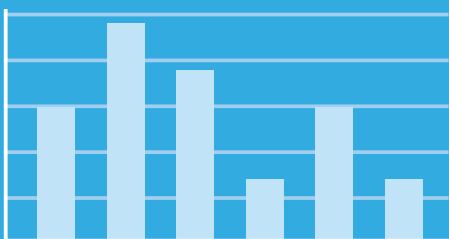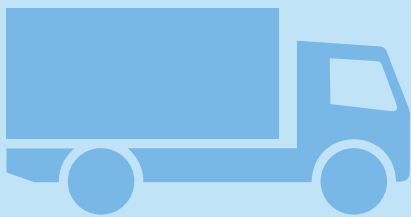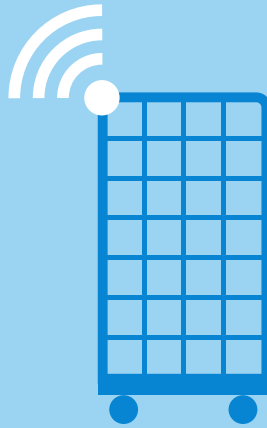**wanzl**

Asset Tracking

Knowing where load carriers are located

Want to increase the **utilisation** of your load carriers?

Do you need to **monitor** the load carriers as they keep on disappearing?

Have you **lost track** of where your load carriers are at any time?

Do you need help in **coordinating** the maintenance work done on the load carriers because it is hard to tell how intensively each one is used?

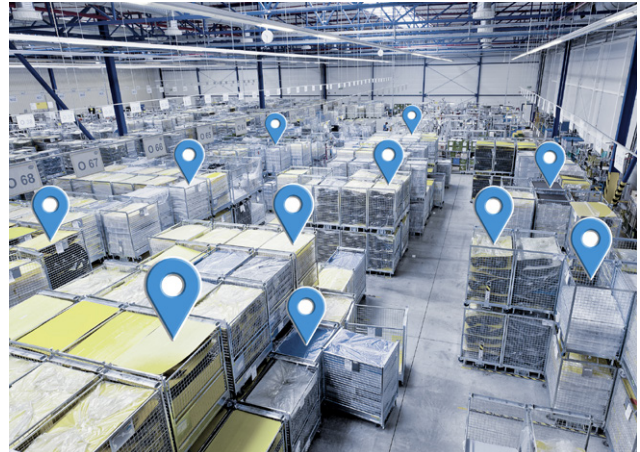Do you need more **transparency** of how your load carriers are used in order to optimise your processes?

THE SOLUTION

ASSET TRACKING
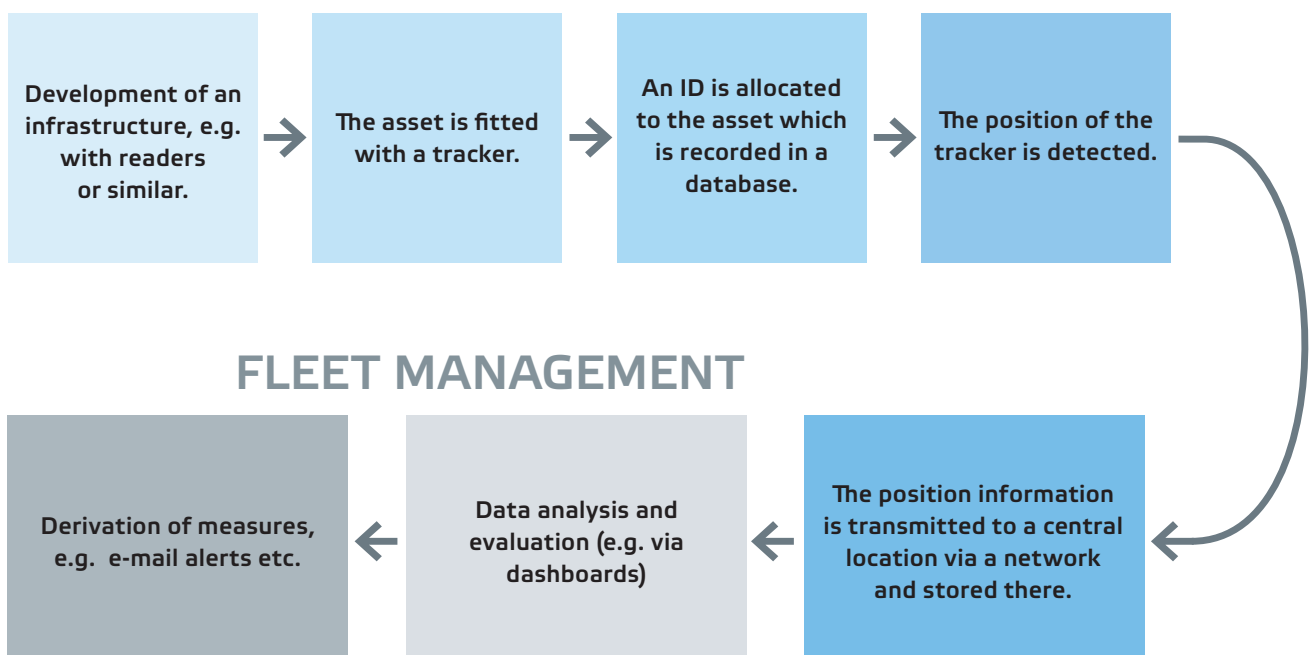
wanzl

Asset tracking

What is it all about?

■ **In logistics, an asset is defined as an item** such as a load carrier, a roll container or goods in themselves. The asset is fitted with a small transmitter (tag *or* tracker) by means of which the current position of the item can be tracked.

Asset tracking can help deliver the information needed to the right place at the right time or to the responsible individual in order to then be able to take the right action. Depending on the area of application, different sensors, technologies and transmitters are available to meet the specific requirements.

ASSET TRACKING

| Development of an infrastructure, e.g. with readers or similar. | → | The asset is fitted with a tracker. | → | An ID is allocated to the asset which is recorded in a database. | → | The position of the tracker is detected. |

FLEET MANAGEMENT

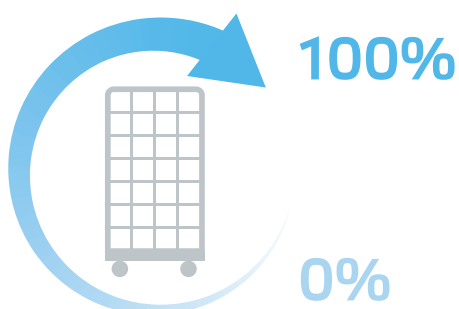| Derivation of measures, e.g. e-mail alerts etc. | ← | Data analysis and evaluation (e.g. via dashboards) | ← | The position information is transmitted to a central location via a network and stored there. |

Advantages

What can asset tracking be used for?

Asset tracking can be used for a variety of objectives:

Example 1
Increasing the utilisation of load carriers

If, for example, too many load carriers are standing idle in various warehouses, an analysis can be performed to arrange relocation to areas where they are needed more urgently. A long-term reduction in load carriers would then perhaps also be feasible.

Example 2
Finding parked load carriers

Sometimes, load carriers are parked at the wrong location by mistake. It can then take a few days until they find their way to the recipient or sender. Asset tracking solves this problem. Using the asset tracker, it will be possible to know exactly where the load carriers are at any time.

Example 3
Coordinating maintenance intervals

Load carriers are used to varying extents. This means that the amount of wear also varies. The data generated by asset tracking can be used to determine how often a load carrier has already been used and provide reminders of individually defined maintenance intervals.

Wanzl – your competent partner

Option 1 – Wanzl integrates your own tracking solution in its load carriers.

Want to use Wanzl load carriers or roll containers but already have a tracking service provider?
No problem. We will assist with your project!

Option 2 – Wanzl takes over the project management and chooses a suitable tracking service provider together with you.

Not sure if asset tracking is worth it for your circumstances and which tracking service provider would be appropriate?
Then look no further than Wanzl!

❶ Workshop
Wanzl offers an initial workshop in which we analyse your area of application together with you, and define the requirements for hardware (technology, battery, installation, etc.) and software (IT infrastructure, existing data base).

❷ Choosing the tracking model
Wanzl will then present the various tracking models and options. Our company has an extensive partner network consisting of suppliers of tracking technology and network operators.

❸ Cost–benefit analysis
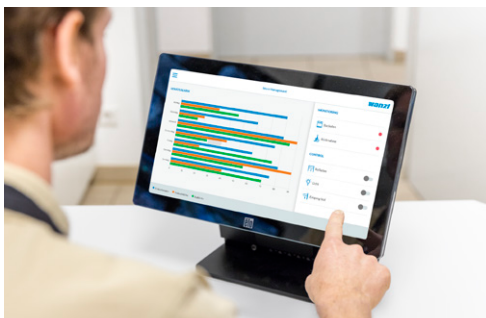Wanzl will calculate the benefit of the investment and the costs incurred for the relevant period.

❹ Roll-out
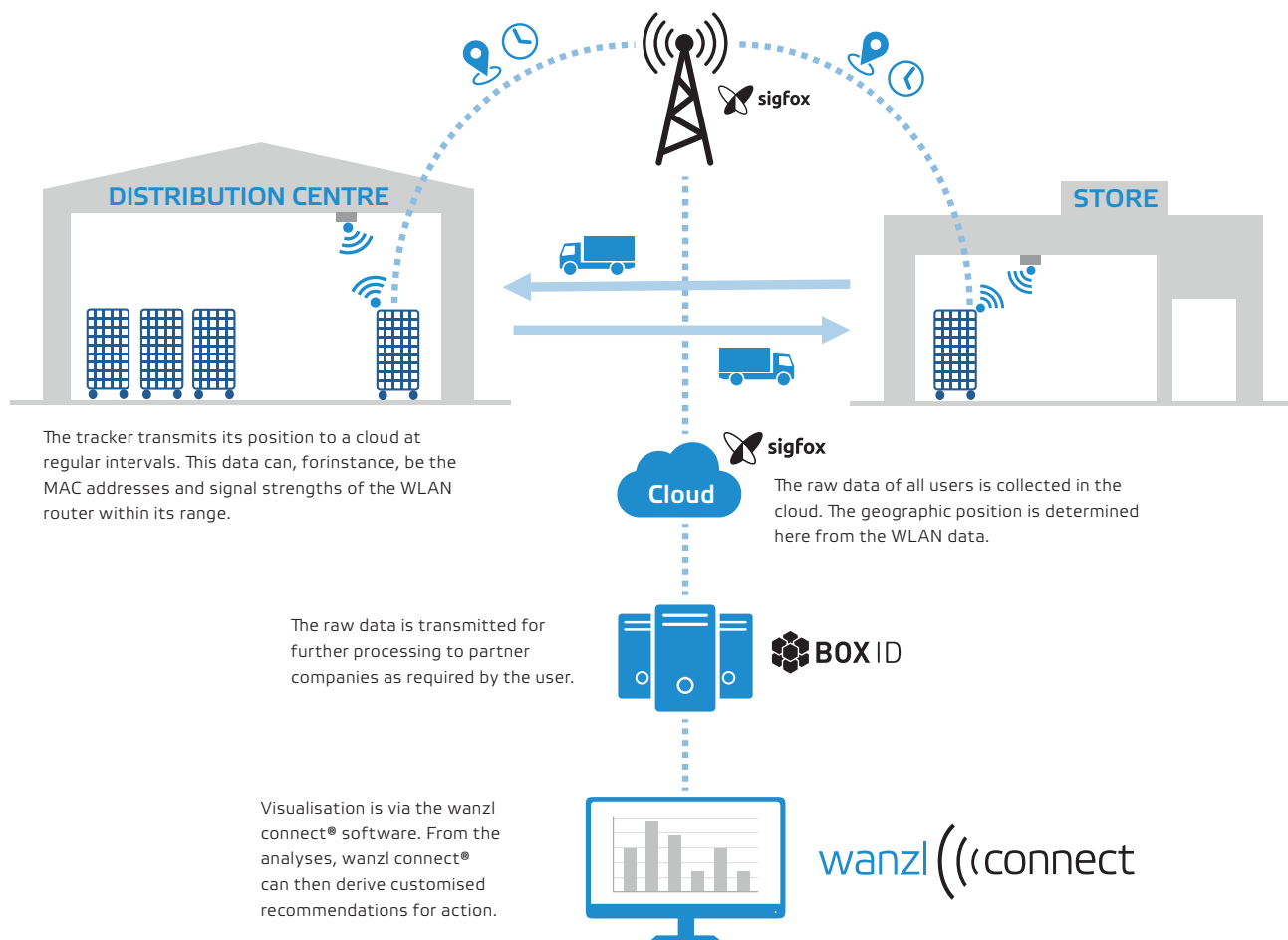Once a decision on the tracking model has been made, Wanzl will assist in the project management and roll-out.

Option 3 – Wanzl introduces you to the wanzl connect® tracking solution.

Familiar with wanzl connect®? Wanzl's software solution offers a modular system for management, control and analysis of all tracking data. It enables digital and cost-effective tracking of logistics assets throughout the supply chain across Europe – site to site, on company premises and within buildings.

Asset tracking with wanzl connect®

DISTRIBUTION CENTRE

sigfox

STORE

The tracker transmits its position to a cloud at regular intervals. This data can, forinstance, be the MAC addresses and signal strengths of the WLAN router within its range.

sigfox

Cloud

The raw data of all users is collected in the cloud. The geographic position is determined here from the WLAN data.

The raw data is transmitted for further processing to partner companies as required by the user.

BOX ID

Visualisation is via the wanzl connect® software. From the analyses, wanzl connect® can then derive customised recommendations for action.

wanzl (((connect

Basic configuration

Each asset being tracked is fitted with a radio transmitter, the BOX ID Double Track. Behind it is an ALPS Lykaner tracker that is already being widely used in logistics.
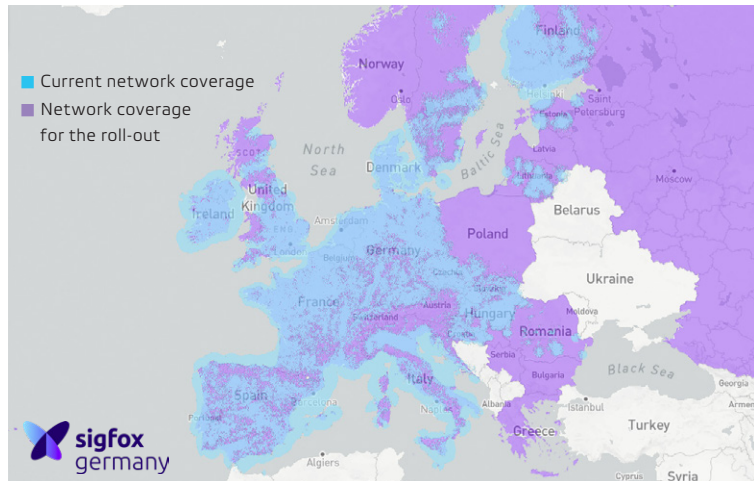
BOX ID

Technical details of the BOX ID Double Track	
Length x width x height (mm)	140 x 50 x 25
Weight (g)	94
Operating temperature (°C)	-20 to +60
Number of position-finding cycles (operational life)	Up to 5,000 (equivalent to 7 years' service life at 2 positional trackings per day)
Sensors	3-axis acceleration sensor WiFi-based positional tracking
Certifications	Sigfox Ready, CE
Protection class	IP65

Asset tracking with wanzl connect®

How is the data transmitted?

The data is transmitted via the Low Power Wide Area Network (LPWAN) of Sigfox which has already been installed in 70 countries globally. The advantage is a high level of network coverage (e.g. 86% in Germany), Europe-wide roaming and energy-efficient data transmission. The data packages contain time and position information and are actively sent to Sigfox base stations. These, in turn, transmit the data to the Sigfox cloud which collects the data from all the trackers and passes it on according to customer requirements.

■ Current network coverage
■ Network coverage for the roll-out
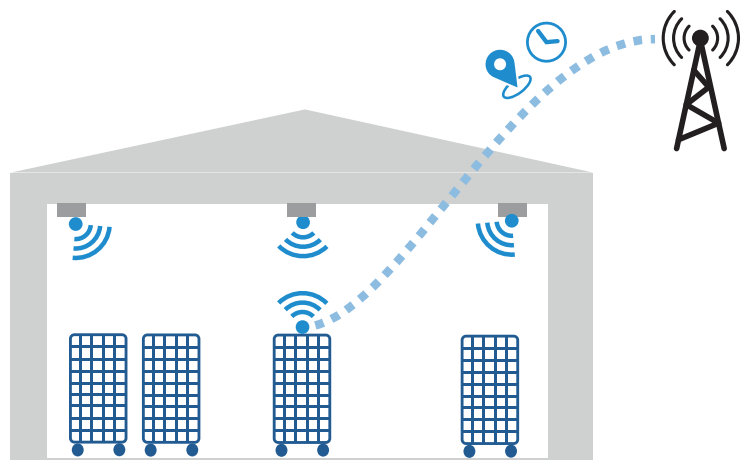
sigfox germany

Sigfox network coverage in Europe, as of January 2020

How does the positional tracking work?

Positioning is carried out via WLAN-based positional tracking. The position is determined using the locations of WiFi hotspots detected. If there are no WLAN signals within range, localisation is via the location of the Sigfox base stations. Data is transmitted as soon as the location of the asset changes. For longer idle periods, the tracker only sends its position data at the specified time intervals. This ensures energy-saving operation.

Accuracy of the positional tracking process:
WiFi-based positional tracking: up to 50 m
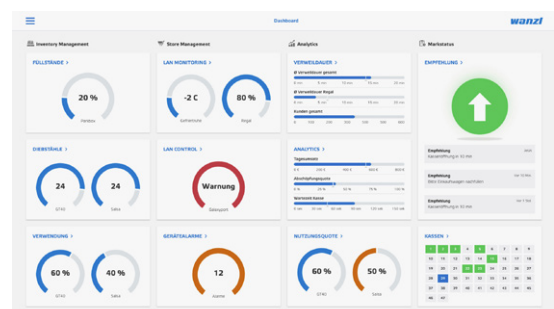Sigfox wireless network triangulation: up to 5 km
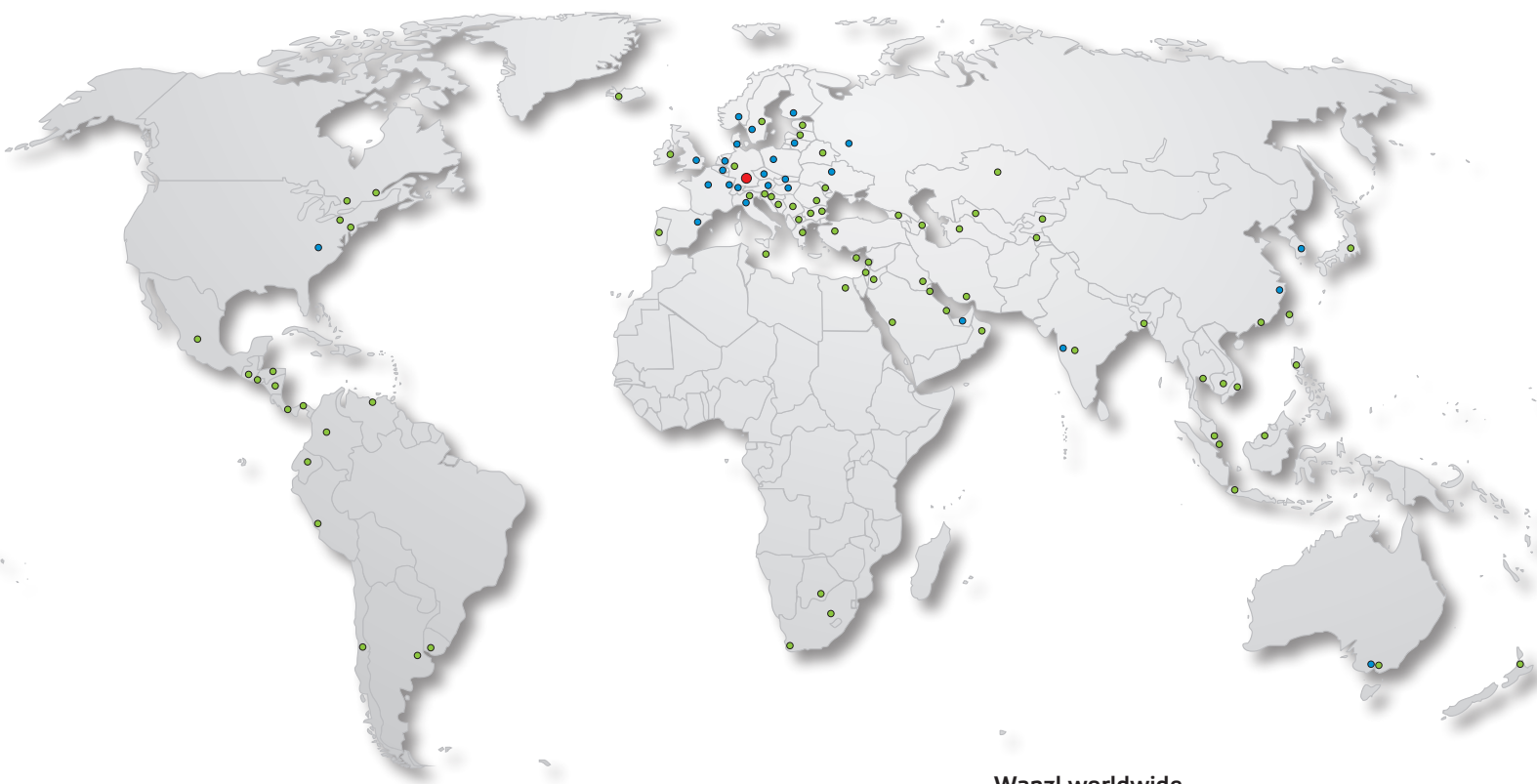

What happens with the raw data?

The raw data from the Sigfox cloud is transmitted to our partner, BOX ID Systems (formerly BLACKBOX Solutions) who prepares the data with further process data for our wanzl connect® software.
Wanzl connect® allows the customer to merge the tracking data with their own data and display it on dashboards. The software can also be linked to existing systems via an interface.

wanzl ((connect

wanzl

Wanzl worldwide
- Head Office
- Subsidiaries
- Partners

F **XING** **You Tube**

GERMANY
Wanzl GmbH & Co. KGaA
Rudolf-Wanzl-Straße 4
89340 Leipheim

Phone +49 (0) 82 21 / 7 29-0
Fax   +49 (0) 82 21 / 7 29-1000

info@wanzl.com
www.wanzl.com

GREAT BRITAIN
Wanzl Ltd.
Europa House
Heathcote Lane
Warwick CV34 6SP

Phone +44 (0) 1926 / 45 19 51
Fax   +44 (0) 1926 / 45 19 52

enquiries@wanzl.co.uk
www.wanzl.com

AUSTRALIA
Wanzl Australia Pty. Ltd.
97 Highbury Road
BURWOOD VIC 3125

Phone +61 (0) 3 / 98 08 22 99
Fax   +61 (0) 3 / 98 08 22 66

info.au@wanzl.com
www.wanzl.com