



CREATECH

SOFTWARE · AUTOMATION · ARTIFICIAL INTELLIGENCE

ENERGY · FUEL DISTRIBUTION · SEPTEMBER 2026

Every tanker, every trip, under control

Telemetry, cloud cameras, blind spot radar, driver analysis and route optimization for fuel distribution fleets — on one platform.

An integrated field solution that prevents product loss, lowers accident risk and makes every trip measurable. Developed in our own R&D centre, from the hardware to the software.

85%

ROUTE EFFICIENCY

95%

DELIVERY ACCURACY

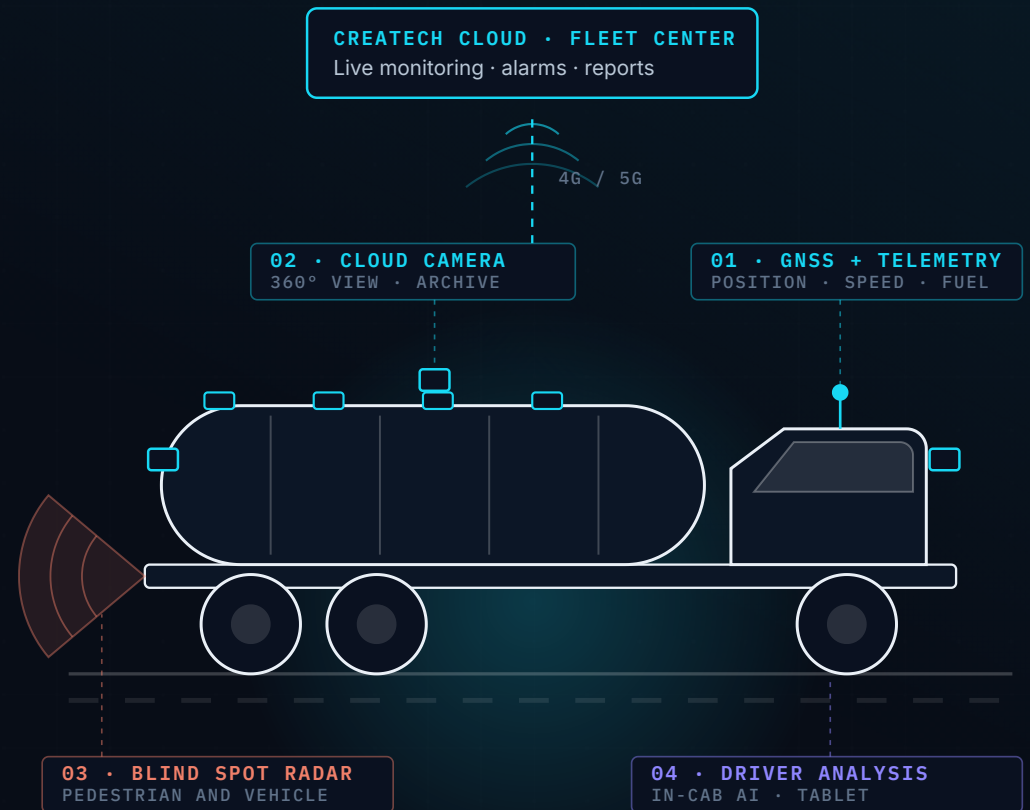
60%

ACCIDENT RISK ↓

These are target values; see page 10.

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01 · THE SECTOR'S CHALLENGES

In fuel distribution, three things must be managed at once

Safety, traceability and cost control. When a measure taken for one makes another harder, field management starts running on guesswork: where the product was lost, why the trip ran long, why the accident happened — all of it discussed after the fact.

The Createch solution ties all three to **one data stream**. The same trip record produces the safety event, the proof of delivery and the cost report.

IN ONE SENTENCE

Seeing what happens in the field **as it happens** and putting it on record — instead of learning about it afterwards.

WHAT HAPPENS TODAY

01 · LOSS

Fuel security and losses

Product delivered to the wrong place, or delivered without authorization, leads to product loss and customer dissatisfaction — often noticed only at stock count.

02 · LOGISTICS

Logistics optimization

Problems in route and delivery planning drive up fuel costs and hurt delivery times alike. The same work is done with more distance and more vehicles.

03 · TRANSPARENCY

Driver and vehicle tracking

A lack of transparency in field activity makes the process harder to manage and reduces efficiency. Reports rest on what people say, reviews on memory.

04 · SAFETY

Safety risks

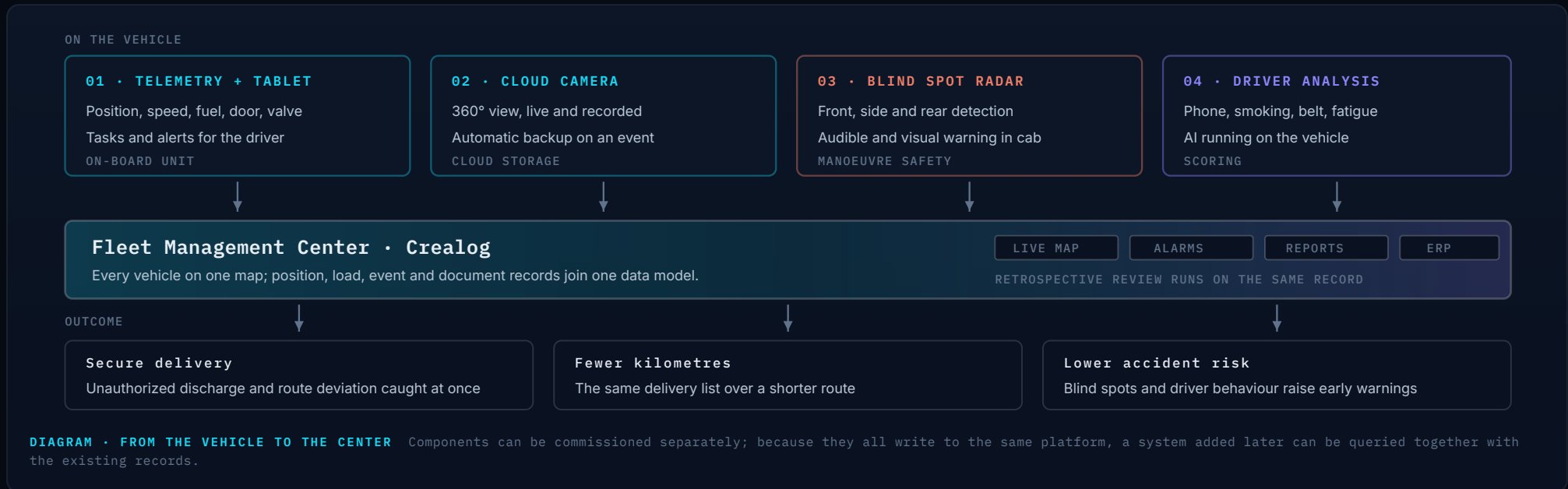
Blind spots and limited visibility increase the danger of workplace accidents. In fuel transport those risks are a matter of life and death.

THE SOLUTION IN SHORT

On the vehicle: **telemetry, cloud cameras, blind spot radar and driver analysis**. At the center: **fleet management and route optimization**. All four write to the same platform, so an event is recorded with its footage, its position and its timestamp together.

Four systems, one data stream, one screen

Every component on the vehicle writes to the same center. A delivery becomes a **single record** carrying its position, its footage, the driver's behaviour and the document trail.



ONE SUPPLIER

Hardware to software

Electronic board design, embedded software, on-vehicle installation, the platform and the AI models are all developed in our own R&D centre.

PHASED ROLL-OUT

Start with one system

You can start with telemetry and add cameras, radar and driver analysis later; no new installation is needed on the platform side.

WITH YOUR SYSTEMS

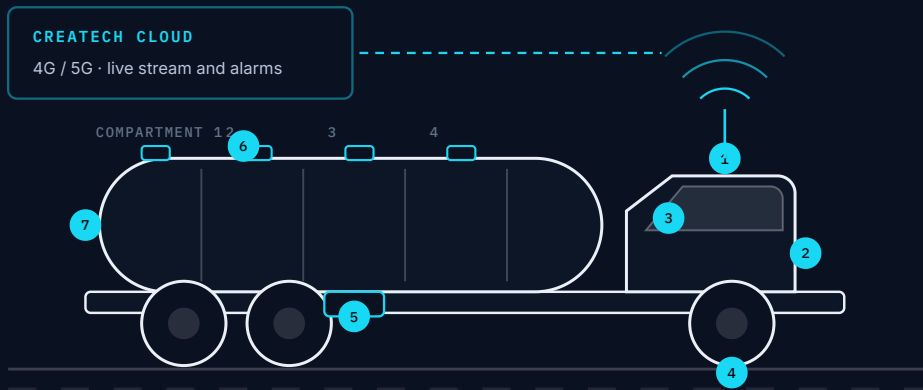
It works alongside your ERP

Trip, delivery and document records are pushed to your existing ERP or order system over an API, so no second data entry is needed.

03 · TELEMETRY AND THE IN-VEHICLE TABLET

Full field control: everything the vehicle knows reaches the center

Our telemetry solution monitors every operational data point from fuel distribution vehicles in real time. The in-vehicle tablet lets drivers receive field instructions digitally, send delivery confirmations instantly and stay in **constant contact** with the center.



- 1 GNSS antenna · position, route, speed
- 2 On-board telemetry unit
- 3 In-vehicle tablet · tasks, delivery
- 4 Vehicle bus data · odometer (CAN)
- 5 Discharge valve and door sensor
- 6 Compartment hatch and level sensor
- 7 Temperature and product type · sector-specific sensor input

The sensor set changes with the vehicle; the diagram is drawn on a four-compartment fuel tanker.

01 · LIVE TELEMETRY

A continuous stream

Vehicle data is sent continuously to the center by sensor technology; map, list and chart views all feed from the same stream.

02 · TABLET INTEGRATION

The driver's side

Drivers follow task and delivery information live on the tablet; the delivery confirmation reaches the center at once.

03 · REAL-TIME ALERTS

Deviation and anomaly

When a deviation or anomaly is detected the system steps in immediately and the center is notified automatically.

EVENT TYPES PRODUCED FROM TELEMETRY

ROUTE DEVIATION

GEOFENCE BREACH

UNAUTHORIZED DISCHARGE

SPEEDING

EXCESSIVE IDLING

HARSH BRAKING

HATCH OPENING

FUEL LEVEL DROP

UNPLANNED STOP

SERVICE THRESHOLD

PROOF OF DELIVERY

Quantity confirmation, signature and a photo are captured on the tablet at the delivery point. The field record and the office document come from the same data, so later disputes are answered from the record.

OFFLINE OPERATION

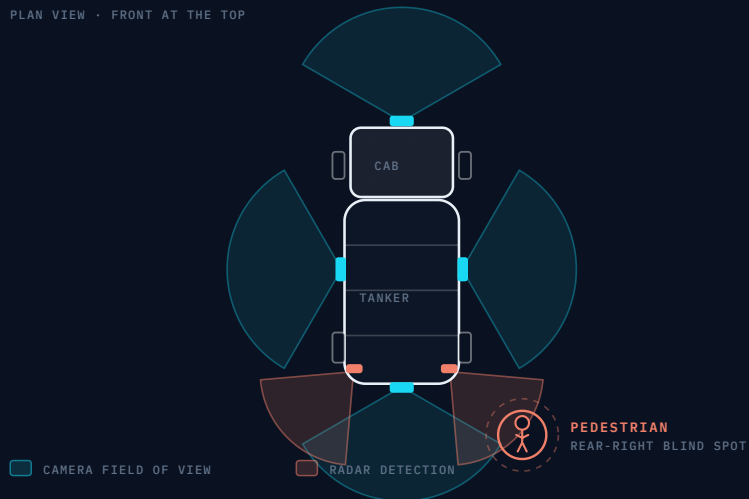
Where there is no coverage the record is held on the device and uploaded once the connection returns. The driver never has to wait and no data is lost.

04 · VISION AND SURROUND SENSING

The camera sees, the radar measures: no blind spot is left

The cloud camera system gives a **360-degree** view around the tanker and carries it to the cloud; the blind spot radar detects pedestrians and vehicles the driver cannot see and warns before the manoeuvre. Both write to the same event stream.

PLAN VIEW · FRONT AT THE TOP



The coverage angles and distances were chosen to illustrate the principle; real coverage is engineered to the vehicle type and sensor configuration.

CLOUD CAMERA · 01

Remote access

The cameras on every tanker in the fleet can be reached live from any device with an internet connection; recorded footage opens in the same interface.

CLOUD CAMERA · 02

Automatic backup

All critical footage relating to dangerous goods transport is backed up to the cloud automatically, preventing data loss.

CLOUD CAMERA · 03

Real-time event alerts

When a fuel security or operational risk is detected, managers receive an immediate alert backed by footage.

CLOUD CAMERA · 04

Archive and reporting

Events relating to logistics operations are easy to filter and detailed safety reports are produced quickly.

RADAR · 01

Instant audible and visual warning

An object in a blind spot triggers an audible alarm and a visual warning in the cab.

RADAR · 02

Wide detection angle

Sensors covering both sides and the rear cover lane changes and reversing.

RADAR · 03

Logging and reporting

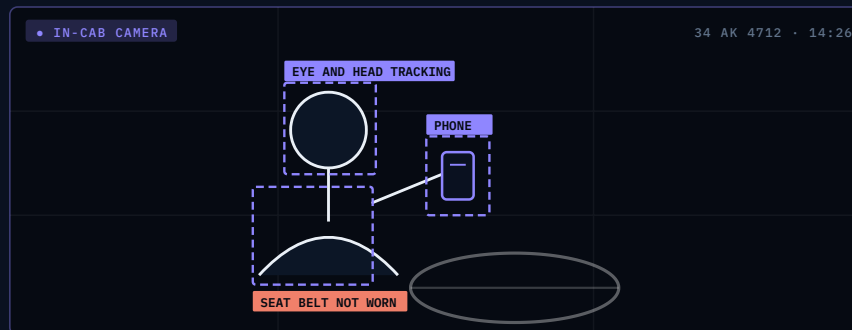
Every event is logged with a timestamp; driver-level risk analysis follows from the center.

EVENT-BASED RECORDING

When a defined event occurs, recording is triggered automatically; **the footage from before and after the event is merged into one file**, archived and sent to the people concerned. Remote analysis and fast decisions work from that file.

Smart monitoring that protects lives

The system monitors the in-cab behaviour of tanker drivers in real time using AI-powered cameras. It detects violations such as phone use, smoking and an unfastened seat belt automatically, and warns **both the driver and the control center** immediately.



MOCK-UP · IN-CAB ANALYSIS AND SCORING The view, detection boxes and score values are SVG mock-ups; the plate, driver codes and numbers are illustrative.

01 · PHONE USE

Detected while driving

If the driver picks up a phone while driving, the system detects it at once, warns in the cab and reports the event to the center.

02 · SMOKING

Fire and explosion risk

The in-cab camera detects smoking. The driver is warned immediately, keeping the risks of fuel transport to a minimum.

03 · SEAT BELT

Checked while moving

Whether the seat belt is fastened is checked and logged while the vehicle is moving. If it is not, an urgent warning is triggered.

04 · FATIGUE

Eye and gaze analysis

Signs of fatigue and distraction such as closing eyes, a dropping head or prolonged gaze deviation are analysed in real time.

05 · CENTRAL SCORING

Per-driver reporting

Each driver's violation history and safety score is tracked on the central dashboard, with detailed reports on demand.

06 · ON-VEHICLE PROCESSING

Analysis runs on board

Analysis runs on the vehicle, so the cab warning needs no connection; only events and their footage reach the center.

THE PURPOSE · PROTECTING HUMAN LIFE

The purpose is not to penalise but to **prevent workplace accidents** and keep safety standards high in dangerous goods transport.

06 · ROUTE AND LOGISTICS OPTIMIZATION

The same delivery list, a shorter route, fewer vehicles

The logistics management system analyses vehicle positions, live traffic data and delivery priorities at the same time to determine the most efficient route. The three things it manages are linked: **cost, time and equipment**.

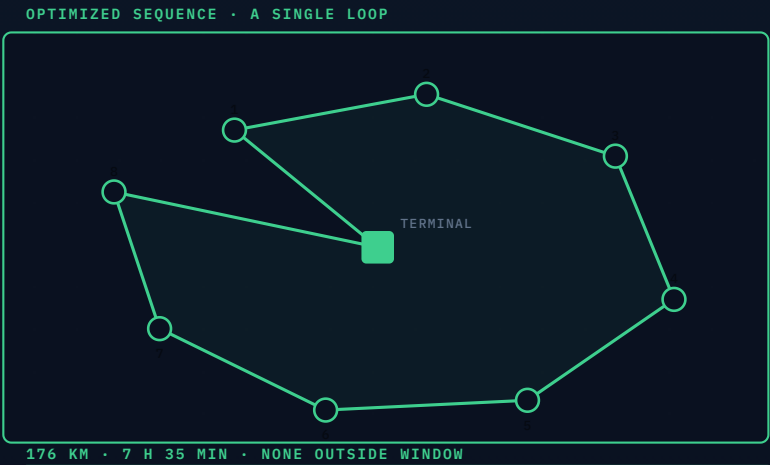
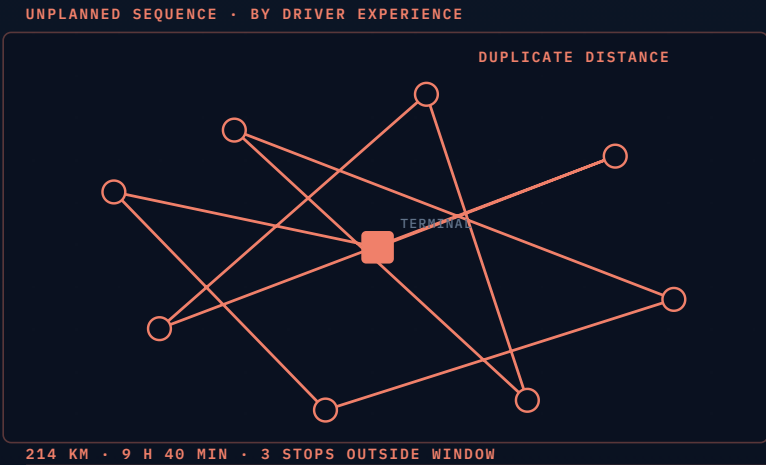


DIAGRAM · UNPLANNED VERSUS OPTIMIZED SEQUENCE The same terminal and eight delivery points in both panels; only the visit order changes. The distance, duration and window figures are illustrative examples, not measured results.

01 · COST

Distance and fuel

- Total trip distance and fuel consumption fall
- Empty returns and duplicate legs never enter the plan
- Trip cost is reported per vehicle and per driver

02 · TIME

Trip duration and window

- Arrival time is calculated before departure
- Stops falling outside the window raise a warning at planning
- Cancellations or new orders resequence the day

03 · EQUIPMENT

Vehicle and tanker capacity

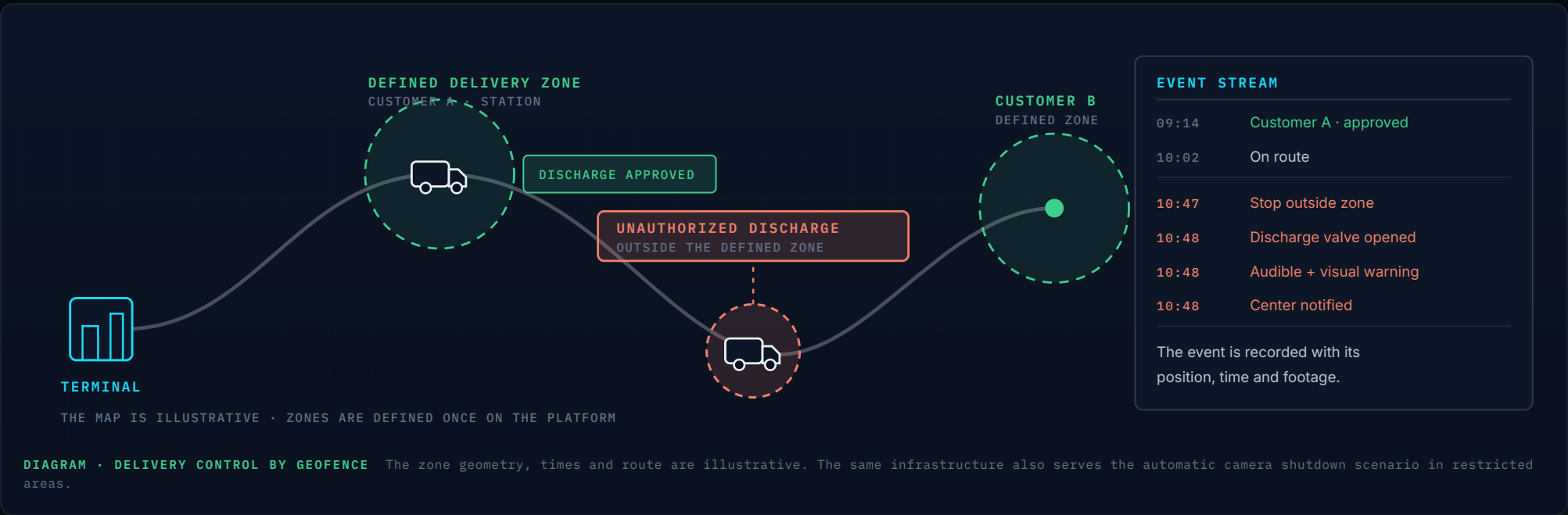
- Delivery volume is matched to compartment capacity
- Fewer trips leave half loaded
- Fleet size is planned to real demand

CONSTRAINTS CONSIDERED

- TIME WINDOW
- COMPARTMENT CAPACITY
- PRODUCT TYPE
- GEOFENCE
- TRAFFIC AND ROADS
- DRIVER HOURS
- BREAKS
- PRIORITY DELIVERIES

Product is discharged only at the defined point, in the defined quantity

If a delivery takes place outside the operating zones defined in advance, or a route deviation is detected, the system steps in immediately: **audible and visual warnings are raised and the control center is notified automatically.** That is how fuel-related product losses are prevented.



01 · ZONE DEFINITION

Marked once

Delivery points and restricted areas are defined once on the map; the system applies those boundaries across the whole fleet.

02 · INSTANT DETECTION

Discharge outside the zone

A discharge attempt outside the defined zone or a route deviation is picked up immediately; a warning is raised in the vehicle and the center is notified.

03 · EVIDENCED RECORD

Position, time, footage

Every event is archived with its position, timestamp and the relevant camera footage; later reviews run from the record.

04 · CENTRAL MANAGEMENT

Updated from one place

Zone rules for the whole fleet are updated and monitored from one platform; adding a new customer is a single operation on the map.

Real-time fleet management: every process under control

Vehicle position, load status and operational data are updated continuously, so your fleet can be followed **live** on a comprehensive digital map. Every operational detail — from driver behaviour analysis to transparent delivery tracking — is controlled centrally.



01 · LOCATION

Live position tracking

GPS position data from every vehicle is shown on the map in real time, making field movements easier to manage.

02 · ROUTE

Route optimization

The most efficient route for each delivery is calculated automatically and updated dynamically as conditions change.

03 · ALARM

Automatic alert system

Managers are notified immediately of unauthorized delivery attempts or route deviations.

04 · REPORTS

Performance reporting

Detailed per-driver and per-vehicle reports support analysis of operational efficiency and identify where to improve.

LOSSES ARE PREVENTED BEFORE THEY HAPPEN

The system detects incorrect or unauthorized deliveries automatically, keeping response time to a minimum. Delivery attempts outside the defined rules and geofences are picked up immediately, **preventing product losses before they happen**.

ALONGSIDE YOUR EXISTING SYSTEMS

The fleet management center integrates with your existing ERP, order and accounting systems over an API. Trip, delivery and document records can be pushed one way or both ways; because the field record and the office document come from the same data, no second data entry is needed.

Measurable operational benefits

The concrete gains the deployed systems deliver in operational processes.

85%

ROUTE EFFICIENCY GAIN
Advanced optimization algorithms cut unnecessary distance and fuel consumption significantly.

40%

LESS MANUAL CHECKING
An automated telemetry monitoring infrastructure markedly reduces the need for manual checking and follow-up.

95%

DELIVERY ACCURACY
Real-time logistics management raises the rate of on-time, correct deliveries and strengthens customer satisfaction.

60%

LOWER ACCIDENT RISK
Using blind spot radar, cloud cameras and driver analysis together catches risks at an early stage.

ABOUT THESE FIGURES

The percentages above are **target values**, not measured results from a particular installation. Project-specific targets are set by measuring the current baseline and reviewing the results of a pilot. The distance, duration, plate and time values in the diagrams are illustrative examples as well.

WHY CREATECH

IN-HOUSE R&D

Through our own R&D centre we develop innovative, sustainable solutions built specifically for the needs of the energy sector.

SECTOR EXPERTISE

Years of experience in fuel distribution mean we know the operational needs of sector leaders at first hand.

CONTINUOUS SUPPORT

Our expert technical team delivers fast, effective service to keep your operations running without interruption.

MEASURABLE RESULTS

Our solutions are designed to deliver concrete efficiency gains and cost savings in operational processes.

NEXT STEP

Carry your operations into the future

From telemetry and the in-vehicle tablet to cloud cameras and blind spot radar, from driver analysis to route optimization, we offer solution packages built around your needs. Systems can be commissioned one at a time and all come together on the same platform.

Get in touch for detailed information, project consultancy or a demo. Our technical team is ready to put together a solution for you.

01

Fleet review

Your vehicles, routes and delivery structure are reviewed together and the priority gains identified.

02

Pilot install

Real measurement on a limited number of vehicles; the gains are seen in your own data.

03

Demo

A live walkthrough of the fleet center, event stream and reporting screens.

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