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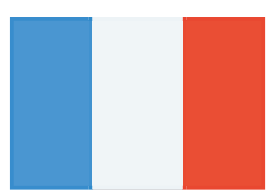
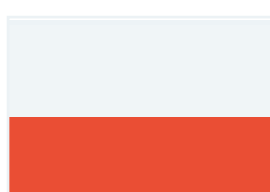
CURRENT TRL
& TARGET TRL

> 95%
ROBUSTNESS

> 95%
SUCCESSFUL
DETECTION

0%
CONTAMINATION
RATE

COUNTRIES



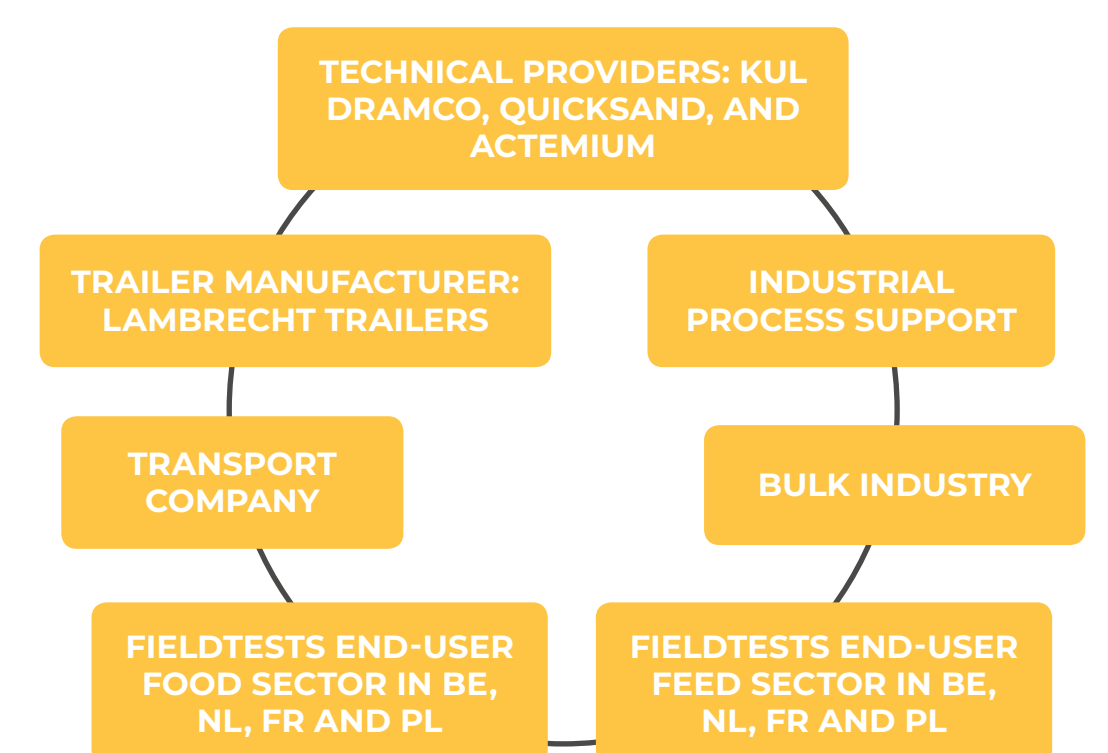
PARTNERS



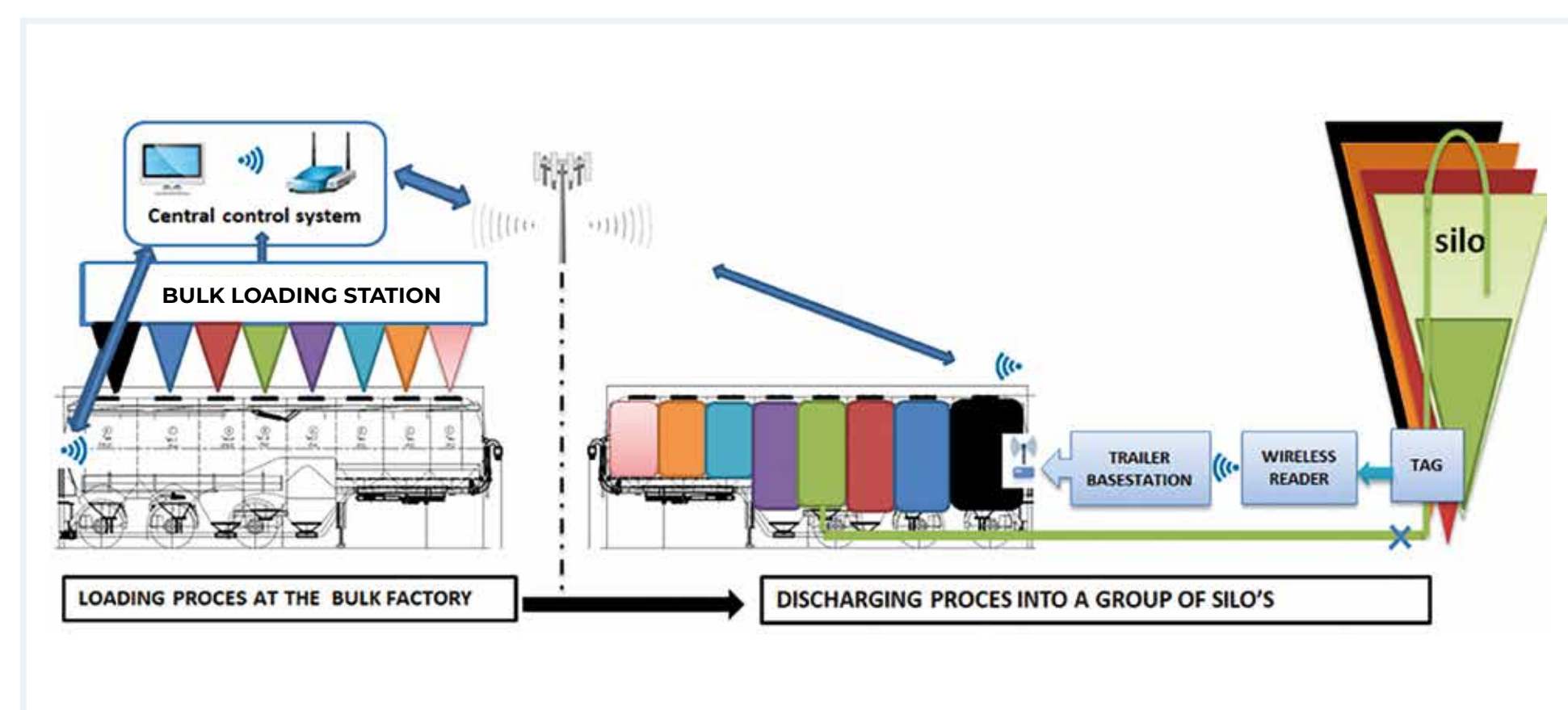
DRAMCO

1.7 TRACEABILITY FOR FOOD AND FEED LOGISTICS

This use case deploys an innovative approach that secures and authenticates the transport of bulk-goods in the agri-food chain, both for feed and food with zero risk of contamination. There is a need to guarantee the traceability of bulk food and feed deliveries from the moment it leaves the loading station right up to when it is delivered to a farm's silo. A fully automated silo detection system, using IoT solutions, guarantees that the right bulk contents are correctly delivered, and that the specifics of that delivery are registered. This solution thus helps to prevent feed and food wastage caused by wrong deliveries.



HOW IT WORKS



The detection system requires the establishment of communication between the loading station and the trailer, using Wi-Fi routers. The transferred data lists which kinds of animal feed are loaded in the different compartments of the trailer.

A base station device, controller and TAG wireless reader are all installed on the bulk trailer. The moment this reader confirms the connection with the right silo, the matching compartment of the trailer can be released and unloaded.

A unique TAG identification is installed on each silo for all delivery addresses.

THE IMPACT

OUR OBJECTIVES

- Real time data delivery and localisation of all trailers;
- Secured delivery procedures;
- Establish complete traceability from factory to client;
- Detailed monitoring of the discharging procedure;
- Direct alarm in case of deviations during the deliveries;
- Data concerning preventive maintenance of the end-user's transport fleet.

ON ECONOMY

- Reduce the recovery cost due to wrong deliveries of feed or food (-90%);
- Compatibility due to system interoperability (99%);
- Increase transport efficiency through data analysis;
- Reduce the destruction cost of contaminated silo content (-90%).

OTHER IMPACT

- Reduce the waste of contaminated silo contents (-90%);
- Lower the need for additional transport (less CO2 emissions), for silo cleaning and re-delivery of new feed by (-90 %);
- Provide guidance and support for truck drivers during the delivery process;
- Increase farmers' trust in the delivery and quality of their feed;
- Improve food safety by securing the supply chain both for animal feed and human food.