# DISTRIBUTION & LOGISTICS

## >REAL-TIME OPERATION TRACKING

VTS-KATSO

**STARCOM** Systems

PTV | GROUP

The mind of movement

**VTs** x3
Solutions Inc.

**KATSO**
Communications SAC
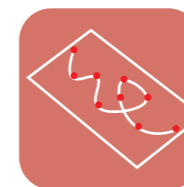
# > LOGISTICS OPERATION
# MONITORING

**Trace and Tracking**
Inventory RFID

**Warehouse**
RFID Automation

**Route Planning and Optimization**
Integration with ERP

**Loading Optimizer**

**Share Estimated Time of Arrival (ETA)**
with Customers and Distribution Centers

**Fleet Management**

**Remote Management and Monitoring of Fuel Consumption**

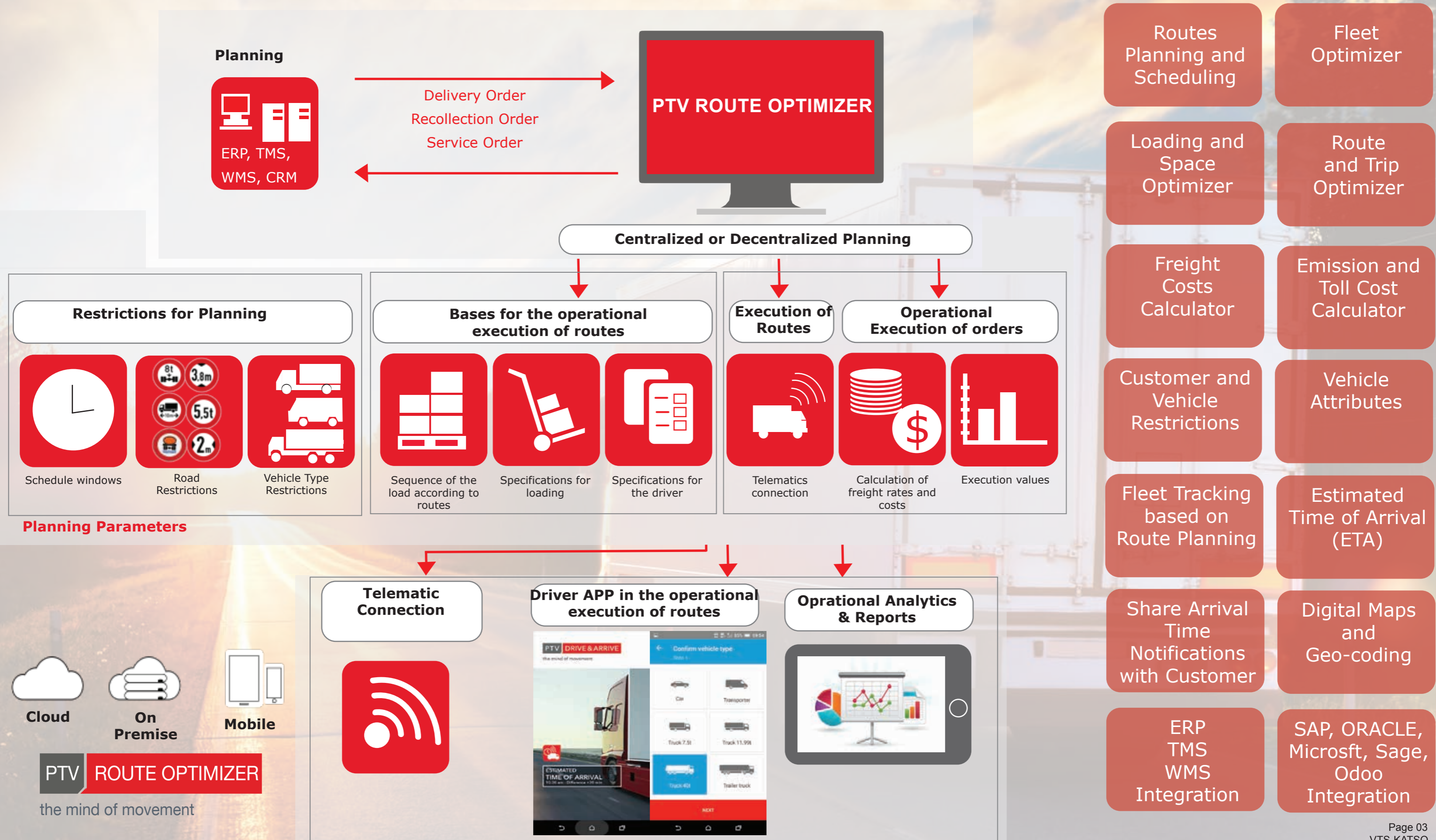**Remote Openness of the Container Door, and/or Cargo Door**

**Monitoring of Delivery Plan Vs Execution**

PLAN    REAL

Integration with:

SAP    Microsoft

ORACLE odoo

# > ROUTE PLANNING AND DELIVERY MONITORING

**Planning**

ERP, TMS, WMS, CRM

Delivery Order
Recollection Order
Service Order

**PTV ROUTE OPTIMIZER**

Centralized or Decentralized Planning

## Restrictions for Planning

Schedule windows | Road Restrictions | Vehicle Type Restrictions

8t | 3,8m
5,5t
2m

**Planning Parameters**

## Bases for the operational execution of routes

Sequence of the load according to routes | Specifications for loading | Specifications for the driver

## Execution of Routes

## Operational Execution of orders

Telematics connection | Calculation of freight rates and costs | Execution values

Cloud | On Premise | Mobile

**PTV | ROUTE OPTIMIZER**

the mind of movement

## Telematic Connection

## Driver APP in the operational execution of routes

PTV DRIVE & ARRIVE
the mind of movement
Confirm vehicle type

Car | Transporter
Truck 7.5t | Truck 11.99t
Truck 40t | Trailer truck

ESTIMATED TIME OF ARRIVAL

NEXT

## Oprational Analytics & Reports

Routes Planning and Scheduling | Fleet Optimizer

Loading and Space Optimizer | Route and Trip Optimizer

Freight Costs Calculator | Emission and Toll Cost Calculator

Customer and Vehicle Restrictions | Vehicle Attributes

Fleet Tracking based on Route Planning | Estimated Time of Arrival (ETA)

Share Arrival Time Notifications with Customer | Digital Maps and Geo-coding

ERP TMS WMS Integration | SAP, ORACLE, Microsft, Sage, Odoo Integration

# > COURRIER SERVICES

# > LOGISTICS SECTOR

ColiPoste

chronopost

EXAPAQ

deret

dpd

GEODIS

FRANCE EXPRESS

pickup services

Groupe GUISNEL

DHL

relais colis
www.relaiscolis.com

DB SCHENKER

DELICom

Colitel
Groupe Expédiel

TNT

Star's service
La logistique du dernier km.

KUEHNE+NAGEL

- Logistic Service Providers

RHENUS LOGISTICS · Post.at · TNT · H.ESSERS · EXAPAQ · Hermes

DHL · KUEHNE+NAGEL · C.H. ROBINSON · GEODIS · DFDS · DACHSER

- Retail/ Wholesale

EDEKA · SPAR · COOP · REWE · Serta SIMMONS

TROST Alles für Kfz-Profis · BILLA heute · C+C SCHAPER · PAPYRUS · antalis

- Industries
  - Transport

RWE · Nestlé Good Food, Good Life. · FRESENIUS KABI · ThyssenKrupp Materials Ibérica UNA EMPRESA DE THYSSENKRUPP SERVICES · LAFARGE DEUTSCHLAND

DANONE · XXXLutz · Linde · LANGNESE · DAIMLER · Miele · TINE

  - Field force

INDESIT We work, you play. · VW · L'OREAL · Pfizer · BOSCH

TOYOTA · P&G · NOVARTIS

- Software vendors and integrators

SAP · SIEBEL · ATHOS · SMC³ · genefix · T··Systems

ClickSoftware · Lotus software · TELETRAC NAVMAN · kratzer AUTOMATION · KEWILL

**Customer Source System Internal / External**

**ERP, WWS, TMS**

**Transfer BD**

**ASCII**

**SAP I-DOC**

**EXCEL**

PTV ROUTE OPTIMIZER

the mind of movement

**Modulos Opcionales: Add-on**

Route Planning

Freight Costs Calculation

* Planning Objects Adding

Execution Monitoring

Route Editor

Telematic Interface

Multi-user

PTV Driver & Arrive

**\* Atributos del Camión, límites código ZIP, datos histórico del tráfico**

## PTV | DRIVE & ARRIVE

the mind of movement

# ARRIVAL BOARD

| ARRIVAL | WILL ARRIVE IN | #CARGO | Line Truck | GATE |
|---|---|---|---|---|
| 08:30:00 | **15 min** | Furniture | MASTER TRUCK ECM5364 +55 3624 1109 | #15 |
| 09:30:00 | **30 min** | Liquid cargo | MASTER TRUCK DBA42 74 +55 3614 1211 | #14 |
| 10:30:00 10:35:00 | **45 min** | Beverages | K-100 TRJA32 56 +55 3618 1309 | #11 |
| 09:30:00 | **46 min** | Harzadous goods | APG SABG8713 +55 3922 1467 | #09 |
| 10:30:00 10:35:00 | **50 min** | Beverages | K-100 DRTG7819 +55 5412 1675 | #03 |
| 09:30:00 | **CANCELLED** | Fireworks | APG PBTY6614 +55 4412 1727 | #01 |
| 08:30:00 | **1:50 h** | Liquid cargo | MASTER TRUCK LBjY6734 +55 6756 8765 | #04 |

TOUR STATUS: **DELAYED**

ESTIMATED TIME OF ARRIVAL
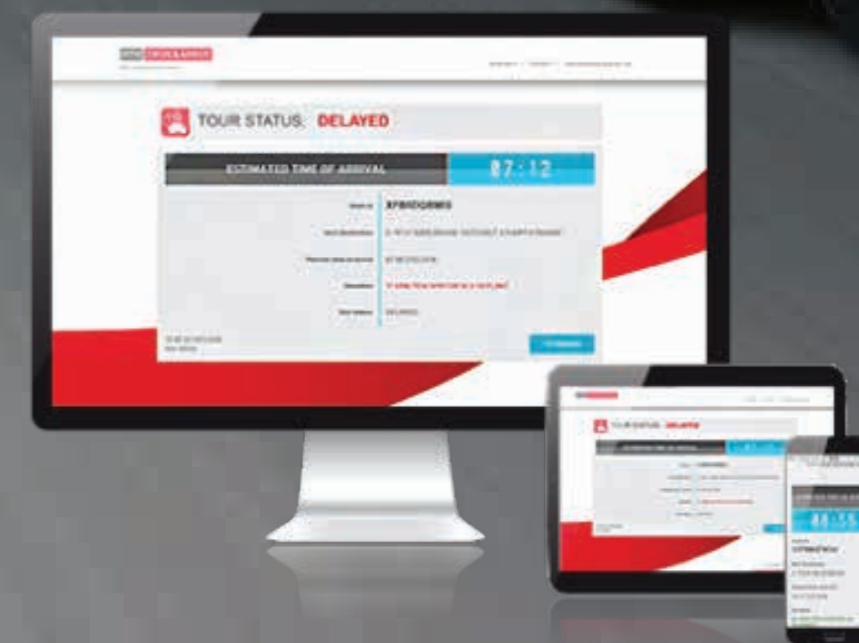
> **ACCURACY ON ESTIMATED TIME OF ARRIVAL** OF THE VEHICLE

## ARRIVAL BOARD

| ARRIVAL | WILL ARRIVE IN | #CARGO | BUS LINE | TERMINAL |
|---|---|---|---|---|
| 08:30:00 | **15 min** | Furniture | AGUIA BRANCA<br>ECM5364 +55 3624 1109 | #32 |
| 09:30:00 | **30 min** | Liquid cargo | CATERINENSE<br>DBA42 74 +55 3614 1211 | #19 |
| 10:30:00<br>10:35:00 | **45 min** | Beverages | 1001<br>TRJA32 56 +55 3618 1309 | #22 |
| 09:30:00 | **46 min** | Harzadous goods | COMETA<br>SABG8713 +55 3922 1467 | #20 |
| 10:30:00<br>10:35:00 | **50 min** | Beverages | ARAGUARINA<br>DRTG7819 +55 5412 1675 | #08 |
| 09:30:00 | **CANCELLED** | Fireworks | ANDORINHA<br>PBTY6614 +55 4412 1727 | #11 |
| 08:30:00 | **1:50 h** | Liquid cargo | AGUIA BRANCA<br>LBjY6734 +55 6756 8765 | #17 |

> **ACCURACY ON ESTIMATED TIME OF ARRIVAL OF THE VEHICLE**
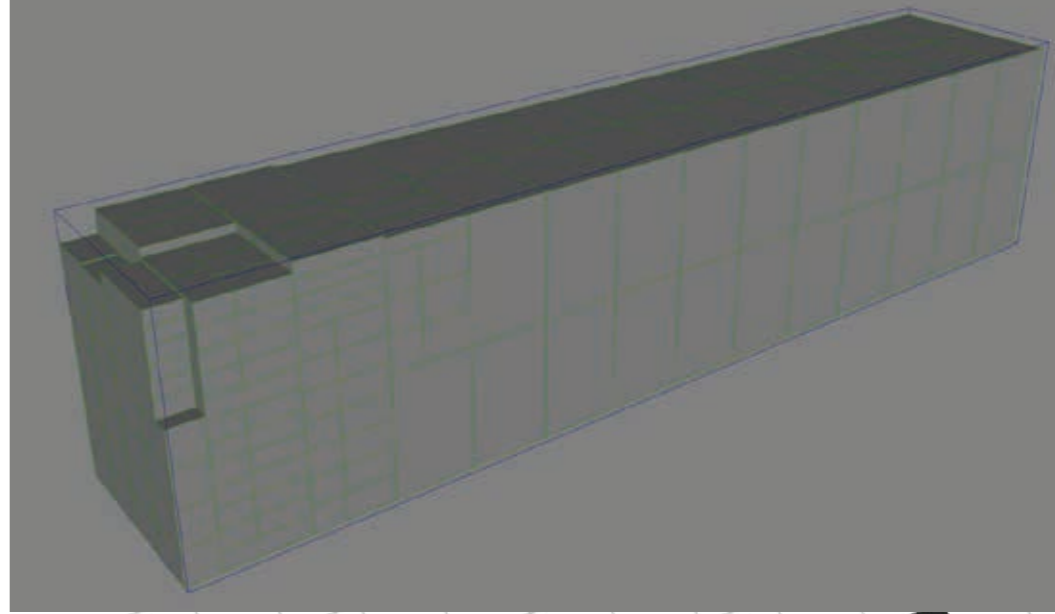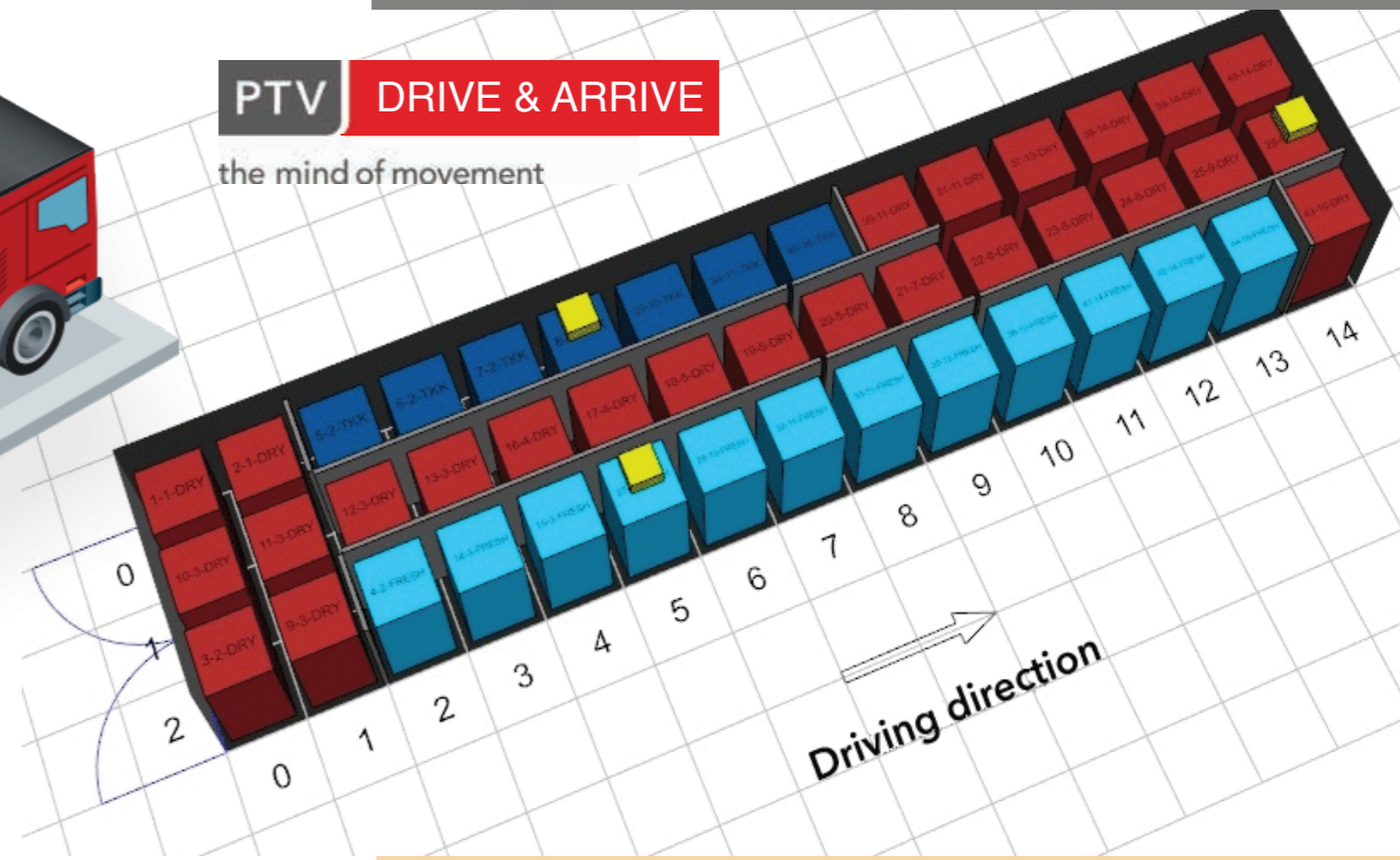
## > LOADING AND SPACE OPTIMIZER
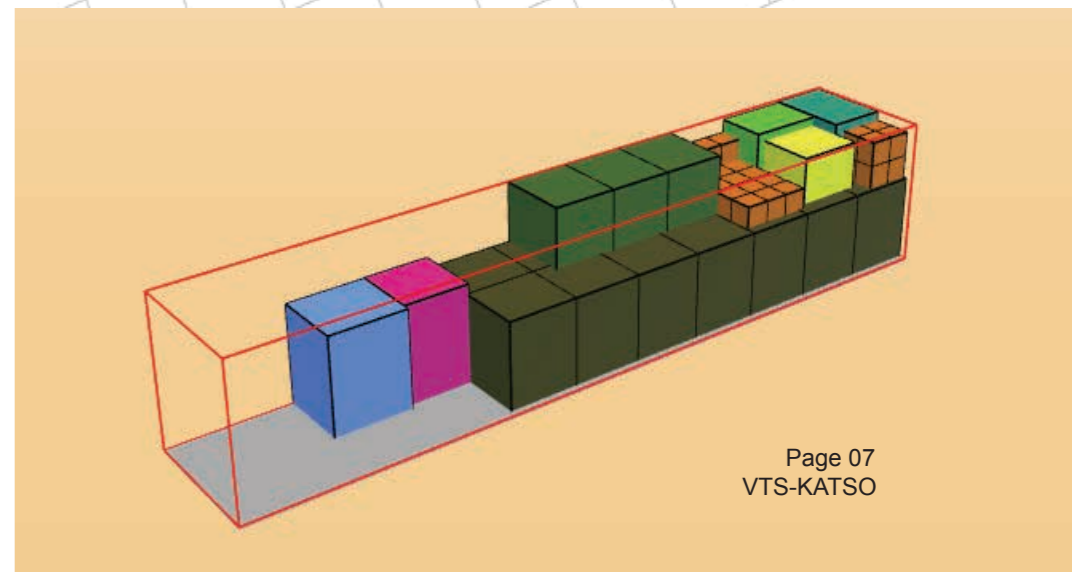
# REMOTE MONITORING OF FUEL COMSUMPTION



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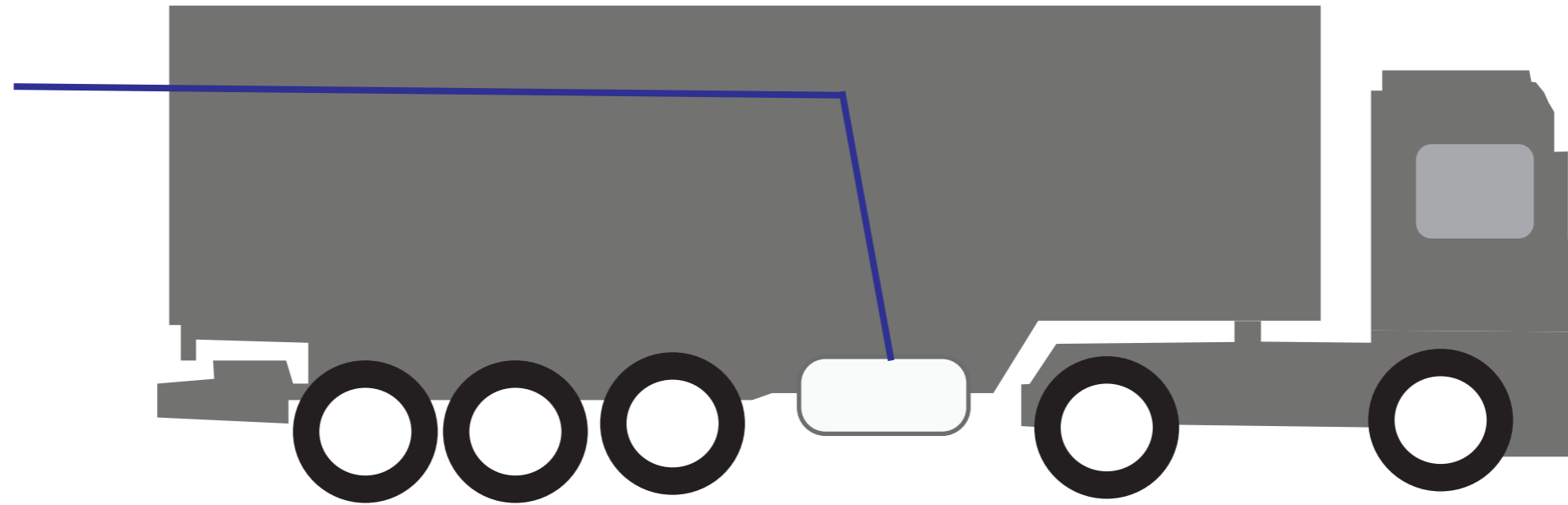
## REMOTE MONITORING OF FUEL COMSUMPTION

# > FLEET MANAGEMENT

## FLEET MANAGEMENT

Events Programing,
Speed Control,
Control of the KM,
Curves Detection,
Engine Running,
Notices Perimeters,
Measurement of the Fuel,
Monitoring Values,
Driver Identification,
Automated Tracking,
Transmission of KM.

## PROTECTION OF THE VEHICLE AND DRIVER

Emergency button,
Detection of Abrupt Braking,
Detection of an Accident,
Auto Lock,
Lock / Unlock Doors.

## COMMUNICATION

Cellular connectivity
TCP connectivity
Data Encryption
Navigation Support
Support of third party devices,
Data Encryption,
Anti-jammer
Compact Protocol

## LOCATION

Tracking and tracing in real time,
GPS Mileage,
Last storage location,
Operation of events log in an independent way,
Events log,
Backup Server,
Data in private cloud.

## ALARM SYSTEM

Theft detection system,
Programming times,
Wakeup from accelerometer:
Towing Detection:,
4 Disarming Devices:,
Gradual detention of the vehicle through the pulses sent to the fuel pump

## EVENTS PROGRAMMING

Control of Inputs / Outputs using geofencing programming.
Programming of variables:
- Temperature
- Speed
- Perimeter
- Location

## AIR COMMANDS

Assemble / Disassemble,
Remote On / Off Remote,
Disconnection of Fuel Pump,
Remote Opening / Closing of doors,
Integration with applications of Roadside Assistance,
Communication of Voice and Data,
Vehicle Tracking,
Vehicle Status,
Parameters Programming.

## CONTROL TOWER

Monitoring of Fleet,
Monitoring of Compliance,
Monitoring of Inputs / Outputs,
Monitoring of Programming Events,
Recording of Time Delivery,
Remote Assistance,
Attention to the Emergency calls,
Fuel Pump Lock in case of theft,
Integration with Emergency Services,
Integration with BI.

# > SECURITY & PROTECTION FOR CARGO IN MOTION

**LOKIES**
**Smart Keyless Padlock**

- Remote Openness from Control Center

- Remote Openness thorugh Authorized Users

- Location, Date, Hour, and Authorized User Identification

- Events Programming and Real-Time Alerts
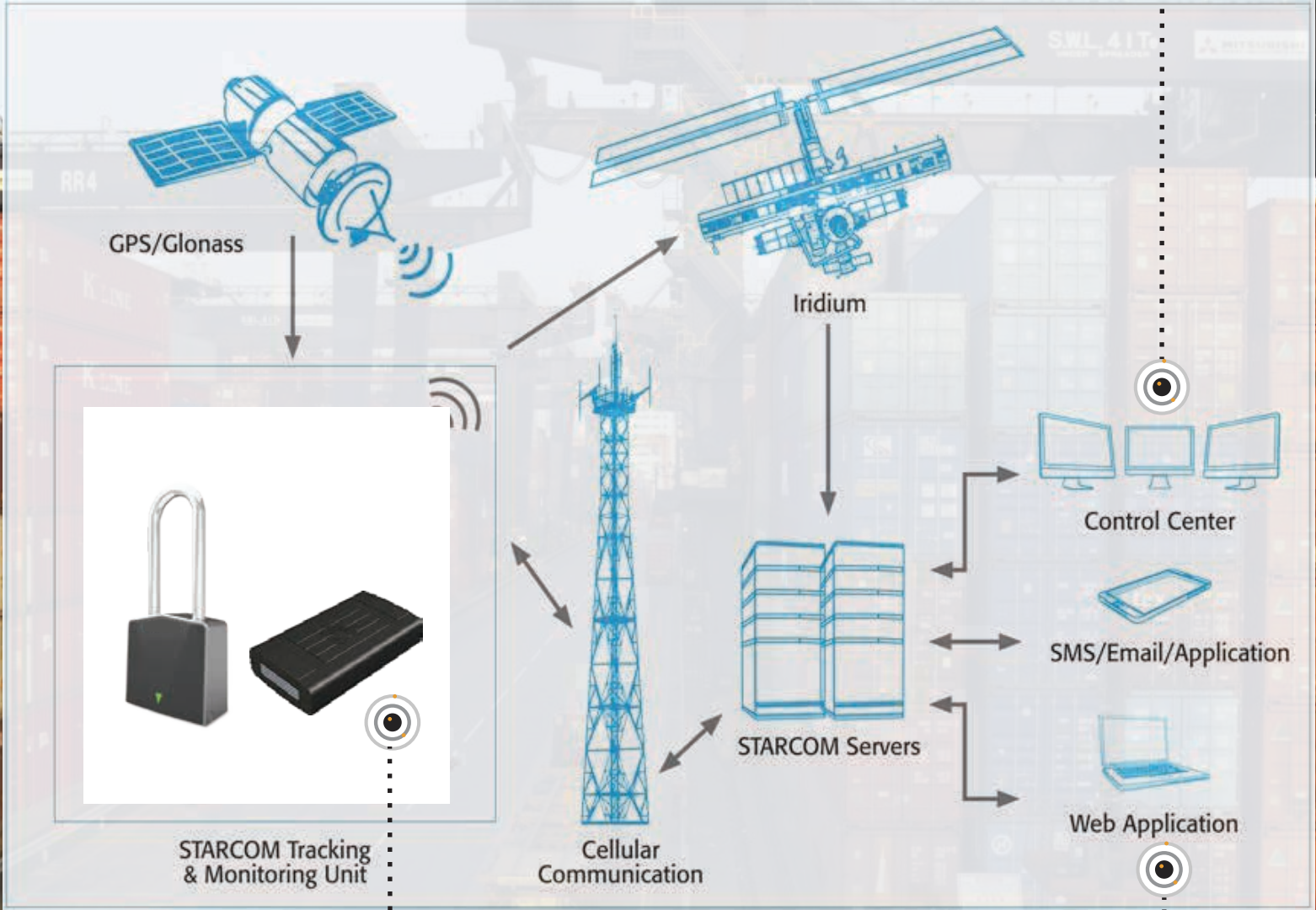
- Monitoring Center and Mobile Apps

**Remote Openness and Smart Design**

Physical Dimenssions of Hard Shackle 110mm

Physical Dimenssion of Padlock 80x80x32mm

IP Protection
-20ºC to +60ºC operacional
-40ºC to +85ºC almacenamiento

Multi-User ID

Color

**Corporate Security**



MONITORING CENTER

LOCAL MONITORING CENTER

Air Communication with devices
Automated Alerts
Events Monitoring
100% availability of Location
Cellular and Satellite Communication

GPS/Glonass

Iridium

STARCOM Tracking & Monitoring Unit

Cellular Communication

STARCOM Servers

Control Center

SMS/Email/Application

Web Application

HW Programming
Built-in Antennas
Sensor vehicle integration
Digital vehicle integration
Analog vehicle integration

Events Programming
Variable Programming
Alerts Programming
Users Administration
Access and Security Profiles
Web Platform

Available on the App Store

GET IT ON Google Play

Mobile Apps for Autorized Users

# HELIOS ADVANCED HYBRID

## Satellite tracking for remote locations without cellular connection

**FLEET MANAGEMENT**

**PROTECTION OF THE VEHICLE AND DRIVER**

**COMMUNICATION**

**LOCATION**

**ALARM SYSTEM**

**EVENTS PROGRAMMING**

**AIR COMMANDS**

**CONTROL TOWER**

**SATELLITE MODEM IRIDIUM FOR LOCATION AND TRACKING**

## Uses

**Remote locations without access to the cellular network**

monitoring in remote sites without access to the cellular network and it has a high risk of theft.

**Remote locations with the risk of theft,**

remote sites of difficult access, without access to the cellular network, which are prone to theft or kidnapping.
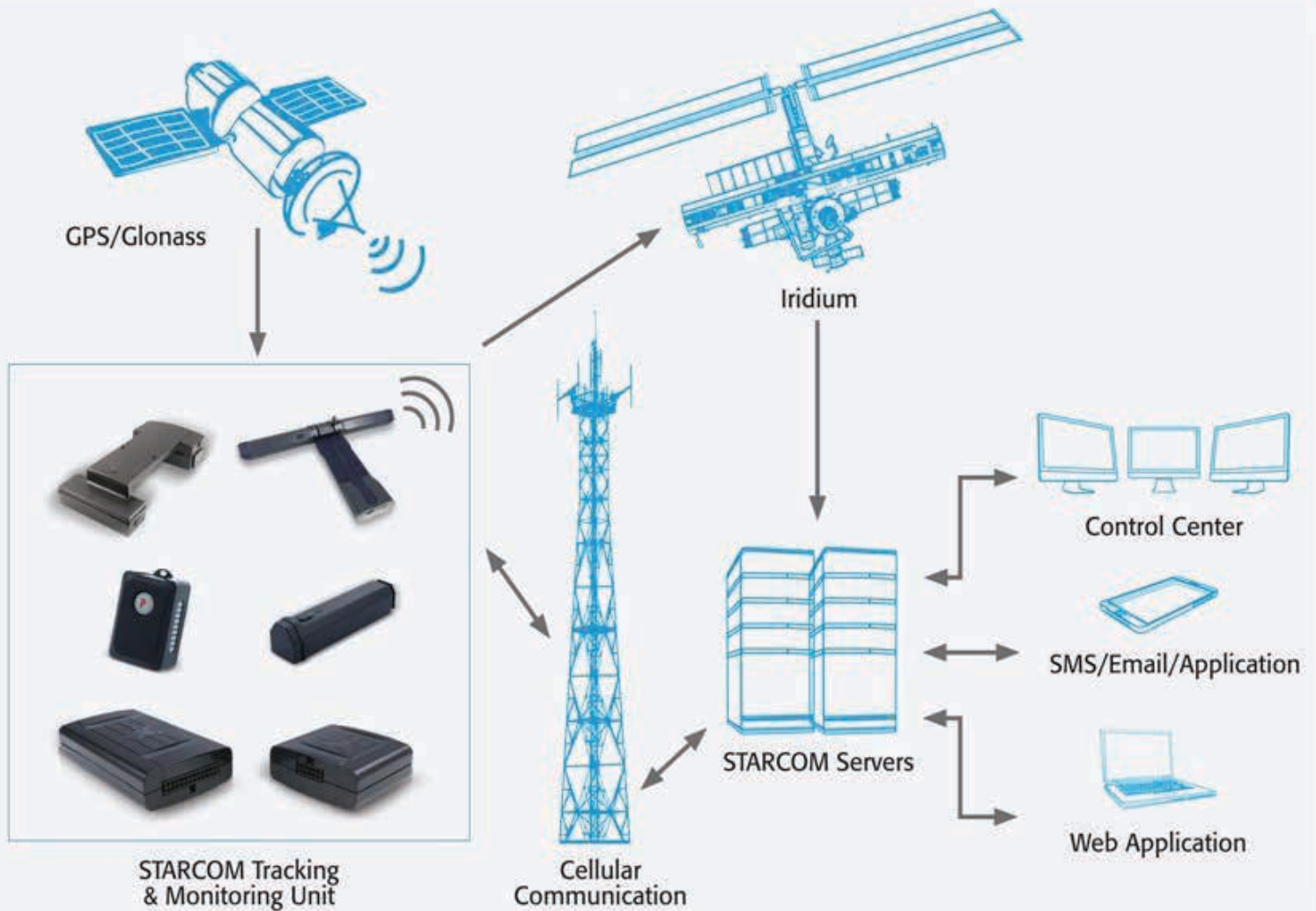
**Roads through deserts and jungles**

roads without communication, such as deserts and jungles, that may be of risk to the carrier by an accident or mechanical failure.

**Roads between mountains**

highways of hard accessibility, that the module of the satellite can prevent risks on track and prevent accidents.

## Real-time monitoring in remote locations without cellular network

# Arquitectura de la Aplicación Starcom Online



GPS/Glonass

Iridium

STARCOM Tracking & Monitoring Unit

Cellular Communication

STARCOM Servers

Control Center

SMS/Email/Application

Web Application

Integration with fuel sensors

# Technology

The entire cellular technology solution (GSM / CDMA / HSDPA) and location (GPS / GLONASS) enable real-time tracking throughout the world using a user-friendly web-based application, which can be easily implemented and accessed from anywhere in the world, in almost any language. All Starcom GPS tracking systems are ISO-9001: 2008 certified and meet the highest industry standards, including:

## ISO-9002 Certified

Tested products in field with global certification

## GPS/Glonass and the lastest Cellular Technology

2G, 3G y 4G - LTE.

## Global Compliance Regulations

# ◉NLINE PLATFORM



## Advanced Web-based Fleet Management with Starcom's exclusive flexible event generator.

Starcom Online offers advanced features:

Detailed maps at street level.

Complete management solution - with Starcom Online, you can manage all your vehicles, assets, employees and much more, all in one tool.

Define your own events with the Starcom Event Generator.

Receive predefined alerts under the required configuration according to the needs of THE CLIENT.

Automatic generation of daily, weekly or monthly reports that can be customized

Obtain all the information of THE CLIENT's needs to manage their requirements, from multiple databases, vehicle data, work schedules and much more.

# ONLINE PLATFORM

## Unique Starcom Event Generator:

Starcom Online's unique Event Builder lets you predefine an event that uses a combination of components or conditions. For example, an event could consist of speed in a specified area, door opening or stopping of vehicles in unauthorized areas, definition of geographical fences and recording of the time when the vehicle enters or leaves the field or geographic fence .
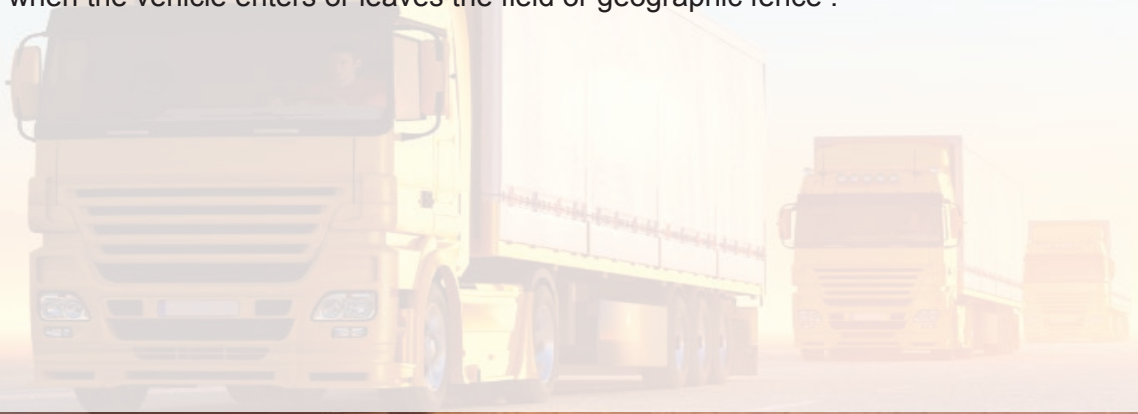
## Starcom Online - advanced solution that provides many benefits:

**Easy to use -** Starcom Online is friendly and requires no installation.

**Cost Reduction -** Monitoring of driver behavior to achieve immediate cost reduction.

**Total Supervision and Control -** Starcom Online helps you create a more efficient organization.

**Application available anytime, anywhere.** Access the Starcom Online platform from anywhere at any time
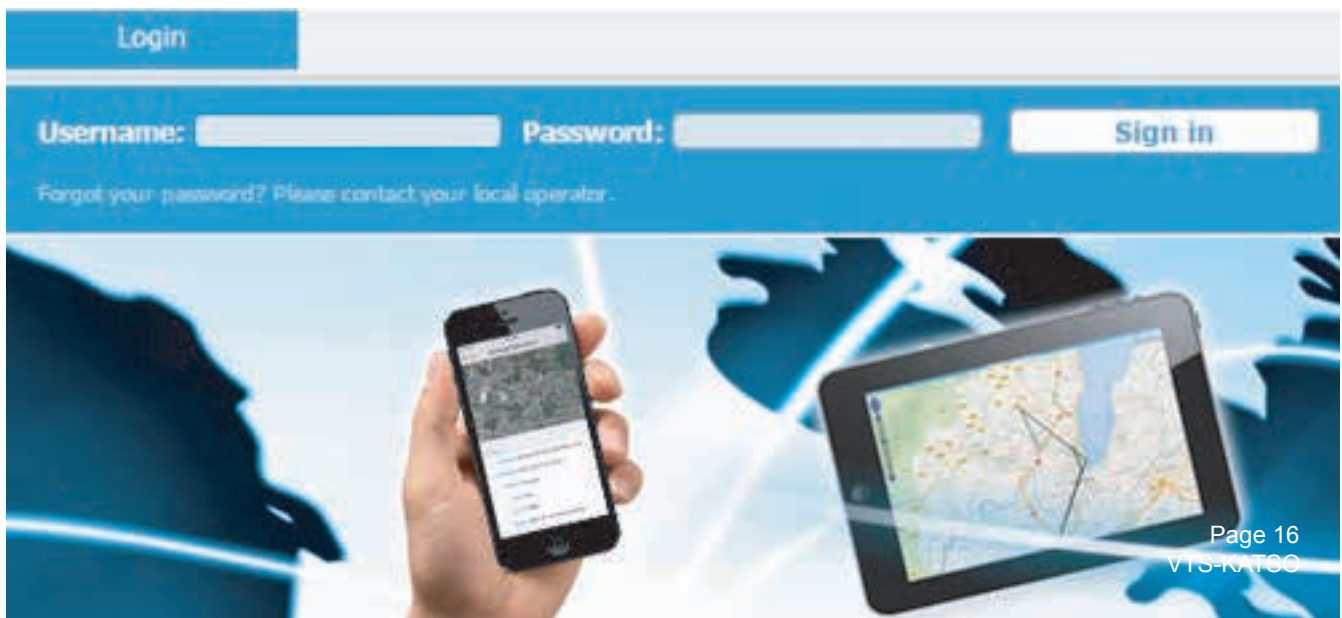
# Remote Monitoring Center

**Alarms, Events, and notifications** are handled as incidents from the Monitoring Center in Real Time.

**Alarm activations attention t**o detection of the location of the event.

The incidences reported, and managed by the Center **can be integrated with the delivery order of ERP (SAP, Oracle, Sage, Microsoft).**

# Monitoring Center

**ODBC support:** The software uses ODBC connections, and therefore you can connect to any database platform.

**Customers:** contains all the information about the VH, including entity, Location, Model, etc.

**Emergency Services:** Contains information about the emergency services for each zone, for calls to bodies of private or public security.

**Stations of installation:** Contains information about the authorized installation stations and their authorized employees.

**Operators:** Contains the list of operators registered in the system, including permissions to access the software for each of them.

**Displays the units:** in a map with the monitoring system of the unit, presenting to the nearest emergency body that can provide assistance and relevant information.

**Keeps a record** of all actions, dates and users.

**Customizable chain of events** in case of an emergency

# Mobile application for the reaction of the body of security
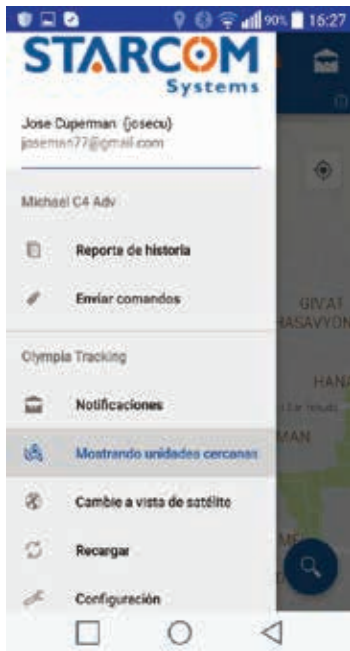


**Identification** of the unit in Emergency or Accident

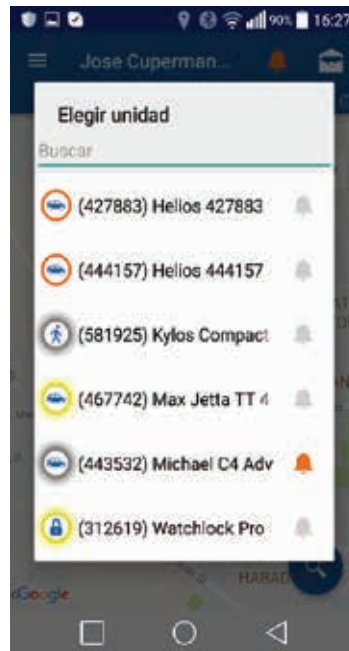Allows the **location of the unit** hrough the download of apps.

**The follow-up** to notification, alarm or event linked to the vehicle using Apps.

**Access authorization** for monitoring through the Apps for security forces.
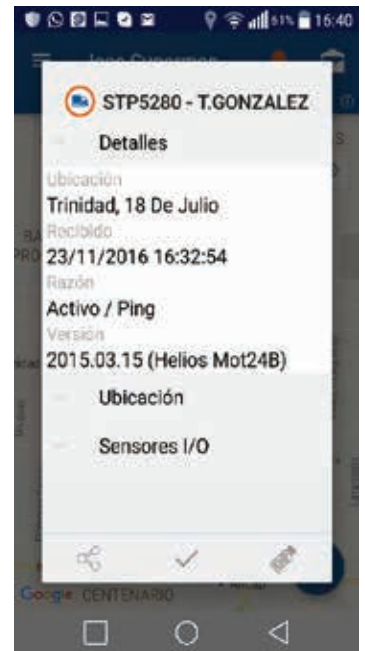
# Olympia Mobile App



**Options**   **Units**   **Location**   **Details**



**Receives alerts in real time**

**Visualization of the location of the fixed assets or in motion**

**Gives all the details of each active device by**

**Viewing the list of notifications**

**Displays details and location of each notification**

**Notification Settings**

**Historical reports per unit**

**Compatible with devices with IOS or Android system**

# HELIOS

**> Real-time solutions for fleet management, protection against theft and security systems**

- **Autonomous units**
- **Quick and easy installation**
- **Events configuration**
- **Audit log**
- **Geofencing**
- **Accelerometer**
- **Information in memory**
- **Roles and Authorizations for users**
- **System based on the web**
- **Multiple languages.**

# STARCOM Systems

Starcom Systems is a leading global company, specializing in advanced automated real-time systems for emote tracking and management of vehicles, containers, assets and people. All systems are characterized in strength, stability and continuous performance.

Starcom Systems is publically traded on the AIM Market of the London Stock Exchange, conforming to the highest and most strict regulations in the market, proving its stability and reliability.

Starcom's systems provide a complete solution, consisting of innovative equipment and unique software. Thanks to the user-friendliness of the system, it provides useful and effective solutions, based on each user's settings and requirements.

With more than 15 years of experience and expertise, Starcom Systems distributes and sells its products through 110 technology partners and independent operators in more than 53 countries, and its application operates in 32 languages. As a global company, Starcom Systems' products include certifications from all the leading standards in the world, including E 24 certification, Safety certification, EMC test certification, Tuv-Rheinland certification and more.

## Certificate ISO 9002

Products tested in the field with global certification
**(TUV, FCC, E-24, and EMC)**

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www.vtssolution.com/starcom

**VTs** Solutions Inc. x3

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