



Green Mobility Exchange 2026

NextETRUCK Workshop

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Logistics Planner

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What is the Logistics Planner?

- It serves as the central operational platform of the ecosystem.
- It enables fleet operators to manage transport missions, electric truck fleets, and driver guidance within a single digital environment.
- The subsystem stores operational data related to missions, vehicles, depots, and charging infrastructure provided by the fleet operator.
- Based on this information, the platform coordinates the execution of transport missions and supports communication between the various subsystems of the NextETRUCK architecture.
- Fleet operators interact with the system through a web-based interface.
- The platform also provides data visualisation tools that support operational monitoring and decision making.



System architecture



It consists of several main components:

- a web-based user interface
- a backend processing and management module
- a relational database storing operational data
- web services enabling communication with external subsystems

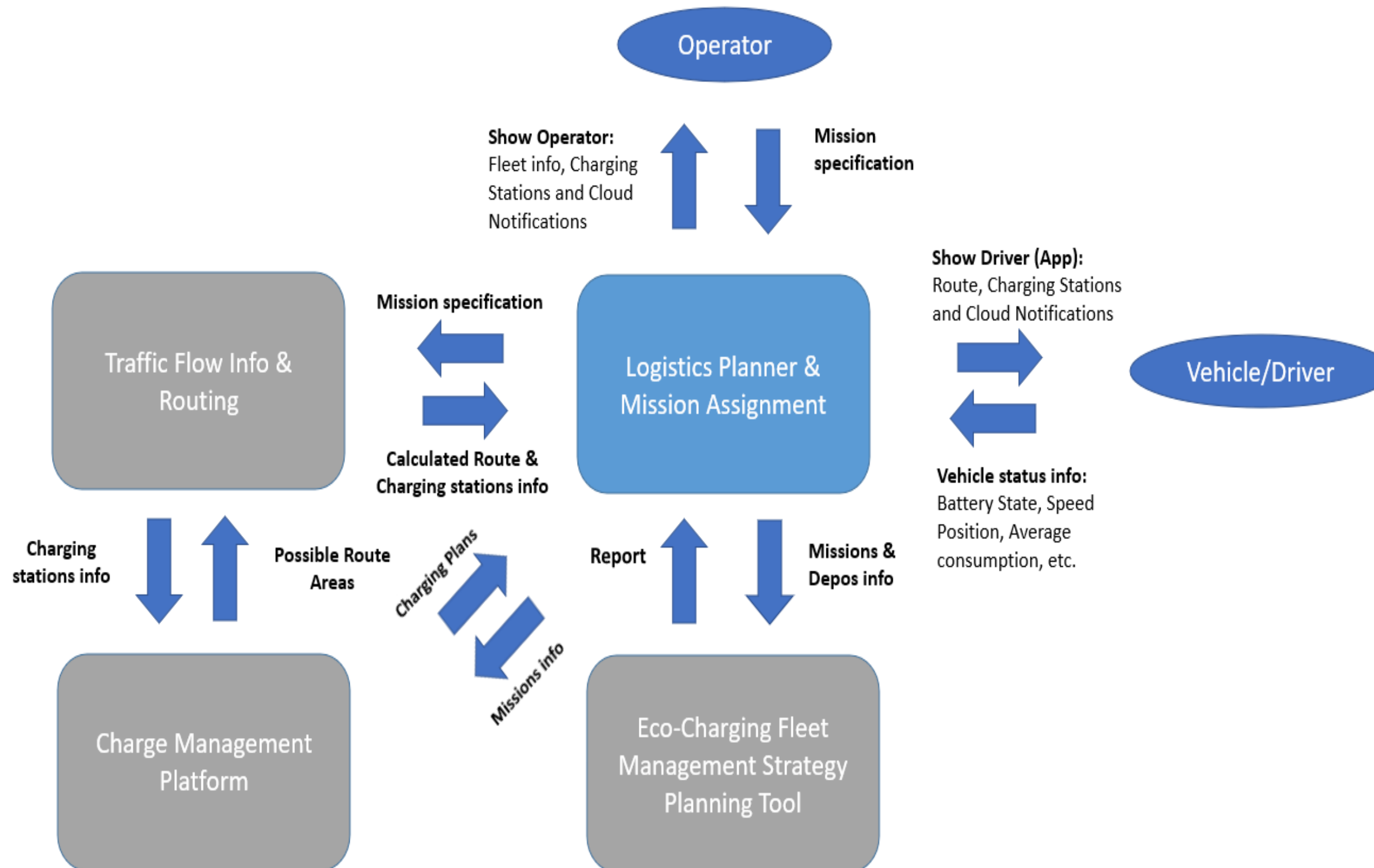


Through these components, the Logistics Planner facilitates data exchange between:

- operators
- vehicles
- routing services
- infrastructure planning tools



Interconnection of the Logistics Planner with the other subsystems





Software architecture (1/2)

Three-Tier Architecture



Presentation Layer

- Provides the user interface for fleet operators
- Supports mission creation and management
- Displays fleet status, depots, vehicles, and charging infrastructure
- Enables real-time operational monitoring
- Integrated with Grafana for dashboards and analytics



Application Layer

- Contains the core business logic of the Logistics Planner
- Handles mission creation and operational data processing
- Manages communication with external subsystems
- Implemented in Java using the Jersey framework
- Connects with routing services, charging management, and fleet monitoring systems



Software architecture (2/2)

Three-Tier Architecture



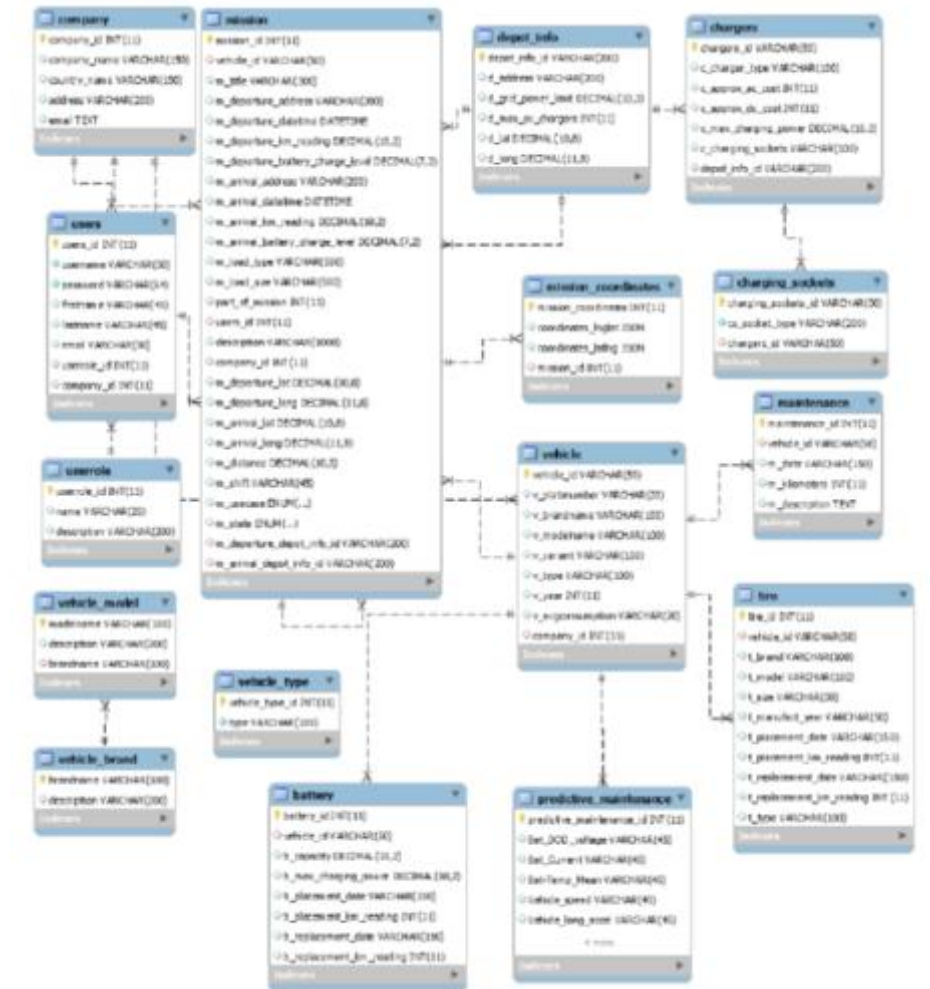
Data Layer

- ❑ Responsible for storing and managing operational information
- ❑ Stores missions, vehicle specifications, depot configurations
- ❑ Includes charging infrastructure and historical records
- ❑ Supports efficient queries and reliable data retrieval

Data Exchange & Integration



- ❑ Communication between layers uses JSON-formatted messages
- ❑ Ensures compatibility with modern web services
- ❑ Simplifies integration with external APIs and systems
- ❑ Supports modular expansion with additional services and data sources





Logistics Planner: Mission

Efficient and affordable Zero Emission logistics through the Next Electric TRUCKs

Logistics Planner

Next Electric TRUCK

Login

Username

Password

LOGIN

Efficient and affordable Zero Emission logistics through the Next Electric TRUCKs

Logistics Planner

Next Electric TRUCK Missions Vehicles Depots Dashboard Charging Plans Eco Charging

Dimitis Margaritis

Missions

NEW MISSION

CSV Excel Search:

SN	Title	Departure	Departure Date	Arrival	Arrival Date	
1	Thess - Vercia	8th km Haritou - Thess	2024-06-17 08:20:00.0	Vrs Georgiou 43A, Davalos 591 32	2024-06-17 12:10:00.0	
2	Thess - Sindos	0th km Haritou - Thess	2024-06-17 08:20:00.0	Hellenic Vehicle Industry Fco S.A.	2024-06-17 08:10:00.0	
3	Sindos - Vercia	Hellenic Vehicle Industry Blvd S.A.	2024-06-17 11:00:00.0	Vrs Georgiou 43A, Davalos 591 32	2024-06-17 12:10:00.0	

Next Electric TRUCK Missions Vehicles Depots Dashboard Charging Plans Eco Charging

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New Mission

Title * Vehicle * Driver *

Load Type * Load Size * Is Part of another Mission?

State Use Case Shift

Departure Address * Departure Date * Departure Kilometers Departure Battery Charge Level

Arrival Address * Arrival Date * Arrival Kilometers Arrival Battery Charge Level

Description



Logistics Planner: Vehicle

Efficient and affordable Zero Emission logistics through the **Next Electric TRUCKs**

Logistics Planner

Next Electric TRUCK Missions Vehicles Depots Dashboard Charging Plans Eco Charging DIMITRIS MARGARITIS

Vehicles

NEW VEHICLE

CSV Excel Search:

SN	Identifier	Plate No.	Brand	Model	Variant	Year	Maintenance Indicator	
1	Cerh_FORD1234567890987	FOR1234	FORD	eFORD	Rigid	2024	●	✎ 🗑
2	Cerh_MERCEDES123456789	MER1234	MERCEDES	eACTROS	300	2023	●	✎ 🗑
3	Cerh_TEVVA123456789098	TEV1234	TEVVA	eTEVVA	Rigid	2024	●	✎ 🗑

Efficient and affordable Zero Emission logistics through the **Next Electric TRUCKs**

Logistics Planner

Next Electric TRUCK Missions Vehicles Depots Dashboard Charging Plans Eco Charging DIMITRIS MARGARITIS

New Vehicle

Vehicle

- Maintenance
- Tires
- Battery

Vehicle Identifier * Plate No. * Type

Brand * Model * Variant

Year Average Consumption

REGISTER



Logistics Planner: Vehicle maintenance

The screenshot shows the 'Maintenance' page. The top navigation bar includes 'Missions', 'Vehicles', 'Depots', 'Dashboard', 'Charging Plans', and 'Eco Charging'. The user 'DIMITRIS MARGARITIS' is logged in. On the left, a sidebar menu has 'Maintenance' selected. The main content area features a table with one entry:

SN	Kilometers	Date	Description
1	60000	2024-01-04	null

Below the table, it says 'Showing 1 to 1 of 1 entries'. There are 'Previous' and 'Next' navigation buttons. Below the table is a 'New Maintenance' form with fields for 'Kilometers', 'Maintenance Date', and 'Description'.

The screenshot shows the 'Battery' page. The top navigation bar and user information are the same as in the previous screenshot. The sidebar menu has 'Battery' selected. The main content area features a table with one entry:

SN	Capacity	Charging Power max.	Placement
1	235	180	2024-01-01

Below the table, it says 'Showing 1 to 1 of 1 entries'. There are 'Previous' and 'Next' navigation buttons. Below the table is a 'New Battery' form with fields for 'Capacity', 'Charging Power max.', 'Placement Date', 'Kilometers (Placement)', 'Replacement Date', and 'Kilometers (Replacement)'.

The screenshot shows the 'Tire' page. The top navigation bar and user information are the same. The sidebar menu has 'Tires' selected. The main content area features a table with six entries:

SN	Brand	Model	Size	Year	Placement
1	MICHELIN	WTuss	385/55-22.5	20	2024-01-01
2	MICHELIN	eTuck	305/22-22.5	30	2024-01-01
3	MICHELIN	Wtuck	315/30-22.5	30	2024-01-01
4	MICHELIN	Wtuck	315/30-22.5	30	2024-01-01
5	MICHELIN	WTuss	315/70-22.5	30	2024-01-01
6	MICHELIN	eTuck	315/70-22.5	30	2024-01-01

Below the table, it says 'Showing 1 to 6 of 6 entries'. There are 'Previous' and 'Next' navigation buttons.



Logistics Planner: Depot

SN	Name	Address	Grid Power Limit	EV Chargers
1	Charist	Spartanbet Strada Charista	80	1
2	Bu	Hellas Vehicle Industry Bldg S.A.	100	1
3	Petrolhosaki	Petrolhosaki	100	1

New Depot

Name * Address *

Grid Power Limit * EV Chargers *

SN	Name	Type	Power	Sockets
1	Charist	AC	22	1

New Socket

Charger Name * Socket Name * Type *





Logistics Planner: Other features

Efficient and affordable Zero Emission logistics through the **Next Electric TRUCKS**

Logistics Planner

Next Electric TRUCKS | Missions | Vehicles | Depots | Dashboard | Charging Plans | Eco Charging | DIMITRIS MARGARITIS

EVs Chargers

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Logistics Planner

Next Electric TRUCKS | Missions | Vehicles | Depots | Dashboard | Charging Plans | Eco Charging | DIMITRIS MARGARITIS

Charging Plans

CSV | Excel | Search:

SN	Plate No.	Depot address	Charger	Charger type	Societ type	Start time	End time	Expected SOC
1	PO1234	0th on Harilaou Thoma	Thom2	DC	CCS CO/VCB 2	2024-12-16 09:00:00	2024-12-16 19:00:00	95%
2	PO1234	0th on Harilaou Thoma	Thom2	DC	CCS CO/VCB 2	2024-12-16 16:00:00	2024-12-16 17:00:00	100%
3	ME1234	0th on Harilaou Thoma	Thom2	DC	CCS CO/VCB 2	2024-12-18 10:30:00	2024-12-18 11:00:00	85%

Missions | Vehicles | Depots | Dashboard | Charging Plans | Eco Charging | DIM

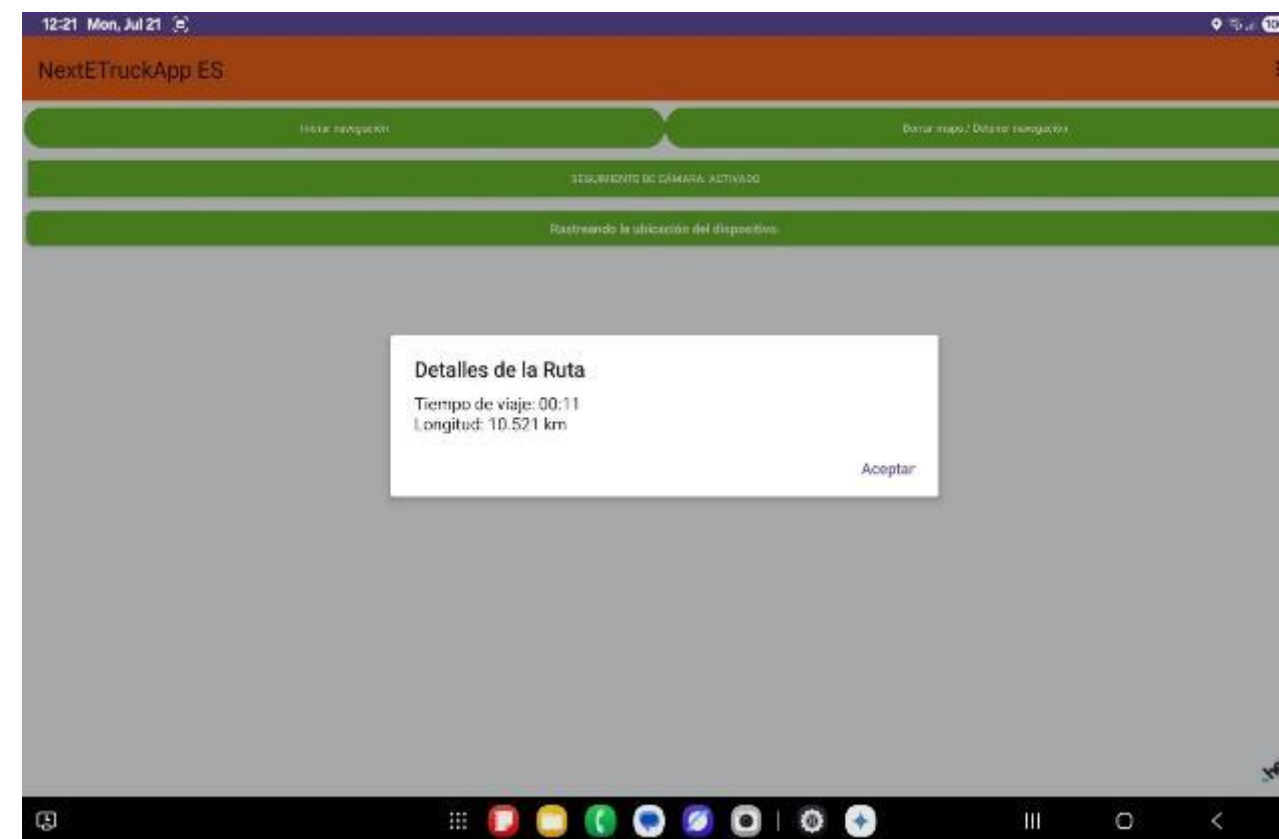
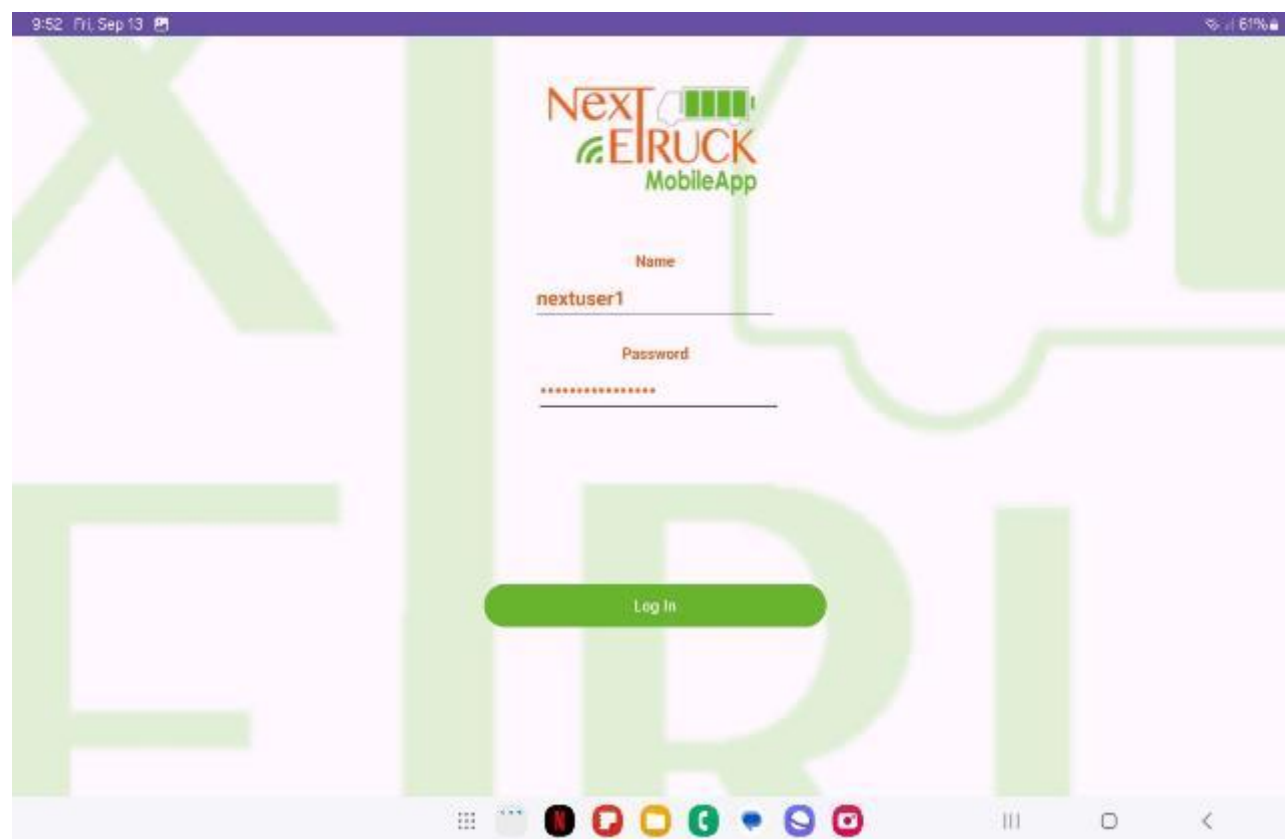
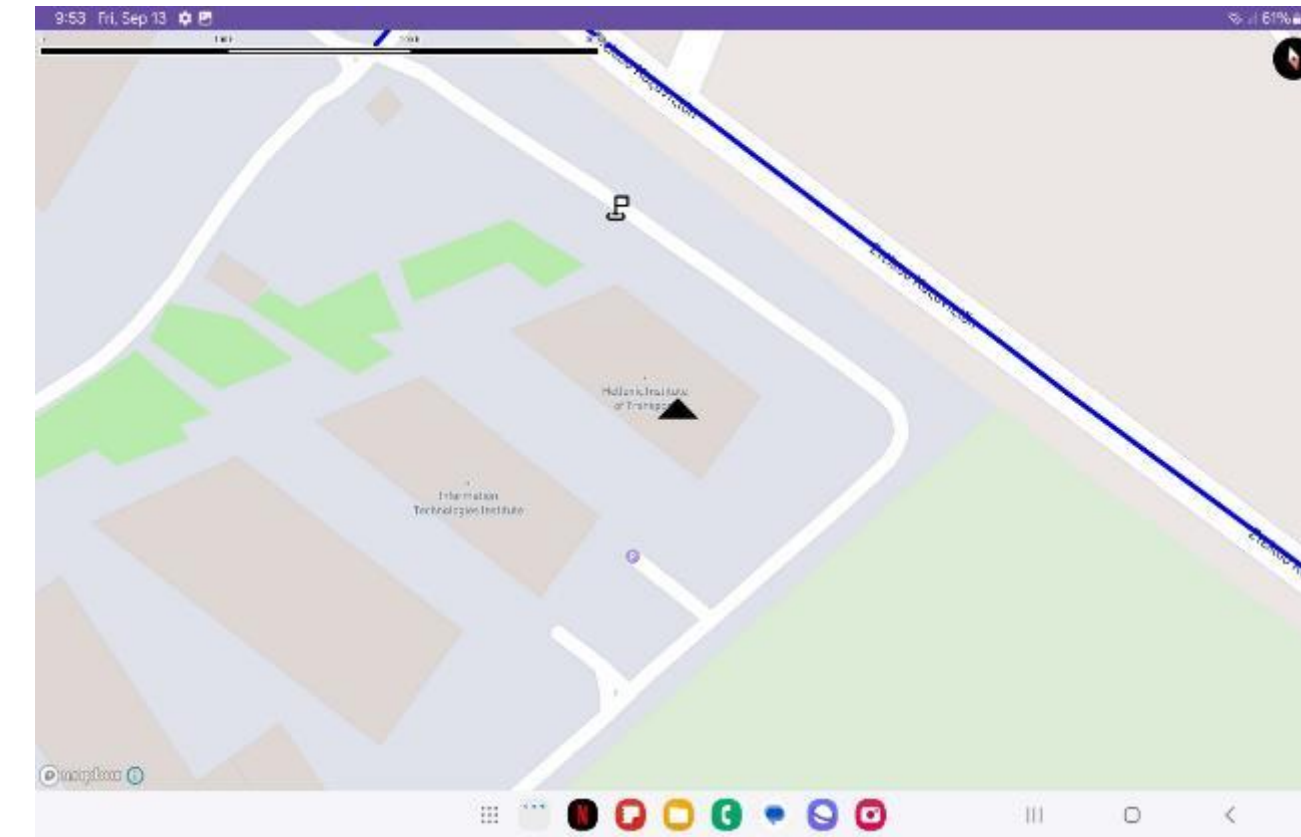
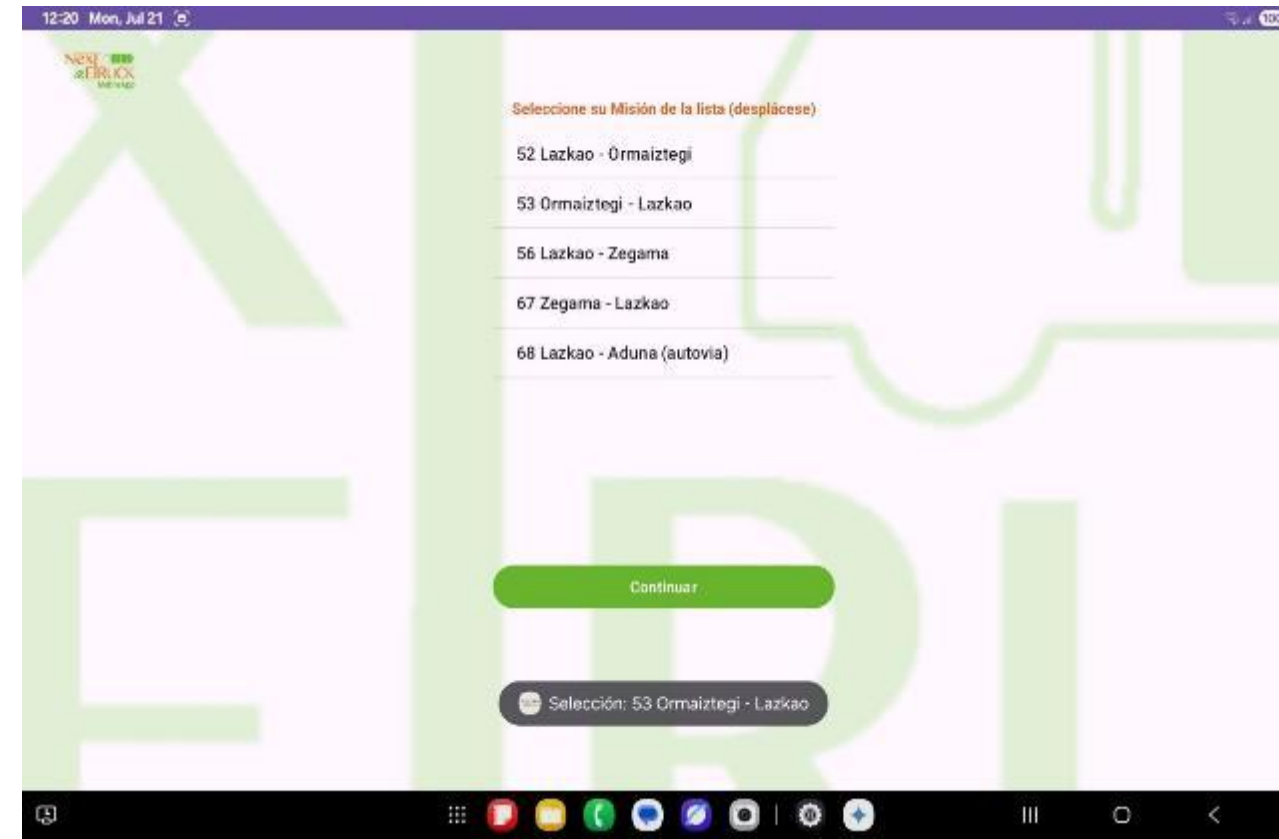
Chargers

CSV | Excel | Search:

SN	Depot Name	No. to Install (22kW)	Install Cost (22kW)	Utilisation (22kW)	No. to Install (50kW)	Install Cost (50kW)	Utilisation (50kW)	No. to Install (150kW)	Install Cost (150kW)	Utilisation (150kW)
1	Ihermi	1	9,000	92%	0	0	0%	0	0	0%
2	Vernia	0	0	0%	0	0	0%	0	0	0%
3	Olvo	0	0	0%	0	0	0%	0	0	0%
4	Charloti	0	0	0%	0	0	0%	0	0	0%
5	Gornali	0	0	0%	0	0	0%	0	0	0%
6	NNG	0	0	0%	0	0	0%	0	0	0%

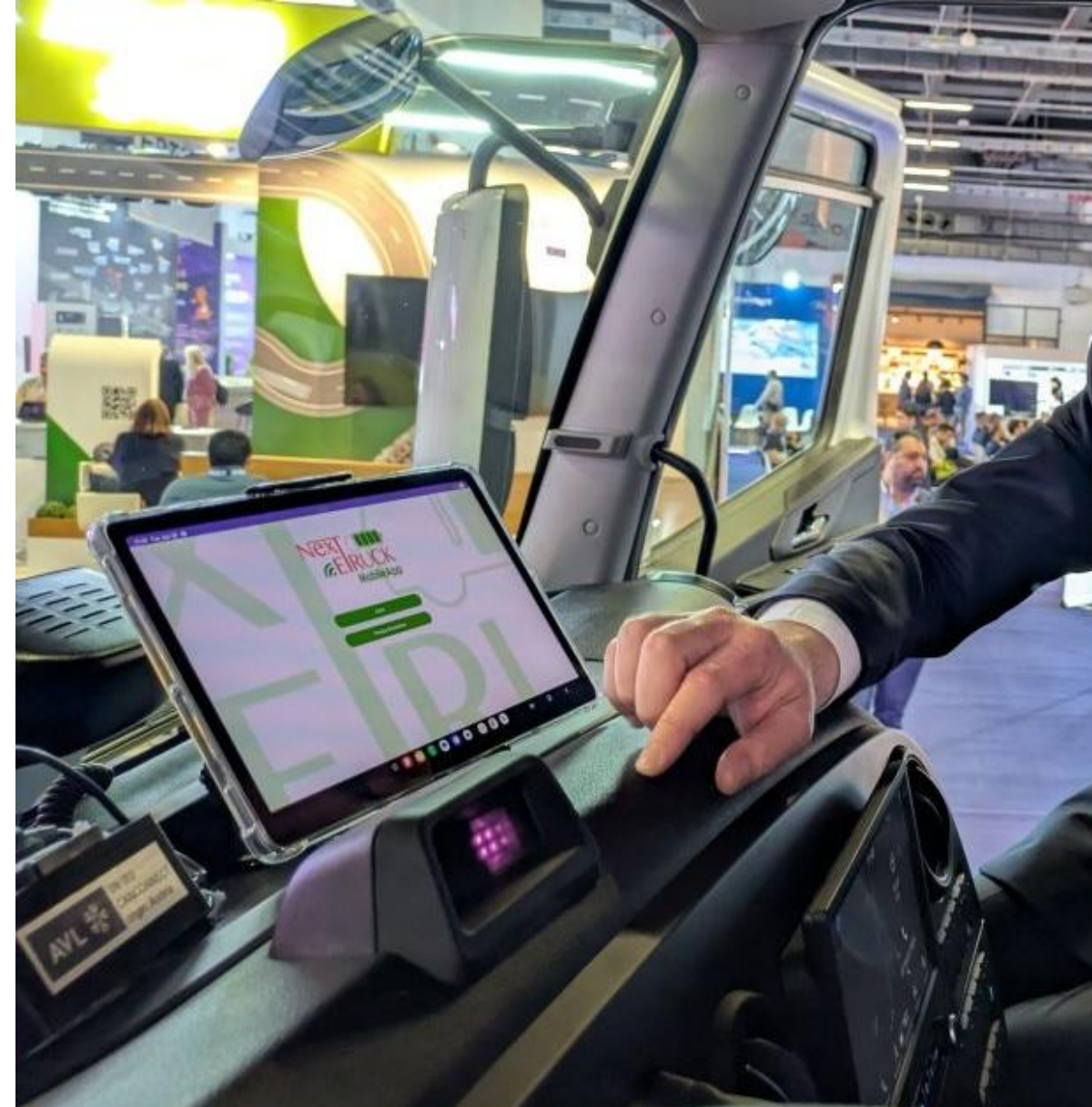
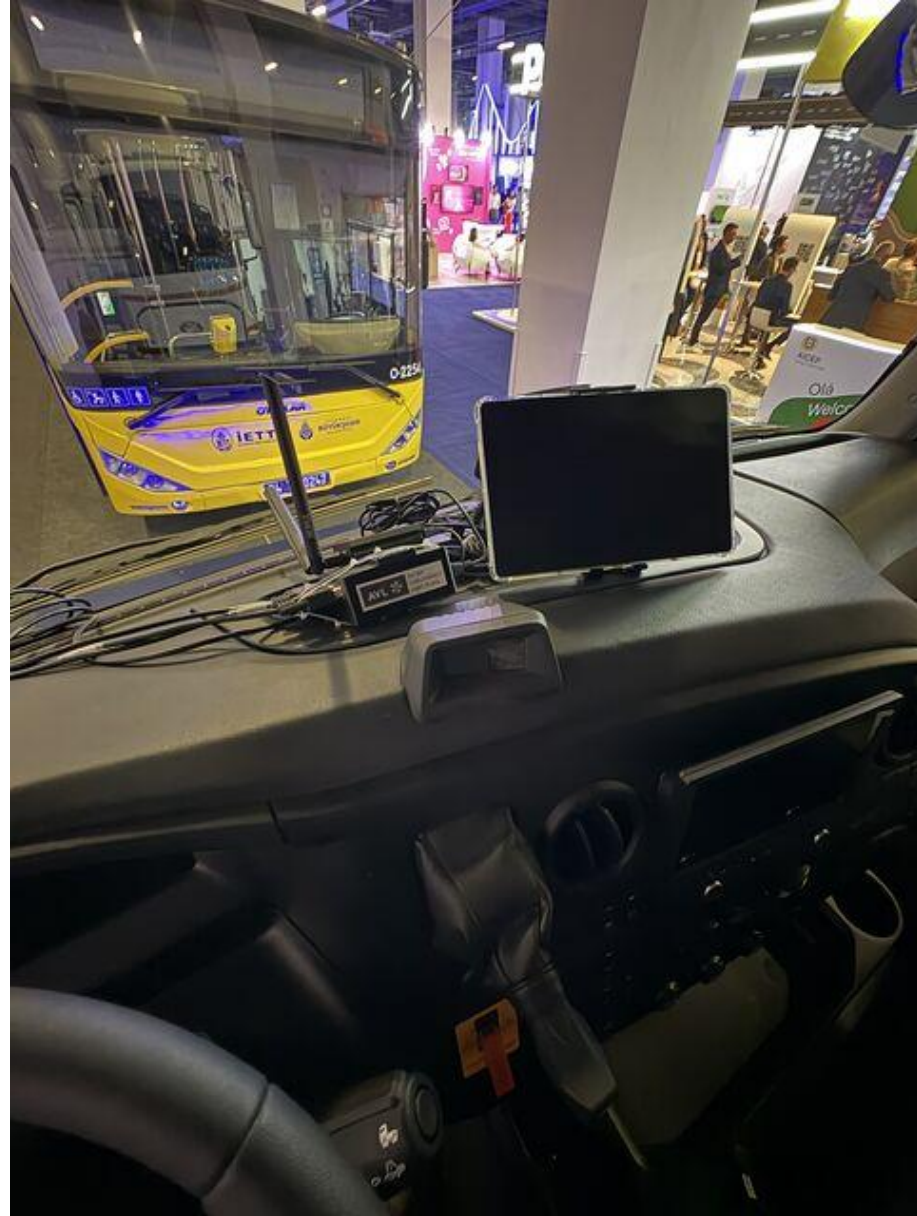


Logistics Planner: Navigation tool





Logistics Planner: FORD demo





Thank you for your attention!



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