



CORPORATE MAGAZINE

FEBRUARY 2022

Crossing the finish line together

ICT Group women ride Amstel Gold Race. **P8**

Adopting new technologies at the center of excellence

Smart, reliable software solutions are a prerequisite for continued excellence. **P21**

Making the world a little **smarter** every day

COLOFON

As a leading European industrial technology solutions provider our 1,600 dedicated technical professionals offer our clients services including: recruitment and staffing, testing and training, software development, project-based solutions, consultancy and managed services.

With a track record spanning more than 40 years, ICT Group has both extensive multi-domain expertise and in-depth industry knowledge. Integrating these strengths into compelling technological solutions puts us in a unique position to help our customers make their business processes more efficient, flexible, simple, safe and – as a result – more sustainable.

ICT Group has identified the areas in which its range of expertise has the highest impact and where the solutions it offers provide the highest added value for customers. This approach enables us to further enhance our technological expertise and innovative capabilities in our focus areas: R&D Engineering, Industrial Automation, Infra & Mobility and Healthcare.

With our Smarter Industries solutions we serve the automotive, manufacturing, high-tech, food, chemical & pharma, oil & gas and logistics industries. Our solutions in Smarter Cities are focused on water, rail and road infrastructure as well as public transport and mobility. Within Smarter Healthcare we provide solutions in the domains of medical data exchange and obstetrics.

Furthermore, ICT Group delivers its own software products including a cloud-based platform for IoT, digital transformation and artificial intelligence and proprietary software for obstetrics and Mobility as a Service. With our Motar low-code platform we facilitate quick and flexible model-based development at faster speed and lower costs. Our web-based solutions offer real-time insight, access and control in supply chains.

ICT Group operates in the Netherlands, Bulgaria, Germany, Portugal and Sweden.

Index

› Foreword	4
› Young ICT: personal development, networking and fun	6
› Raster develops ICSS for gas producer IOG	7
› Crossing the finish line together	8
› Go for IT! Highlights	10
› Go for IT! Blogs	12
› InTraffic & RailConnect develop simulation learning environment	14
› Strypes, nearshoring from ‘coast to coast’	16
› CASE: Better software and clear roadmap for OD Security	18
› CTG in primary care: the right care close to the client	20
› Adopting new technologies at the Center of Excellence	21
› ICT develops cloud platform for Virtual Lab for Plant Breeding	22
› KLM Healthcare Services uses COVID-19 crisis to adapt	24
› Development of water authority wide standard process automation	26

A NEW YEAR - LET'S GO FOR IT

That 2022 also started with a lock-down is something that we could not have foreseen a year earlier. COVID-19 and the subsequent Delta and Omikron variants have challenged us all, and I realise that the situation has been difficult for everyone over the past year. But with the tenacity and commitment of our staff, together we have made it a good year for ICT Group. It was also a special year because after almost 25 years we left the Amsterdam stock exchange and are now part of NPM Capital. With NPM Capital, we have a shareholder that thinks along with us and wants to help us achieve our growth.

In addition, we have once again added a number of new companies to the group. In January 2021 we welcomed Yellowstar, a company that optimises your supply chain with its own software solution, and in April Profit and Strypes Netherlands joined the group. Strypes Netherlands has now merged with the ICT Group subsidiary Innocy. The Portuguese branch of Strypes NL will strengthen our nearshoring proposition. In this magazine we will tell you more about our Coast to Coast nearshoring offering in Bulgaria and Portugal.

2021 was also the year of our GoforIT campaign, which focuses on inclusiveness, vitality and connectedness. What a fantastic moment it was when I stood at the start

of the Amstel Gold Tour with 500 power women. Our own ICT Group participants were trained by Leontien Zijlaard - van Moorsel and in this magazine you can read how she experienced this.

› Digital Solutions

This issue also contains many examples of the digital solutions that we offer in the sectors in which we are well established: industry, logistics and critical infrastructures. A major challenge in these sectors is the shortage on the labour market. Even more than before, companies are looking for solutions to speed up innovation, so that more work can be done with fewer people. For example, in March 2020, KLM Health Services (KHS) was suddenly faced with the challenge of devising a method of planning PCR tests.

“We want to help customers accelerate innovation.”

JOS BLEJIE, CEO ICT GROUP

With the help of ICT Group, KHS built a website where KLM staff can schedule a PCR test and view the results. ICT Group also used this project to quickly familiarise KHS with agile software development.

Another example has its origins in the shortage of train dispatchers. The more people that can be trained quickly, the faster this shortage can be solved. However, the simulation environment was a bottleneck. InTraffic and training company RailConnect have therefore developed a ‘simulation environment light’ that trainees can access from home using their own PC. They then need to spend less time in ProRail’s real-life simulation environment, allowing more people to be trained at the same time.

One sector that is also discovering substitution is healthcare. By moving care from the hospital to the first line or even to the patient at home, costs can be saved and doctors can be relieved, while it is also safe and pleasant for the patient. ICT Healthcare Technology Solutions saw this coming a long time ago and has developed a product for home monitoring, among other things. This makes it possible to make a CTG of the unborn baby in the midwife’s practice or at the pregnant woman’s home.

› Innovation accelerator

These examples illustrate the mission of our company: we want to help customers to accelerate innovation. Sometimes we do that by providing ready-made products, sometimes by providing a platform and always by sharing our knowledge. With NPM Capital on our side, we are excellently positioned to strengthen our position even further.

EEN NIEUW JAAR – LET’S GO FOR IT!

Dat 2022 begon met een lock-down konden we niet voorzien, maar door de vasthoudendheid en inzet van onze medewerkers hebben we er voor ICT Group een goed jaar van gemaakt. Het was ook een bijzonder jaar. Na bijna 25 jaar verlieten wij de Amsterdamse beurs en zijn nu onderdeel van NPM Capital, een aandeelhouder die met ons meedenkt en ons helpt onze groei te realiseren. 2021 was ook het jaar van onze GoforIT-campagne. Fantastisch om met 500 powervrouwen de Amstel Gold Tour te rijden. Verder in dit magazine voorbeelden van onze digitale oplossingen. Deze voorbeelden illustreren de missie van ons bedrijf: we willen klanten helpen om innovatie te versnellen. Soms doen we dat door kant-en-klare producten te leveren, soms door een platform te bieden en altijd door onze kennis te delen. Met NPM Capital aan onze zijde zijn we uitstekend gepositioneerd om onze positie nog verder te versterken. ‹‹



Young ICT: personal development, networking and fun

Young ICT stands for developing yourself, networking and making friends within ICT Group. Despite what the name suggests, your age does not matter, your mindset does. “We are here for everyone in our company who wants more fun and satisfaction from their work.”

This interview is with **Rens Kuijpers**, junior business development manager at ICT Netherlands - unit Industry and employed by ICT since April. He considers personal development opportunities very important in his work and explicitly asked for them during the job interview. “After I was hired, I immediately signed up with Young ICT and asked if I could help organize events. It’s the perfect way to quickly get to know colleagues outside your own business unit.”

› Content and fun

At the sporting and educational events organized by Young ICT, colleagues from all over the company come together; people with different backgrounds who work in different business units and in various positions. That’s exactly why Young ICT’s events are so attractive for networking and making contacts with colleagues you wouldn’t otherwise easily meet.

For example, Young ICT recently organized a beach volleyball tournament with a barbecue and drinks. Currently, we are brainstorming for the next event. “We are thinking about a hackathon: a technical challenge in which you compete as a team against other teams. That’s a great way to link content with fun and networking.” In doing so, Young ICT is also collaborating with InTraffic’s young professional

club. “They also have a networking club, we want to organize an event together.” The goal is to organize a fun or knowledge event about four times a year.

Do you want to know more? Contact:

✉ young@ict.nl

Persoonlijke ontwikkeling, netwerken en plezier
Jezelf ontwikkelen, netwerken en vrienden maken binnen ICT is niet voorbehouden aan een leeftijd, al hebben jongeren die aan het begin staan van hun carrière er meer behoefte aan. Young ICT richt zich daarom op iedereen die het nuttige met het aangename wil combineren en zo meer plezier en voldoening uit zijn werk wil halen.

Bij de sportieve en educatieve evenementen die Young ICT organiseert komen collega’s uit het hele bedrijf elkaar tegen; mensen met verschillende achtergronden die bij verschillende business units en entiteiten werken en in diverse functies. Juist daarom is het zo aantrekkelijk om via de evenementen van Young ICT te netwerken en contacten te leggen met collega’s die je anders niet zo snel tegenkomt.

Raster develops ICSS for gas producer IOG

Raster has recently been working hard on the development of the Integrated Control and Safety System (ICSS) for two production islands of the British gas producer IOG.



For over twenty years, Raster has been completely at home in the world of production islands for the extraction of oil and gas. The company, which is part of ICT Group, focuses on complex projects in industrial automation. The production islands of IOG were built at the yard of HSM Offshore in Schiedam.

These are unmanned platforms that make sustainable use of existing infrastructure and are operated from the mainland’, says Claudia van Batenburg, account manager & business development manager at Raster. The ICSS that Raster designed and built includes the controls to open and close valves, as well as the controls that ensure that everything is blocked or locked in case of emergency’, Claudia explains. Raster is also responsible for the fire & gas system of the production islands, of which the instrumentation was supplied by Johnson Controls. Raster developed the systems in cooperation with Schneider Electric and engineering Iv-ONE.

Claudia: ‘Raster employees have a lot of domain knowledge and are fully TÜV trained and certified. We always work in a team, where you are each other’s backup. When you are working on safety, it is a requirement that you constantly review each other’s performance.

[WATCH THE RASTER MOVIE](#) ➔

Do you want to know more? Contact:

Claudia van Batenburg

Business Development Manager, Raster

✉ claudia.van.batenburg@raster.com

in [linkedin.com/in/claudia-van-batenburg-78362620/](https://www.linkedin.com/in/claudia-van-batenburg-78362620/)



ICT GROUP WOMEN RIDE AMSTEL GOLD RACE

Power women cross the finish line together!

Cycling and the IT world seem to be mainly the domain of men. Wrong! The women are on the rise! In mid-September, a team of 500 power women gathered for the tour version of the Amstel Gold Race in the hills of Limburg. Nine female ICT Group employees were trained by four-time Olympic champion Leontien van Moorsel and reached the finish line with excellent times.

ICT Group was the main supporter of this great initiative by Leontien van Moorsel, Wendy van Dijk and Anouk Smulders. The sponsoring of the 500 women in the Amstel Gold Race is part of ICT Group's Go for IT! campaign. The campaign focuses on vitality, inclusiveness and collaboration.

› Goose bump moment

"It was amazing!", says Van Moorsel. "500 women in motion, cycling after such a bizarre period of corona, in which we sat still at home far too much. The moment all those women started was a goosebump moment for me. What a positive energy!"

"The health and well-being of our employees is very important to ICT Group," explains Carla Stuifzand, marketing & communications director at ICT Group. "When Leontien talked to us about her plan to cycle with 500 women, we were immediately interested. The initiative fits in perfectly with the goals of the Go for IT!

"These women from all over the world have shown that with perseverance, training, fun and togetherness you can achieve anything"

CARLA STUIFZAND

campaign. But we didn't just want to sponsor the event and provide technical support, we also thought it would be a good idea to ask ICT staff whether they wanted to join in the cycling tour."

› Social aspect

ICT Group employees represent thirty nationalities. The nine power women who took part in the tour are a good reflection of this. "With sports, the health aspect is of course important, but certainly also the social aspect," says Van Moorsel. "Being in contact with each other gives so much sociability." Van Moorsel provided various clinics for the ICT Group team in the months leading up to the tour. "We all enjoyed ourselves so much. Some of the ladies had little cycling experience and had never been on a racing bike before. When we cycled uphill during the first clinic, I was glad Michael, my husband, was there. He regularly pushed the ladies in the right direction. I am so proud of them. All the ladies in ICT Group made it to the finish line, and how!"



Stuifzand also looks back with satisfaction and pride. "Especially our international colleagues, who were so affected by the corona crisis because they had to miss their family and friends in their home countries, really found support from each other. Through the WhatsApp group, cycling appointments were made and the team became closer and closer. "These women from all over the world have shown that with perseverance, training, fun and togetherness you can achieve anything," says Stuifzand.

AFTER MOVIE AMSTEL GOLD RACE ›

De wielersport en de IT-wereld lijken vooral het domein van mannen. Mis! De vrouwen zijn in opkomst! ICT Group sponsorde een team van 500 powervrouwen om mee te rijden in de Amstel Gold Tour. Negen medewerksters van ICT Group werden getraind door Leontien van Moorsel en haalden met mooie tijden de finish. "Het was waanzinnig", blikt Van Moorsel terug. "500 vrouwen in beweging, lekker fietsen na zo'n bizarre coronaperiode, waarin we veel te veel stilzaten thuis. Het moment dat al die vrouwen van start gingen, was een kippenvelmoment!"

"De gezondheid en het welzijn van onze medewerkers zijn voor ICT Group heel belangrijk", licht Carla Stuifzand, marketing & communicatie director van ICT Group toe. "Dit geweldige initiatief sluit naadloos aan bij de doelen van onze Go for IT! campagne die draait om vitaliteit, inclusiviteit en samenwerking.

Alle dames van ICT Group hebben de finish gehaald, en hoe! Deze vrouwen uit alle windstreken hebben laten zien dat je met doorzettingsvermogen, training, plezier en saamhorigheid alles kunt bereiken", vertelt Stuifzand. ICT Group gaat deze positieve ervaringen verder uitbouwen in de campagne Go for IT!. ‹‹

"With sports, the health aspect is of course important, but certainly also the social aspect."

LEONTIEN VAN MOORSEL



Go for IT! Highlights

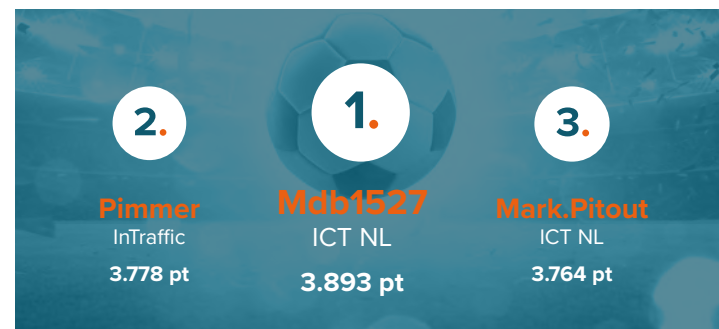
ICT Group is committed to the well-being of its employees. We want to encourage our employees to get the best out of themselves and we do this with a campaign in which the overarching message is: Go for IT! Whether individually or collectively; Go for IT! This way, ICT Group contributes to stimulating a healthy body and mind, strengthening an inclusive work environment and increasing and sharing (technological) knowledge.



WATCH THE AMSTEL GOLD RACE MOVIE ➤

➤ Relay Baton

Through the relay baton, employees get to know their colleagues in a different way! In the relay race, colleagues give each other tips on how to stay vital, but also on what motivates them to work together with others.



➤ UEFA EURO GAME

On 11 June, our UEFA EURO prediction competition kicked off. Employees from all corners of the organisation participated enthusiastically. Marco took home the trophy and the UEFA ball. But prizes were also received in Sweden and Bulgaria.



➤ Go for IT - Workshops

In October, we introduced the first three of a great series of Go for IT workshops. In these workshops, we focus on the four themes to help our employees make the best version of themselves.



WORK SMARTER
NOT HARDER



RESET YOUR
MIND



INTERCULTURAL
AWARENESS



COOKING
WORKSHOP



HEALTHY
WORKPLACE



HEALTHY
FOOD

➤ Bike-to-Work Day

We challenged our employees to come to the office by bike on Thursday 16 September! And you did! Many of our colleagues cycled to the office on 16 September or did the #thuiswerkronde. Watch the video of our colleagues on the bike.

WATCH THE VIDEO ➤



“The ICT Academy provides courses to further develop various technical skills, but also personal skills such as professional leadership. These GoforIT courses are a great addition to this.”

ELLEN TE KLOEZE
HR director

Win a

€ 500,-

donation to a charity
of your own choice!

➤ ICT Group Paralympic Games

We believe that exercise is important and healthy. Everyone should have the opportunity to sport or exercise. That is why we asked our employees in August to share a photo of a sporty moment of yourself wearing your ICT Group sports shirt. The best two won a donation to a charity of choice.

WINNERS:

Oscar Visser - Stichting het Gehandicapte Kind
Wicher Harmsen - Tour du ALS



ICT Group stimulates a healthy body and healthy mind. Together, we work on and in a vital, inclusive and challenging organisation. Colleagues explain how they get the best out of themselves and what role ICT Group has in this. Curious about the personal stories? Read them here!



Mostafa Danash works in development teams together with colleagues from different cultures. The more diverse the team, the more you can learn from each other. Mostafa welcomes the fact that diversity and inclusiveness are important themes in ICT Group's "Go for IT!" campaign.

“I feel
completely
at home here”

READ MY BLOG >

Cora Maurice came to work for InTraffic about two years ago. The size of the company definitely played a role for me: not too big, so you know almost all the colleagues, and not too small, so you have plenty of opportunities to develop. Being part of ICT Group means that you get every opportunity to do so.

“I **enjoy**
working here
every day”

READ MY BLOG >

Ahmed Abdelmonim is a driven Technical Project Leader with a listening ear. I enjoy working with people and want to bring out the best in everyone. A good work balance also includes being healthy and fit. He sees vitality as an indispensable theme in ICT Group's Go for IT! campaign.

“**Supporting
colleagues**
gives me a lot
of **energy**”

READ MY BLOG >

Marissa Prins and **Mirna Bakker** are two ambitious young women. Both are at the beginning of their careers and enjoy working for INNOCY. What do they find important in their work? Interesting projects, the pleasant cooperation with colleagues and opportunities for optimal development. And INNOCY offers plenty of that.

“**Interesting projects**
and **plenty of
opportunities**
to develop”

READ OUR BLOG >



InTraffic & RailConnect develop a **simulation learning** environment for train traffic controllers

Railway manager ProRail is facing an increasing shortage of train traffic controllers. The recruitment of new staff has not solved the problem yet, because it takes nine months to train a traffic controller. InTraffic worked together with training and consultancy firm RailConnect to develop a hybrid training course aimed at becoming a traffic controller. The course was partly virtual and partly physical. This allows more people to be trained at the same time.

› Rebuilt simulation workstation

An indispensable part of the training course is the simulation set, a replica of a ProRail traffic control centre. “A traffic controller’s workstation consists of eight monitors that run ten different applications,” explains InTraffic’s Edwin Winterkamp. “It was up to us to recreate ProRail’s traffic control centre in a digital environment for training purposes. This environment allows trainee traffic controllers to learn and practise safely, without disrupting operations.” Because the training set ensures that ProRail can complete the training programme without having to share equipment.

InTraffic took care of the infrastructure when building the simulation environment. Winterkamp: “We have the knowledge to build such a workplace, but a lot of

“We have designed the course to be as flexible as possible: digital where possible and physical where necessary”

PHILIP HUPKES

Founder and owner of RailConnect



time goes into investigating what is needed. Then it has to be realised and we have to find suppliers for applications, telephony, etcetera.”

› Hybrid training

The training itself was developed by RailConnect. Philip Hupkes, founder and owner of RailConnect says: “We designed the course to be as flexible as possible: digital where possible and physical where necessary. We want people to be able to learn as much as possible from home, or at least not necessarily from ProRail’s traffic control centres. That’s why we worked together with InTraffic to develop a digital traffic control environment. By making learning methods flexible, people from all over the country can be trained.

This saves them a lot of travel time. In addition, more people can be trained at the same time than is the case with classroom education.”

› Supervisory role becomes more important

Despite the fact that InTraffic has succeeded in making a digital copy of ProRail’s traffic control centre and that the railway manager is facing a serious shortage of traffic controllers, Winterkamp and Hupkes do not expect that the role of the traffic controller will be taken over by a computer any time soon. Hupkes: “There will certainly be a greater degree of automation in the future, but I firmly believe that the role of a train driver is more likely to be taken over by an automated system than that of a traffic controller. After all, in ATO (Automatic Train Operation) in particular, a traffic controller has an even more important supervisory and steering role.”

Do you want to know more? Contact:

Edwin Winterkamp

Key Accountmanager, InTraffic

✉ edwin.winterkamp@intraffic.nl

in [linkedin.com/in/edwinwinterkamp/](https://www.linkedin.com/in/edwinwinterkamp/)

Spoorbeheerder ProRail kampt met een oplopend tekort aan treindienstleiders. Hoe meer mensen snel kunnen worden opgeleid, hoe beter het is. Daarom ontwikkelde InTraffic in samenwerking met opleidingspartner RailConnect een hybride opleiding: digitaal waar mogelijk, fysiek waar nodig. Zo hoeven toekomstige treindienstleiders niet continu naar een centrale opleidingslocatie te komen en kunnen bovendien meer mensen tegelijkertijd worden opgeleid. Bij de opleiding wordt veel gebruikgemaakt van een simulatieomgeving, waarop deelnemers kunnen oefenen met het werken met acht schermen en tien applicaties tegelijkertijd. InTraffic bouwde de verkeersleidingspost van ProRail volledig na, en ook nog eens op zo’n manier dat deelnemers ook thuis op hun eigen PC al kunnen proeven aan de complexiteit van de echte omgeving. Daardoor hoeven deelnemers minder tijd in de simulatieomgeving door te brengen, wat weer bijdraagt aan de belangrijkste doelstelling: in hoog tempo veel mensen opleiden tot treindienstleider. ‹‹

Strypes, nearshoring from ‘coast to coast’

From the Black Sea to the Atlantic Ocean, Strypes expands its nearshoring model. ‘In this way we can do more and more for our clients.’

In six years Strypes in Bulgaria has grown from 50 to 400 employees. In addition to Sofia and Plovdiv, an office in Burgas at the Black Sea was opened last June. In Portugal, besides the office in Lisbon, a branch was recently opened in Porto. We talked to Todor Marinov CEO of Strypes Bulgaria and Geert Eijkhout, CEO Strypes Portugal. ‘Yes, Strypes is growing rapidly. The key is that we do not only grow

in size but also in responsibility’, emphasizes Bulgaria ceo Todor Marinov, ‘Our mission is to create impact for our clients. They ask us to cover the full scope of projects, from analyzing their business needs and developing tech solutions till implementation and management afterwards, including risk and quality management. We take full responsibility. Besides that, we work for companies that are

“Exceptional and highly empowered employees are essential to cover this wide variety of challenging software development disciplines”

among the most innovative in the world. They have to expand a lot. To keep track with them as their partner, it is inevitable to expand with them.’

Strypes Portugal develops a wide range of embedded software solutions – in cooperation with partners – while also covering real-time operating systems, board support packages and device driver development. “Exceptional and highly empowered employees are essential to cover this wide variety of challenging software development disciplines”, says Portugal ceo Geert Eijkhout. “Growing fast is not an objective but a derivative of doing things that make customers and employees happy. Growth then comes naturally.

› Nearshoring

Right at the start in 2008, Strypes embraced its Nearsurance model. Account delivery teams present on site with the client organize the work for outsourcing, agile remote teams deliver the IT

solutions needed. ‘Nearshoring combines the best of both worlds’, says Marinov. ‘Near’ means you’re close. It is important for our clients they can look us in the eye. Working together is all about trust. Our remote teams understand the domain and are very experienced in solving the clients problem. It is difficult for companies in the Netherlands to find the right IT talents locally. Nearshoring is a very good alternative to unburden our clients. Strypes can offer all of that, from coast to coast, from the Black Sea to the Atlantic.’

› Transformation

Eijkhout notes a significant transformation is taking place. ‘In Europe, nearshoring is becoming increasingly important. Given the retreats in Asia, demand will increasingly take place on a European scale. Nearshoring is attractive. We can call on well-trained and well-motivated IT talents, who are extremely adept at writing software. Twenty years

ago, nearshoring was mainly cost-driven. Now it’s all about high-quality services. Strypes adds value.’

› ICT Group

Being a part of ICT Group brings Strypes lots of opportunities. ‘For each client’, explains Marinov, ‘Strypes and ICT Group can create all kinds of synergy. We’re already collaborating on various projects, especially in hightech and transportation.’ Eijkhout adds: ‘It is important you can offer economies of scale if you want to tackle extensive projects. The great thing is that we can combine activities. New clients will experience what it is like to work with a small dedicated team with Strypes. In this way we can do more and more for our clients.’

Do you want to know more? Contact:

Eric Damhuis

Strypes Sales Director

✉ eric.damhuis@ict.nl

in [linkedin.com/in/eric-damhuis-3758822/](https://www.linkedin.com/in/eric-damhuis-3758822/)

Strypes: nearshoring van de Zwarte Zee tot de Atlantische Oceaan

Met zijn nearshoring-model ontzorgt het vanuit Bulgarije en Portugal opererende Strypes in toenemende mate zijn klanten in de hightech en logistiek. De snelle groei van het bedrijf ligt voor een groot deel in het feit dat klanten Strypes vragen de volledige scope van ICT-projecten te dekken, van het analyseren van hun behoeften en het ontwikkelen van ICT tot de implementatie en het beheer daarna, inclusief risico- en kwaliteitsmanagement. Het werk vindt on

site (‘near’) bij de klant plaats, terwijl andere teams op afstand de benodigde ICT-oplossingen bouwen. Gekwalificeerde ICT-professionals in Nederland zijn schaars, en dat maakt nearshoring extra aantrekkelijk. Door de terugtrekkende bewegingen in Azië neemt het belang van nearshoring op een Europese schaal nadrukkelijk toe. Onderdeel zijn van ICT Group betekent voor Strypes dat het schaalgrootte en synergievoordelen kan bieden bij omvangrijke projecten. ‹‹



CASE

Better software and clear roadmap for OD Security

OD Security makes Transmission X-Ray Full body scanners. The scanners are used worldwide in penitentiary institutions, by customs and in diamond and gold mines. Software forms the heart of the scanners. “ICT Group developed a robust software platform that gave us much more than just the requested stable software base,” says Martin van der Kaap, Technical & QA Manager at OD Security. “Via the roadmap, we are actively involved in all the steps that ICT Group takes for us. This makes ICT Group the ideal partner for us.”



› Structured, project-based approach

Project-based collaboration is an important part of the new approach that was deployed under the guidance of ICT Group. “We work on challenging software for clients in all sorts of sectors. The plan of approach is important for this, in order to work in a structured, project-based manner. It makes us their ‘trusted advisor’, based on more than forty years of experience” says Marco Boeve, Operations Manager at ICT Group. “We have been working with OD Security for about ten years and more recently our structured, project-based approach has also become important to them.”

The software for the body scanners must be reliable and easy to scale, both for an individual device and within a network of scanners. Communication within a network of scanners, for example, is important in order to collectively remain within the safety standards. After all, it is not the intention that people for whom the scanners are intended are exposed to more than the annual limit of radiation.

› Software according to a roadmap

“At OD Security, we were not used to requirements and specifications. More recently, and during this particular

project, we started working together on a much more project-oriented basis, and we formalized and professionalized several things,” Van de Kaap explains. “That was important to us, otherwise the software would never have been developed as it is now.”

ICT Group develops software for OD Security on the basis of a clear roadmap. The milestones mark important new items, and new features are given clear desired specifications in advance. “We see the Sprints that ICT Group does and are actively involved in them,” Van der Kaap explains. “This way we have access to the DevOps environment and communication is optimal.” The developed solutions meet the high requirements for functional testing of new releases. In addition, regression tests run much more smooth, so that the development speed is higher than before. “Of course it is the software that ultimately contributes to the distinguishing capacity

“We have been working with OD Security for about ten years and more recently our structured, project-based approach has also become important to them.”

MARCO BOEVE

Operations Manager at ICT Group

of OD Security, although restructuring such a process and the cooperation is an enormous help in achieving good results,” concludes Boeve.

Do you want to know more? Contact:

Marco Boeve

Operations Manager, ICT Netherlands

✉ marco.boeve@ict.nl

in linkedin.com/in/marco-boeve-0137771/

OD Security maakt Transmission X-Ray Full body scanners. De software vormt het hart van deze body scanners. “ICT Group ontwikkelde een robuust softwareplatform dat ons veel meer heeft opgeleverd dan alleen de gevraagde stabiele softwarebasis. Via de roadmap zijn we actief betrokken bij alle stappen die ICT Group voor ons zet. Projectmatig samenwerken is een belangrijk onderdeel van de nieuwe aanpak die onder begeleiding van ICT Group werd ingezet.”, aldus Martin van der Kaap, Technisch & QA Manager bij OD Security. “

“We werken voor klanten in allerlei sectoren aan uitdagende software. Belangrijk daarbij is het plan van aanpak, om gestructureerd en projectmatig te werk te gaan. Het maakt ons hun ‘trusted advisor’, op basis van meer dan veertig jaar ervaring” vertelt Marco Boeve, Operations Manager bij ICT Group. De ontwikkelde oplossingen voldoen aan de hoge eisen voor het functioneel testen van nieuwe releases. Bovendien verlopen regressietesten veel vlotter, waardoor de ontwikkelingssnelheid hoger ligt dan voorheen. <<



CTG in primary care: the **right care** close to the client

When pregnant women feel reduced life, when they are ‘late’ or when the baby is in the breech position and is turned, a CTG is made: a cardiogram of the unborn child. In the past, women had to go to a hospital for this, but from 2023, after years of pilots, there will be a reimbursement for obstetrics practices that offer this care close to home. This care is made possible by the home monitoring solutions of ICT Healthcare Technology Solutions (HCTS).

At the foundation of this success is obstetrician Siegrid Hoekstra. She speaks from experience when she says: “Women who come to our practice with one of the three indications mentioned feel a lot of anxiety: is everything still all right with my baby? If we have to refer her to the hospital, that tension only increases.

Op de meeste plekken in ons land worden vrouwen die verminderd leven voelen voor het maken van een hartfilmpje van de baby doorverwezen naar het ziekenhuis. Enkele regio’s lopen voorop en hebben het met de technologie van thuis monitoring mogelijk gemaakt om zo’n antenataal CTG in de verloskundige praktijk te maken, waarbij desgewenst de gynaecoloog in het ziekenhuis meekijkt. Vanaf 2023 wordt deze vorm van zorg in heel Nederland door de verzekeraar vergoed. Goed nieuws voor zwangere vrouwen, want zij waarderen zo’n CTG in de eerste lijn met het rapportcijfer 9,4. In de regio Nijmegen maken ze zo’n CTG in de eerste lijn bij drie indicaties. In totaal hoeft maar liefst 86% van de vrouwen niet doorverwezen te worden naar het ziekenhuis.

However, in nine out of ten cases, the CTG shows that nothing is wrong. How nice is it if you can examine this woman in your own practice and quickly reassure her or give her the reassuring answer that no abnormalities were found? Home monitoring makes this possible.

› Satisfied patients

Hoekstra is the initiator of a pilot that started in 2015 in the Nijmegen region and that was later extended to other regions. This pilot shows that on average over the three indications 86% of the women no longer need to be referred to hospital. But most importantly: the women are very positive about the care close to home. They give the care a score of 9.4.

The quality of care is high. Obstetricians are taught how to read a CTG during their training. They also receive training in the use of the equipment. If there is any doubt, they can ask a gynaecologist in the hospital to watch remotely via streaming. In the Nijmegen region, gynaecologists and midwives also hold a quarterly session in which they discuss the CTGs they have recorded. Hoekstra: “It is instructive for both professional groups to evaluate together. You get to know each other better, learn to look at things through each other’s eyes and reinforce the feeling that you are doing it together.” This all results in care that the women experience as being very valuable. It also contributes to the substitution of care from second to first line.

Do you want to know more? Contact:

Eline Wennekes

Business Development Manager bij ICT Healthcare Technology Solutions

✉ eline.wennekes@ict.nl

in [linkedin.com/in/eline-wennekes-78950b61/](https://www.linkedin.com/in/eline-wennekes-78950b61/)



Adopting new technologies at the **Center of Excellence**

Smart, reliable software solutions are a prerequisite for continued excellence. They are crucial to reduce the time-to-market and to stay ahead of the competition. That’s why the ICT Center of Excellence concentrates all knowledge and experience gained from previous projects for high tech players.

Julien Schmaltz, Principal Consultant at ICT: “We started a Center of Excellence in consultancy and innovation to help our clients to understand and adopt technology quicker, which is beneficial. Take the digital twin for example: thanks to implementing this technology, you can understand from a virtual image how your processes would work in real life.”

Examples of technologies that have been tested accordingly are machine learning, model-driven engineering, model-based testing, systems engineering and soft PLC. Schmaltz: “In our field lab we test new technologies on the basis of real cases in a conditioned environment. This research

Testen van nieuwe technologieën in het Center of Excellence

Slimme, betrouwbare softwareoplossingen zijn voorwaarde om te blijven excelleren. Dit is cruciaal om de time-to-market te verkorten en de concurrentie voor te blijven. Daarom introduceert ICT Group het Center of Excellence. Hierin wordt alle kennis en ervaring die is opgedaan bij eerdere projecten voor hightech topspelers gebundeld. Wij testen nieuwe technologieën aan de hand van cases uit de praktijk, maar dan in een geconditioneerde omgeving. In de video legt Julien Schmaltz uit hoe dat in zijn werk gaat.

does not disrupt your processes and is objective and independent. The research can be done from exploration and concept development to delivery and maintenance.”

LEARN MORE AND WATCH THE VIDEO ➔

Do you want to know more? Contact:

Julien Schmaltz

Technical Consultant, ICT Netherlands

✉ julien.schmaltz@ict.nl

in [linkedin.com/in/julien-schmaltz-3787537/](https://www.linkedin.com/in/julien-schmaltz-3787537/)



CASE

ICT develops cloud platform for Virtual Lab for **Plant Breeding**

In the past it took decades to breed a new variety for a crop. By crossing varieties more and more selectively, that has been reduced to ten to fifteen years. By using genomics, that time can be shortened even further. This is what the Virtual Lab for Plant Breeding (VLPB) wants to establish with a cloud platform for genomics.

Because the investments in technologies to unravel and make good use of the genome of plants are large, the VLPB was established. This is a partnership between six companies active in flower and plant breeding for pre-competitive investment in bioinformatics and genomics. Five of those companies decided to jointly develop a common cloud platform for genomics consisting of infrastructure and specific tooling in this field. In doing so, the VLPB called in the help of ICT Group.

› Domain knowledge

Saulo Aflitos is a senior researcher in bioinformatics at Bejo, one of the participants in VLPB. He is the initiator of this project. “I’m impressed with ICT Group’s domain knowledge. They immediately understood that setting up a pipeline for genomics is one hundred percent custom work. You can’t just design a data lake and select some generic analytical tools; you have to redesign it from scratch. We have to totally reengineer existing tooling for genomics research to make it suitable for use in a distributed environment.”

The first phase of this process is completed. The data lake is in place and the tools can be used in the cloud, but they are not yet fully cloud native. That’s the next step. “We eventually want to be able to scale up and down the required resources fully automatically and in a fully flexible way; at the moment this still has to be done manually,” explains Aflitos. After that, he also wants to take steps when it comes to the automatic pre-processing of data, so that less manual work is involved. Ultimately, he foresees a situation in which bioinformatics specialists are only concerned with data and no longer with the IT environment you need for genomic research.

› Business-critical environment

Eric Kuijt, bioinformatician at GenNovation, can’t wait for that situation. GenNovation is one of the participating parties in VLPB and represents four ornamental plant breeders. “Until now, as a lab, we had our own server for data storage, computation and visualizations. But now that this type of research is becoming increasingly important for the future success of breeders, you don’t really want to have such a business-critical environment in house anymore. Quite apart from the fact that that server is full, while the amount of data is only growing.”

He is very pleased with the collaboration with ICT Group. “They help us to make the right choices in areas such as security, scalability and robustness. What appeals to me is their openness in all areas; about the possibilities and impossibilities, the costs,

and also about things that, in retrospect, they could have handled differently. We are truly one team working towards the same goal rather than customer and supplier.”

Aflitos concurs. “Many suppliers try to sell you their ‘solution’, whereas the ICT Group wants to help you solve your problem. We are only at the beginning of this journey. We hope to continue it with ICT Group, because our collaboration was certainly pleasant and productive.”

Do you want to know more? Contact:

Almando Coutinho

Business Consultant Data Analytics, ICT Group

✉ almando.coutinho@ict.nl

in [linkedin.com/in/almandocoutinho/](https://www.linkedin.com/in/almandocoutinho/)

“I’m impressed with ICT Group’s domain knowledge. They immediately understood that setting up a pipeline for genomics is one hundred percent custom work.”

SAULO AFLITOS

Senior researcher in bioinformatics at Bejo

Genomisch onderzoek wordt steeds belangrijker voor het succes van bedrijven die zich bezighouden met plantenveredeling. De investeringen die gemoeid gaan met de benodigde technologieën zijn echter groot. Vandaar dat vijf van deze bedrijven samenwerken in het Virtual Lab for Plant Breeding (VLPB). Met

hulp van ICT Group heeft het VLPB een gemeenschappelijk cloudplatform met gemeenschappelijke tooling opgezet. In een eigen private cloud-omgeving doen de bedrijven vervolgens hun eigen onderzoek. ICT Group zal ook betrokken blijven bij de doorontwikkeling van het platform. <<

KLM Health Services uses COVID-19 crisis to **adapt**

KLM Health Services provides healthcare services to both KLM and organizations whose staff fly frequently. The COVID-19 pandemic brought with it a significant drop in demand for medical examinations and traveler's vaccinations, but at the same time the demand for PCR testing exploded. In no time, both the organization and the underlying IT landscape had to be transformed.

In 2019, KLM Health Services (KHS) formulated its digital strategy, says Joaquin Zschuschen, Digital Manager at KHS. KHS built a new foundation for its IT environment. A foundation on which an entire 'village' will be built with 'Lego blocks'. The first 'house' was built early 2020: a specific part of the physical examinations. Then Covid came to Europe. From one moment to the next, almost all flights were cancelled. There was no demand for physical examinations, vaccinations and international medical advice from large international customers. But at the same time a new demand arose: from travelers who wanted to be tested for necessary trips and from flight attendants flying to countries with a PCR requirement. The work of the business unit International Health & Travel Services changed completely, says business unit manager Monique de Jong. "In one month we went from 5 PCR tests per week to 100 per day. We were bombarded with calls from travelers with questions. We also predicted an even much stronger growth in PCR testing once air travel got underway."

"In one month we went from 5 PCR tests per week to 100 per day. We were bombarded with calls from travelers with questions. We also predicted an even much stronger growth in PCR testing once air travel got underway."

MONIQUE DE JONG
Business Unit Manager at KLM Health Services

Website for PCR testing

It was clear that there had to be a website where people could schedule a PCR test, quickly see the result, and get a travel statement. A challenge, says Zschuschen, "Because apart from that foundation and a vision, we didn't have anything yet. We didn't even have a Scrum team that could develop software in an agile way."

With the help of Improve Quality Services, an ICT Group Company, that team got there at lightning speed. It was decided that despite the rush, no 'quick & dirty' product would be built, but rather an environment that was future-proof and met the highest standards, especially when it came to security and privacy. Zschuschen: "We built according to the architectural principles that we had defined, so that we would have a future-proof product. In addition, we wanted to avoid a data leak or accidentally communicating the wrong test result to someone." In 4 iterations and in 8 weeks, a minimum viable product of the website was brought live, a remarkable achievement.

This experience was taken into account when building a system for Occupational Health and Safety Services, which started in September 2020. De Jong: "The software was completely rebuilt from scratch into a minimal version in a period of four months. That would really have taken much longer via the traditional working method."

Hungry for more

KHS has seized the crisis in the aviation industry to establish a new IT foundation. And that in a phase in which not a penny could be spent, salaries were cut, the workload and emotions were high and uncertainty prevailed. De Jong laughs when she says, "I actually only have one problem now: employees have seen how quickly we can develop new IT systems. That makes people hungry. They want to go faster than the digital teams can facilitate. Covid has changed our business permanently. We need to be able to respond flexibly to changes in the market. We are adapting our IT landscape accordingly. Without the pressure from Covid, we would have needed much more time to adapt the way we work. I'm really proud of what we have put in place."

Do you want to know more? Contact:

Martijn van de Haterd

Agile Consultant, Improve Quality Services

✉ martijn.van.de.haterd@improveqs.nl

🌐 [linkedin.com/in/martijnvandehaterd/](https://www.linkedin.com/in/martijnvandehaterd/)



KLM HEALTH SERVICES GEBRUIKT CORONACRISIS OM AAN TE PASSEN

KLM Health Services (KHS) levert gezondheidsdiensten aan zowel KLM als aan organisaties wiens personeel vaak vliegt. Toen in maart 2020 corona Europa bereikte en het vliegverkeer van het ene op het andere moment vrijwel volledig stil kwam te liggen, veranderden de taken van de business unit International Health & Travel Services. Er was geen vraag meer naar medische keuringen, vaccinaties en internationaal medisch advies, maar in plaats daarvan ontstond er vraag naar PCR-testen voor personeel dat nog vloog op de noodzakelijke vluchten. Er moest zo snel mogelijk een website komen waar mensen een PCR-test konden plannen en het resultaat bekijken. Met hulp van ICT Group dochter Improve is er razendsnel een Scrum team neergezet dat in vier iteraties en acht weken tijd een minimal viable product van de website live bracht. In september werd dit succes gevolgd door een complete nieuwbouw van de software voor arbodienstverlening. KHS heeft de crisis in de luchtvaart aangegrepen om een nieuw IT-fundament neer te zetten. «



Partnership Waterschap Brabantse Delta and ICT Netherlands

Development of **water authority wide standard** process automation

Waterschap Brabantse Delta (WSBD) and ICT Netherlands B.V. (ICT) recently signed an agreement for the development of WSBD's new PA/PI system concept, which is to take shape over the next few years. ICT will, in consultation with WSBD, develop a new water authority wide standard for process automation and computerisation. The partnership between WSBD and ICT contributes to a manageable (controllable) future.

› Unique assignment

ICT is very pleased with this assignment. Not only is an organization-wide implementation unique in the field of water authorities, but the explicit wish to integrate process automation into the new system concept also makes this assignment unique of its kind. "We are going to work on a next generation of integrated process automation and process computerization," explains Gert Grimbergen, enterprise architect at ICT. "We are bringing IT into the traditional domain of operational technology. The possibilities offered by our partners Siemens and KISTERS in this program, both in terms of software and hardware, mean that together we can organize the management of the technical domain of the water authority in a different way. Information and data analysis will play an important role in the further optimization and control of the processes. The fact that the systems must be set up uniformly, with extra attention to recognizability and user-friendliness, makes the task extra challenging!

› 10-15 years

The water authority wide standard will be implemented in building blocks, with which the various locations and objects within the water system, the water chain and the waterways will be converted. The conversion will initially take place for a single pilot environment. This will be used to test whether the system concept matches the expectations of the water authority, but also whether ICT is fulfilling

"We are going to work on a next generation of integrated process automation and process computerization."

GERT GRIMBERGEN
Enterprise Architect at ICT

its role as partner in this extensive program to its satisfaction. The final rollout of the standard to all locations and objects within the water authority will start after the pilot phase. Who will carry out the individual projects will be determined for each project. ICT monitors the standard and makes adjustments where necessary. The expectation is that the total water authority wide transition to a new system concept will take some 10 to 15 years. ICT will take care of the management for the next 15 years.



Do you want to know more? Contact:

Eric van der Laan

Business Development Manager, ICT Netherlands

✉ eric.van.der.laan@ict.nl

in [linkedin.com/in/ericvanderlaan/](https://www.linkedin.com/in/ericvanderlaan/)

Waterschap Brabantse Delta (WSBD) en ICT Netherlands B.V. (ICT) ondertekenden onlangs een overeenkomst voor de ontwikkeling van het nieuwe systeemconcept PA/PI van WSBD, dat komende jaren vorm moet krijgen. ICT zal, in samenspraak met WSBD, een nieuwe waterschapsbrede standaard voor de proces automatisering ontwikkelen. "We gaan werken aan een volgende generatie van integrale procesautomatisering en procesinformatisering", vertelt Gert Grimbergen, enterprise architect van ICT. "We brengen IT in het traditionele domein van de operationele technologie." De verwachting is dat de algehele waterschap brede transitie naar een nieuw systeemconcept zo'n 10 tot 15 jaar in beslag zal nemen. ICT verzorgt het beheer voor de komende 15 jaar. Het partnership tussen WSBD en ICT draagt bij aan een beheersbare (controleerbare) toekomst. <<

