



## EcoHubs Demonstration Workshop

4 December, 2014 - Brussels

*A European project for  
improving the greening and efficiency of terminals in Europe*

The EcoHubs Project organised a workshop to demonstrate the various (ICT) tools developed within this European co-funded initiative on 4 December, 2014 in Brussels.

About 30 experts from various spheres - terminal managers, 'last mile' road operators, Combined Transport Operators, industry associations- attended and exchanged their views on the demonstrated solutions.

The proposed ICT tools are all currently tested and validated by the demonstrators. They will be used as key-components for the new ICT environment (or known also as ICT-Ecosystem) of hubs and terminals, which has been defined in the project's vision.

(<http://www.uirr.com/en/component/downloads/downloads/1065.html>)



### The CCIS application as proof that the future of interoperability and connectivity is now

The key challenges for the next generation of IT data exchange architectures are to provide interoperability "without changes" (no change to existing legacy applications and data exchange formats) and connectivity "all at once" (communication with all partners that are connected).



**Mr. Jan-Tore Pedersen, CEO Marlo**, demonstrated with the CCIS prototype that these challenges can be met now with the implementation of the new ISO/IEC 19845 standard (known as the 'common framework') and the utilisation of intelligent 'access points', intermediate interfaces allowing an easy data transferability and convertibility.

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he CCIS application is currently being tested in the port of Koper in order to enhance the data exchange between the port terminal and the intermodal operator Adria Kombi.

The overall aim is to increase by 20% the total terminal capacity and to optimise the preparation of the CT trains operated by Adria Kombi.

**Presentation:** <http://www.uirr.com/en/component/downloads/downloads/1069.html>

**Product sheet:** <http://www.uirr.com/de/component/downloads/downloads/1062.html>

### The ITEC application as the unique GHG calculator for transshipment facilities

The European standard EN 16258, adopted in March 2013, includes a methodology for calculating and declaring the energy consumption and GHG emissions of transport services. However, warehouses and transshipment facilities are not covered by this standard. The EcoHubs project partners contribute to ensure that terminals might also calculate their carbon footprint in a similar scientific approach.



**Mr. Lars Deiterding, Executive Director HaCon**, reported on the specific methodology and tool developed for the transshipment facilities: the Intermodal Terminal Eco-efficiency Calculator (ITEC). A three-step approach was adopted to ensure a complete coverage of the terminal requirements: a capture of actual terminal processes (as far as relevant for energy/GHG calculation), a translation of those processes into a model and the transfer of the model into the practical calculation tool. With the tool, a terminal operator may accurately calculate its actual GHG performance, identify the 'hot spots' and evaluate the impacts of various measures in ex-ante scenarios or in ex-post monitoring activities.

The application is currently tested at the following terminals: Antwerp Combinant, Antwerp Main Hub, Interporto Bologna, Ljubljana Moste, Neuss Trimodal and Stockholm Arsta.

**Presentation:** <http://www.uirr.com/en/component/downloads/downloads/1066.html>

**Product sheet:** <http://www.uirr.com/de/component/downloads/downloads/1047.html>

## The ecoTAURuS application as optimiser tool of the last mile operations in CT Road-Rail

Road-Rail Combined Transport is the result of an optimal combination of a rail journey with a first/last mile - as short as possible - on road. It is essential that both terminal operators and trucking companies exchange accurate status information on loading units that will be delivered or picked up and on operational events that might occur on the terminal or during the last mile road journey.



**Mr. Makis Kouloumbis, Program Manager at Inlecom Ltd, presented the innovative 'last mile' solution for Road-Rail Combined: the ECOhubs Truck Appointment & Unit Reporting statUS solution (ecoTAURuS in short).**

This application, developed on a service-based approach, is dedicated specifically to the terminal operators and to the trucking companies and its drivers. Various functionalities are proposed (either to be purchased as a package or as a single service depending on the real needs): unit order management, trip order management with slot pre-reservation and allocation, trucker mobile interface and notification services).

Thanks to the application, the terminal operators will improve their awareness of expected trucks in a defined slot, minimise truck queuing and administrative arrangements and finally, the most important, improve the direct loading ratio.

For the trucking companies, it allows to create a one-stop-shop interface for the organisation of their road trip arrangements through direct integration with multiple terminal operating systems. The terminals Antwerp Zomerweg and Ljubljana Moste are currently implementing the EcoHubs' solution.

Presentation: <http://www.uirr.com/en/component/downloads/downloads/1067.html>

Product sheet: <http://www.uirr.com/de/component/downloads/downloads/1063.html>

## MetricHub as flexible and adaptable measuring tool for terminals

Terminals need to collect metrics basically for three purposes: for continuous improvement (by monitoring predefined KPIs), for capacity management (manage of slot allocations) and for anomaly detection.



**Mr. Benjamin Hodgson, Senior research scientist at BMT Ltd, presented the newest technology in data capturing and metrics calculations: the MetricHub application.** This tool allows, with no changes to the legacy systems and with no need to analyse the message schema, the extraction of data using one single interface, or to 'intercept' data when being exchanged between two existing software systems (by installing a transparent proxy in-between). The captured arbitrary data will then be stored, analysed and stamped according to various events that are finally defined as a metric (for example 'trip time between two terminals'). The tool is actually embedded in the ecoTAURuS application, which has developed some standard dashboards to monitor some important KPIs for the dispatcher or the trucking companies.

Presentation: <http://www.uirr.com/en/component/downloads/downloads/1068.html>

Product sheet: <http://www.uirr.com/de/component/downloads/downloads/1052.html>

## Summary of discussions

The participating experts agreed on the promising benefits of all technologies used and products developed, highlighting in particular the innovative components used in the various EcoHubs developments.

EcoHubs has been identified as a first step towards a new IT ecosystem for Road-Rail Combined Transport, especially for the terminals. The experts are awaiting further feedback in a 'follow-up' workshop when the solutions will be put in a real business environment.

For more information please visit the project website at:

[www.ecohubs.eu](http://www.ecohubs.eu)

