



Project RTS-AGW

The Co.El.Da. Software has concentrated its business research in designing and patenting an innovative system for the management of rail freight logistics

Who we are

The Co.El.Da. Software was founded in 1987 with the aim of creating and offering specific software solutions to Corporate Authorities and Professionals, offering IT Consulting services and custom software application development.

To date, the company is a Market Leader for the supply of application software in the Port System Authority sector, with over 70% of the Bodies authorithies served.



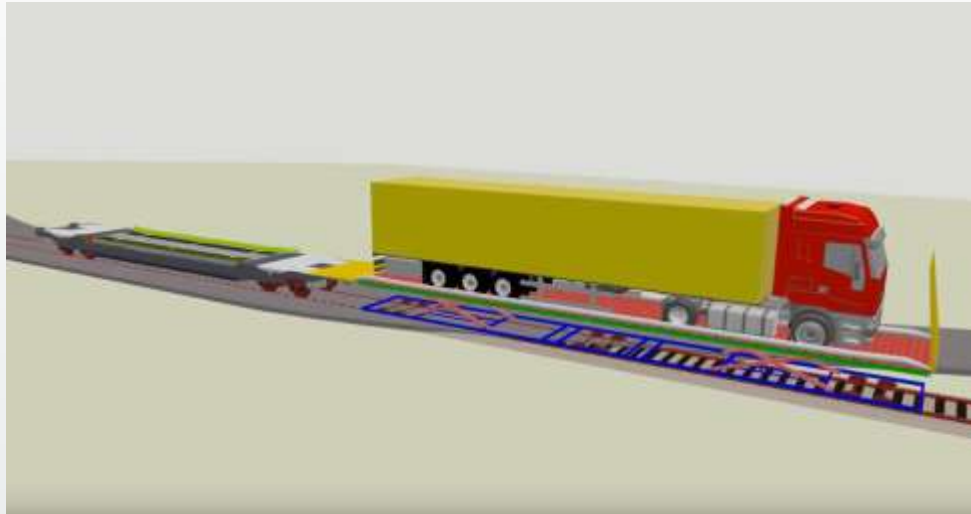
The INTELLIGENT railway wagon

- The current wagon is transformed from a passive element, that can be moved only by a locomotive, to an autonomous element
- The wagon is managed remotely by a software platform to perform movements to:
 - position itself anywhere in the railway yard
 - approach another wagon for coupling operations
 - position itself next a crane for containers loading / unloading operations
 - position itself next to another wagon for horizontal transhipment of containers
 - position itself next to a warehouse for loading pallets, goods, etc..

[Demo video simulation](#)



Intelligent 'poche' wagon



- Modification of a normal wagon with upgrades to make it "smart"
- Mobile loading platform
- Automatic hooking / unhooking of semitrailer towing pin

[Demo video simulation](#)



The solution designed

- Automates the traction of individual railway wagons
- Automates the coupling / uncoupling system of the individual wagons with backward compatibility with the current system
- Automates the wagon handling phases
- Automates the maneuvers for the composition and decomposition of trainsets
- Automates the loading / unloading modes
- Computerises the intermodal centers
- Interfaces control systems

Functions

- Planning the movement of individual wagons
- Organizing the maneuvers, selecting the optimal routes to move the wagons
- Interfacing with the manager of the railway yard
- Interfacing with the signs of the railway yard
- Managing of wagon orders
- Checking the correctness of the maneuvers
- Checking the process of automatic coupling
- Interfacing with the loading / unloading devices
- Creating the possibility, for different operators, to operate independently on their wagons



Realization areas

The project is able to significantly increase the efficiency of transport management in the various areas of logistics and transport.

- Ports
- Intermodal logistics areas
- Medium / large stations
- Small stations
- Industrial areas
- Industrial plants
- Each of these areas is suitable for different applications to optimize the costs of sorting goods.

Partners sought

- Railway freight wagon builders
- Rail operators with container transportation service
- Operators of intermodal logistics areas