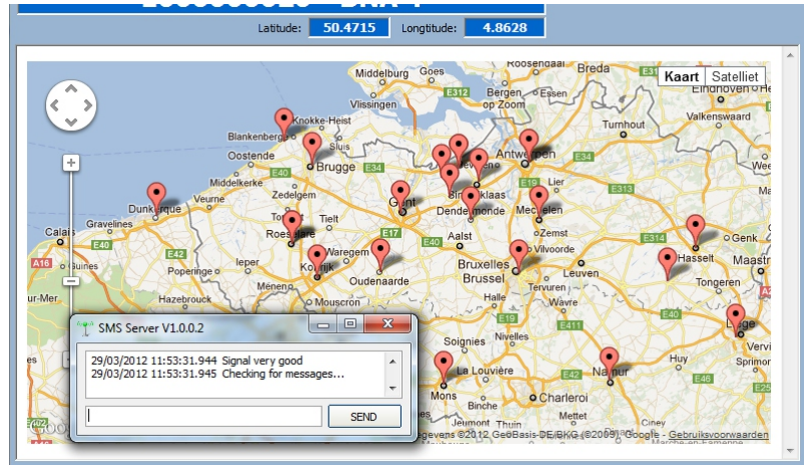


R-Track provides Ardo with an up-to-date overview of the location of all its containers



In each container a GPS tracker was invisibly anchored



R-Track: container tracking via GPS / RFID technology

The customer

With production and packing units in 8 different countries, Ardo is the European leader in the frozen fruit and vegetables sector. The Ardo group grows, freezes and sells 608.000 tons of end products to 58 countries, with a turnover of 620 million euro.

The challenge

Ardo provides its production units with containers in which the grown products are loaded in bulk at harvest time for transport to the packing units. These containers represent a considerable investment, meaning it is important for Ardo to know the location of these containers and to control whether or not they actually returned to the warehouse at the end of the harvesting season. For this purpose, Ardo looked for a company that could deliver a tailor-made solution that would meet its most urgent needs – i.e. location detection of its containers – but also held the potential of future extensions in due time. The challenge for Aucxis was to elaborate a modular concept, enabling Ardo to systematically optimize its company processes.

The solution

Aucxis developed a concept in which the following goals were integrated:

- ▷ Asset management: detection and follow-up of the number of containers and their location.
- ▷ Traceability of the production as of the production parcel.
- ▷ Data integration in an umbrella RFID platform.

The result

- ▶ Ardo obtains an up-to-date daily overview of the number of containers and their location.
- ▶ The geographical position of each container is visualized in the Aucxis track & trace application.
- ▶ In case of theft, the container's location can be detected very quickly.

R-Track

provides a clear overview of the containers' positions, both schematically and by means of co-ordinates.

The solution (cont.)

Each container was equipped with a compact, highly sensitive active GPS tracker with a built-in antenna and an autonomous battery with a life span of minimum 7 years.

This tracker, selected by Aucxis, can be programmed from a distance (via GPRS) to preset the reporting frequency in function of the selected parameters (ex. movement, geo perimeter ...). Given the limited number of movements, for this application it was preset that the sensor transfers the containers' position once a day.

The information is received at the Ardo offices via a GSM/GPRS modem, and is then visualized in a track and trace application purpose-built by Aucxis.

Possible extensions

Link track & trace application with client database

To ensure whether or not the container's location corresponds to the location where it should be according to the customer, it is possible to link the customer's address book to the track & trace application.

Follow-up of the container movements

Each tracker contains a passive RFID tag that enables to map out more detailed container movements (e.g. loading on the truck, unloading at the distribution centre,...).

This combination of active GPS tracking and passive RFID tracking results in a powerful and innovative track & trace solution at a competitive price.

Container	Breedte°	Lengte°	Timestamp
1000000001 - TCE 1	51.2138	3.2355	2/2/2012 11:04:48 AM
1000000002 - AVE 1	51.0483	3.7189	2/2/2012 11:04:48 AM
1000000003 - XBB 1	51.2963	3.0817	2/2/2012 11:04:48 AM
1000000004 - BNA 1	51.1716	3.9414	2/2/2012 11:04:48 AM
1000000005 - TGB 1	51.0262	4.1030	2/2/2012 11:04:48 AM
1000000006 - TGB 2	51.1587	4.1446	2/2/2012 11:04:48 AM
1000000007 - TCE 2	51.2258	4.4220	2/2/2012 11:04:48 AM
1000000008 - AVE 2	50.8441	4.3671	2/2/2012 11:04:48 AM
1000000009 - XBB 2	50.8176	5.1811	2/2/2012 11:04:48 AM
1000000010 - BNA 2	50.9314	5.3366	2/2/2012 11:04:48 AM
1000000011 - TGB 3	50.8263	3.2622	2/2/2012 11:04:48 AM
1000000012 - TCE 3	50.9463	3.1229	2/2/2012 11:04:48 AM
1000000013 - AVE 3	51.1057	3.9880	2/2/2012 11:04:48 AM
1000000014 - XBB 3	51.2077	4.0402	2/2/2012 11:04:48 AM
1000000015 - BNA 3	51.0302	4.4756	2/2/2012 11:04:48 AM
1000000016 - TGB 4	50.8493	3.6090	2/2/2012 11:04:48 AM
1000000017 - TCE 4	50.4575	3.6564	2/2/2012 11:04:48 AM

Remark: the data shown in the screen shots of this case study are fictitious.