

Complex Operations Call for Smart Tools

Streamlining Communication, Collaboration and Workflows in the Process Industry

Gemsotec was founded in 2017 by three engineers looking to increase efficiency and safety in the process industry by applying the latest digital technologies. Today, the company has two products on the market which have been awarded for their user friendliness. On one hand, the GoRound platform offers a 100% digital and mobile solution for daily operations and on the other hand, the intervention app INA makes all relevant information about an intervention easily available and streamlines communication between all stakeholders.

CHEManager: What was the starting point and motivation for founding Gemsotec?

Geert Sergoyne: While working in the chemical industry, I was surprised that despite the level of automation and the challenging environment, people were still very dependent on paper. Workflows, instructions or the sharing of information were all paper based processes. We lost time on finding the right documents. Furthermore, these documents mostly consisted of text and were therefore a missed opportunity to give clear instructions to the personnel. What does the valve look like that needs to be turned? Where can I find it? Given the digital revolution and the improved availability of smart devices for the industry there were no more excuses to continue this way. This was the reason we decided to start Gemsotec.

Stefan Ruyters: We founded Gemsotec back in 2017 with the vision to reach an even more safe and sustainable industry by means of digital technologies. The aim is to further reduce incidents and gain more efficiency in manual operations. We first did many interviews in the industry to better understand the general needs and the problems being faced. The founders, although three engineers, combined very complementary and essential skills to start the company and especially to build the right solutions. That's how Gemsotec was born.

What does the company name Gemsotec actually stand for?

S. Ruyters: Looking for a good name, we spent quite some time and discussions on it. I did not want a name that clearly depicts the names of the founders. That's how we came up with Gemsotec. A gem is a bright and highly valued stone, and in Dutch it refers to a goat/antelope-like animal (chamois) able to quickly climb rocks and mountains. These are two characteristics that we could associate with our company. But, yes, it also refers to the letters of our first names.

What problem does Gemsotec's technology specifically solve, or what previously untapped opportunities does it open up?

G. Sergoyne: We focus on streamlining operations and communication in a production site reaching the next level of operational excellence. As mentioned, a lot of paper is still circulating in production.

In addition, while everybody uses a smartphone and tablet in their daily lives, they are only rarely found on the production floor. Both observations drove us to developing mobile apps for production companies. That's how we came up with the GoRound platform to reduce paper forms, and INA, our communication platform for intervention management and preparation.

Who are your customers and in which markets do you find them?

G. Sergoyne: The GoRound platform is very flexible allowing it to be used for various use cases. In essence it is a no-code platform that enables busi-



Geert Sergoyne (left) and Stefan Ruyters, Gemsotec

ness users to configure their paper checklists, tasks, instructions et cetera. Our biggest customer is H. Essers who uses it to streamline and standardize their internal audits, like 5S, of warehouses across the EU. We immediately became active internationally in six countries. Our platform has been designed for the process industry, including food and chemical industries. Our clients are, for example, breweries in Belgium but also chemical multinationals such as Oleon. INA is equally relevant for chemical industries, both in operations as in the company fire department, and for public fire departments. For example, INA is used by the Fire Department of the city of Antwerp, the largest in Flanders.

What do you see as the main drivers for your success and what is the feedback from the industry?

S. Ruyters: Our customers always say that our apps are very easy to use and align very well with the workflows and requirements of the process industry. As mentioned, we put user-friendliness at the forefront of development, taking into account the specific nature and circumstances of a production plant and its workers. As an example, our mobile app is made for operators & technicians of all ages and digital skill levels. It does what it needs to do, and that is highly appreciated. Through our kick-off program we help

PERSONAL PROFILE

Stefan Ruyters is Co-Founder of Gemsotec. He obtained a PhD in environmental sciences (Bioscience Engineering, KU Leuven) in 2010 specializing in microbial ecology. After his post-doc, Stefan has been active in R&D and innovation in the food and chemical industry. He has managed a Horizon2020 project focusing on supporting innovative start-ups and SMEs before starting his own venture Gemsotec. Stefan is specialized in managing innovation projects in a multidisciplinary way, giving a 360° view on the project. He has gained expertise in digital product development, IoT sensors and circular economy.

Geert Sergoyne is CEO and Co-Founder of Gemsotec. He obtained a master's degree in catalytic chemistry (Bioscience Engineering, KU Leuven). He soon joined Air Liquide thereafter and has been active for more than 10 years in different operational management roles. He dealt with the optimization of the entire supply chain from the production in the plant to the distribution through pipelines or trucks. These years of experience were very valuable in order to better understand the needs and to come up with the appropriate solutions.

our customers to configure the platform and identify all the possible use cases, so that they get the maximum out of our platform. ■



BUSINESS IDEA

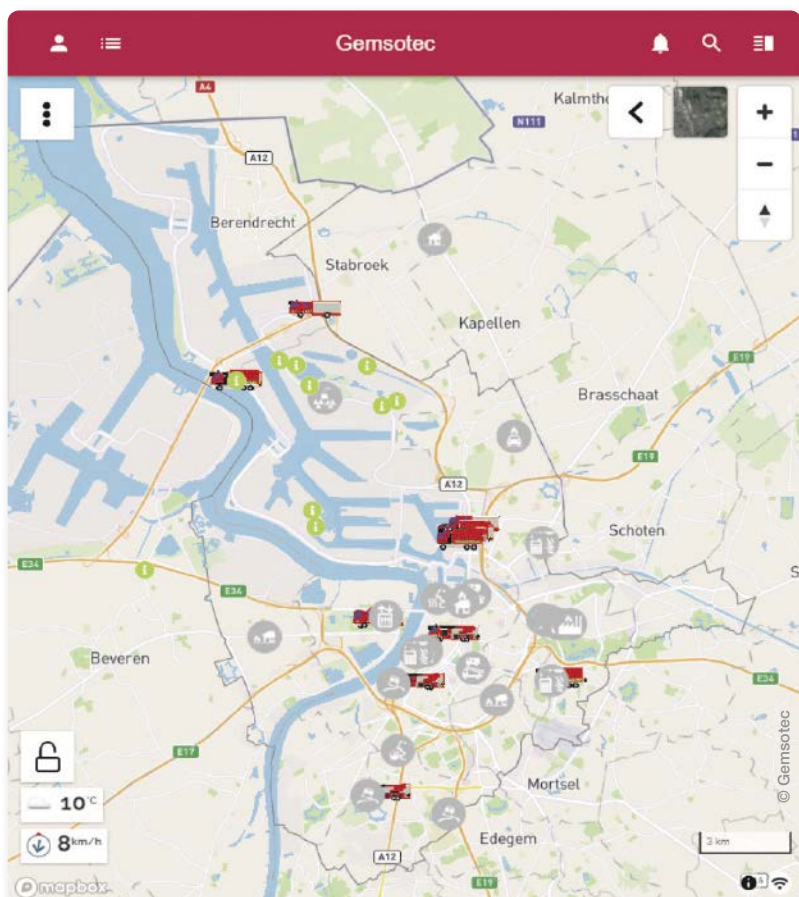
Making Operations Smart and Mobile

The idea of Gemsotec is that operators and technicians should be geared with the right digital tools to maintain the highest level of operational excellence. Tools that make their work easier, more effective and that offer them all the information they need. And since mobile devices are so common in personal life, it was about time to adopt them in industrial operations. Essential in the GoRound platform is our mobile app which is used by operators and technicians to execute inspections, register data, consult instructions and perform tasks right from their smartphone or tablet. This digital system allows data to flow seamlessly throughout the organization, breaking down data silos (like maintenance, production, quality) which are typical in production plants. In addition, whereas data usually sits down on paper forms, it is now ac-

tivated and allows to automatically update dynamic reports and dashboards with the latest data. Typical use cases are 5S audits, lockout tag-out instructions, operator rounds, safety inspections et cetera.

INA has been developed in co-creation with the Antwerp fire department. INA is an innovative concept that integrates GIS with a smart chat application. The map shows all the relevant data such as hydrant locations, the incident location, while the chat application allows to directly communicate with experts and automatically share documents and other information with all stakeholders. When an incident happens, every minute counts. And with INA they save time in preparing the intervention. INA has won the e-gov award in Belgium for the most user-friendly solution, a recognition of which we are very proud.

■ Gemsotec BV, Herent, Belgium
www.gemsotec.com



The app INA makes all relevant information about an intervention easily available and streamlines communication between all stakeholders.

ELEVATOR PITCH

Futureproofing Operational Excellence

Gemsotec offers smart and mobile tools to streamline collaboration and workflows in complex and critical environments such as the process industry. These solutions contribute to a more sustainable and safer world. The Gemsotec GoRound and intervention app INA is being used in the process industry, logistics and fire brigades—and this already in six countries. The Gemsotec team grew to eight people and now consists of five developers and three business-oriented profiles.

started. Gemsotec managed to receive a second subsidy from the Flemish government.

2020

■ The first version of INA was ready and rolled out in Q3 2020 at the fire brigade of Antwerp. The GoRound platform is evolving rapidly and is being used in six countries in the process industry and in logistics. Gemsotec received the Agoria e-Gov Smart City award for most user-friendly e-gov app and won an “AI for maintenance” hackathon organized by Aquafin.

Milestones

2017

■ Gemsotec was founded and was admitted to the KBC start-it incubator in Leuven, Belgium. Gemsotec managed to receive an innovation subsidy from the Flemish Government.

2018

■ Gemsotec hired its first employees and started the developments of the GoRound platform. The first version was ready and tested in proof-of-concepts in the industry in Q4.

2019

■ The first GoRound customers were onboarded. The developments of the intervention app INA

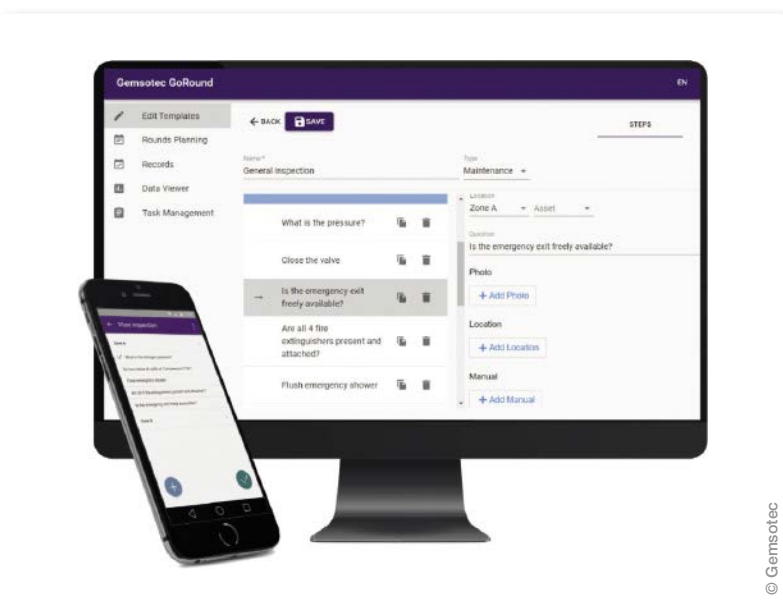
Roadmap

2021

■ Rollout of INA to other public and company fire brigades. The GoRound platform will integrate sensor data coming from production plants. All the gathered data will be used in an intelligent way to notify operation personnel.

2022

■ The collaboration and integration capabilities will be further improved for both the GoRound and the intervention app INA. Gemsotec will enter into partnerships to boost the distribution of the GoRound.



GoRound is a platform that assists operators and technicians to perform visual inspections, instructions and tasks.