3	0.00	EUR	32.00	3		<input checked="" type="checkbox"/>		
15/04			A	02837001	66078/19	LOG	40 kg	0.000 m3	0.00	EUR	70.00	6		<input checked="" type="checkbox"/>		
							9,056 kg	1,000 m3	0.00	177.00	3498					

**Cargo search** - cargo search by cargo description or object name

**Selection of cargo according to conditions** - searches cargo according to weight, volume, capacity, number of items for selected subtypes of goods

**Adjust Map** - Centers and zooms the map for a better view

**Include All** - selects all documents

**Deselect all** - deselects all documents

**Display of parameters** - displays in the Shipments window according to previously defined parameters in the Schedule of columns of the overview of unassigned shipments

**Display destination** - provides a display in the Shipments window according to the previously defined parameters in the Schedule of columns of the overview of unassigned shipments. Basically, there are data about the code of the object, the place of the object, the address of the object, the time window of the object.

**Deployment** - opens the Delivery Solution window. Available vehicles are selected for each work shift. Then the number of available drivers and auxiliary workers per shift is entered. By pressing Go, the program automatically arranges deliveries by vehicle according to the given criteria and optimizes their schedule and delivery times.

### Search cargo

When we select the option from the toolbar for **Search cargo**, a window opens as shown in the image below.

Search cargo

Cargo description or object name

Search cargo in **Loaded** Global

Drag a column header here to group by that column

Document	Carg	W	Vc	C	A	M	Source	Object	Object I	Vehic	Carg	Com	Ce	W
65992/19	LOG	15/04/2019	132 k	0.000	0.00	EUR 216.1	16 11,77	LDC UB	Mercato	01391204				24/04
65993/19	LOG	15/04/2019	40 kg	0.000	0.00	EUR 50.0	4 2,700	LDC UB	Mercato	01391201				24/04
65994/19	LOG	15/04/2019	4,14t	0.000	0.00	EUR 6,04	6 347,2	LDC UB	Delhaize	00176071				24/04
65996/19	LOG	15/04/2019	119 k	0.000	0.00	EUR 840.1	2 23,63	LDC UB	Europror	00379012				24/04
65997/19	LOG	15/04/2019	44 kg	0.000	0.00	EUR 124.1	7 4,665	LDC UB	Mercato	01391161				24/04
65998/19	LOG	15/04/2019	138 k	0.000	0.00	EUR 212.1	13 11,53	LDC UB	Mercato	01391003				24/04
66000/19	LOG	15/04/2019	86 kg	0.000	0.00	EUR 220.1	11 7,783	LDC UB	Sezam 0	00516001				24/04
66001/19	LOG	15/04/2019	38 kg	0.000	0.00	EUR 30.0	3 2,929	LDC UB	Brassil ?	02324001				24/04
66002/19	LOG	15/04/2019	62 kg	0.000	0.00	EUR 54.0	5 4,486	LDC UB	D. Eko bi	03631001				24/04
66003/19	LOG	15/04/2019	52 kg	0.000	0.00	EUR 54.0	5 3,635	LDC UB	D.eko bi	03611001				24/04
66005/19	LOG	15/04/2019	86 kg	0.000	0.00	EUR 144.1	8 7,520	LDC UB	Mandora	01909001				24/04
66006/19	LOG	15/04/2019	61 kg	0.000	0.00	EUR 102.1	8 5,387	LDC UB	DA ?a?al	02037001				24/04
66007/19	LOG	15/04/2019	44 kg	0.000	0.00	EUR 84.0	5 3,266	LDC UB	Mercato	01391268				24/04
66008/19	LOG	15/04/2019	73 kg	0.000	0.00	EUR 100.1	9 5,874	LDC UB	DA Čačal	02037002				24/04
66010/19	LOG	15/04/2019	5 kg	0.000	0.00	EUR 12.0	2 707.5	LDC UB	DA ?a?al	02037003				24/04
66011/19	LOG	15/04/2019	10 kg	0.000	0.00	EUR 26.0	2 815.4	LDC UB	Fruti Me'	01993002				24/04
66015/19	LOG	15/04/2019	75 kg	0.000	0.00	EUR 100.1	8 6,010	LDC UB	Fruti Me'	01993009				24/04
576			4 kg	0 m3	0.00	7.00	51	4.78						

When we enter a document or the name of an object, then click on search (magnifying glass), the requested document and object appear.

Search cargo

Cargo description or object name

Search cargo in **Loaded** Global

Drag a column header here to group by that column

Document	Carg	W	Vc	C	A	M	Source	Object	Object II	Vehic	Carg	Com	Ce	W
66015/19	LOG	15/04/2019	75 kg	0.000	0.00	EUR 100.1	8 6,010	LDC UB	Fruti Me'	01993009				24/04

1 75 kg 0 m3 0.00 0.00 8 10.81

0.012 sec

It is possible to search for the specified shipment AND globally (for multiple dates). Click on the tab: Global, then enter the specified document and click on Search (magnifying glass) and the results will appear as in the picture below.

Search cargo

Cargo description or object name:  100 days Search cargo in: Loaded Global

Drag a column header here to group by that column

Document	Carc	C	V	Vi	C	M	Source	Objec	Object	Vehic	Trip	Ce	Cc	C	
NI01/245200017935	LOG	14/09/24	71 kg	0.00	0.00	EU	120.11	8,11	LDC NIŠ	ZLATNIK 5518001	UB-019-F	26	14/09/24	1 14:14	
NI01/245200017936	LOG	14/09/24	39 kg	0.00	0.00	EU	76.05	5,14	LDC NIŠ	Bs prom 0321000	UB-019-F	26	14/09/24	1 06:06	
NI01/245200017937	LOG	14/09/24	11 kg	0.00	0.00	EU	36.03	1,71	LDC NIŠ	!Maki-Bi 0432000	Nem	UB-037-C	78	14/09/24	1 14:14
NI01/245200017938	LOG	14/09/24	11 kg	0.00	0.00	EU	110.1	6,41	LDC NIŠ	BIO - MI 6685	Nem	UB-037-C	78	14/09/24	1 10:10
NI01/245200017939	LOG	14/09/24	11 kg	0.00	0.00	EU	26.02	2,22	LDC NIŠ	Aman d 0243626	Nem	UB-037-C	78	14/09/24	1 10:10
NI01/245200017940	LOG	14/09/24	19 kg	0.00	0.00	EU	52.04	2,55	LDC NIŠ	Aman d 0243628	Nem	UB-037-C	78	14/09/24	1 13:13
NI01/245200017941	LOG	14/09/24	16 kg	0.00	0.00	EU	46.03	2,13	LDC NIŠ	Aman d 0243628	Nem	UB-037-C	78	14/09/24	1 12:12
NI01/245200017942	LOG	14/09/24	18 kg	0.00	0.00	EU	12.02	2,09	LDC NIŠ	Aman d 0243626	Nem	UB-037-C	78	14/09/24	1 12:12
NI01/245200017943	LOG	14/09/24	47 kg	0.00	0.00	EU	102.9	7,98	LDC NIŠ	Aman d 0243626	Nem	UB-037-C	78	14/09/24	1 11:11
NI01/245200017944	LOG	14/09/24	11 kg	0.00	0.00	EU	26.02	2,15	LDC NIŠ	Aman d 0243627	Nem	UB-037-C	78	14/09/24	1 11:11
NI01/245200017945	LOG	14/09/24	20 kg	0.00	0.00	EU	32.03	3,30	LDC NIŠ	Aman d 0243626	Nem	UB-037-C	78	14/09/24	1 11:11
NI01/245200017946	LOG	14/09/24	18 kg	0.00	0.00	EU	38.03	3,79	LDC NIŠ	~HOTEL 6095001	UB-019-F	26	14/09/24	1 13:13	
NI01/245200017947	LOG	14/09/24	11 kg	0.00	0.00	EU	26.02	2,21	LDC NIŠ	Aman d 0243627	Nem	UB-037-C	78	14/09/24	1 11:11
NI01/245200017948	LOG	14/09/24	15 kg	0.00	0.00	EU	46.03	2,71	LDC NIŠ	Aman d 0243626	Nem	UB-037-C	78	14/09/24	1 09:10
NI01/245200017949	LOG	14/09/24	22 kg	0.00	0.00	EU	32.03	2,67	LDC NIŠ	Aman d 0243626	Nem	UB-037-C	78	14/09/24	1 09:09
NI01/245200017950	LOG	14/09/24	16 kg	0.00	0.00	EU	46.03	2,11	LDC NIŠ	Aman d 0243626	Nem	UB-037-C	78	14/09/24	1 11:11
NI01/245200017951	LOG	14/09/24	15 kg	0.00	0.00	EU	38.03	3,15	LDC NIŠ	Aman d 0243627	Nem	UB-037-C	78	14/09/24	1 09:09
88603			4 kg	0.00	0.00		.13	22	5.34						

30.371 sec

In the above picture, we can see that the dates of the documents from 14.09.2024. In this case it shows us all the documents starting with NI01 but they are all different documents. Otherwise, one document with a unique document number may appear on more than one date, if the date of the document (shipment) changes or if the delivery for the specified document is not made and the document is returned to unassigned on another date.

In addition, we can set the number of days for which we want to search shipments.

If we want to see the cargo items, right-click on cargo, then Show cargo details.

If we want to export the specified found cargo or cargo, right-click, then Export to Excel.

### Conditional select cargo

It is possible to select a shipment according to the parameters of weight, volume, capacity, by selecting the type and subtype of goods.

Conditional select cargo

Select all objects where sum of all cargo is less or equal then (zero if not used)

Weight:  Volume:  Capacity:  Items:

ALL  AT LEAST ONE  cargo items has the followings cargo subtypes:

Cargo type name	Cargo subtype code	Cargo subtype name
<input checked="" type="checkbox"/>	1001	
<input checked="" type="checkbox"/>	1002	
<input checked="" type="checkbox"/>	1005	
<input checked="" type="checkbox"/>	1006	
<input checked="" type="checkbox"/>	1014	
<input checked="" type="checkbox"/>	1015	
<input checked="" type="checkbox"/>	1016	
<input checked="" type="checkbox"/>	1100	
<input checked="" type="checkbox"/>	1102	
<input checked="" type="checkbox"/>	1107	
<input checked="" type="checkbox"/>	1108	
<input checked="" type="checkbox"/>	2101	
<input checked="" type="checkbox"/>	2102	

199

Select Cancel

If, for example, we enter the weight: 5 kg and then click on the Selection option, it will show us all objects for which each shipment has a weight less than or equal to 5 kg in the Shipments window.

Source	Date	Object	Object	Obj	Documer	Car	Weig											
Source : LDC	15/04/20	DA ?a?ak - I	KNI?ANIN	A	020370	66010/19	LOG	5 kg	0.0	0.0	EUF	12.	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			

### Show cargo parameters

When we select the Show cargo parameters option in the Shipments window, a window opens as shown in the image below.

Date	Object	Object address	Access	Document	C	Weight	Volume	Capacity	F	I
15/04/20			A	66456/19	LOG	16 kg	0.000 r	0.00	4	<input checked="" type="checkbox"/>
15/04/20			A	66268/19	LOG	29 kg	0.000 r	0.00	7	<input checked="" type="checkbox"/>
15/04/20			A	66425/19	LOG	82 kg	0.000 r	0.00	11	<input checked="" type="checkbox"/>
15/04/20			A	66002/19	LOG	62 kg	0.000 r	0.00	5	<input checked="" type="checkbox"/>
15/04/20			A	66003/19	LOG	52 kg	0.000 r	0.00	5	<input checked="" type="checkbox"/>
15/04/20			A	66004/19	LOG	9 kg	0.000 r	0.00	1	<input checked="" type="checkbox"/>
15/04/20			A	66006/19	LOG	61 kg	0.000 r	0.00	8	<input checked="" type="checkbox"/>
15/04/20			A	66010/19	LOG	5 kg	0.000 r	0.00	2	<input checked="" type="checkbox"/>
15/04/20			A	66008/19	LOG	73 kg	0.000 r	0.00	9	<input checked="" type="checkbox"/>
15/04/20			A	66093/19	LOG	25 kg	0.000 r	0.00	5	<input checked="" type="checkbox"/>

There we can see the object to which the delivery is made, the address of the object, the access of the object, document, type of goods, weight, volume, capacity.

The display of the parameters that will appear in the Cargo window can be defined in the Cargo- Setup cargo view columns.

### Show cargo location

When we select the View destination option in the shipment window, a window opens as shown in the image below.

Date	Object	Access	Object address	Object location	Document	C	Time window	Capacity	F	I
15/04/20		A			66456/19	LOG	08:00-20:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
15/04/20		A			66268/19	LOG	08:00-20:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
15/04/20		A			66425/19	LOG	08:00-20:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
15/04/20		A			66002/19	LOG	08:00-20:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
15/04/20		A			66003/19	LOG	08:00-20:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
15/04/20		A			66004/19	LOG	08:00-20:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
15/04/20		A			66006/19	LOG	08:00-20:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
15/04/20		A			66010/19	LOG	08:00-20:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
15/04/20		A			66008/19	LOG	08:00-20:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
15/04/20		A			66093/19	LOG	08:00-20:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
15/04/20		A			66112/19	LOG	08:00-20:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>

There is information about the object, the access of the object, the address of the object, the place where the object is located, as well as the time window of the object (the time of receipt of the object's goods).

The data that will appear in the Cargo window when we click on Show cargo location can be defined in the Cargo-Setup cargo view columns.

## AI solve !

Solve deliveries

**Input parameters**  
 Amount of available trips for supplementing: 0  
 Amount of cargo to solve: 576 (571)

Start

Close

1 Select available vehicles for new trips for each work shifts:

Group	Vehicle	Start from	Finish at LDC	Weight	Volume	Capacity	Pass	Category					
Start from LDC : LDC										03:01-20:00			
	Actros	LDC	LDC	23,000 kg	0.0 m3	23,000	C - Veliko vozil	Without ci	1	03:01	20:00	<input checked="" type="checkbox"/>	
	Atego	LDC	LDC	10,000 kg	0.0 m3	10,000	C - Veliko vozil	Without ci	1	03:01	20:00	<input checked="" type="checkbox"/>	
	Atego	LDC	LDC	10,000 kg	0.0 m3	10,000	B - Srednje vo	Without ci	1	03:01	20:00	<input checked="" type="checkbox"/>	
	Atego	LDC	LDC	10,000 kg	0.0 m3	10,000	B - Srednje vo	Without ci	1	03:01	20:00	<input checked="" type="checkbox"/>	
	Atego	LDC	LDC	10,000 kg	0.0 m3	10,000	B - Srednje vo	Without ci	1	03:01	20:00	<input checked="" type="checkbox"/>	
	Atego	LDC	LDC	3,500 kg	0.0 m3	3,500	B - Srednje vo	Without ci	1	03:01	20:00	<input checked="" type="checkbox"/>	
	Atego	LDC	LDC	55,000 kg	500,000	55,000	C - Veliko vozil	Without ci	1	03:01	20:00	<input checked="" type="checkbox"/>	
	Atego	LDC	LDC	10,000 kg	0.0 m3	10,000	B - Srednje vo	Without ci	1	03:01	20:00	<input checked="" type="checkbox"/>	
	Sprinteri	LDC	LDC	7,000 kg	500,000	7,000	A - Bez ograni	Without ci	1	03:01	20:00	<input checked="" type="checkbox"/>	
	Sprinteri	LDC	LDC	7,000 kg	500,000	7,000	A - Bez ograni	Without ci	1	03:01	20:00	<input checked="" type="checkbox"/>	

65 12

2 Adjust maximal amount of available drivers and workers per work shifts:

Load selection Save selection

LDC	Shift	Docks available	Used drivers	New drivers (W)	New drivers (B)	New drivers (B,)	New drivers (B,)	Used helpers	New helpers
LDC	1 (06:00-20:00)	0	0	0	0	0	0	0	0
LDC	1 (03:01-20:00)	12	0	12	0	0	0	0	0

Waiting for start

0 % Break

When we select the **Scheduling** option, the Solve deliveries window opens.

Automatic distribution of shipments consists of 3 parts: Selecting vehicles for new trips for each work shift, Selecting the number of available drivers and auxiliary workers per shift, the process of distributing shipments to trips and creating routes when we click on the Go option.

We select vehicles according to the starting warehouses for which we want to do routing. When we select the vehicles we want for, the number of available docks and the number of available drivers per shift for that starting point automatically appear in the second part. If we want, we can change these parameters and increase, for example, the number of available drivers and workers.

When we select the Go option, the process of automatic distribution of shipments begins. At the bottom of the Delivery Solutions window in the header, we can monitor how the deployment process is progressing. The process starts from Dormancy and moves to Main optimization. In the status line of the header at the bottom, we can monitor the percentage the process has reached, and in the lower right corner, we can monitor the time since the start of the deployment process in minutes:seconds.

From the process of Main optimization routine, it is transferred to the process of Saving results.

Then follows the process of Preparation for supplementing for all trips, then Supplementing-which is also the final one, after which we get a display of the Statistics of the automatic deployment solution.

Common		LDC	#1
Vehicles used .....	12	Total cargo .....	362
Total trips .....	12	Total objects .....	358
Total helpers .....	0	Average cargo per vehicle .....	30.2
Total kilometers .....	2486.5	Average objects per vehicle .....	29.8
Average kilometers per vehicle .....	207.2	Average cargo per trip .....	30.2
Average kilometers per trip .....	207.2	Average objects per trip .....	29.8
Total time .....	138 h 58 m	Total waiting time .....	36 h 47 m
Shortest trip time .....	9 h 39 m	Shortest shift time .....	9 h 39 m
Longest trip time .....	12 h 34 m	Longest shift time .....	12 h 34 m
Average trip time .....	11 h 34 m	Average shift time .....	11 h 07 m
Max. simultaneously used docks ...	12	Total CO2 emission .....	1162.3 kg
Time windows violation amount ....	0		
Total money .....	2537053.25	<b>Mark:</b>	
Total mark / total money .....	1.73 %		<b>43899.75</b>

Close

In Solution Statistics, when we click on the Common tab, we see data on how many vehicles were used in routing, total number of trips, total auxiliary workers, total kilometers, average kilometers per vehicle, average kilometers per vehicle, average kilometers per trip. In addition, there are data on the total duration of the trip, the duration of the shortest trip, the duration of the longest trip, as well as the average duration of the trip.

We also see data on the maximum number of simultaneously used docks, the number of deliveries outside working hours.

In addition to this data, you can see data on the total number of distributed shipments for that day, total routed objects, average routed shipments per vehicle, average routed objects per vehicle, average shipments per trip, average objects per trip.

You can see data on waiting time, the shortest shift duration, the longest shift duration, as well as the average shift duration.

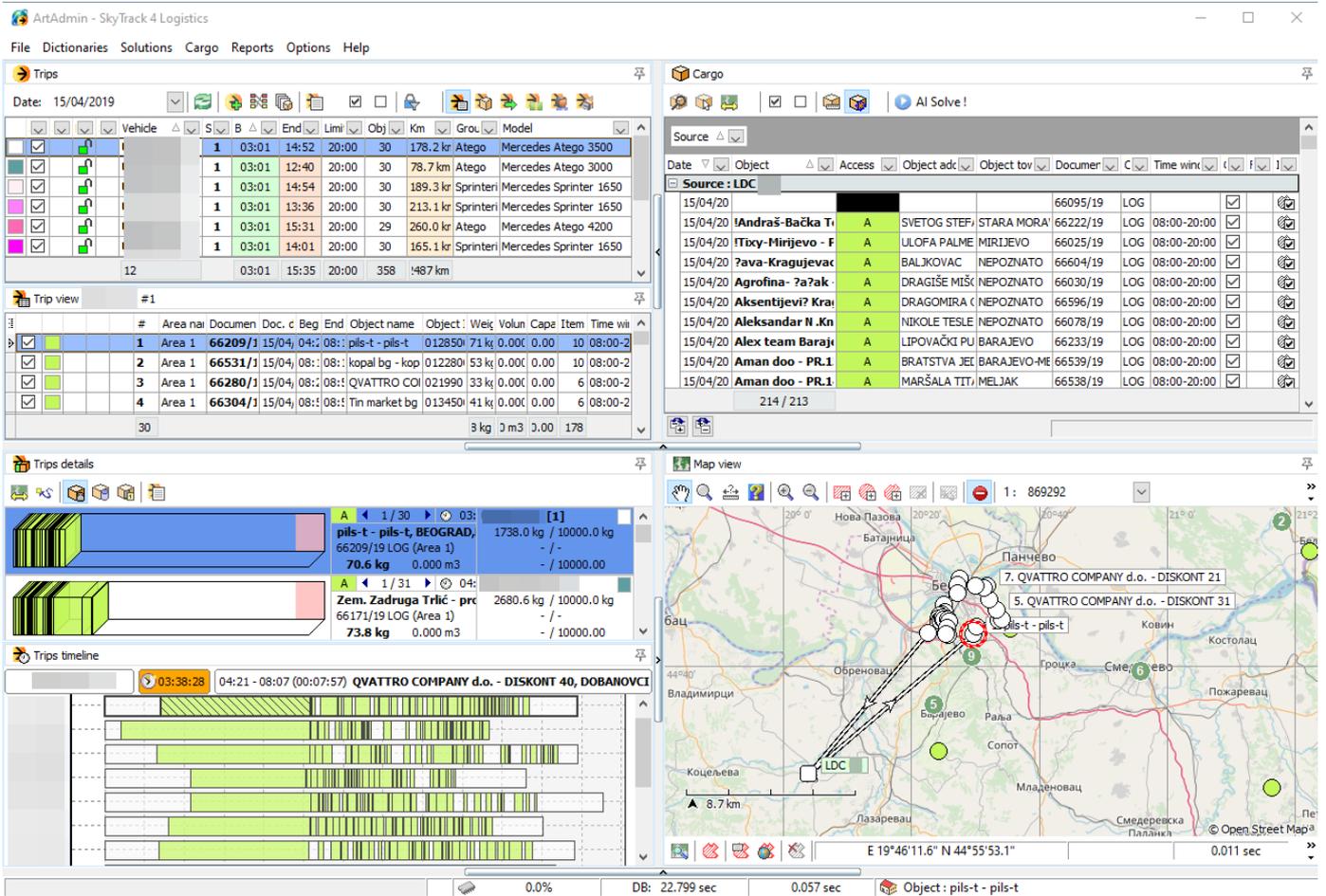
In addition to this data, we can see the rating data for all trip(s).

All this information can also be seen for individual LDCs, when we click on the LDC tab in Solution Statistics. In this case, click on the Granary #1 tab.

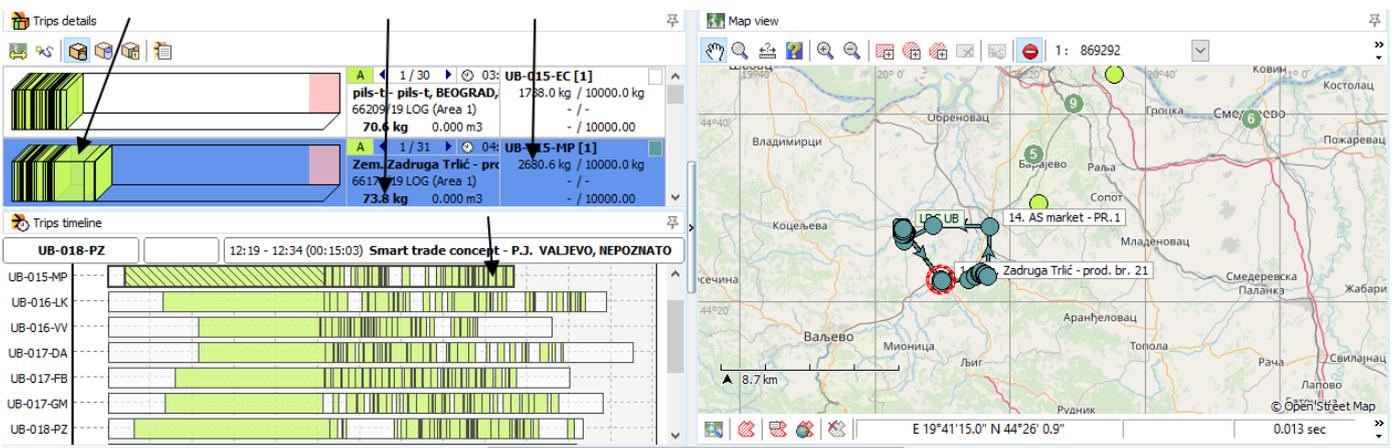
When we close this window by clicking on the Close option, we can see the solution for the automatic distribution of shipments in the driving, shipment and map windows.

In the Trips window we see 12 runs for 12 different vehicles.

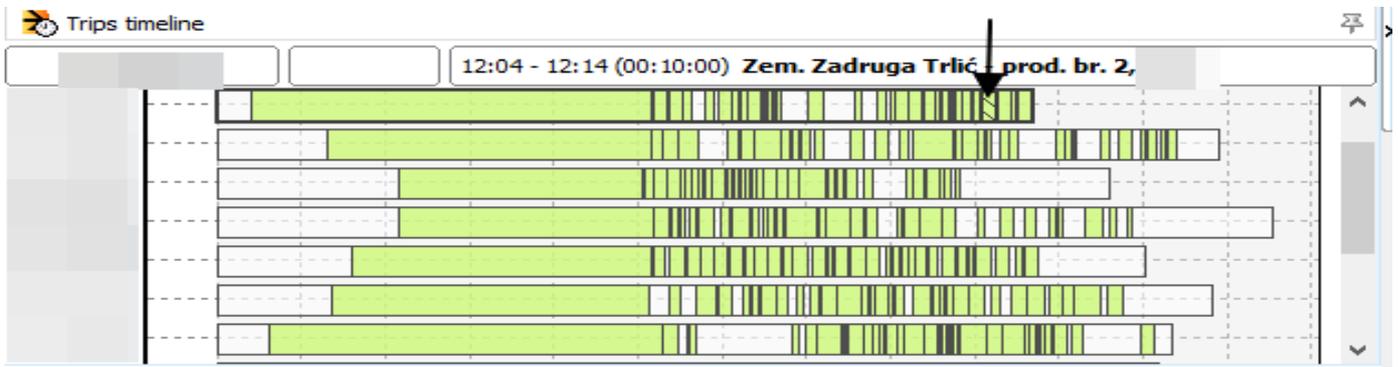
When we click, for example, on another run, a list of shipments for the specified run opens in the Run Overview window. When we click on the first document from the list, the specified object (marked with a red circle) to which the shipment is delivered appears on the map.



In addition, in the Trip Details window, a 3D graphic appears showing the occupancy of the cargo space of the trip, as well as how much individual shipments occupy the occupancy of the trip.



For the selected shipment, in the Driving Timescale window, we see the planned delivery time marked on the graph (black rectangle in the image below). By clicking on the rectangle that represents the delivery, the place of delivery is marked on the map and at the top of the window you can see the expected delivery time and the name of the place of delivery.

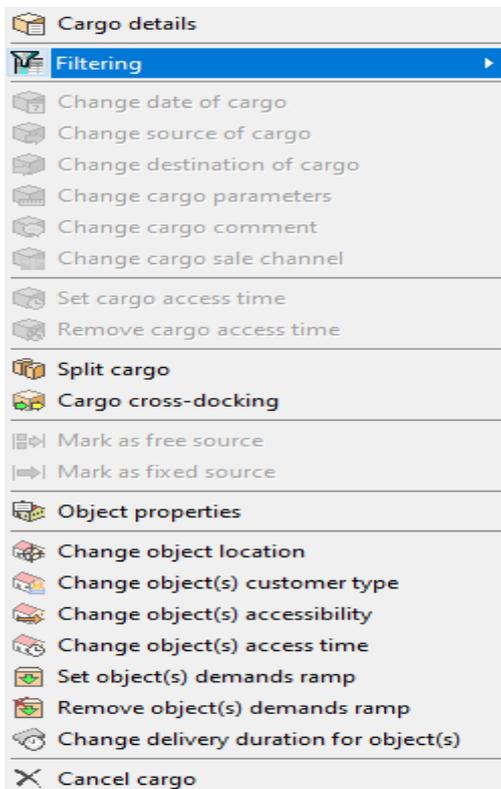


## Objects and shipments

By selecting the Source option from the drop-down menu, it is possible to select the LDC source, from which we want to see unassigned objects and documents for that date.

Date	Object	Access	Object ad	Object tov	Documer	C	Time wint		
15/04/20					66095/19	LOG		<input checked="" type="checkbox"/>	
15/04/20	!Andraš-Bačka Tr	A	SVETOG STEF	STARA MORA'	66222/19	LOG	08:00-20:00	<input checked="" type="checkbox"/>	
15/04/20	!Tixy-Mirijevo - F	A	ULOFA PALME	MIRIJEVO	66025/19	LOG	08:00-20:00	<input checked="" type="checkbox"/>	
15/04/20	?ava-Kragujevac	A	BALJKOVAC	NEPOZNATO	66604/19	LOG	08:00-20:00	<input checked="" type="checkbox"/>	
15/04/20	Agrofina- ?a?ak	A	DRAGIŠE MIŠC	NEPOZNATO	66030/19	LOG	08:00-20:00	<input checked="" type="checkbox"/>	
15/04/20	Aksentijevi? Kra	A	DRAGOMIRA C	NEPOZNATO	66596/19	LOG	08:00-20:00	<input checked="" type="checkbox"/>	
15/04/20	Aleksandar N. Kn	A	NIKOLE TESLE	NEPOZNATO	66078/19	LOG	08:00-20:00	<input checked="" type="checkbox"/>	

When we right-click on a document/object, a menu with several options opens.



When we select the **Cargo details** option, the window below opens.

Cargo details

Object: **!Andraš-Bačka Topola - PR.2**  
SVETOG STEFANA 49  
STARA MORAVICA

Document: **66222/19**  
Cargo type: LOG  
Comment:  
Cargo AUX code:

Access: **A**

Link #	Cargo typ	Cargo type	Unit	Customer	Serial num	Weight	Volume	Capaci	Money	Amount
1	0	58427	KOM			2.4 kg	0.000 m3	0.00	544.84	6.000
2	0	57967	KOM			3.6 kg	0.000 m3	0.00	312.50	20.000
3	0	57969	KOM			3.0 kg	0.000 m3	0.00	252.79	6.000
4	0	57966	KOM			18.0 kg	0.000 m3	0.00	1,222.09	12.000
5	0	57965	KOM			12.0 kg	0.000 m3	0.00	853.79	12.000
						39.0 kg	0.000 m3	0.00	3,186.01	56.000

When we select the **Change shipment date** option, the window below opens.

Change date of cargo

Select date of cargo

September 2024

	M	T	W	T	F	S	S
35	26	27	28	29	30	31	1
36	2	3	4	5	6	7	8
37	9	10	11	12	13	14	15
38	16	17	18	19	20	21	22
39	23	24	25	26	27	28	29
40	30	1	2	3	4	5	6

Ok Cancel

There it is possible to transfer the selected shipment (document) to unassigned on another date. By clicking on Ok, we confirm the change we make, and by clicking on Cancel, we cancel the change of date for the shipment.

When we select the **Change source of cargo** option, the window below opens.

Change source of cargo

Select source of cargo

CHIPS WAY D.O.O.

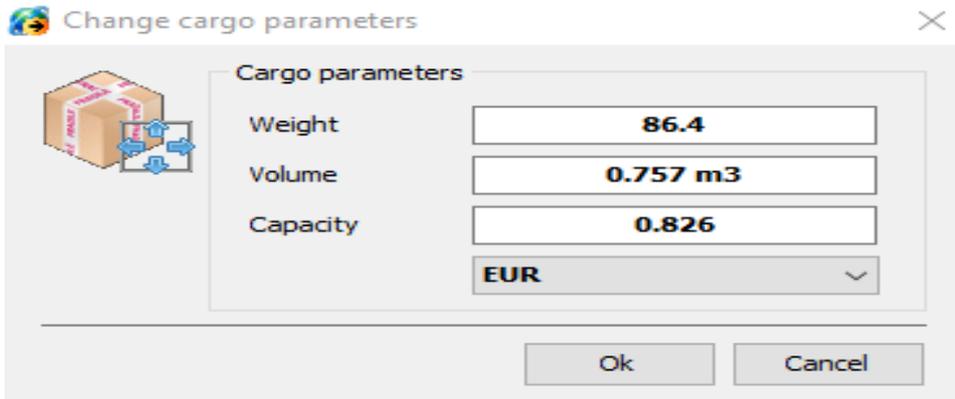
Ok Cancel

There it is possible to change the source of the shipment (document). By clicking on Ok, we confirm the change we make, and by clicking on Cancel, we give up on changing the source of the shipment.

When we select the **Change destination of cargo** option, the window below opens. When, for example, we enter the name of the object: PLODINE in the search field, a whole list of objects opens to us where we can set the destination of the specified shipment.

By clicking on Ok, we confirm the change of shipment destination if we are 100% sure, otherwise we will click on the Cancel option.

When we select the **Change cargo parameters** option, the window below opens.



There it is possible to change the weight of the shipment, the volume of the shipment and the capacity of the shipment, as well as the type of capacity unit.

After making the changes, if we click on Ok, the specified changes become visible for the specified shipment in the Shipments window. If we change our mind about the changes for the specified shipment, then click on the Cancel option.

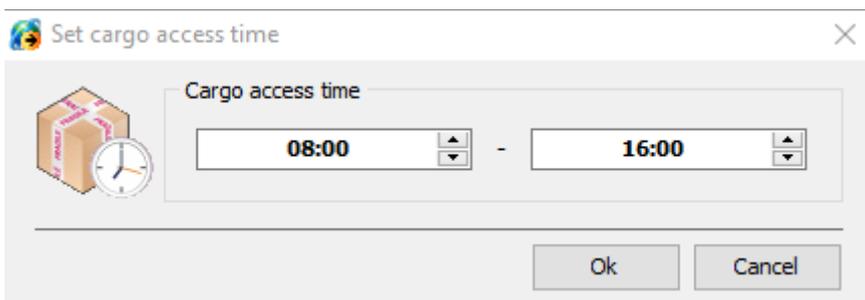
When we select **Change shipment comment**, it is possible to add a comment for the specified shipment.



If we click OK, the specified shipment comment will be visible in the Comment column in the shipment window. If you change your mind about adding a comment, then click Cancel.

Source	Object	Object	Docun	Carg	We	Vol	Ci	It	Comme		F	I
14/	~TRIOFLE	BULEVAR A	A	20056150	GTF	24 kg	0.044	0.04	4			
14/	3M 10	MIHAILA PL	DS	99281677	GJA	8 kg	0.094	0.05	9			
14/	3M 11	BULEVAR ZI	DS	99281672	GCO	7 kg	0.047	0.01	11			
14/	AMAN 267	STRUGARSI	C	20056160	GBA	19 kg	0.062	0.09	5	test		
14/	AROMA 74	RAVANIČKA	C	20056151	GDO	38 kg	0.181	0.12	11			
14/	INTERCAFF	VODOVODS	B	99281674	GMA	292 kg	1.843	1.12	4			
14/	LUKOIL 53	DŽONA KEN	B	99281674	GCP	10 kg	0.118	0.06	6			
14/	MAXI 144	MAJKA JUG	B	20056151	GPD	2 kg	0.384	0.03	1			
14/	MAXI 261	KRALJA PET	B	99247007	GOS	4 kg	0.346	0.02	1			
14/	MAXI 786	DUBROVAČ	B	20056151	GPD	2 kg	0.384	0.03	1			
14/	MAXI 786	DUBROVAČ	B	20056151	GPD	2 kg	0.384	0.03	1			

When we select **Set cargo access time**, the window below opens.



There it is possible to change the time of receipt of goods. If we click on Ok after the change, the change will be visible when we click on Display destination in the toolbar of the Shipments window.

Object	Ac	Object addr	Object towr	Document	Cargo t	Time windk	c	f	I
14/c ~TRIOFLEX DC	A	BULEVAR ARSE	BEOGRAD-VRAI	2005615099	GTF	06:00-21:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
14/c 3M 10	DS	MIHAILA PUPIN	BEOGRAD	9928167755	GJA	06:00-21:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
14/c 3M 11	DS	BULEVAR ZORA	NOVI BEOGRAD	9928167206	GCO	06:00-21:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
14/c AMAN 267	C	STRUGARSKA 1	BEOGRAD	2005616079	GBA	08:00-16:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
14/c AROMA 74 DO	C	RAVANIČKA 31	BEOGRAD	2005615132	GDO	06:00-21:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
14/c INTERCAFFE DC	B	VODOVODSKA	BEOGRAD - ČUI	9928167495	GMA	06:00-09:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
14/c LUKOIL 5381-F	B	DŽONA KENEDI	BEOGRAD - NO	9928167489	GCP	06:00-21:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>

When we select the option **Remove cargo access time**, the goods receipt time is returned to the one that was originally set. The change will be visible when we click on View destination in the toolbar of the Shipments window.

Object	Ac	Object addr	Object towr	Document	Cargo t	Time windk	c	f	I
14/c ~TRIOFLEX DC	A	BULEVAR ARSE	BEOGRAD-VRAI	2005615099	GTF	06:00-21:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
14/c 3M 10	DS	MIHAILA PUPIN	BEOGRAD	9928167755	GJA	06:00-21:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
14/c 3M 11	DS	BULEVAR ZORA	NOVI BEOGRAD	9928167206	GCO	06:00-21:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
14/c AMAN 267	C	STRUGARSKA 1	BEOGRAD	2005616079	GBA	06:00-21:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
14/c AROMA 74 DO	C	RAVANIČKA 31	BEOGRAD	2005615132	GDO	06:00-21:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
14/c INTERCAFFE DC	B	VODOVODSKA	BEOGRAD - ČUI	9928167495	GMA	06:00-09:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
14/c LUKOIL 5381-F	B	DŽONA KENEDI	BEOGRAD - NO	9928167489	GCP	06:00-21:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>

When we select the **Split cargo** option, the window below opens.

**Split cargo**

Original cargo parameters

Weight: **39.0 kg**  
 Volume: **0.000 m3**  
 Capacity: **0.000 EUR**

50.00 %

First cargo parameters

Weight: **19.5 kg**  
 Volume: **0.000 m3**  
 Capacity: **0.000**

Second cargo parameters

Weight: **19.5 kg**  
 Volume: **0.000 m3**  
 Capacity: **0.000**

First cargo | Cargo barcode | Cargo area unit | Warehouse name | Second cargo

Ok Cancel

We have a defined weight of 39kg for this shipment. It is possible to make 2 shipments from it, by distributing the weight by moving the slider to the left or right, or by manually entering the weight in the fields for the first shipment and for the second shipment.

Split cargo

Original cargo parameters

Weight 39.0 kg  
Volume 0.000 m3  
Capacity 0.000 EUR

59.00 %

First cargo parameters

Weight 23.0 kg  
Volume 0.000 m3  
Capacity 0.000

Second cargo parameters

Weight 16.0 kg  
Volume 0.000 m3  
Capacity 0.000

First cargo Cargo barcode Cargo area unit Warehouse name Second cargo

Ok Cancel

If we click on Ok after the change, the change will be clearly visible when we click on Show cargo parameters in the toolbar of the Cargo window. If we click on Cancel, we abandon the specified changes.

When we select the Cross-docking LDC option, the window below opens.

Cargo cross-docking

Select cross-docking LDC

LDC NIŠ

Ok Cancel

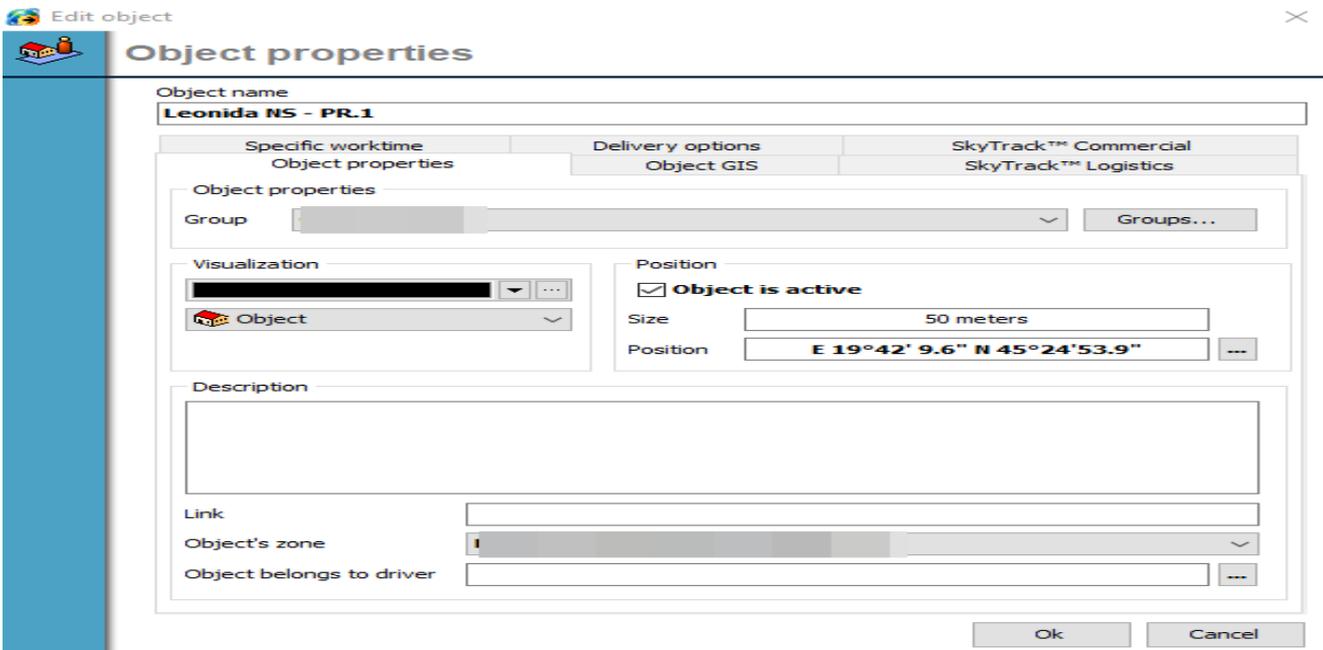
From the drop-down list, it is possible to select the cross-docking LDC for the specified shipment. When we click on Ok the change will be saved. If we click on Cancel, we abandon the specified changes.

When we select the **Mark as Free source** option, a free source is added, which becomes visible when clicking on Display parameters and Display destination, in the Shipments window.

When we select the **Mark as Fixed source** option, the fixed source ceases to be visible when clicking Show cargo parameters and Show cargo location, in the Cargo window.

## Object properties

When we select the **Object properties** option, the Object Properties window opens. By default, the **Object properties** tab is displayed.

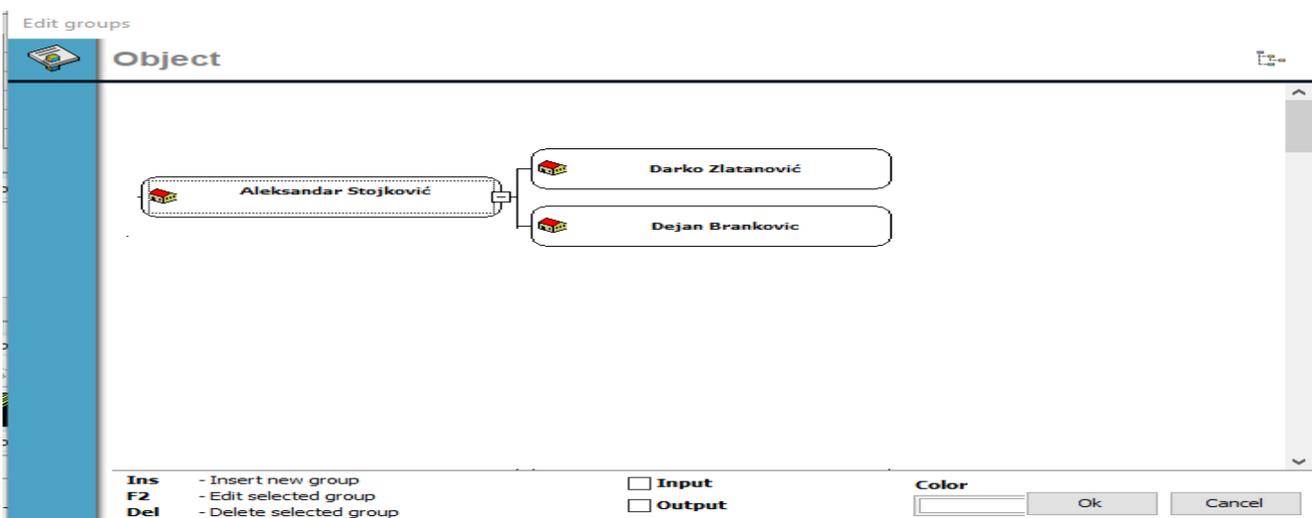


## Object settings

On the **Object Settings** tab, we can make object settings, set the object display and location, enter a description for the specified object, enter a link, assign a certain zone to the object, associate a certain driver with the object.

### Object settings

In this section, it is possible to select the object group it belongs to from the drop-down list. By clicking on the Groups option in the right part, the Edit Groups window can be opened.



In this section, it is possible to add a new group of objects by clicking Ins from the keyboard. By clicking on F2, it is possible to change the previously selected (selected) group. By clicking Del from the keyboard, it is possible to delete the previously selected (selected) group - if we are 100% sure.

In addition, for the selected group, it is possible to set whether it is input or output, or both, by clicking on these options. It is possible to adjust the color by choosing from the drop-down list of colors or by adding a new one by clicking on the three dots.

If we want to save the changes we made, click on the Ok option, and if we don't, click on Cancel.

## Display

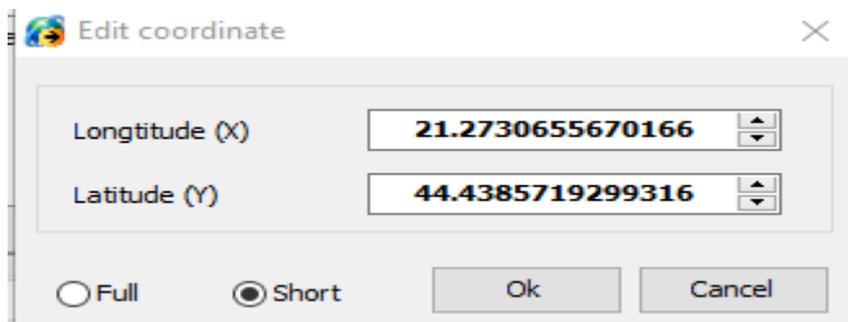
In this section, it is possible to change the color of the object's display, the icon symbolizing the object.



## Location

In this section, it is possible to set whether the specified object is active or not. It is possible to set the radius of the object size in meters. In addition, in the Location field we see the object's geocoordinates.

If we want to change the geocoordinates of the object, click on the option with three points - the window below opens.



Edit coordinate - Geocoordinates for objects can be found on Google Maps, if we know the address for that object or the exact name of the object. When we find the geocoordinates for the object, we can enter it in the specified Longitude (X) and Latitude (Y) fields.

By clicking on Ok, we confirm the given entry of geocoordinates and they become visible in the Location field. If we still give up on entering the geocoordinates, then click on Cancel.

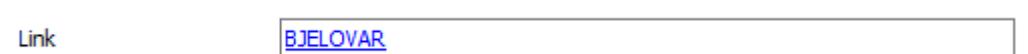
## Description

In the description section, we can enter any description for the specified object.



## Connection

In the links section, it is possible to enter a link to an object, web page, etc.



## Zone of the object

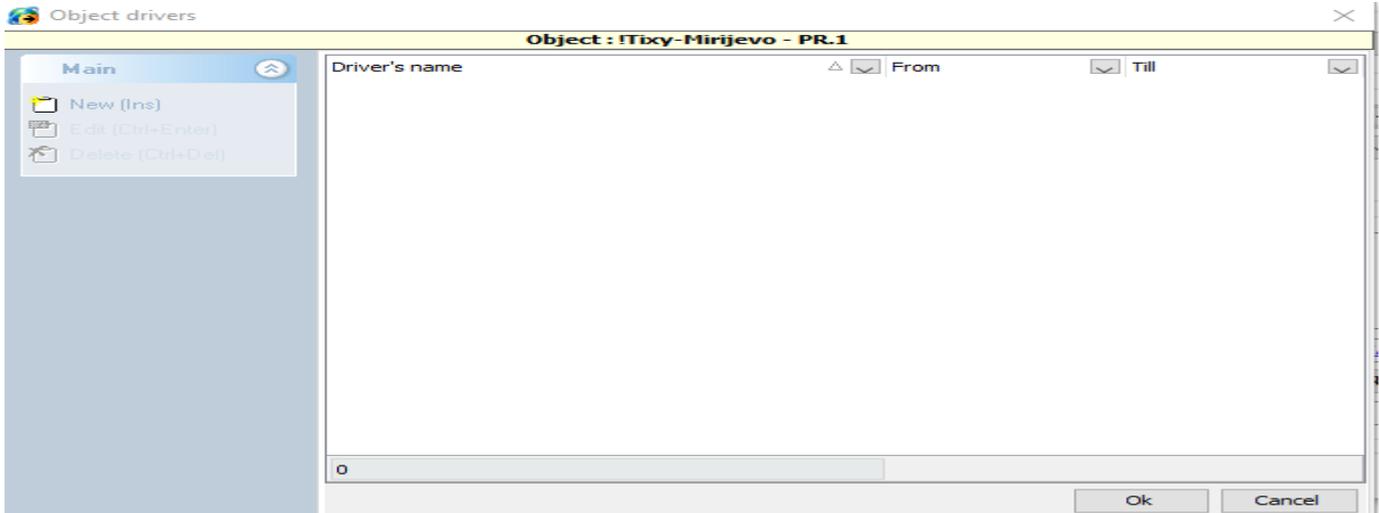
In this section, it is possible to assign a certain zone to the selected object.

## Object belongs to driver

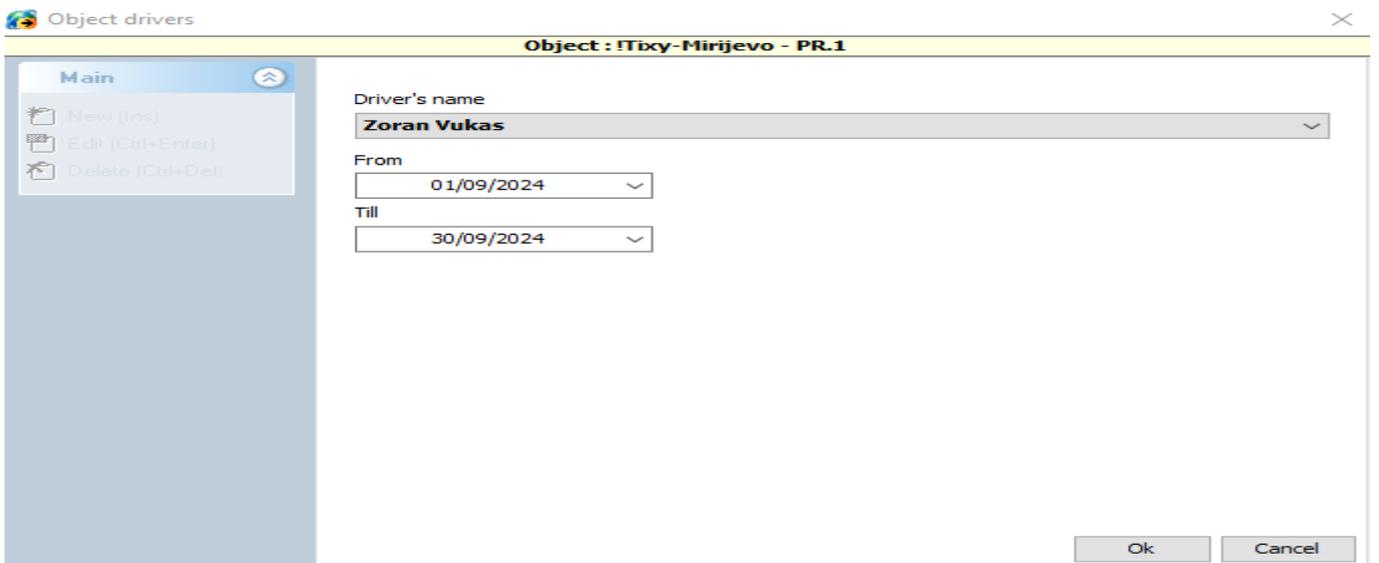
In this section, it is possible to associate a specific driver for the specified object.

Object belongs to driver  

When we click on the three dots, the window below opens.

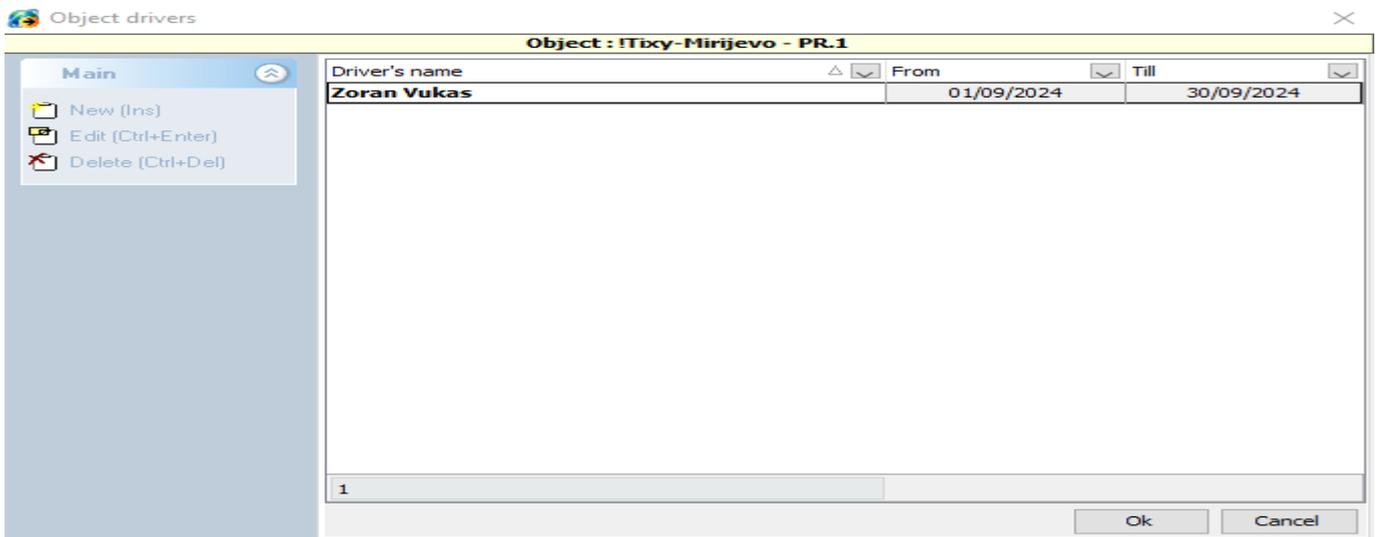


When we click on the New option in the upper left corner of the window Drivers attached to the object, the window below opens.



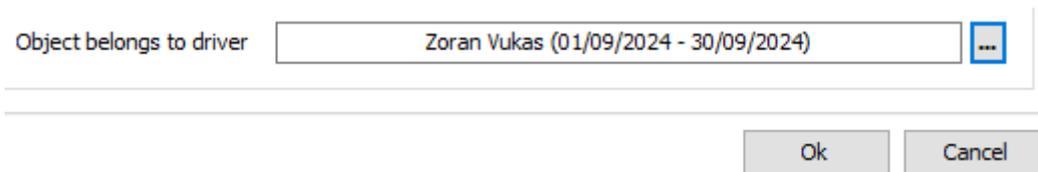
From the drop-down list, it is possible to select the driver we want to associate with the specified object. In addition, it is possible to select the period from when the driver is attached to the specified object, to when he is attached to the specified object.

If we click on OK, we associate the driver with the specified object in the period for which we have selected - the window below. If we click on Cancel, we abandon the changes.



In a similar way, we can add more drivers to the same object by clicking New in the upper left corner of the window. If we want to make changes for the added driver, click on the Change option. If we want to delete the association of a specific driver - select the driver and click on the Delete option.

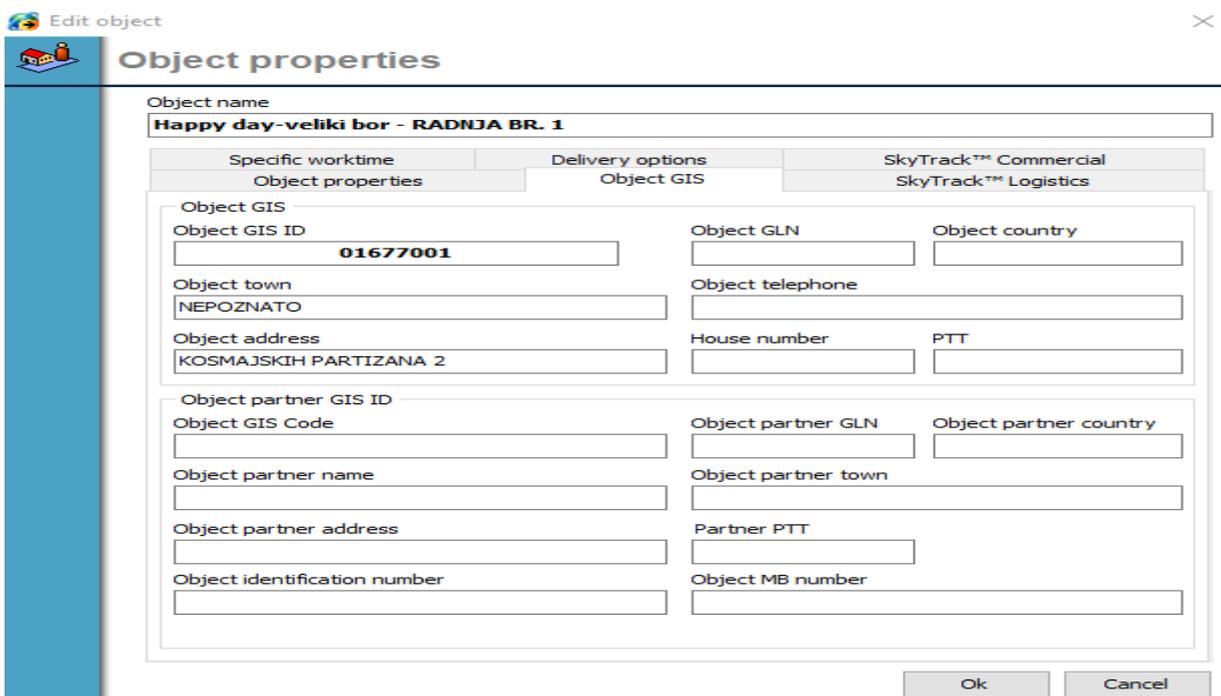
If we are sure about joining one driver/several drivers to the specified object, click on Ok and the window below will open. If not, click on the Cancel option and none of the above changes will be visible.



When we repeat Ok the specified driver will be associated with the specified object. If not, click on Cancel and the specified changes will not be saved.

## Object GIS

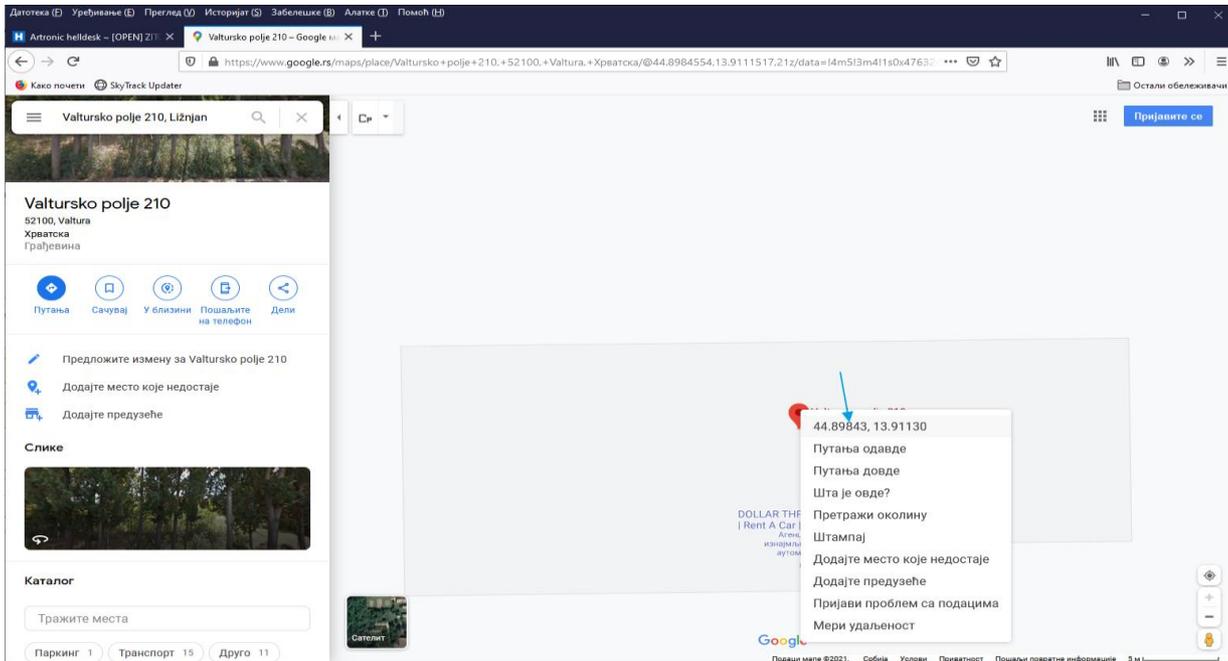
When we click on the Object GIS system tab, the window below opens.



The GIS system tab usually contains data imported from the client's business system.

There is data on the object's external code, the place to which the object belongs, the object's address, data for the postal code.

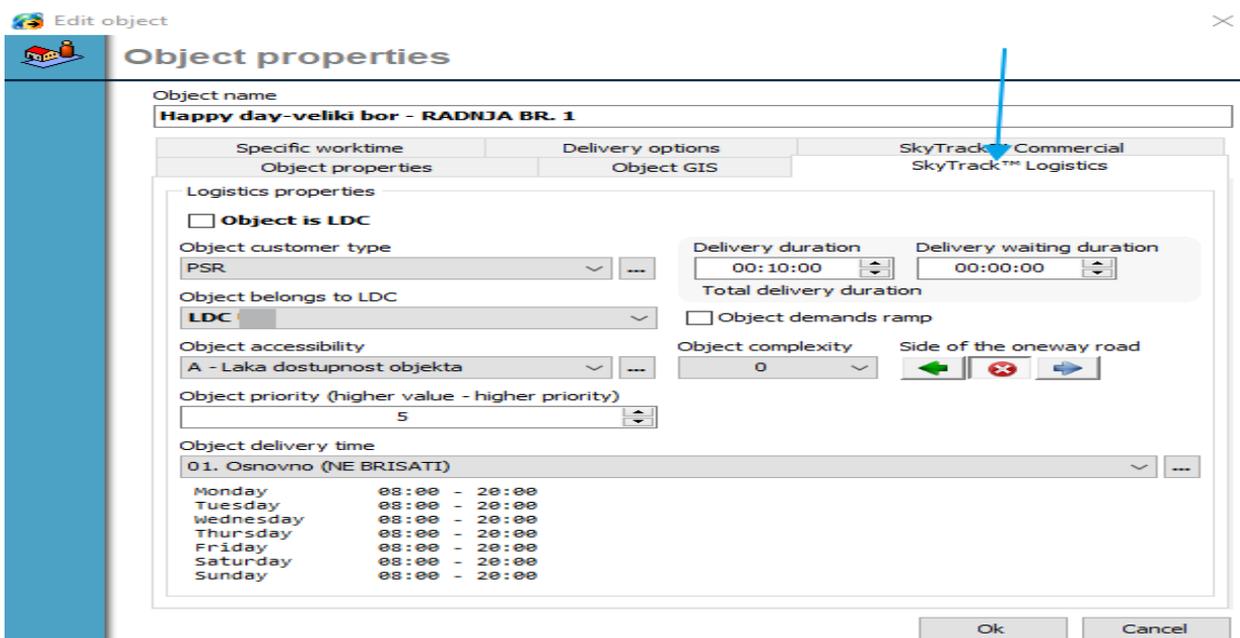
Based on the data on the address of the object, the place to which the object belongs and the postal code, the name of the object is possible geolocate the object more precisely when this data is entered into Google Maps and the object is found. When we zoom in on the specified object, then right-click on the displayed object (red bubble) on the map - the geocoordinates of the object are visible.



The obtained geocoordinates can then be entered in Logistics in the Location field on the Object Settings tab, according to the instructions previously described.

## Logistics

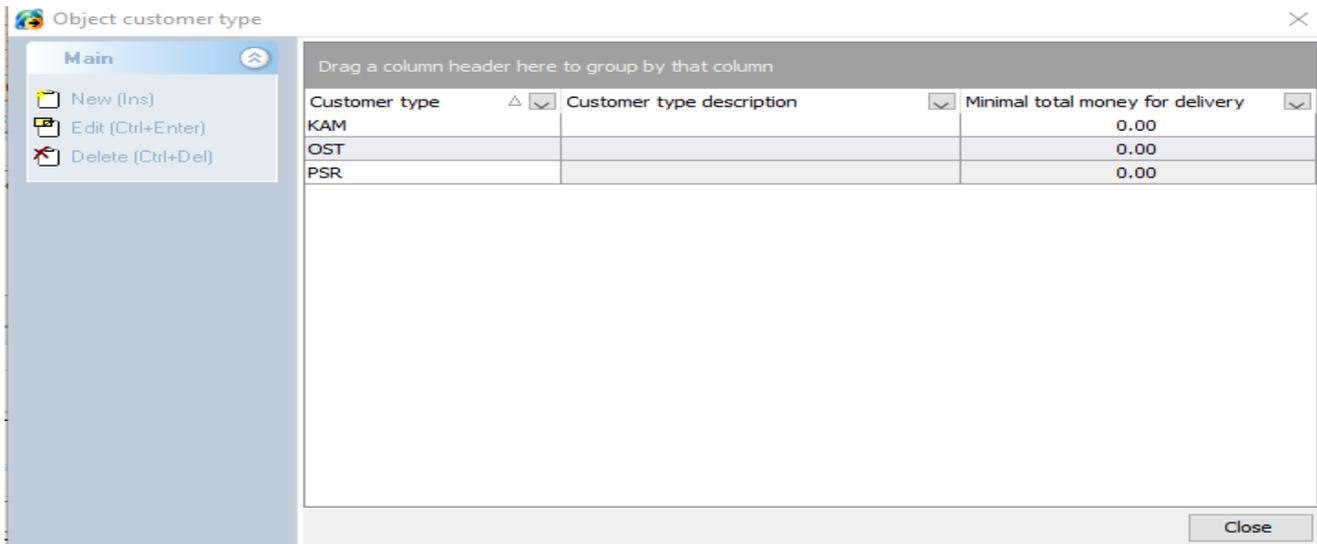
When we select the Logistics option, the window below opens.



## SkyTrack Logistics settings

**Object is LDC** - if we check this option, the specified object becomes a Logical Distribution Center (LDC).

**Object customer type** - it is possible to select the type of customer from the drop-down list. If we click on the three points in the extension, the customer type code book opens.



If we click on the New option in the upper left corner of the window, it is possible to add a new customer type, which we can later set as the customer type for the specified object. If we click on Change, it is possible to change the parameters for the specified type of customer. We will click on the Delete option only if we are sure that we want to delete the specified customer type.

### Delivery duration

Here you can set how long it takes us to deliver the specified object. Usually this time is in minutes.

### Delivery waiting duration

The waiting time at the object can be set here.

### Object belongs to LDC

From the drop-down list, it is possible to choose which LDC the object belongs to.

### The object requires a vehicle with a loading ramp

If we check this option, only a vehicle with a loading ramp will be able to deliver to the object.

### Object accessibility

From the drop-down list, it is possible to select one of the defined availability for the specified object. If you click on the three points in the extension, the previously described object accessibility code opens. In it, it is possible to add new availability of the object if there is a need for it, change the parameters of the existing availability and delete a certain availability of the object if we are 100% sure.

### Object complexity

From the drop-down list, it is possible to select a number from 0 to 10, which represents the complexity of the specified object.

### Side of a one-way road

Here we can choose which side of the one-way road the object is located on. The arrow to the left indicates that it is on the left side, the arrow to the right indicates that it is on the right side, and the red circle inside the x indicates that it is not on either side.

## Object priority

In this field, it is possible to enter a number representing the priority of the object. If the value is higher, the priority of the object is higher.

## Object delivery time

It is possible to select previously defined working hours from the drop-down list.

Object delivery time

01. Osnovno (NE BRISATI)		✓	⋮
Monday	08:00 - 20:00		
Tuesday	08:00 - 20:00		
Wednesday	08:00 - 20:00		
Thursday	08:00 - 20:00		
Friday	08:00 - 20:00		
Saturday	08:00 - 20:00		
Sunday	08:00 - 20:00		

If we click on the three points in the extension, the **Object delivery time name** of the object below, which was previously described in the **Dictionaries section**, opens.

Vrijeme prijema robe objekta

Glavna

- Novo (Ins)
- Promjena (Ctrl+Enter)
- Brisanje (Ctrl+Del)

Naziv vremena prijema robe

1. Osnovno radno vrijeme

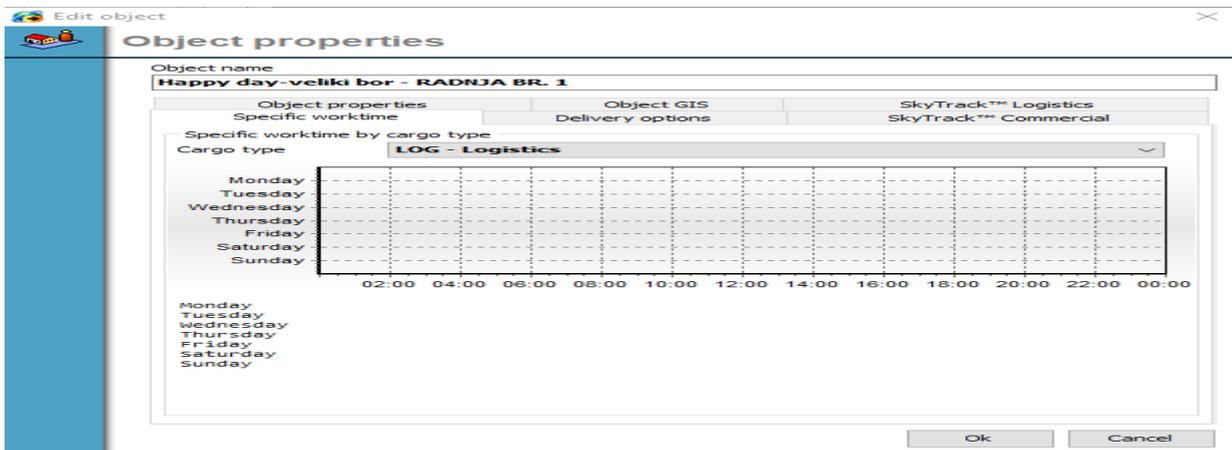
Zatvori

By selecting the New option, it is possible to add a new goods receipt time with the associated schedule of goods receipt times by day of the week. By selecting the Change option, it is possible to change the parameters of the selected name of the time of receipt of goods. Deleting a certain time of receipt of goods is best not to do unless we are 100% sure.

After all the changes we make on the **Logistics** tab, if we click on Ok, the changes will be saved. If we click on Cancel, we abandon the changes made.

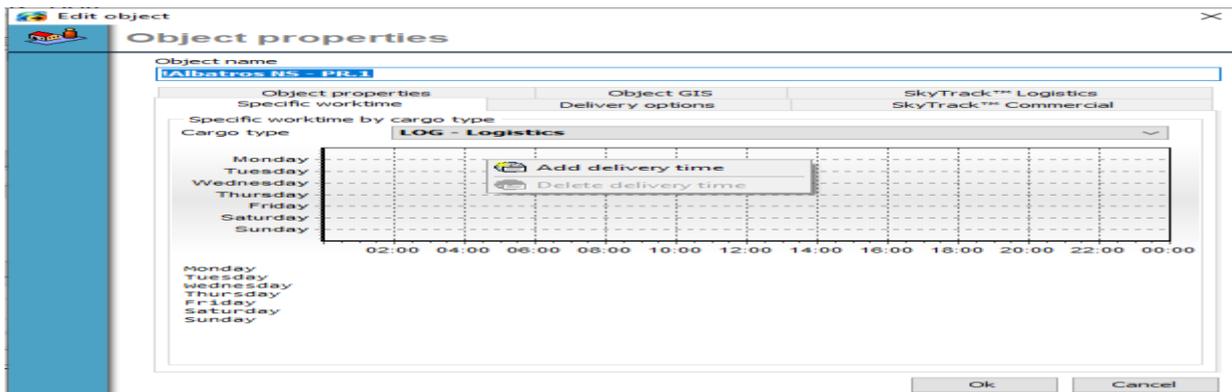
## Specific worktime

When we select the Special time of goods receipt tab, the window below opens.

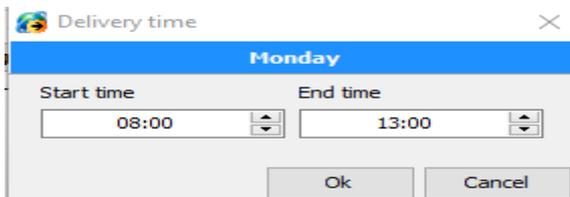


From the drop-down list, it is possible to select the type of goods for which we want to set a special time for receiving the goods.

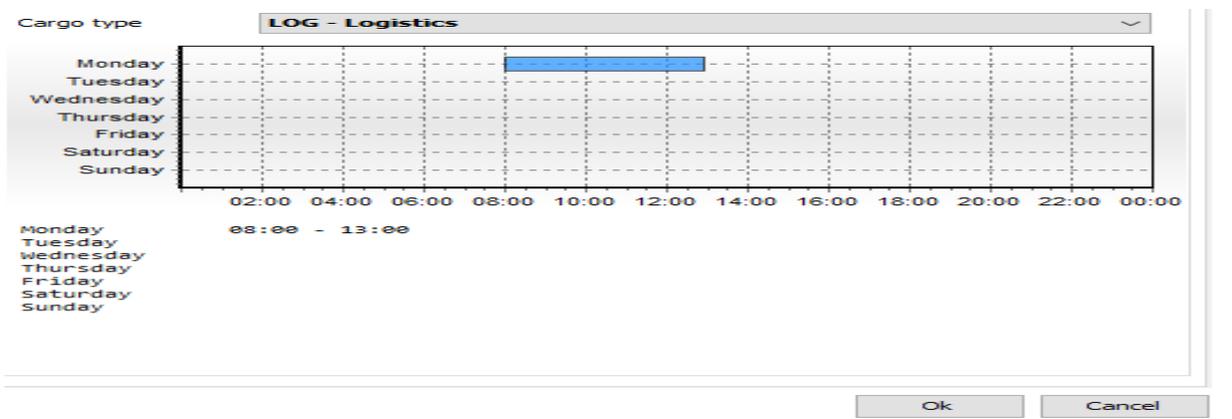
For example, as in this case, we can choose LOG - Logistics.



When we right-click on the diagram in the plane of the day for which we want to set the time of receipt of goods, then on Add delivery time, the window below opens.



When we click on Ok, the specified time of receipt of goods according to the type of goods for the selected day becomes visible on graph I in the schedule of time of receipt of goods for that day.

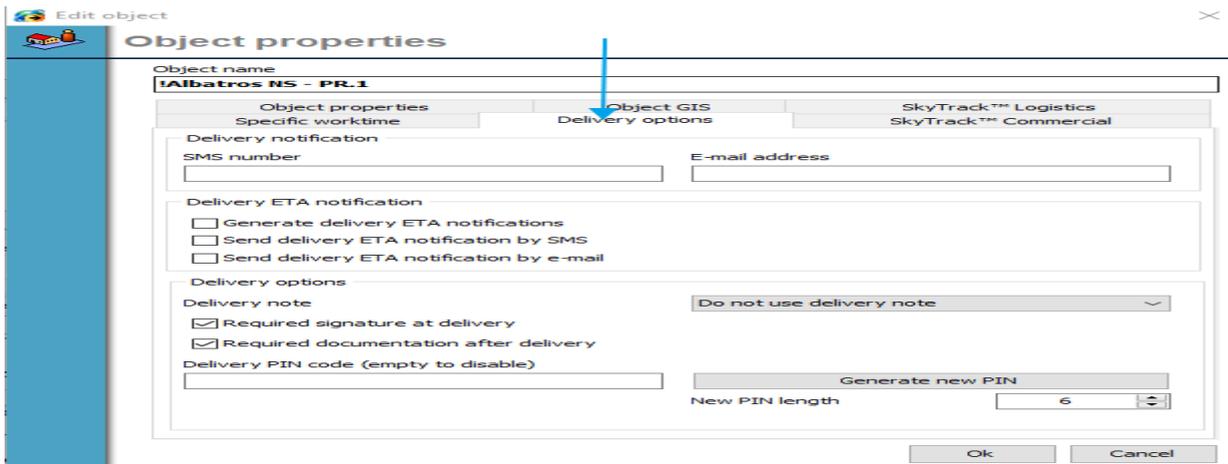


In the same way, we can add the time of receipt of goods for other days of the week.

If we are sure about the changes made on the Special receipt of goods card, click OK, otherwise click Cancel.

## Delivery options

When we select the **Delivery options tab**, the window below opens.



The screenshot shows the 'Object properties' dialog box with the 'Delivery options' tab selected. The object name is 'Albatros NS - PR.1'. The dialog is divided into three sections: 'Object properties', 'Object GIS', and 'SkyTrack™ Logistics'. The 'Delivery options' section contains the following fields and options:

- Delivery notification:** Fields for 'SMS number' and 'E-mail address'.
- Delivery ETA notification:** Checkboxes for 'Generate delivery ETA notifications', 'Send delivery ETA notification by SMS', and 'Send delivery ETA notification by e-mail'.
- Delivery options:** A 'Delivery note' dropdown menu set to 'Do not use delivery note'. Checkboxes for 'Required signature at delivery' and 'Required documentation after delivery' are checked.
- Delivery PIN code (empty to disable):** A text input field.
- Generate new PIN:** A button.
- New PIN length:** A spinner box set to '6'.

Buttons for 'Ok' and 'Cancel' are at the bottom right.

### Delivery notification

Generate information about the estimated delivery arrival time - by checking this option, we enable the generation of information about the planned delivery arrival time

Notify by sending an SMS to a number - by checking this option, we include sending a notification to the number, which can be entered in the field in the extension on the right.

Notify sending an e-mail message to the address - by checking this option, we enable the sending of notifications to the e-mail address, which can be entered in the field in the extension on the right.

### Delivery options

#### Work with delivery notes

From the drop-down list, it is possible to choose whether delivery notes are used or not.

Signature required upon delivery - checking this option requires a signature upon delivery

Request to send documentation after delivery - checking this option requires sending documentation after delivery

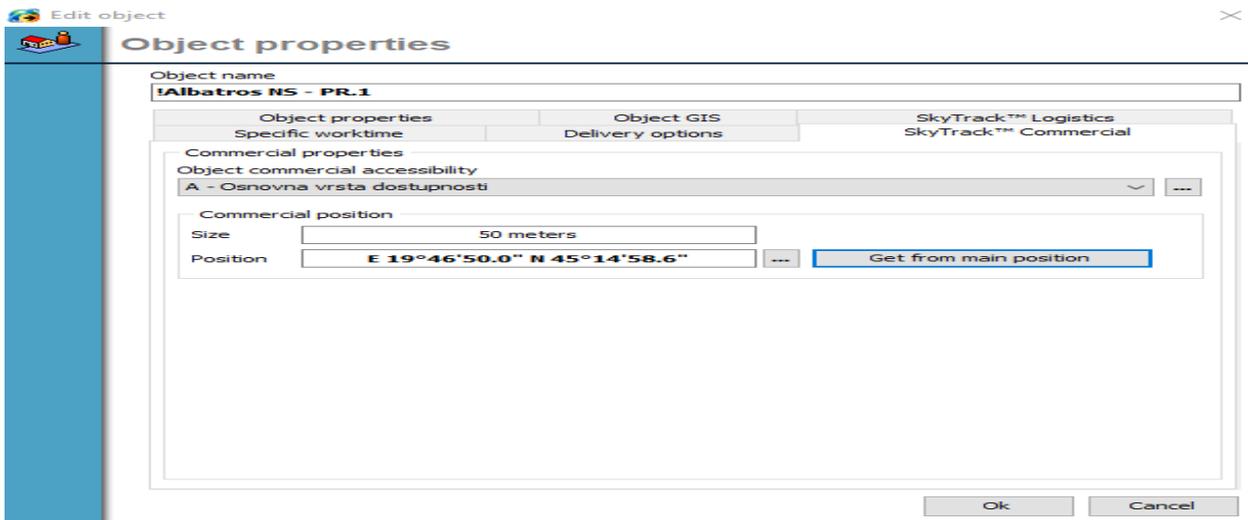
#### Shipping pin

It is possible to enter the delivery pin code in the Delivery pin code field. If it is disabled, the field is left blank.

If we want to save any changes made on the **Object Notification** tab, click on Ok, if we want to cancel the changes made, click on Cancel.

## Commercial

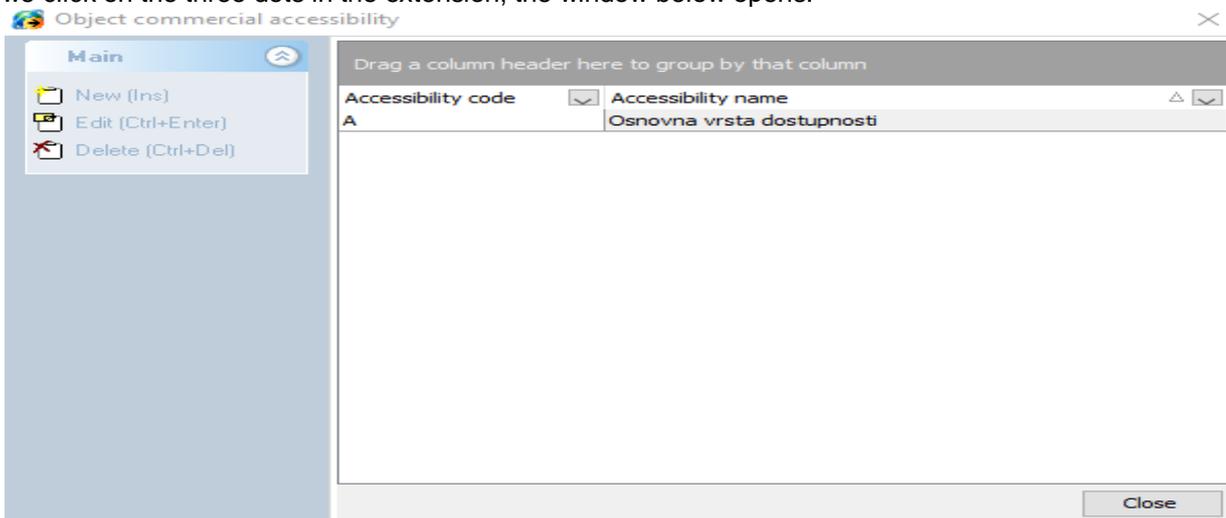
When we select the **Commercial** option, the window below opens.



## Commercial properties

### Object commercial accessibility

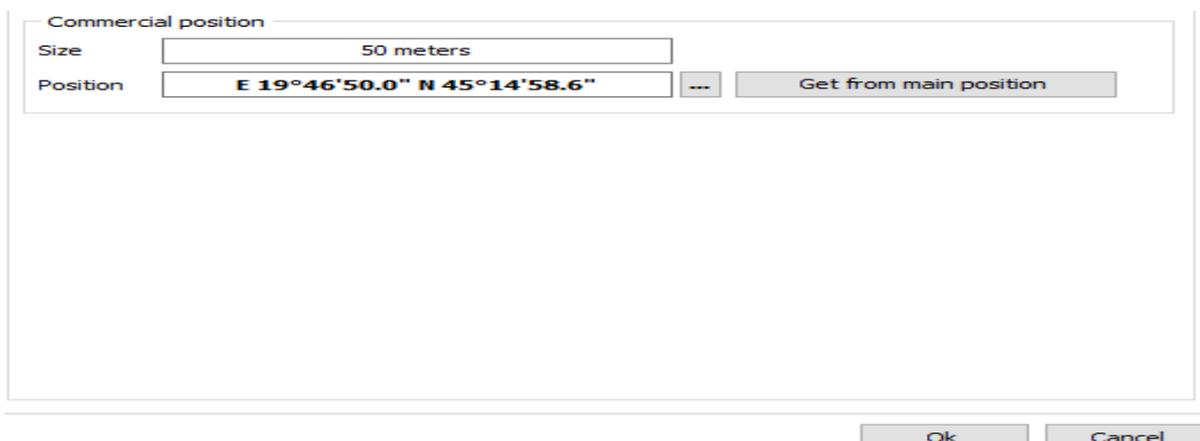
From the drop-down list, it is possible to select one of the previously defined object availability for the commercial. If we click on the three dots in the extension, the window below opens.



Here we see that there is already a defined Basic availability type for commercial, whose availability code is A.

If we want to add a new type of availability for the commercial, click on the New option in the upper left corner of the window. If we want to change the parameters of the specified availability, click on the Change option. Deleting a certain type of availability is best not done unless we are 100% sure.

### Location for commercial



## Size

The radius of the size of the object in meters is entered in this field.

## Position

In this field, the object's geocoordinates are displayed. If we click on the three points in the extension, it is possible to manually enter the geocoordinates of the object.

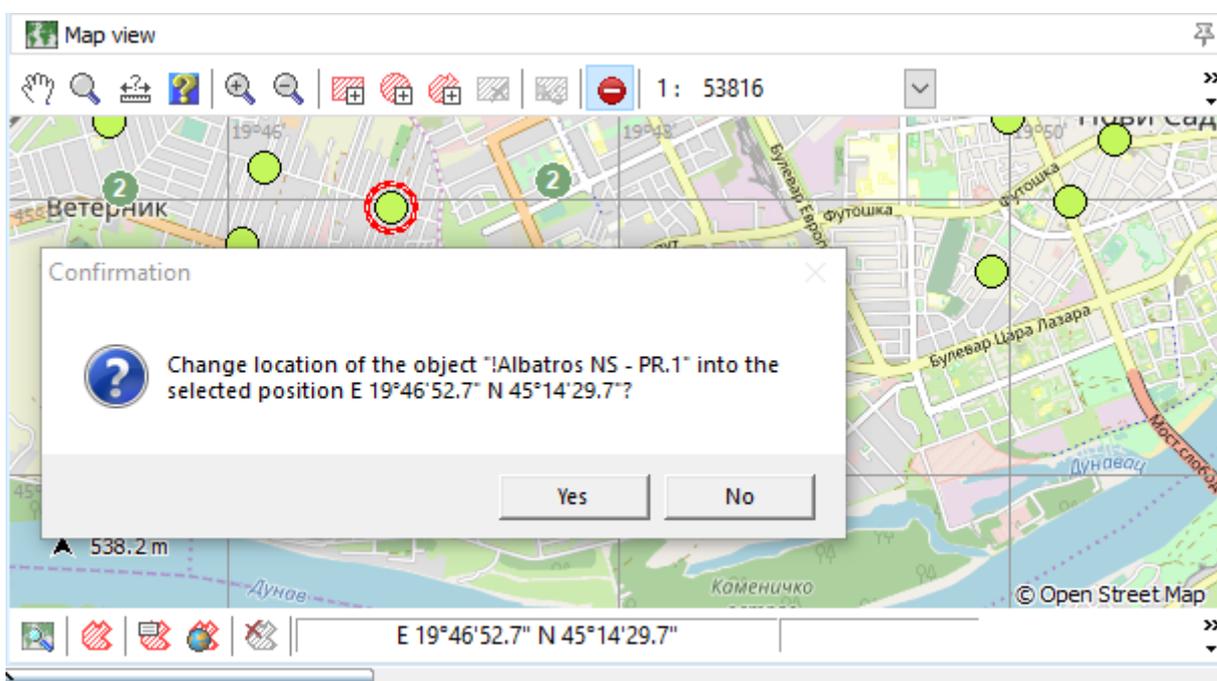
We prefer the **Get from Main position** option. When we click on this option, the object's geocoordinates appear in the Position field.

Position  ...

By clicking on Ok, the changes made on the Commercial tab will be saved. If we want to abandon the changes made, click Cancel.

## Change the location of the object

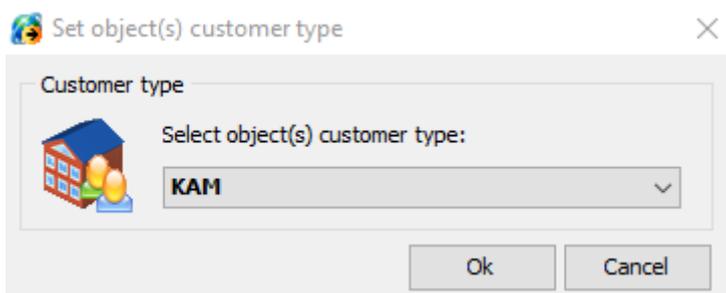
When we select the option Change the **location of the object**, the window below opens.



If we are sure, we click on the Yes option, and if we are not, on No.

## Change object(s) customer type

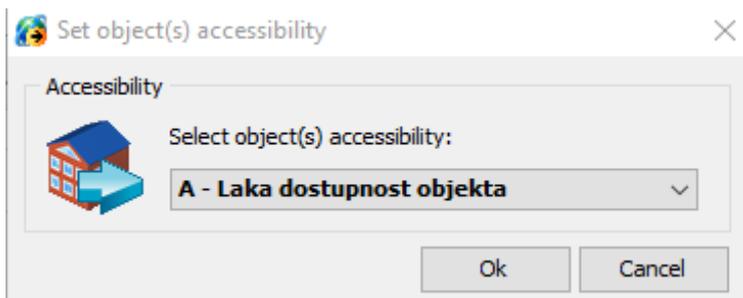
When we select the option **Change the type of buyer of objects**, the window below opens.



From the drop-down list, it is possible to select the type of customer for the specified object.

## Change object(s) accessibility

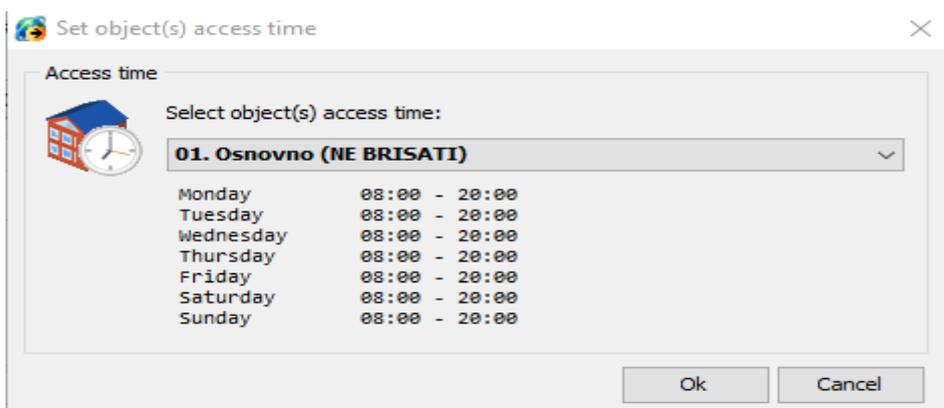
When we select this option, the window below opens.



From the drop-down list, it is possible to select the availability of the object for the specified object.

## Change object(s) access time

When we select this option, the window below opens.



From the drop-down list, it is possible to select the time of receipt of goods for the specified object.

## Set object(s) demands ramp

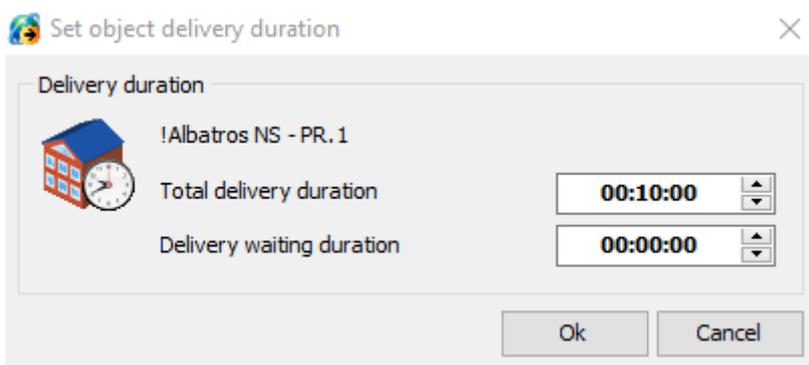
By selecting this option, a vehicle with a loading ramp is required for the specified object.

## Removed object(s) demands ramp

Selecting this option removes the need for a vehicle with a loading ramp for the specified object.

## Change delivery duration for object(s)

Selecting this option opens the window below.



It is possible to set the total duration of delivery at the specified object, as well as the duration of waiting at the object.

### Cancel delivery

If we select the specified option, the specified cargo will no longer appear in the list of Unassigned cargo.

## 2.6 Map view

The **map view** shows the routes we select and the delivery points of unassigned shipments.

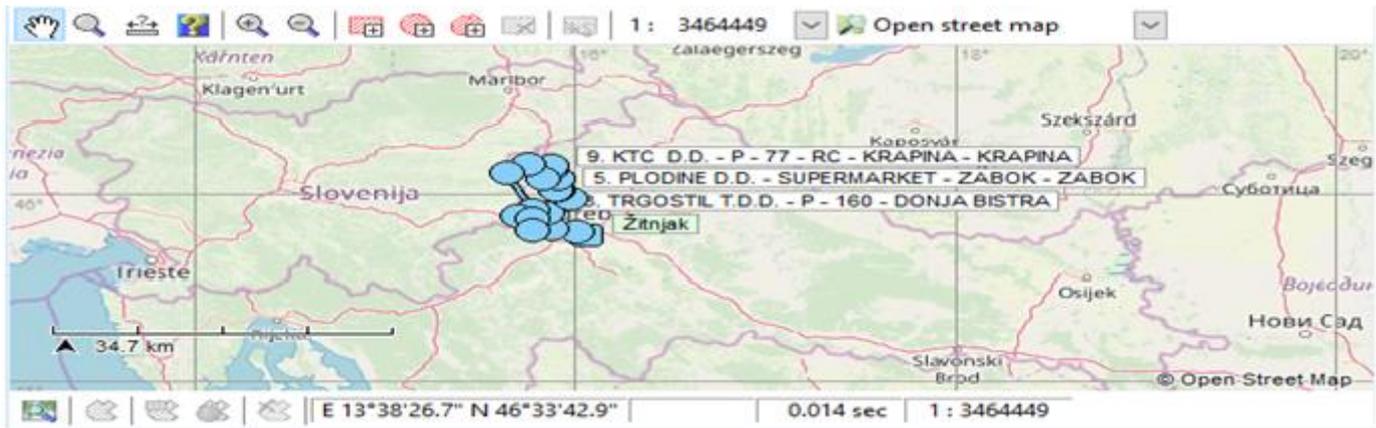
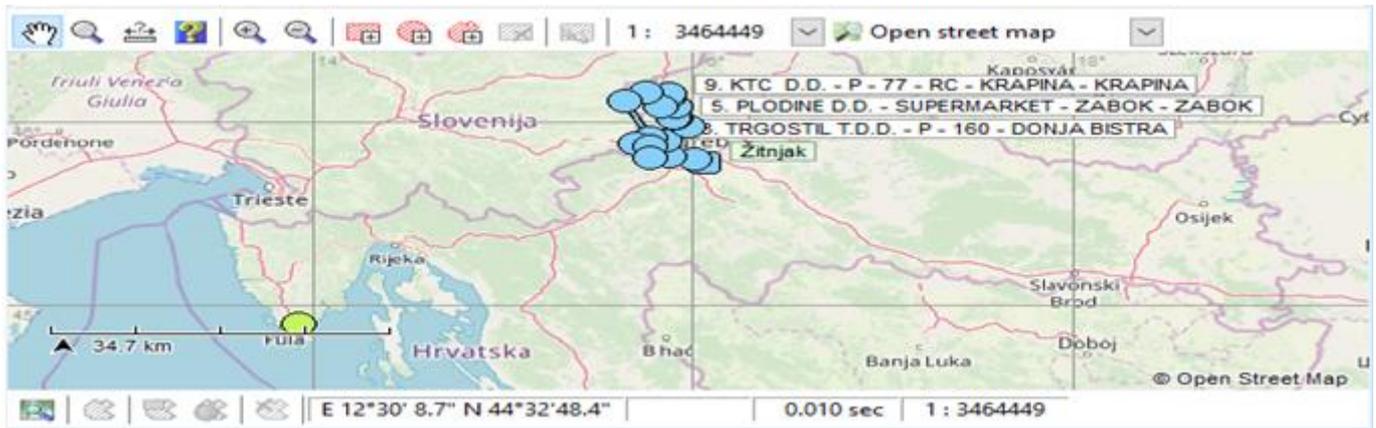
The **map view** contains a standard toolbar for working with the map.



**Pan** - is used to manually move the map



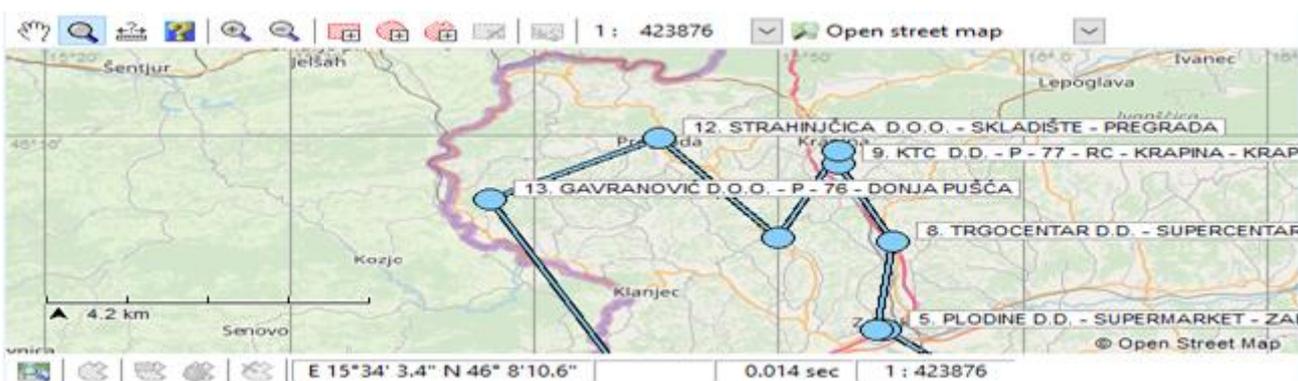
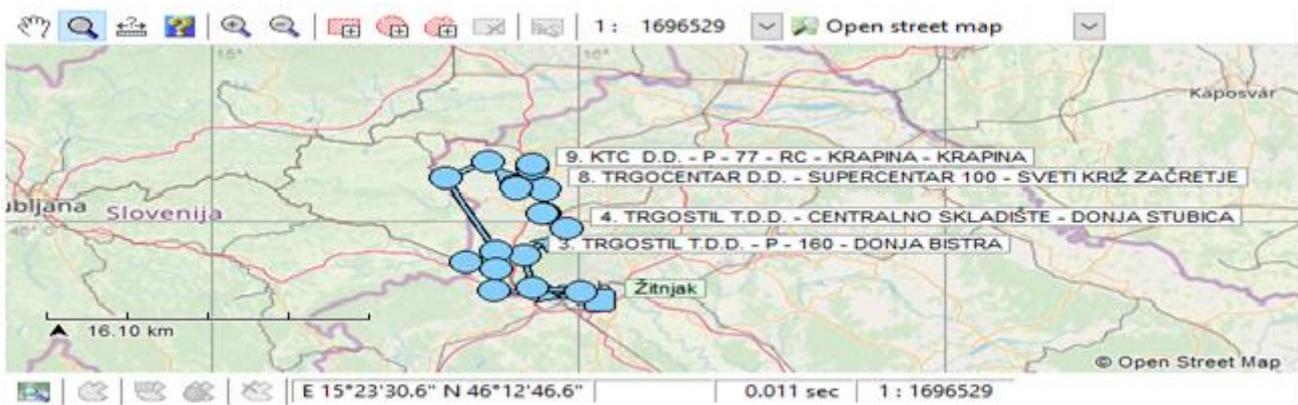
When we select this option, we have the possibility to move the map left, right, up and down. We do this by clicking on the map and holding the click, then moving the map in the direction we want. When we move it where we want, release the mouse click.



**Zoom** - zooms in on a specific object on the map



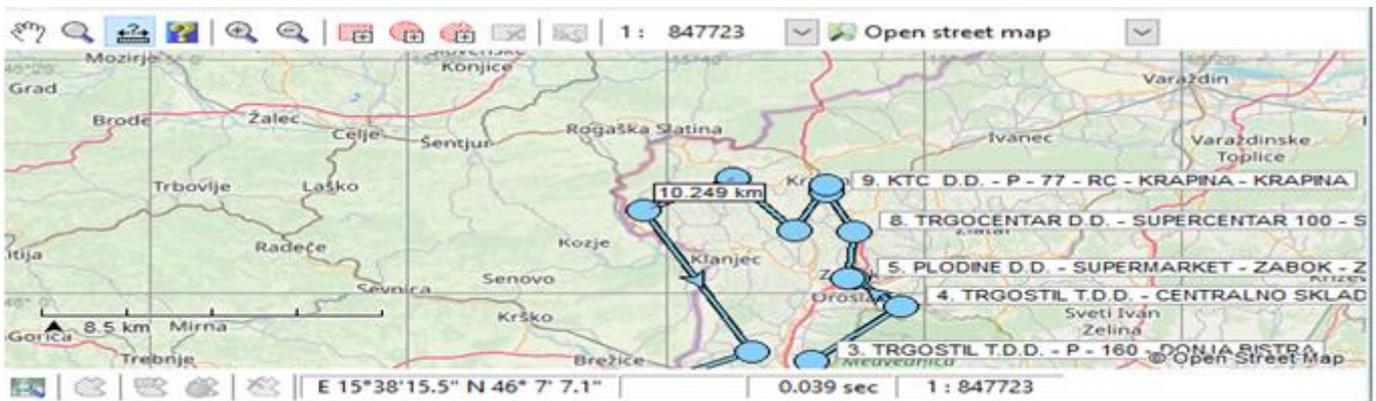
When we select this option, a magnifying glass appears, with which when we select a certain part of the map, or certain objects, they are zoomed.



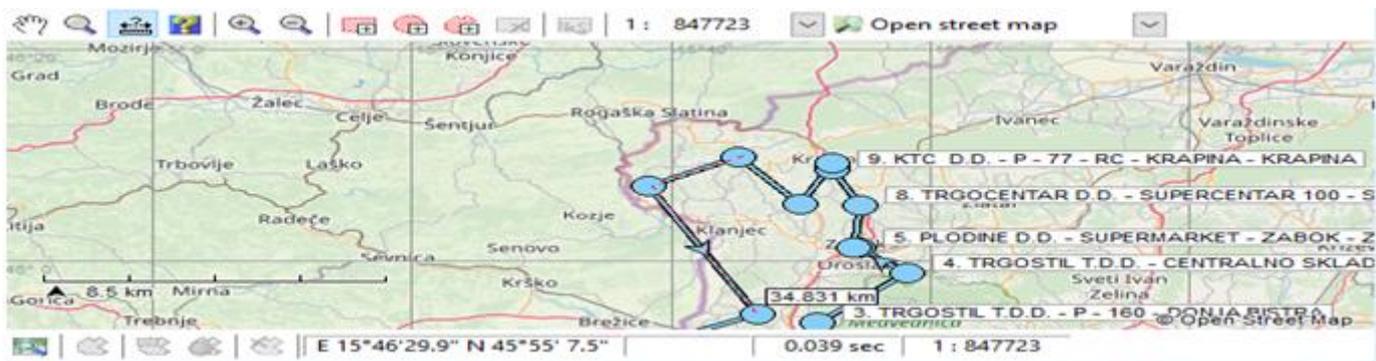
**Measure distance** - measures the distance between objects



When we select this option, a tool appears, with which when we click with the left mouse button on the first object on the map, then we move the tool to the second object and the distance in kilometers is shown.



If we then want to see the distance to the third object on the map, left-click on the second object and move the tool to the third object - where the distance from the first to the third object appears in kilometers.



**Show information** - displays information about a specific object



When we select this option, a yellow question mark appears, which when placed on an object or several, shows us information about that object or several.



**Zoom** - zooms in on the map



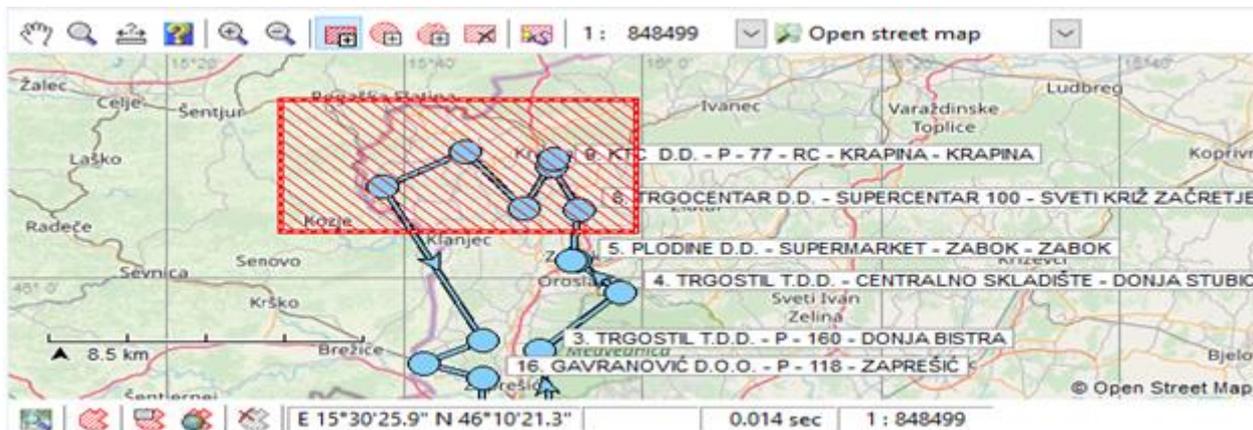
**Zoom out** - zooms out on the map



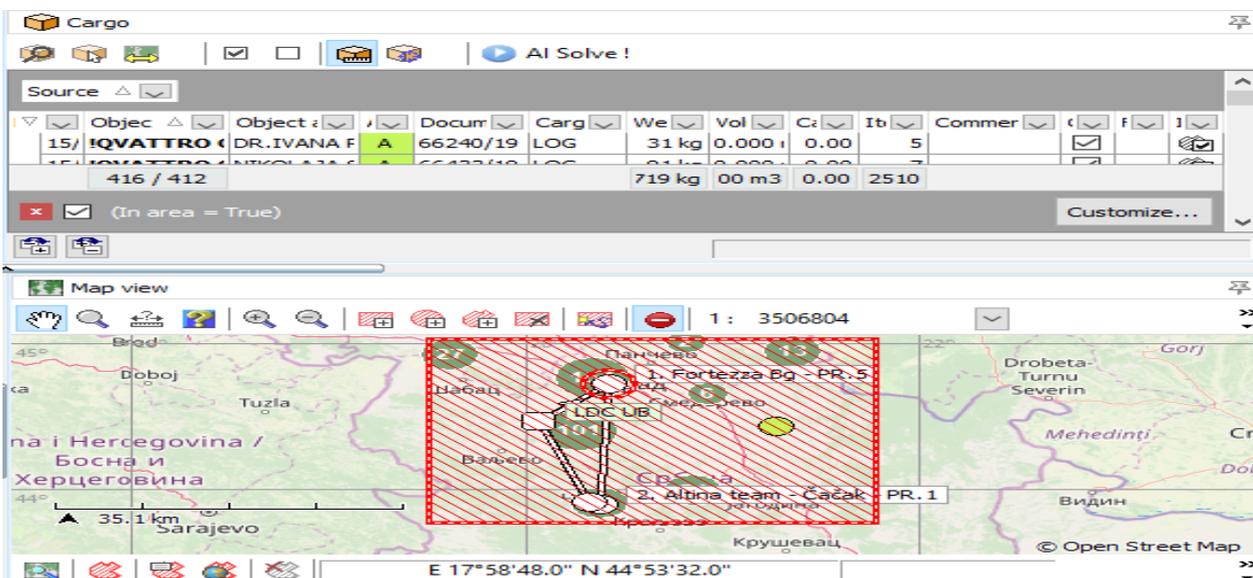
**Add rectangle selection area** - selects the area where we mark with a rectangle



When we select this option, a tool appears in the form of a rectangle, which when we move it on the map, the selection area appears.



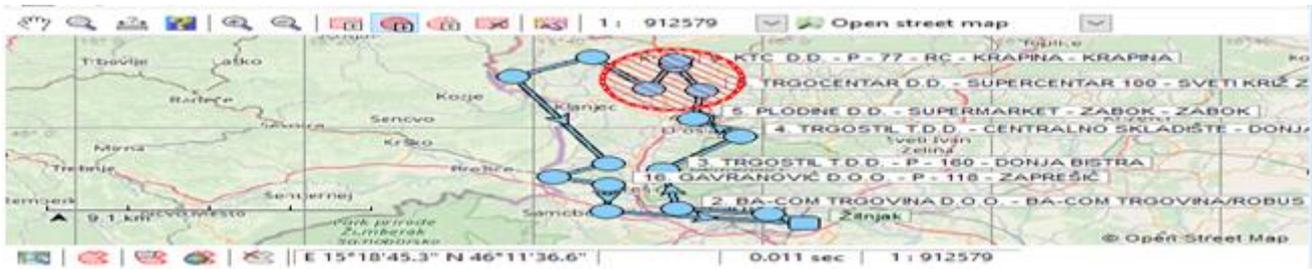
When we disable adding the selection area for unassigned shipments/objects, data on weight, volume, and capacity appear at the bottom of the Shipments window. These data can be for one shipment/object or aggregate data for several of them, depending on how many are selected on the map.



**Add circle selection area** - selects the area where we mark with a circle



When we select this option, a tool appears in the form of a circle, which when we move it on the map, the selection area appears.



**Add zone selection area** - gives the possibility to add and select a zone on the map



When we select this option, the tool for drawing the zone on the map appears.

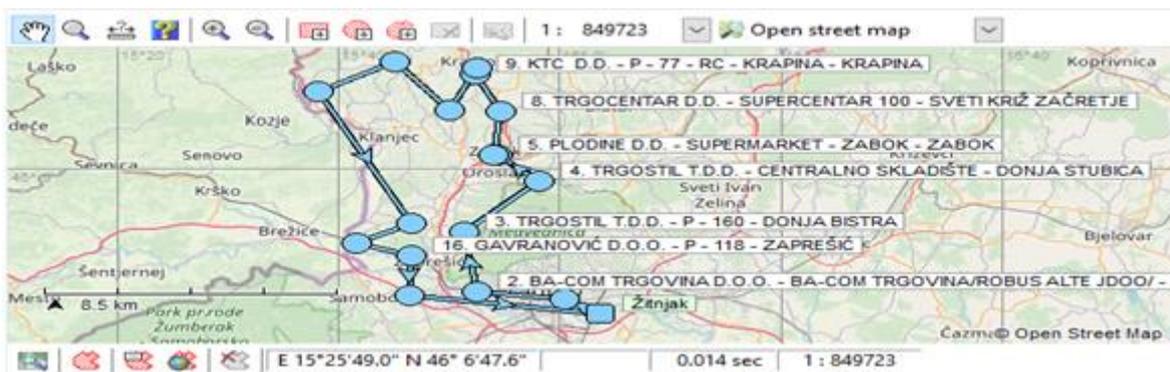


We move this tool to the place where we want the first point of the zone to be. Then we move the tool to the second point - where we left-click and the point is set, then the same to the third point of the zone. That's how we draw the zone.

**Remove Selection Area** - Removes specific selection areas on the map



When we select this option, the image below appears, in which there is neither a circle as a selection area nor a zone.



**Show trip(s) in selected area** - shows trip(s) in certain areas that we have selected

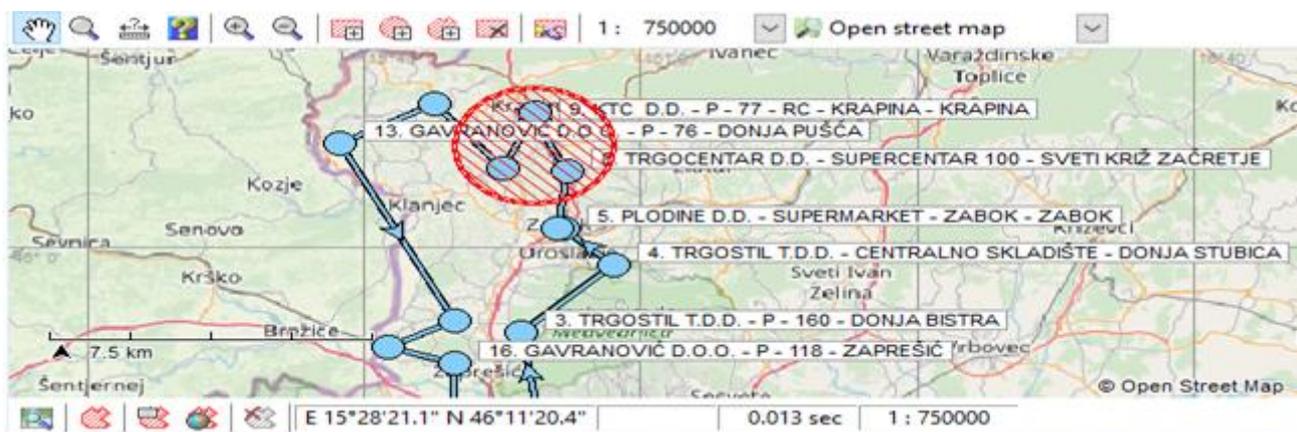
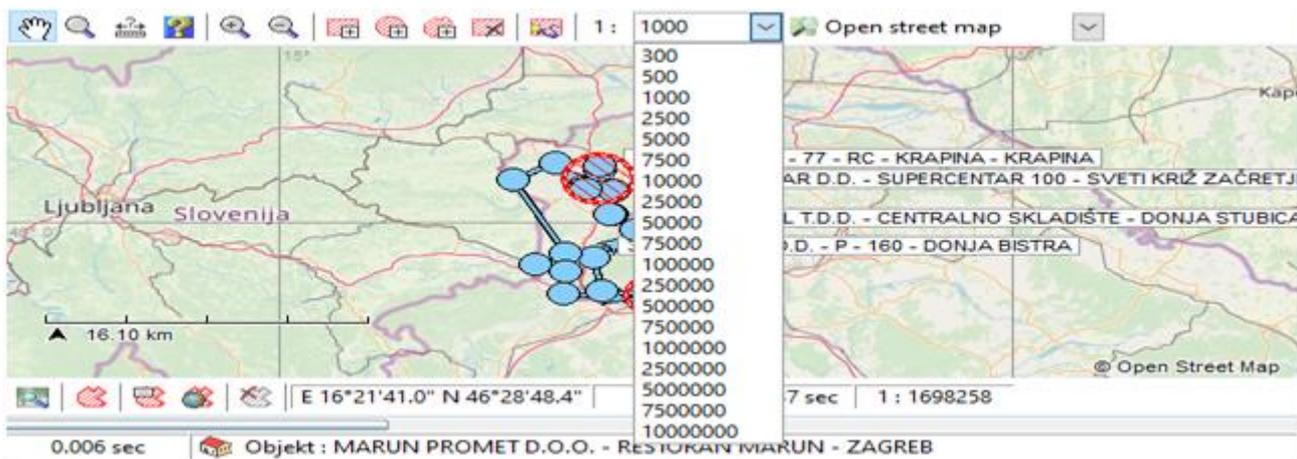


When we select this option, a trip for the selected area is selected.

**Map scale** – gives the option to select the scale of the map.



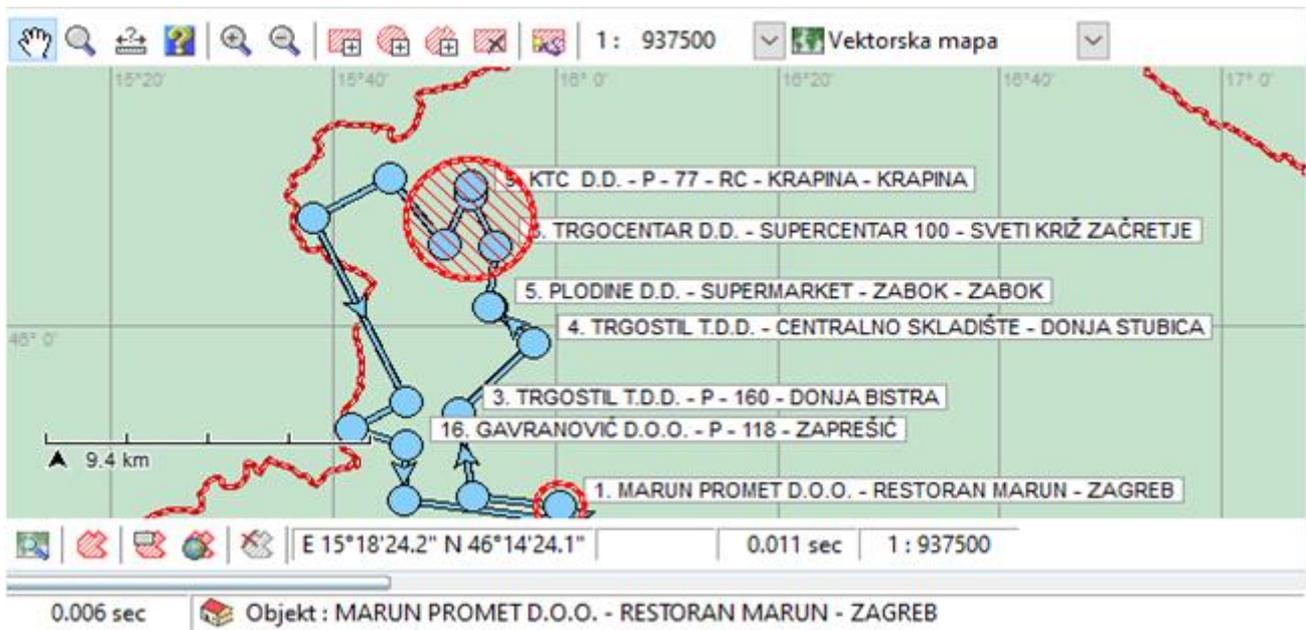
When we select this option, we have the possibility to change the scale of the map.



**Select map** - gives the option to select a map



Currently, the Open Street map was selected, if we want, we can also select the **Vector map** from the drop-down list.

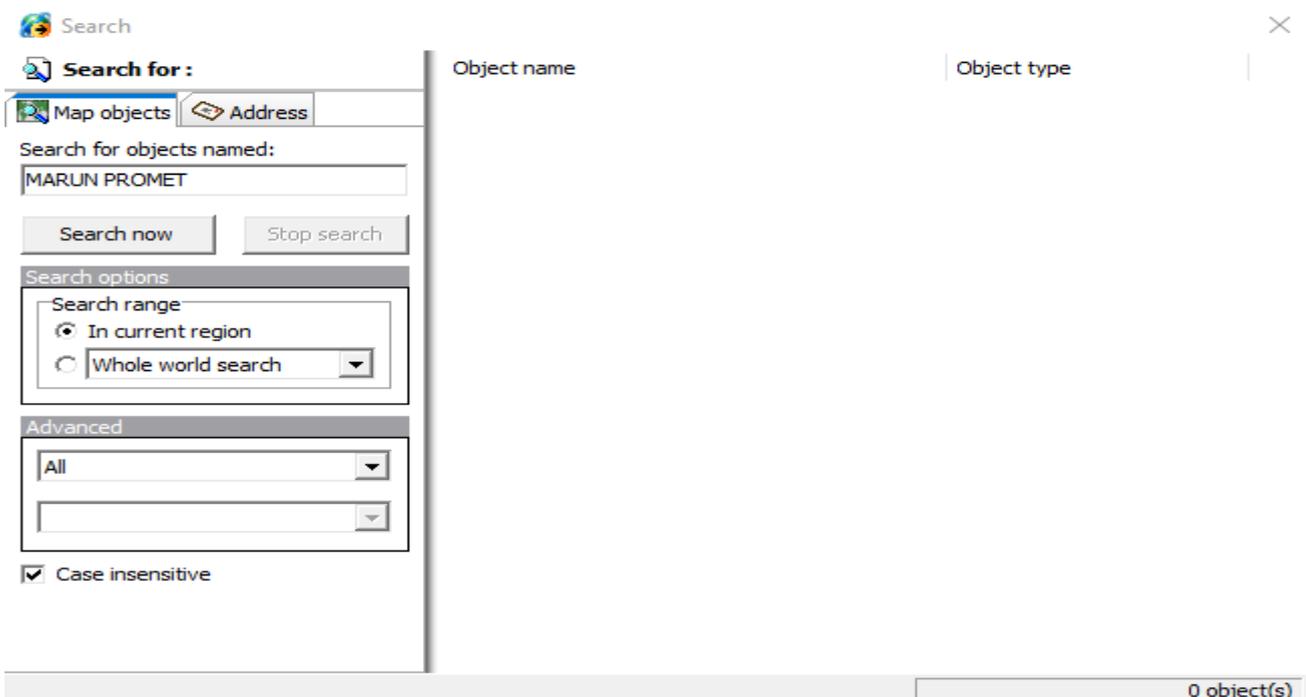


In addition to the tools mentioned at the bottom of the **Map View** window, there is the following toolbar.



## Search

When we select this option, the window below opens. When we enter the name of the object and click search, it finds the object we are looking for.



When we double-click on it in the right part of the window, the view of the object on the map opens.



### Go to selection



When we select this option, it shows us the object we previously selected.

### Edit selection



When we select this option, it opens the Object Settings window for the previously selected object. Object settings are explained previously.

### Go to link of selection



When we select this option, we go to the selection link, if it was previously defined.

### Clear selection



If we choose this option, we move the selection and the tools Go to selection, Selection properties, Go to selection link, Remove selection become grayed out and cannot be used.

In order to be able to use them again, we need to click on the Show trip(s) in the selected area tool in the upper tool palette of the Map View window

