

# measure bulletin

Newsletter for the customers of Labkotec Oy

November 2015

## Oy Pohjolan Liikenne Ab

- Part of the VR Group
- Finland's largest road transport group
- Buses mainly operate in southern Finland in ExpressBus and city transport traffic as well as in contract and charter traffic
- A total of 300 buses
- Passenger traffic accounts for 16.9% of the company's net sales
- Goods traffic is carried out by Oy Transpoint Ab and Combitrans Oy
- Oy Transuotila Ab, a company engaged in road tanker traffic, was sold outside the group to Kiitosimeon Oy



## Pohjolan Liikenne trusts LabkoNet®

Pohjolan Liikenne utilises the latest technology to make bus traffic more economical, comfortable and less emission-intensive. The company operates nine bus depots and five refuelling points for its passenger traffic. All depots have been brought to the KTM 415 standard by providing them with LabkoMax sensors, among other things. LabkoNet® is used as support for both environmental protection and logistics. The level measurement and oil trap alarms of the tanks have been linked to LabkoNet®. In terms of logistics, at issue here are 8 million litres of diesel oil at an annual level, for the transportation of which 400 road tankers of 20,000 litres are needed.

### Setting the alarm thresholds correctly is crucial

When an order limit alarm is received from the fuel tank, an order is automatically sent to the transport company responsible for maintaining a sufficient amount of fuel in the tank. The alarm limit is set in such a way that there will be enough fuel for the weekend even if the order is sent on Friday afternoon, for example.

"The main thing is to have enough fuel at all times. This is taken care of by the transport company. People simply cannot be left standing on bus stops. The delivery can take place on Monday morning; urgent weekend work is not necessarily needed. When the system was installed, all tanks were calibrated to attain sufficient accuracy," says **Jorma Haapasalo**, Technical Manager at Pohjolan Henkilöliikenne Oy.

The transport company responsible for the fuel deliveries agrees that setting the order and low level alarm thresholds correctly is crucial for attaining the benefits delivered by the system. Transport Manager **Petri Halonen** from Kiitosimeon Oy emphasises the importance of sufficient leeway.

### "We no longer need to worry about placing the orders"

The order is sent as a text message, and the transport company delivers the fuel at the most logistically convenient time using the most convenient route. Monitoring and responsibility have been successfully outsourced. Haapasalo thinks that this has worked fine thus far.

"We no longer need to worry about placing the orders. The fuel is purchased with an annual contract. When the transport company is free to arrange the transportations in an optimal manner, I think we will have an opportunity to attain savings in fuel prices in the long run. This, in any event, has been one of our objectives."

"Thanks to LabkoNet®, we are able to divide the transportations over the entire week, not just on Monday and Friday as is customary with traffic fuel deliveries. This also makes it possible to have as large delivery lots as possible, so that we are always able to drive a full load in each direction. In practical terms, this means that we no longer need emergency deliveries," says Halonen.



The detectors for cardless refuelling are contained inside the fuel dispenser nozzle (black collar) and in the fuel tanks of the buses. Information about the fill-ups is sent automatically to the LabkoNet® system. This way, the level control automatics will know that the amount of fuel in the tank is not decreasing because of a leak.

### “Capital should not be resting idle in the tanks”

“With the alarms now in place, the inventory can be kept at a relatively low level. When the average volume can be easily displayed, we can be confident that not too much fuel (= money) is resting idle in the tanks. I believe that the load volumes have decreased,” says Haapasalo.

All the information required by the authorities can also be found from the system: fill-ups, sales, differences in quantities, daily volume... “Thanks to LabkoNet®, the delivery sizes have generally increased,” admits Transport Manager Halonen.

### “LabkoNet has worked well”

When the oil traps have filled up, an alarm is automatically sent to those responsible for their servicing and maintenance. Each location has a named individual tasked to keep an eye on LabkoNet® on the company’s behalf.

“We have been pleased with the service. There have been no alarms due to the filling up of oil trap wells because they, too, are connected to LabkoNet®. The monitoring is effective.”

With a large amount of busses, the fuel tanks in the depot also need to be large. LabkoNet® makes sure that the tanks are filled in an optimal manner.

Halonen agrees that LabkoNet® has worked extremely well. Not even storms have had any effect on its operation. There have been no disruptions. The connection can be established even from a delivery truck.

Kiitosimeon delivers fluids by road tankers to different clients in more than 70 locations south of Viitasaari, i.e. in the southern half of Finland. LabkoNet has served as a useful aid in the planning of transportations.

### Economic efficiency, passenger comfort and reduced emissions

Oy Pohjolan Henkilöliikenne Ab has developed a proprietary driving style monitoring system. It features cardless refuelling as well as data collection and transfer from vehicles and distribution points. The system collects data about fuel consumption, oil pressure and motor temperature as well as itinerary and driver-specific data. The system also provides information about the servicing needs of vehicles. Passenger comfort and economic efficiency are the objectives.

Unique even on a global scale, the EcoLine system is already used in more than 200 buses. The monitoring that was started in 2003 has resulted in a noticeable reduction in fuel consumption.

Surfaces cleaned and back on the road.

“The fuel dispenser nozzles and fuel tanks of the buses are equipped with detectors that control the operation of the fuel pump and deliver the information to the LabkoNet® system. This way, the level control automatics is able to distinguish refuelling from a leak in the tank. Information about the refuelling is forwarded to LabkoNet®, but otherwise the systems operate separate from one another,” says Haapasalo.

Pohjolan Liikenne also invests heavily in the reduction of carbon emissions. The company has commenced a proprietary biodiesel project aimed at providing a 100% biofuel for city buses. The project was initiated by the Helsinki City Transport, YTV, the Technical Research Centre of Finland and Neste Corporation.

The project also poses new challenges to Labkotec, which delivers level measuring devices for the biodiesel tanks. Biofuel also differs from conventional fuels in term of its properties. In particular, the chemical properties of the fuel and the materials used in the measuring devices will require some additional product development work.