### **MARVIN**

# Independent Smart Machine-Vision Based Cargo Counting Module

Funding: European (Horizon 2020)

Duration: May 2015 - Oct 2015

Status: Complete

**Total project cost:** €71,429 **EU contribution:** €50.000



Call for proposal: H2020-SMEINST-1-2014

**CORDIS RCN: 196422** 

## **Objectives:**

Alekon Cargo will develop and commercialize a fully automatic, high accuracy machine vision based scanner for handling and counting of neo-bulk cargo. Today, manual counting and loading of cargo is one of the biggest bottlenecks in European and global logistics chains. Besides time-consuming process, the manual method requires a lot of workforce and is prone to human errors. Each error in logistics business leads to incorrect documentation, delays in customs, fines and unsatisfied customers. Therefore, in order to increase the accuracy and cargo processing time, Alekon will introduce a totally independent, configurable and low-cost solution for cargo operating businesses like logistics hubs, postal services, large manufacturing units, warehouses, rail and road transport hubs, etc.

Alekon together with its scientific partner Tallinn University of Technology has developed a machine vision based scanner system that has multiple benefits compared to current warehouse automation systems. Machine vision based solution has very high accuracy and does not depend on additional labelling (barcode) or sensors (RFID) that need investments and arrangement within the whole logistics chain. Alekon has already established a large sales network in EU and globally as the company has more than 20-years of experience in logistics, crane equipment sales and other warehouse management operations. Alekon's innovative solution has confirmed global market potential and great improvement potential over time.

The machine vision based Cargo Counter has very short profitability period as the potential savings from one device may increase up to €200 000 in a year for the end-users. Besides direct economic benefits, the CargoCounter improves workplace safety in logistics sectors reducing the need for difficult manual labour in harsh outdoor conditions.

#### **Parent Programmes:**

H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport

Institute type: Public institution

Institute name: European Commission

Funding type: Public (EU)

#### **Lead Organisation:**

#### **Alekon Cargo Osauhing**

Address: KASTANI 10 44307 RAKVERE Estonia

**EU Contribution: €50,000** 

# **Technologies:**

Freight transport technologies Cargo scanning system

**Development phase:** Research/Invention

**STRIA Roadmaps:** Network and traffic management systems, Infrastructure

Transport mode: Air transport

**Transport sectors:** Freight transport **Transport policies:** Safety/Security **Geo-spatial type:** Infrastructure Node