LEONARDO CYBER & SECURITY SOLUTIONS

ViGATE

GATE AUTOMATION AND ACCESS CONTROL FOR PORTS AND CRITICAL INFRASTRUCTURES

Secure Cloud & Digital

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ViGATE is the Leonardo Gate Automation Suite for speed up and optimize your operations at gates. Long truck queues and, in general, vehicles at gates can contribute significantly to emissions, noise, and traffic congestion in and around infrastructures. Gate management strategies reduce idle emissions and lower average wait times.
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ViGate platform provides solutions for the control procedures management for pedestrian, vehicles, in port entrance/ exit and critical infrastructures. Controls can be applied in logistics contexts (maritime and inlands hubs) also for railway freight trains.

SUITE SOLUTION

ViGate suite is composed by:
- **The lane infrastructure:** CCTV cameras, sensors and devices configured and integrated according any single specific context to automate the identification and recognition of:
- **People:** Identity document, Badge, Biometric device, Pin code,Bar code, QR code, RFID label, Smartphone
- **Vehicles:** Front/rear licence plates, Railway wagon code (UIC), RFID label
- **Goods:** Container (BIC - ISO6346), Intermodal loading unit (ILU), Dangerous goods by road (ADR), Dangerous Goods by Rail (RID), RFID label, QR code or Bar code, trailer plate.

The complete vehicle lane is generally equipped with a kiosk that will allow the driver to be identified while remaining seated in the vehicle, even in the absence of the security staff and execute all the necessary operations to enter or exit, communicating with the central personnel, if it is necessary.


Some example of multi technology kiosk

SOFTWARE PLATFORM

The software platform that consists of a Central Module that allows to manage the application, all the databases and the Gate Module that supervise and automate the gate operations.

The **Central Module** consists of the following products:
- **ViGate Management Console**, which deals with the centralized management of the access control platform and all the data registered on the system; its main functionalities are:
  - Management of users, parameters, roles
  - Infrastructure management (zones, gates, security levels, access logics, …)
  - Management of personal data relating to People, Vehicles, Companies, Permission Cards, etc.
  - Emission and management of permission tickets
  - Occasional fast ticket creation and management
  - Search for permission tickets
  - Transit search and reports.

- **ViGate CheckPoint,** which allows the saving of all transits at the gates on the central database.
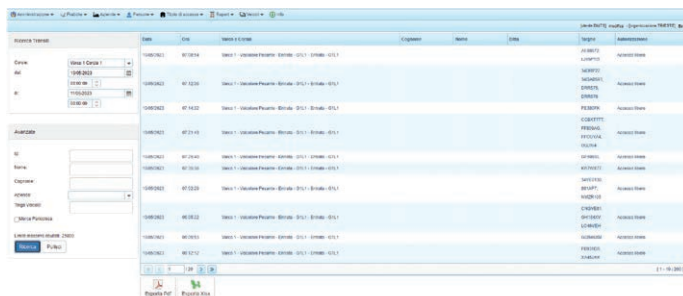
- **ViGate Operator Console**, which allows operators to supervise transits at gates in real time. The operator will have a geographical view on the map and a detailed one. For each gate it will be possible to activate the details of the events for the gate and the visualization of the video streams.
  For each lane of the gate, moreover, the operator will be able to interact with the field devices (e.g.: opening bars, displaying the status of traffic lights, etc.).

- **Service module**, which allows central interaction with other systems.
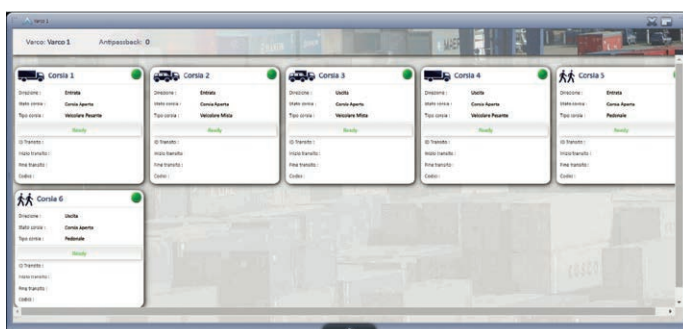
The **Peripheral Gate Module** (ViGate CheckPoint) allows to validate, time stamp and automatically register the entry or exit of people, vehicles and goods. The module acquires information from the automatic reading and recognition of barcode, QR code, RFID devices, licence plates and other identification codes at the transit of any entering or exit lanes equipped with heterogeneous devices.

The Peripheral Gate Module has the following main functions:
- Gate equipment management
- Acquisition of information from the lanes that make up the passage
- Transit supervision to give the operator visual and immediate feedback on field operations
- Local storage of transit data and information
- Sending of any information and status from field (badge readers, plates, etc.)
- The reception of the actions to be performed (presentation of messages on the screen, opening of bars/turnstiles, enabling or disabling of devices, etc.).

The ViGate platform has a centralized database and a set of "lite" databases on each gate. The local databases are synchronized with the central one until any loss of connectivity, ensuring in any case the autonomy and operation of the gates.

MOBILE GATE

The mobile application of ViGATE Suite enables the creation of a Mobile gate. In this way, the gate operator can:
- move freely in the area of the gate without getting behind the console to monitor or control the transit bars.
- go to the vehicle in transit and make more accurate controls before opening the bar.
- open a temporary gate to allow special access.
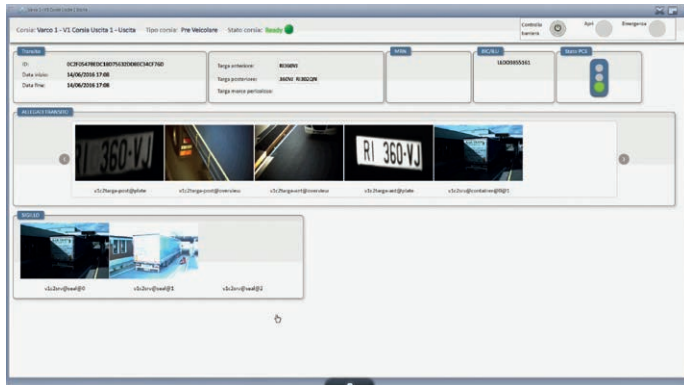
RAILWAY MODULE

A specific gate portal is designed and build for railways in cargo terminal to automate the operation for entering and exit of trains. Main functionalities are:
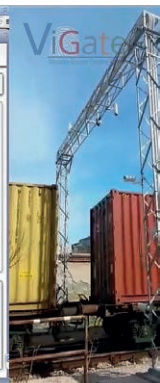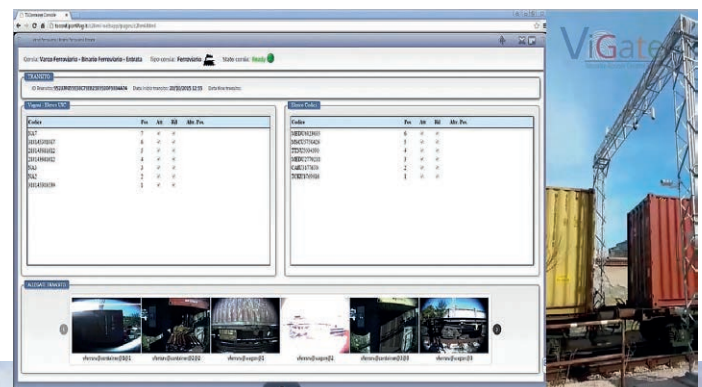- Reconstruction of in transit trains «trace» (carts, sequence and goods on each one)
- Long-range verification of correspondence between the scheduled train and the train in transit.
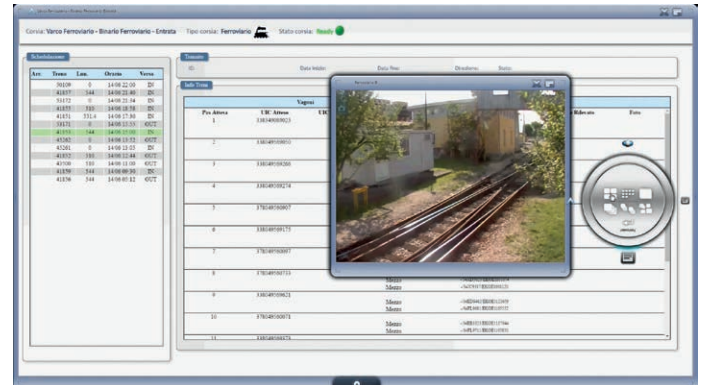
STRENGTHS AND BENEFITS

Thanks to our advanced technologies and the modularity and scalability of the solution, ViGATE Suite ensure:

- Full integrability with Terminal Operating Systems, providing acquired data and images in real time

- Automated control of transit procedures, removing the necessity of having personnel at the gate or optimizing it.

- Speed up of control procedures

- High modularity, allowing to implement applications which meet specific terminal operator requirements.

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