

## **Seawing R&D Master thesis work on remotely controlled passenger boarding bridge.**

Seawing PBB AB design and manufacture passenger boarding bridges for airports and seaports worldwide. The Seawing head office is located in Malmö, Sweden. We are designing our bridges to be sustainable and to give a comfortable experience for the airport passengers.

### **Background**

When an aircraft passenger boarding bridge is being connected to an aircraft today an operator is needed for each bridge. When not used the boarding bridges are in parked position out of the way of gate vehicles and approaching aircraft. When an aircraft is approaching the gate the operator can either take the boarding bridge semi-automatically to a for each aircraft pre-set position or drive it fully manually from parking position to the aircraft. Operations are performed from the operators panel located in the aircraft front end of the bridge. This is labor intense and not very efficient for the airport. Seawing has received inquiries from numerous airports to investigate the possibilities to operate the boarding bridges remotely from a control room located somewhere at the airport.

### **Purpose and Objective**

- Investigate different techniques and solutions for remote operation of the passenger boarding bridges.
- Implement the solutions and software for remote operation of the passenger boarding bridge.
- Fail-safe solutions when driving along apron any obstacles must be recognized and/or avoided.
- Fail-safe solutions for not damaging the aircraft when connecting to or driving towards the aircraft.
- Aircraft recognition

The project is planned to start in January 2020 or according to agreement with the student, the thesis work will be performed at Seawing head quarter and/or Lund University.

Contact person:

Jonas Bruun

073-1488901

jonas@seawing.se