



AMCS Case Study

SUEZ, Division Recovery & Recycling, Belgium

[Read more about AMCS Routeoptimization](#)

AMCS Intelligent Optimization decreases SUEZ R&R most important KPI: 'time per order' and increases productivity

SUEZ division Recovery & Recycling in brief

The SUEZ Group draws on the expertise it has been developing since the late 19th century to help people constantly improve their quality of life. Every single day, SUEZ commits to preserving the fundamental elements of the environment and invests in preserving and restoring natural capital, and the future of biodiversity.

The SUEZ division Recovery & Recycling (SUEZ R&R) is globally responsible for waste collections and recycling of - amongst others - household waste, commercial waste, construction and demolition waste and all other forms of recyclable waste ranging from plastics to biowaste, all with the purpose of turning them into new resources. Annually this results in a staggering 4,2 million tons of produced secondary raw materials.

The 2023 goal is a worldwide implementation of AMCS Intelligent Optimization

The global waste collection activities of SUEZ R&R have an annual value of one billion euro. Previously, the operational waste logistics with more than 11,000 vehicles on the road was generally decentralized without the support of a route planning system. "SUEZ realized that in order to optimize planning they needed to be supported by state-of-the-art systems and centralized planning in order to create synergies between previously small planning regions", says Peter Bevers, Group Activity Leader Collections, who is responsible for driving performance improvements of SUEZ's worldwide waste collection activities.

In 2012, AMCS initiated an Optimization project with SUEZ R&R in Belgium. In 2017 the SUEZ Group decided on accelerated collaboration between all countries active in waste collections, ending in a framework contract with AMCS for AMCS Intelligent Optimization consisting of Route Planner to plan master routes and Fleet Planner for dynamic planning.

For the upcoming years, the goal is to integrate the AMCS planning systems within as many countries as possible. The ultimate goal by 2023 is a possible worldwide implementation of Route Planner and/or Fleet Planner depending on which activities in a country are most important. So far SUEZ Sweden, Poland and Luxembourg have followed suit and Australia is expected to do so in 1 to 2 years, after having first deployed the AMCS ERP platform.

Conscious decision in choosing AMCS

The SUEZ Group made a conscious decision to choose AMCS.

- ▶ First of all, AMCS Intelligent Optimization is one of the only systems on the market able to handle roll-on/roll-off container optimization.
- ▶ Secondly, AMCS knows the global waste and recycling industry very well. Route Planner and Fleet Planner are both specifically designed for the waste management market, the concepts and parameters are geared to waste logistics while other softwares take a more general approach.
- ▶ Thirdly, the routes AMCS delivered were of better quality than the other software packages tested during the selection process in 2012. According to Peter Bevers, "A lot of software delivers routes that drivers don't understand, for instance, two trucks in the same street. And then it follows on that 'If the driver doesn't get it, he doesn't do it'. AMCS has invested in smart algorithms that drivers understand. They, therefore, accept the routes and drive them accordingly.
- ▶ And fourthly, AMCS invests in developments that are relevant to the waste market, such as fully automatically controlled planning through IoT resulting in an increased fill-level of underground containers, thereby driving efficiencies into SUEZ R&R's worldwide waste collection operation.

“AMCS Intelligent Optimization throughout the last couple of years has already proven itself beyond any expectation.”

Reducing the most important KPI 'time per order'

Peter Bevers: "The experiences in Belgium and The Netherlands proved that investing in Route Planner alone for instance, led to a significant increase in productivity of the waste collection operation of between 3% and 5%. This is mainly due to reducing the most important key performance indicator 'time per order' by optimizing routes for the commercial waste collection with wheelie bins."

Optimizing master routes is a precondition for controlling costs

SUEZ deploys Route Planner to plan master routes for the commercial waste routes with wheelie bins and for household waste collections. Previously, fixed collection routes were created in Excel, put in a logical order and sent to the driver's in-cab device. If a customer terminated a contract, a route became inefficient and it was also unknown if new customers were added to the most efficient route. As Peter Bevers puts it, "With thousands and thousands of orders it is impossible to optimise manually in Excel. Route Planner provides the possibility to immediately plan new on-call emptying orders from customers and/or plan new customers in existing master routes. Customers get immediate and automated feedback via our customer websites and smartphone applications."

Dynamic route planning with Fleet Planner gives 30% time savings per planner

SUEZ R&R optimizes the waste collection routes of roll-on/roll-off containers with Fleet Planner, providing the ability to plan more orders at the same time. Before, some planners were able to handle 20 vehicles a day, others got stuck after planning 7 vehicles. Peter Bevers: "With Fleet Planner on average, we save 30% time per planner. The huge difference is that the planning is not based on the planner's estimates, but on the fixed data Fleet Planner is using. This translates into a financial benefit. For instance, the time per order decreases - which is the main critical performance indicator - by 2% to 3.6%. This goes for countries and regions where intelligent Optimization has been completely rolled out and 2 to 3 years after full implementation, such as in France."

Simulating costs of waste collection routes for upcoming tenders

As part of a tender, SUEZ R&R uses Route Planner to calculate routes which were previously drawn on a paper map of the city. Peter Bevers explained, "Based on the available data, Route Planner simulates the waste collection routes and accordingly calculates the costs. Since these are already optimised plans, we can offer the best possible price in the tender. To respond to a tender, Route Planner can calculate with relatively little data, just "tons per month" for example. The system can also calculate different scenarios such as how much time is saved when drivers work in single shifts compared to double shifts."

“

Experiences in Belgium and The Netherlands proved Route Planner led to a significant increase in productivity of the waste collection operation of between 3% - 5%

Peter Bevers, Group Activity Leader Collections

Visit our commercial waste industry page

Digitalisation in the C&I waste industry to gain visibility and control on the key metrics that drive the profitability of your routes. Read more about the benefits our solutions on the AMCS industry page

View page →

