



Photo courtesy of Grup TCB

SPANISH PORT OPTIMISATION TO SAVE MILLIONS

# Valencia's Window of Opportunity

THE PORT OF VALENCIA HAS BEGUN OPERATIONS USING A NEW PLATFORM FOR DATA EXCHANGE THAT OFFERS "massive business and environmental benefits". Part of the European funded research project 'eMAR', software house MJC<sup>2</sup> has completed its role in implementing the eMAR Optimisation System (EOS) for container logistic operations at the Spanish port.

WORDS BY JOHN GAULDIE

"Valencia represents the ideal challenge for a solution of this type," explains Julian Stephens, Technical Development Manager at MJC<sup>2</sup>. "[It's] a busy port acting as a major hub for multimodal transport operations, with a reputation for innovation and forward thinking."

### Real-Time Logistics Optimisation

A major benefit of the European Commission's e-Maritime initiative (eMAR) automated data exchange is the ability to make huge efficiency gains across the entire logistics operation. The eMAR Optimisation System (EOS) allows all the actors in the maritime logistics operation to plan their operations in a coordinated, integrated way.



*The eMAR platform results in massive business and environmental benefits.*

Estimated savings run into millions of euros for large organisations – easily paying for the investment in the advanced technology required.

Mr Stephens continues, "The EOS has been configured to model and optimise across the multimodal logistics process: starting with the ship approaching the port and going right through the berth allocation process, unloading and transfer to train, movement inland, final delivery to customer and repositioning of the empty container (and of course the reverse process for exported goods)."

In the eMAR project MJC<sup>2</sup> has developed the real-time logistics optimisation solutions, building on the eMAR platform which has been developed by the eMAR consortium of industry, government, technical and research organisations.

### Cornerstone Is Exchange

Currently most operations have a high degree of manual planning, primarily due to two main factors: poor availability of vital information and outdated, limited planning systems that lack the power to tackle complex operations.

eMAR provides the core data exchange mechanism which drives the availability of real-time information such as consignment data, resource status and customs clearance, while the EOS plans port operations, hauliers, rail movements,

container depots, repositioning movements and shipping capacity, taking into account the real-world operational rules and constraints that have to be considered if a useful output is to be achieved.

The strategic optimisation system allows the user to undertake tactical and strategic analysis of the operation. Based on the enhanced data provided by the eMAR platform the planner can overlay alternative scenarios and assess their impact. For example the impact of changing schedules or availability of resources on the overall efficiency of the operation can be estimated. The EOS includes archiving and data management tools which allow the user to make such changes and build up a library of scenarios that can be used for future operational planning.

### Measurable Benefits

"Applying the EOS to Valencia demonstrates, most importantly, that the overall e-maritime concept can deliver," explains Mr Stephens. "Specifically it shows how port authorities, shipping lines, freight forwarders and transport operators can use a common system to plan and manage their operation, and how the exchange of the structured, standardised data that is the cornerstone of the eMAR platform results in massive business and environmental benefits."

Benefits include:

- Faster turnaround time for ships: optimised port planning minimises wasted time in terminals and ensures that capacity on routes is well-utilised for freight or empty repositioning
- Reduced congestion in ports & terminals: better planning of multimodal transport combined with real-time information about ship ETAs and resource availability
- Cost savings for logistics operators: the EOS technology has been shown to save around 10 percent of transport costs for large freight and container operations
- Reduced environmental impact: EOS reduces emissions, as well as minimising traffic, congestion and noise around busy logistics hubs.

i. [www.mjc2.com](http://www.mjc2.com)

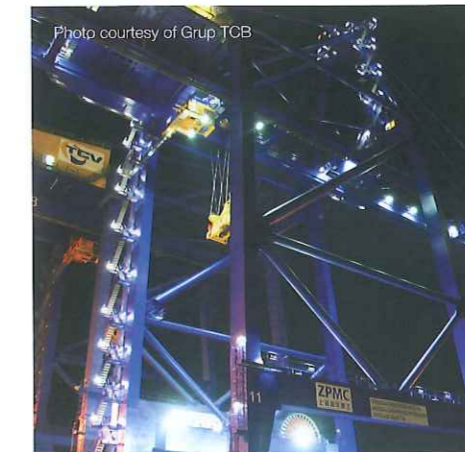


Photo courtesy of Grup TCB

### Grup TCB Invests in Valencia Efficiency

At the Valencia Container Terminal (TCV) four new RTG cranes have been operational since December, in addition to the five new terminal trucks and five terminal chassis operating since last summer. The Spanish terminal is part of Grup TCB, which in 2013 invested EUR 26.2 million on purchases of machinery for its worldwide terminals, a 102 percent increase in equipment investment with respect to 2012. Grup TCB has also developed new software internally for maintenance management. The system is already operating at several of its terminals worldwide and is expected to be implemented at TCV in 2014. "Technological innovation and development are priorities for keeping Grup TCB terminals at the forefront of international logistics operations," says Xavier Soucheiron, CEO of Grup TCB. "Our ultimate goal is to offer customers an efficient, flexible and quality service, so we will continue investing in this modernisation strategy." At the beginning of April, Grup TCB entered into a strategic alliance with Mitsubishi Corporation. This is a significant jump for Grup TCB, raising expectations for the development of their management activity and implementation of container terminals in Asia and Africa.