

SUCCESS STORY



ICO steers its port vehicle processing to pole position thanks to INFORM'S software solution

International Car Operators reached its ambitious goals by implementing a terminal operating system that meets the full scope of business needs.

International Car Operators

International Car Operators (ICO) is one of Europe's most important stevedoring companies for roll-on/roll-off cargo, offering vessel and terminal handling services, vehicle processing centers, port agency, customs clearance and forwarding. ICO is a subsidiary of Nippon Yusen Kaisha (NYK Line), one of the world's leading transportation companies.

In 2019, ICO handled a total volume of 2.6 million cars and high and heavy units at its specialized roll-on/roll-off terminals in Zeebrugge and Antwerp. All major ro/ro shipping lines and OEMs are served.

www.icoterminals.com

Background

International Car Operators (ICO) specializes in roll-on/roll-off (ro/ro) cargo handling. With terminals in Antwerp and Zeebrugge, it provides terminal handling services, vehicle processing, port agency services, and forwarding of around 2.6 million vehicles and 3,000 vessels every year.

ICO's Vrasene terminal in Antwerp covers 125 hectares and is the main terminal for the import of nearly all Korean makes of car as well as imported cars from Japan and European cars on their export routes. Zeebrugge is Europe's main handling terminal for finished vehicles and is the hub for the European car transit trade.

Handling around 7,000 vehicles every day is a major logistical feat. Each car is worth thousands of euros and requires different levels of service and must travel only the minimum distance so ICO's logistics coordinators had to find the optimal parking spot for each. Tens of thousands of them are parked bumper-to-bumper, either waiting for their transshipment to other countries or being prepared to their delivery to new owners.

The challenge

Such high volumes of traffic require tight management. However, before 2012, each location used a different IT-system and largely depended on manual calculations for logistics processes. This presented a major undertaking for ICO's logistics managers.

"It was difficult to link the two systems and make changes so we started a project to create a system that would unify the Antwerp and Zeebrugge ports," says Alain Guillemyn, General Manager Corporate at ICO. "Our goal was to ensure that the cars were handled more efficiently. We mapped our business processes and created a blue-print of what we needed, then investigated the best the market had to offer to accomplish our goals."

The solution had to provide:

- eGate for electronic inbound and outbound processes;
- Optimization of order processing for truck, vessel and rail planning;
- Efficient yard and berth planning;
- VPC optimization;
- Terminal optimization;
- Prevention of incorrect shipments;
- Accounting system improvements and electronic invoicing;
- Web portal for customer interactions;
- Direct interfaces to customer systems;
- IT flexibility to address customer requests and map new business processes.

ICO reviewed 16 suppliers: eight that were still building their software and eight that had products already available, one of which was INFORM. Even with cultural and operational differences at ICO's two sites (Antwerp deals mostly with longhaul and Zeebrugge shorter journeys), both parties unanimously agreed on a co-engineering setup between ICO and INFORM around the software solution intelligent yard management for three principal reasons:

- The completeness of mapping terminal processes with ICO's operational business knowledge;
- the intelligent processes that automate all entire terminal planning and optimize logistics processes;
- the flexibility to allow new business processes and workflows to be implemented.



Thanks to INFORM's software solution, our workflow efficiencies and costs are streamlined beyond our expectations.

Alain Guillemyn, General Manager Corporate ICO

The solution

INFORM already offered an intelligent yard management system that identifies the ideal berth location for vessels, the ideal parking position for each vehicle and tracks all information relevant to suppliers, dealers and manufacturers and limits the distance each vehicle must drive. INFORM worked with ICO to co-engineer a bespoke solution based on their established and trusted INFORM's software.

"INFORM helped us create 'work schemes', which give us a graphical representation of our business processes," says Mr Guillemyn. "We now have a simple way of changing orders electronically and all the complex logic has been transferred to the system. The new system went live in Antwerp in 2012 and in Zeebrugge in 2013."

To minimize the distances the vehicles travel through the terminal, the software calculates the ideal place for an incoming ship to dock and determines the ideal parking spot for each vehicle based on, amongst others, the ship's berth, the vehicle's final destination, any necessary customization, the delivery date, and the expected date and time of arrival and departure. Reducing the number of required trips and the distances travelled shortens the loading and waiting times, as well as minimizing the use of resources. The whole terminal becomes much more productive, adherence to delivery dates increases, and costs reduce.

The results

ICO sets its sights high: its goal is to operate the best ro/ro terminals in the world for quality, safety, and cost-awareness. To achieve these goals and put the improvement program into practice, ICO has launched the "Implementation of a Terminal Operating System (TOS)" project, based on INFORM's software solution.



ICO's EDI software engine manages up to 100 million messages every year mainly to be processed by INFORM's system. Linking to the vehicle information number (VIN), the messages track every single element of the process from unloading, to a change of parking space or specific customization, all the status, tracking and routing information is captured in the system. This view of the supply chain can be extended beyond the terminal, to other areas such as shipping, providing complete operational transparency.

By creating an electronic information gateway the pressure of manual logistical calculations is alleviated. The identification of the ideal location for each vehicle, has reduced total annual travel distance for the vehicles ICO handles by around 100,000 km – with 1.2 million cars processed in 2012. In turn, it reduces ICO's carbon footprint continuously and saves its personnel driving time.

ICO's customers have also experienced improvements, including a dramatically diminished waiting time to load and unload trucks, thanks to INFORM's software solution. Both ICO and its customers now have completely transparent processes that they can monitor in real time and react. They know exactly what has happened at the terminal with which car, and when, as well as the services for which they are paying.

"The flexibility of INFORM's software safeguards our strategic growth targets from a technical and administrative perspective because workflows can be changed without requiring any system intervention or programming knowledge," says Mr Guillemyn.

"Previously, all the work and calculations were completed by change requests to the software vendor. Thanks to the combined solution, our workflow efficiencies and costs are streamlined beyond our expectations. Overall we've seen the cost per car reduced, which provides us with the potential to process more cars with the current staff."

Results

- Overall terminal efficiency is up from 94% to 99%
- The time a truck spends in the terminal has declined by 50%
- Reduced driving distances for vehicles
- Capacity increase of yard and berth utilisation of 8-12% by real-time position change processes of vehicles

If you would like to know more, we look forward to hearing from you:

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