

INTEGRITY reaches new milestone using Container Security Devices

The EU-funded project INTEGRITY (Intermodal Global Door-to-door Container Supply Chain Visibility) has achieved one of its major milestones. By using data from Container Security Devices (CSDs) the developed IT-platform SICIS (Shared Intermodal Container Information System) is now able to monitor container movements by merging data from CSDs and terminal messages.

The first SICIS container started its journey in September 2009, one year after the project was launched. Since then journey event data have been automatically retrieved from existing terminal IT systems - but the starting event in SICIS still was a manual process to be performed by the factory where the container was stuffed. With the use of CSDs this process is also automated. On closing the container, the CSD is activated, acquires a GPS position and, using its integrated SIM card, and communicates the details to the SICIS server. The GPS module and GSM communication allow the reporting of waypoint events using geo-fencing functionality and any tampering of the container. Possible gaps during the sea leg of the voyage will be closed by integrating AIS signals of the vessel obtained via satellites.



The first CSD equipped container in preparation for its trip to Europe



Arrival of the SICIS monitored and CSD equipped container at DHL Warehouse in Rotterdam

The first CSD equipped container started its trip on the "MOL Prosperity" from the DHL Consolidation Centre in Hong Kong on March 29th and was discharged at the Delta DDE Terminal of project partner ECT in Rotterdam on April 27th following the major INTEGRITY trade lane from China to Europe. This journey, combined with the ability of SICIS to provide online monitoring of the container location and status throughout, has achieved

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one goal of INTEGRITY i.e. to find a methodology for effective, secure and visible container flows from door to door.

It should be noted that, although the data quality provided by CSDs cannot be achieved by other means, the INTEGRITY approach is in no way dependent on their use. Because it is considered unlikely that each and every container will be equipped with a CSD in the near future, the manual start process and tracking based on terminal data is still an option.

Johan van Wensveen, Manager Logistic Competence Center, DHL Global Forwarding emphasizes:

"We want to become the "First Choice" for our customers, employees and investors and are therefore always searching for good innovations and means to improve the service to our customers and make our processes simpler and more transparent.

SICIS would enable real-time information sharing of various parties along the supply chain resulting in better visibility, i.e. including the container terminal at origin, container terminal at destination and Customs.

We are using DHL controlled containers for this trial with CSDs and it allows us to perform pro-active monitoring of the supply chain. Equipping these containers with GPS devices enables us to view the container's current location and to see the security status of the container, i.e. if the doors have been opened.

These enhancements will lead to reliability of the overall supply chain, enhanced security and a potential "Green Lane" by Customs in future."

For more information please visit: www.integrity-supplychain.eu