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25 Years of heroism:
Meet Martin Simonsson, the
guardian of high seas p.8

SHAPING SAFETY



AMANDA GRAHN

»IT'S ABOUT EMBRACING
OPPORTUNITIES«

ISSUE 1 ▶ 2024

A MAGAZINE FROM CONSILIUM

DEAR READER

We all love magazines. Hence, there is no publication so compelling as one that is just being born. A magazine inspires us with new ideas, people, and things that can change our world.

So let me welcome you to the first issue of Shaping Safety. A new magazine that delves into the topics that are affecting our everyday lives and will impact our future.

We will show how Consilium Safety Group contributes to solving safety challenges around the globe. We will include interviews with experts to share their insights and provide our readers with facts and figures, enabling you to form your perspectives.

In this issue, we will take you on an odyssey with articles from across the globe where we cover Consilium's work. From a Gothenburg lab to an Oman dry dock. We report from Singapore's harbor, meeting safety students in Stockholm, going local in the waters of Costa Rica, Austria's Alps and Scotland's grasslands.

We spotlight the teams at Consilium who are tirelessly elaborating and innovating in safety technology. Weaving together continents and communities to secure the quality of life for future generations. Shaping societies full of opportunities in healthy environments.

As the world's leading fire, flame, gas and safety tech company, we want to help solve safety challenges through innovations. Our purpose as a company reflects this aim: We are shaping safety to protect lives, values, and our planet for a sustainable future. A cause we are genuinely passionate about.

Find out more about how we do this in Shaping Safety.

Join us on this journey and discover sustainable solutions for today's world – and tomorrow. Happy reading!

Malin Cardemar
CMCO/Head of Sustainability



Did you know?



80%

It is estimated that an overwhelming majority of goods, around 80 percent, are transported by ships.



Environmental impact

GAS, FIRE AND FLAME detection systems do not only protect lives and values, they also contribute to environmental conservation efforts by preventing the release of harmful pollutants and greenhouse gases in the event of leaks or fires.

In 2022, fire and explosion ranked as the second most common reason for the complete loss of ships.



2 min

A fire can become life-threatening in just two minutes.

5 min

A residence can be engulfed in flames in five minutes.

Most uncontrolled fires are caused by small objects such as cigarettes and candles.



4 000+

is the average of smoke detectors aboard on a cruise ship.

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FROM FAXES TO PHOTONICS

Martin Simonsson's career with Consilium Safety Group underscores the crucial role of fire safety systems on ships, ensuring lives are protected and ships are secured against potential disasters at sea. Over the years, Martin witnessed significant technological advancements in fire safety, from faxed technical information to sophisticated systems like thermal cameras. **p.8**



CLEAN SEAS, NEW CHOICES

With a global push towards cleaner aligning with UN sustainability goals, the marine sector embraces alternative fuels, driving innovation for a more sustainable future. While alternative fuels offer a cleaner path forward, each of these fuels comes with challenges in the context of fire and gas safety. **p.13**

THE FLAME DETECTIVES: MICROPACK'S INNOVATIONS

Meet Graham Duncan, Managing Director at Micropack. Learn about their flame detection technology and collaboration with Consilium. **p.12**



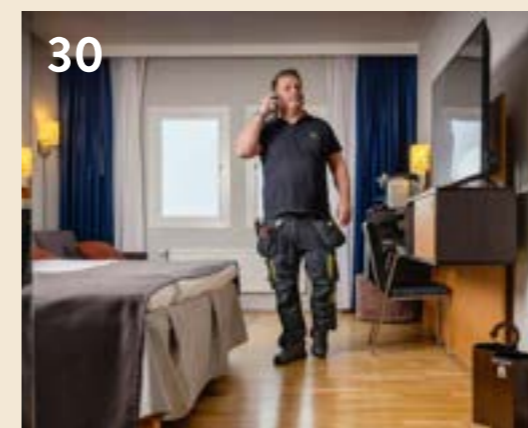
STUDIES MEETS INDUSTRY

Discover the partnership between Säkerhetsuniversitetet and Consilium Safety Group through the eyes of Amanda Grahn, a safety engineering student. Amanda shares insights into her education, hands-on experiences with fire detection systems, and her internship at Consilium. **p.20**



FIKA WITH PHILIP

Over a cup of coffee and a wheat bun, we chat with Philip Isell Lind af Hageby, CEO of Consilium Safety Group – about the company's progress in safety tech, its dedication to innovation, teamwork, sustainability and the impact of its safety solutions. **p.24**



WATERFRONT'S SMART FIRE PREVENTION

How one hotel in Gothenburg uses AI to prevent fires, setting a new standard in safety and savings. Mathias Wahlberg, the hotel's Technical Manager, guides us through the hotel as he highlights the effectiveness of Early Action. **p.30**



GLOBAL IMPACT, LOCAL SPIRIT

Explore the global network of safety experts driving marine commerce from Singapore to Oman and beyond. Edmund Shen, Managing Director at Consilium Singapore, and Manu Potty, Senior Vice President of MEIA, shed light on local insights shaping Consilium's expansion into strategic hubs. **p.34**

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You are reading the first issue of Shaping Safety. We're eager to hear your thoughts. Are there specific topics you are interested in exploring further? Share your opinions and suggestions with us, using the QR-code.



FROM EXCEPTIONAL DISASTERS TO ACCIDENTAL DISCOVERIES

••• The journey of fire safety innovation is one of necessity and serendipity.

PHOTO: GETTY IMAGES, WIKIPEDIA, CONSILIUM

1852

The world's first fire alarm telegraph system was established in Boston, by Dr. William F. Channing and Moses G. The system, featuring three box circuits, three bell circuits, forty boxes, sixteen alarm bells, and basic central office equipment, received its first alarm on April 29, 1852, marking a significant milestone in fire safety technology.



1912

The first marine safety regulation requirements for international shipping were developed as part of the 1914 SOLAS Convention, which was developed in response to the sinking of the Titanic in 1912.



1930s

Swiss physicist Walter Jaeger accidentally invented the first smoke detector. He was actually attempting to design a sensor that could identify poison gas. However, when Jaeger lit a cigarette he discovered that his invention could detect smoke particles.



1965

Stanley Bennett Peterson and Duane D. Pearsall invented the first home smoke detector. This device was cheap enough to be installed in most homes, although it was not widely used in homes until the 1970s.



1974

SOLAS Convention introduces vital regulations for fire detection systems on ships, setting standards for equipment like alarms and sensors to enhance marine safety and prevent fire disasters at sea.

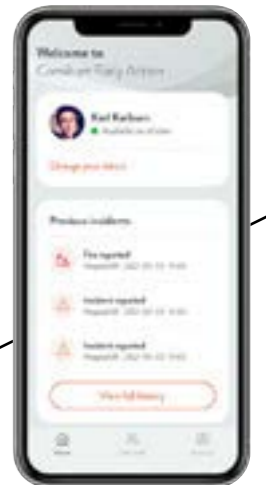


Gas detectors incorporating semiconductor-based sensors became more prevalent, providing more reliable and affordable options for gas detection in residential and commercial settings.

1980s

1990s

The tragedy of the Scandinavian Star ferry fire on April 7, 1990, had a profound impact on safety regulations. This event led to a review of standards and the implementation of updated regulations to enhance fire detection and safety protocols.



In recent years, safety technology has seen rapid advancements in AI and machine learning, enhancing detection accuracy and response times.

2020s

2010s

Detection systems got smarter, gas detectors became more sensitive, and smoke management systems evolved with innovative solutions. Integration with building automation systems improved coordination, while a focus on user experience led to more intuitive interfaces.

2000s

Gas detectors became more sensitive to a broader range of gases, and smoke management systems saw better control technology and automation, allowing centralized monitoring. Evolving regulations further drove safety enhancements.



The images in the illustration are symbolic.

» The fact that you can be involved in preventing fires and saving lives is something I am very proud of. That's one of the reasons why I've been doing this for more than 25 years.«

Martin Simonsson, Senior Technical Advisor Fire and Gas

DECADES OF COMMITMENT

... For over a quarter of a century, Martin Simonsson dedicated his career to ensuring fire safety on ships at sea. While visiting the passenger terminal in Gothenburg, we joined Martin on a tour of one of the ships equipped with Consilium's fire safety systems.

TEXT: SIXTEN NYHLÉN > PHOTO: JONAS GRATZER

It is a grey and windy morning, and as we make our way towards the quay, Martin smiles and says: "I hope you brought warm clothes."

Martin joined Consilium in Gothenburg in 1997 and has since travelled all over the world to supply fire safety systems on over a thousand ships.

He reflects on the technological changes since he started, noting that they used to send technical information via fax. "A lot has happened since then", he says.

Advancements in technology have led to the use of more sophisticated systems, such as thermal cameras. Now the crew members can detect fires through an application.

For Martin, it has been fascinating to witness these developments firsthand and work with different solutions directly on the ships.

"Technological developments have offered great opportunities", Martin explains.

“The fact that we can deliver a well-integrated system that effectively connects thousands of fire detectors is amazing. We are a strong driving force in this development. With constant investments in research and development of new technologies, we have contributed to increased fire safety, both on land and at sea.”

Consilium Safety Group has grown from a small family business to a world leader in fire safety technology. Martin is proud to have been a part of it from the beginning.

“There’s a reason I’m doing this,” he says, emphasizing the importance of the safety systems he works with in helping to save lives.

A shrill voice from Martin’s radio signals us to board the ship. As we head towards the bridge, Martin points at the balconies and tells us that over 1900 fire detectors have been installed on them alone, which indicates the magnitude of the projects they work on.

The ship we are on is one of the largest passenger ships powered by liquefied gas. Martin explains that they have delivered an extensive gas alarm system to the ship’s LNG machinery, which is crucial because these ships run on methane gas.

Once on deck and a few flights of stairs later, Martin takes us to the control room and shows us how the system works with can effectively alert the crew to a potential fire.

“One of the biggest safety risks on a ship is a fire. It could have devastating consequences, especially with thousands of people on board. With our fire safety services and products, you get an early indication of smoke and heat formation.

The most important thing about fire safety is to act early. One or two minutes can make all the difference, turning a small, manageable incident into losing an entire ship.”

As we make our way to the deck, Martin stops at one of the balconies to take in the view of the sea horizon. He tells us that the ship environment is something he holds dear.

“Being out on the ships, getting to know the systems and the people on site has been a great driving force for me”, Martin says.

He explains that the purpose of his work is always at the forefront of his mind and is something he carries with him daily.

“The fact that you can be involved in preventing fires and saving lives is something I am very proud of. That’s one of the reasons why I’ve been doing this for more than 25 years.”

As our tour ends, Martin checks his watch and tells us that he needs to board another boat soon. Once back on land, I ask Martin about his thoughts on the future of ship fire safety technology. He pauses and looks thoughtfully at the ship behind us before answering.

“Opportunities. With innovation and technology and people who are passionate about working together to save lives, protect properties, and preserve our planet, we can achieve great things. Every ship saved from burning out on the ocean is a significant step toward safeguarding the ecosystem of the oceans”, says Martin Simonsson.

➤ *Every ship saved from burning out on the oceans is a significant step toward safeguarding the ecosystem of the oceans»*

Martin Simonsson, Senior Technical Advisor Fire and Gas

Smoke and heat detection →



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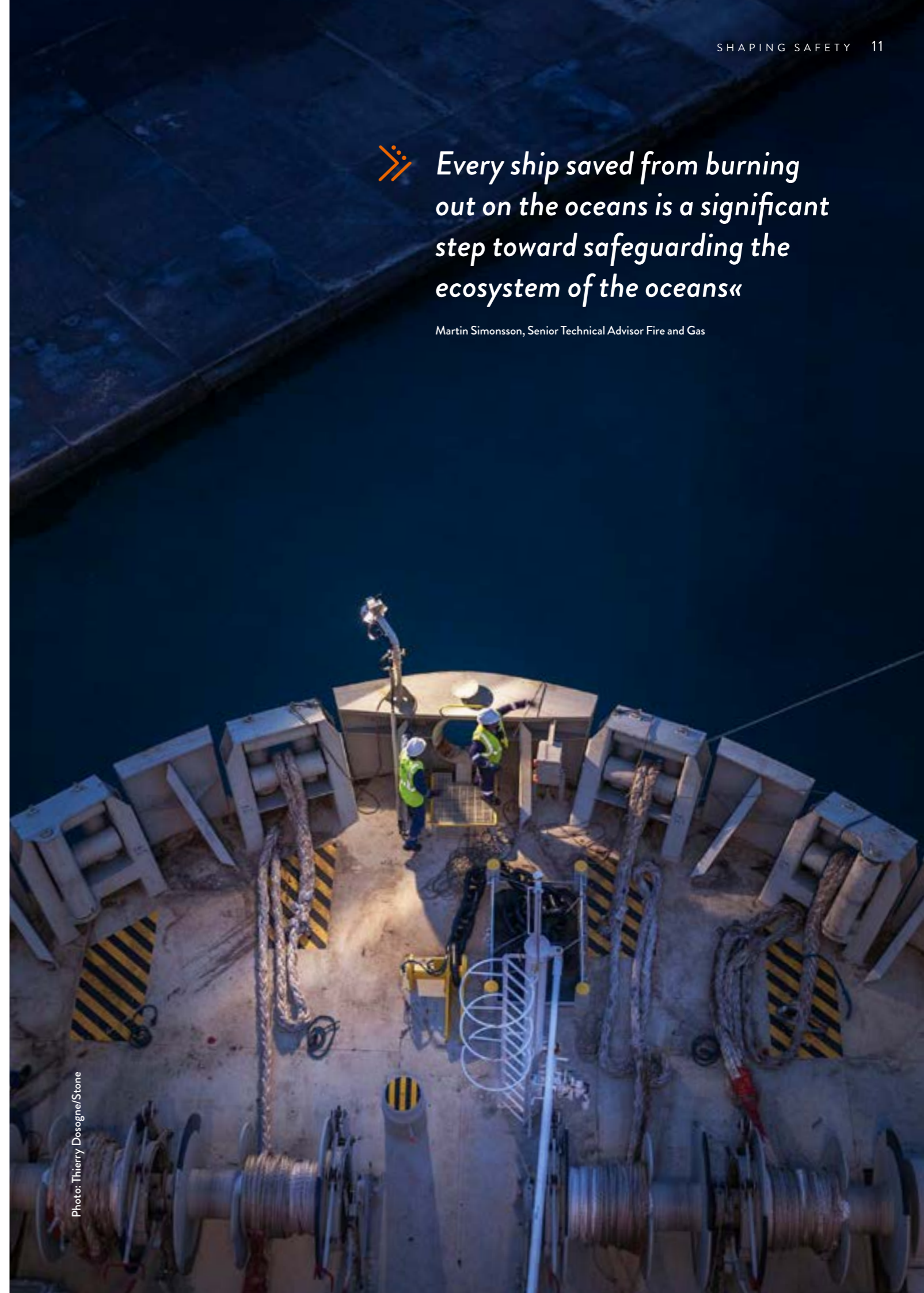


Photo: Thierry Desagne/Stone

VOICES FROM CONSILIUM

→ A CONVERSATION WITH GRAHAM DUNCAN

TEXT: ERELIE MYRBERG > PHOTO: PRIVATE

Partnering and collaborating with the most brilliant brains is the key to success. We had the opportunity to sit down with Graham Duncan, Managing Director at Micropack, located in Scotland, to discuss his work and Micropack's partnership with Consilium.

Hi there Graham! Please tell us about Micropack

"Micropack designs and manufactures an industrial range of flame detectors with unique technology. Previously there were a lot of problems with infrared and ultraviolet-based flame detectors, constantly falsely alarming. Instead, Micropack developed a camera-based technology to detect fires visually, a camera with intelligence. We also design and map the coverage in flame and gas detection. We have developed a unique software that ensures the correct number of detectors in the suitable locations."



↑ The FDS303. Micropack's latest multi-spectrum IR flame detector is designed to meet the strict safety requirements of the hydrogen industry.

What was the biggest change becoming a part of the Consilium family in 2016?

"The acquisition opened up a vast number of possibilities. Consilium operated on a much larger scale, even if Micropack was a global company, but at a smaller extent. Now, we can work with several different Consilium companies which is great, we are valuable to each other."



Tell us a bit about your journey with Micropack

"My background is in engineering, and during my initial years, I worked on projects worldwide. Eventually, an opportunity opened in sales management in Scotland. It was a significant shift in my career, going from being the guy who knows the systems to becoming the guy doing presentations about them, but I loved it. My engineering background proved a significant asset, providing credibility to the products that I was selling. In the summer of 2023, I became managing director, which has allowed me to build bridges together with several different people and Consilium companies worldwide; it's great."

What inspires you in your work?

"Consilium's vision of being number 1 in Safety tech greatly inspires me. Of course, my family and kids always inspire me. Still, from a business perspective, the ambition and determination to work towards becoming number one inspires me. Additionally, we ensure that loved ones come home safely. It might sound corny, but this is real life. These are real-life safety systems."



NEW FUELS, NEW CHALLENGES

••• In a conversation with Fredrik Jonasson, Global Product Line Manager Gas at Consilium Safety Group, we discuss the vital role of safety and innovation in marine's shift to alternative fuels.

TEXT: RAMIN RAHMANI > PHOTO: JONAS GRATZER



Fredrik Jonasson together with Silvia Iovanut, Test Engineer at Consilium's lab in Gothenburg.

Low-carbon shipping is making waves across the marine sector. With a global goal aligned with the United Nations 2050 sustainability goals to achieve clean shipping, the race to adopt alternative fuels is in full swing. As the sector shifts towards greener solutions, new challenges arise in ensuring fire and gas safety aboard ships.

Marine transport, the backbone of global trade and economies, currently manages over 80 percent of the international goods trade volume, with an even higher percentage for many developing nations.

Today, the shipping industry predominantly relies on marine diesel oil (MDO) and heavy fuel oil (HFO). While these fuels have powered global trade for decades, the industry is exploring alternative fuels to meet evolving environmental standards. Five major types of alternative fuels are on the radar for shipowners: LNG, methanol, ammonia, hydrogen fuel, and battery power.

LNG AND METHANOL

One of the frontrunners in the alternative fuel race is liquefied natural gas (LNG). According to Fredrik Jonasson, LNG, stored at extremely low temperatures, evaporates into gas when it encounters the environment. This conversion process makes it an attractive, low-emission option for the marine industry.

That said, LNG is no magic bullet. "LNG is considered environmentally friendly if it is being burned. But there could be leakages of LNG from the moment it's extracted throughout the entire distribution chain until it gets on board ships; then it's not as environmentally friendly anymore. Also, concerning the entire process from extraction to combustion, if you calculate the whole cycle, then it's not that environmentally friendly."

Another option is methanol. Which has been gaining attention

due to its reduced environmental impact, Jonasson notes.

"The CO₂ footprint of methanol depends on how it is produced and transported. Fossil-based methanol results in higher overall CO₂ emissions throughout its lifecycle compared to diesel. But green methanol, produced in a low-carbon process, could be a good choice," says Jonasson.

Methanol's ease of distribution also makes it appealing. "Methanol is easier to handle, and its distribution network is relatively well-established. It's becoming a preferred choice for a growing number of industry players," says Jonasson.

AMMONIA: EFFICIENCY WITH TOXICITY

Ammonia has also gained increased interest, but it has its own set of challenges and benefits. Despite its potential as a more efficient and space-saving option, it has significant safety concerns due to its toxicity for humans.

"Ammonia can create a corrosive environment in the space where the ammonia is evaporating. Imagine the devastation caused by an ammonia leak at a port facility supplying ammonia fuel to ships," says Fredrik Jonasson.

HYDROGEN FUEL AND BATTERY POWER

In the case of hydrogen, the environmental benefits are great. "Hydrogen's only emission is pure water, which makes it the most environmentally friendly," Jonasson explains. But the production of hydrogen is energy-intensive, and green hydrogen, extracted from water by electrolysis, is not yet widely used.

For shorter distances, battery-powered ships could become more mainstream than hydrogen, especially as batteries become smaller and prices go down.

In Europe alone, 696 ferries are operating in open sea waters, covering routes of fewer than 41 kilometres. These ships have the potential for a seamless transition to electrification.

Norway is already making strides in electrifying its fleet.

»
As more ships turn to alternative fuels like methanol, ammonia, hydrogen, or batteries, gas and flame detection is crucial.

Fredrik Jonasson, Global Product Line Manager Gas, Consilium Safety Group



They are on a good path to decarbonising most of their fleet in the next 10 years.

SAFETY FIRST: ADAPTING SYSTEMS FOR ALTERNATIVE FUELS

While alternative fuels offer a cleaner path forward for the marine industry, ensuring safety at every step of their use is paramount. Each of these alternative fuels comes with challenges in the context of fire and gas safety.

Jonasson highlights the importance of adapting fire and gas safety systems to enable the green transition through alternative fuels. Consilium is a front-runner in this regard, understanding that each alternative fuel requires its own set of safety considerations and regulations.

"For every alternative fuel, we need to adapt our safety solutions to ensure that the ships operate safely, protecting both the crew and the environment," Jonasson says.

For ships using LNG, there are already established safety protocols and equipment.

"We made our first LNG installations on ships in 2010 and have led and spearheaded the industry since then. We have well-developed and advanced solutions for LNG-fuelled ships."

INNOVATIVE SAFETY SOLUTIONS FOR AMMONIA AND METHANOL

The situation becomes more complex when dealing with methanol and ammonia. These fuels can be mixed with water, requiring specialised technology for measurement, especially within engine cooling systems.

Concerning methanol from a fire safety standpoint, handling it with care is crucial, as its vapours are flammable. Safety systems tailored to methanol's characteristics are essential.

"In an engine room, for instance, when you have a hot engine and there's a methanol leak, there's a natural concern

that the methanol could come into contact with the engine's heat source and ignite," said Fredrik Jonasson.

Ammonia, with its toxicity and potential for leaks, calls for advanced gas detection systems and additional precautions.

"We're developing technologies for ammonia that can detect leaks and monitor gas concentrations in water and engine cooling systems. Ammonia gas detectors have a brief lifespan and a significantly delayed reaction time, making it one of the most challenging gases to detect using conventional methods. Therefore, Consilium is actively seeking improved solutions in this area," explains Jonasson.

MANAGING THE EXPLOSIVE NATURE OF HYDROGEN

When it comes to hydrogen, safety concerns are pronounced due to its high explosiveness. Innovative sensor technologies and detection systems are required to manage potential hazards effectively.

Hydrogen isn't toxic like ammonia but is highly explosive with a wide flammability range. This means it has a much wider range of where it can ignite, making it one of the most explosive gases.

"Hydrogen burns with an almost invisible flame which poses safety challenges and requires special hydrogen flame detectors able to detect this specific infrared spectrum. Consilium is among the few companies in the world that offer technology capable of detecting hydrogen flames. Its lower energy density than ammonia means you can't store as much hydrogen on your ship".

TACKLING BATTERY THERMAL RUNAWAY CONCERNS

The risk of a thermal runaway and off-gassing poses a significant concern for battery-powered ships. Battery-related accidents are typically associated with a buildup of gas that may not be vented, leading to an explosion.

Consilium Safety Group is actively involved in addressing these concerns, and Fredrik Jonasson mentions a recent project with RISE and Chalmers to design early detection and ventilation for battery rooms, focusing on safety and prevention.

INNOVATIVE SAFETY SOLUTIONS FOR METHANOL-FUELED SHIPS

While addressing the fire safety challenges of alternative fuels, Jonasson mentions their fire, flame and gas safety solution on a methanol-fuelled cruise ship. Consilium has designed a “safe return to port” (SRTP) solution for gas detection on this ship, which stands as a testament to the company’s innovation.

Unlike its competitors, Consilium was able to reduce the number of detectors by half, making the system both cost-effective and safer.

“Our expertise allows us to customise safety solutions for ships using different fuels,” says Jonasson. “For example, our gas detection systems have been designed to address the unique safety challenges of ammonia and methanol.”

Jonasson says that methanol is becoming a preferred choice for a growing number of industry players.

“We have numerous ongoing discussions with customers looking to retrofit their container ships to run on methanol. Consilium sees this as a great opportunity. Historically, few ships needed gas detection. But now, as more ships turn to alternative fuels like methanol, ammonia, hydrogen, or batteries, gas and flame detection is crucial. Our potential has grown significantly,” says Jonasson.

THE FUTURE OF MARINE TRANSPORT

Fredrik foresees methanol and ammonia being the dominant alternative fuels. However, the transition will depend on factors such as infrastructure development, the availability of fuel, and industry regulations.

“Safety solutions, innovation, and collaboration among various stakeholders will play crucial roles in shaping the future of marine transport. Consilium is at the forefront of these efforts, ensuring that safety remains a top priority in the quest for environmentally friendly and efficient shipping solutions.”



SELECTING THE RIGHT FUEL: A DELICATE BALANCING ACT

To select the right fuel, ship owners must consider some key drivers.

“Fuel energy density is crucial, as it determines your energy return on investment. Availability in ports is a critical factor. Ship managers and operators need to consider fuel availability in all the different ports where their ships will be trading. Also consider fuel logistics, storage, usage, and importantly fire safety risks,” highlights Fredrik Jonasson.

Ship owners have to consider ship design operation, as fuels with different volumetric energy densities may require additional space.

“For instance, when comparing diesel fuel to alternatives like ammonia or hydrogen, the cleaner options generally demand larger storage capacity to cover the same distance between Port A and Port B,” says Fredrik Jonasson.

Hydrogen detection →



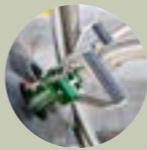

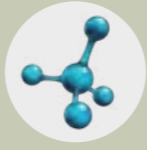


THE ST650

Hydrogen detection reinvented

Discover a better way of detecting hydrogen in the industrial workspace. The ST650 is fitted with the cutting-edge MPS sensor, providing reliable and accurate detection of hydrogen and other combustible gasses, without any of the drawbacks of its competitors.



Marine fuels: Key insights

	Fire and gas safety challenges	Adaptation for fire and gas safety	Usage in the marine	Key facts
Liquefied Natural Gas (LNG) 	Evaporates as its temperature increases, heightening the risk of leakage.	Established safety protocols and equipment for LNG-fuelled ships.	Widely used, availability of LNG is growing in several ports across Europe.	Reduces greenhouse gas emissions if used correctly, as it emits less carbon dioxide when burned. But leakage can diminish its environmental benefit.
Methanol 	Not highly dangerous but poses health risks in case of a leak. Concerns about working with methanol in confined spaces.	Safety protocols, specialized fire detection.	Gaining momentum with industry players investing in methanol-powered ships.	Easier to obtain compared to other alternatives. Methanol is a liquid fuel that can be produced from natural gas.
Ammonia 	Highly toxic. Safety systems must be meticulously designed to handle leaks.	Enhanced gas detection and handling.	Still in the early stages with some exploratory projects. Availability is limited.	Offers higher storage capacity. Infrastructure like dedicated ports is necessary for ammonia fuel.
Hydrogen 	Highly explosive wide flammability range.	Requires advanced safety systems. Larger storage spaces may be needed due to lower energy density.	Limited usage in the marine industry, with experimental projects like the hydrogen-powered Hydra in Norway. Availability is relatively low.	Requires electricity and water for production.
Battery power 	Risk of thermal runaway if a cell fails. Gas buildup can be explosive.	Requires advanced ventilation systems to prevent thermal runaway.	Mainly for short routes.	Provides a sustainable and emission-free power source for ships. Batteries store electricity generated from various sources.

BRIGHT DAYS AHEAD FOR CONTAINER SHIPPING: RADICOS TECHNOLOGIES GAME CHANGING MARINE INNOVATION

... A shift is underway in container ship safety, an area in need of innovative solutions. Recent developments indicate significant advancements, poised to transform industry safety protocols.

TEXT: SIXTEN NYHLÉN & RAMIN RAHMANI > PHOTO: ABSTRACT AERIAL ART/DIGITALVISION

Consilium Safety Group's recent acquisition of Radicos Technologies marks a crucial step in enhancing container ship safety. By integrating Radicos' solutions, Consilium aims to revolutionize safety on ships, introducing an early warning approach to prevent potential fire incidents.

Founded in 2011 and rooted in innovation, Radicos, based in Austria and Switzerland, is a leader in Industrial Internet of Things for linear detection such as heat, gas, and vibration. The company has developed a sensor network to collect data from large industrial infrastructure, enabling early detection of anomalies such as minimal temperature gradients in fire incidents.

The synergies created through the integration of Radicos' TWIN system with Consilium's fire, flame and gas safety solutions increase early detection capabilities, providing a comprehensive approach to safeguarding both assets and people in industrial settings.

Container ships, some of the largest at sea, can carry up to 24,000 containers, posing significant safety challenges in the event of fire. Current practices often rely on technologies with limitations in early detection and incident prevention.

"Radicos' solutions allow quick tracing if for instance one container is at 18 degrees Celsius and the adjacent one is 35 degrees Celsius. Using our safety management system software, SMiG, operators receive valuable information when a conflicting pattern is identified. With this solution incidents are detected in an early stage, even at ambient temperatures. It's a true game-changer for safety within the container shipping industry," highlights Thobias Ernfridsson, Chief Technology Officer at Consilium Safety Group.

Real-world testing conducted by Radicos further underscores the TWIN system's robustness. The system has been rigorously tested in harsh environments, including various

stressors such as saltwater exposure, wind, and temperature variations. The technology has proven highly reliable and effective in the most challenging maritime conditions.

Bernhard Heibl, Co-Founder and Managing Director at Radicos, expresses his enthusiasm about the acquisition.

"Since the very first meeting, it felt natural. It was evident that we shared the same safety DNA. Consilium's global reputation and extensive presence around the world, along with their commitment to excellence in safety solutions, made Consilium the ideal choice to elevate our technology."

As the collaboration between Consilium and Radicos advances, their combined technologies are poised to establish new standards in container ship safety. The acquisition highlights Consilium's commitment to advancing safety technology and bolstering Radicos' innovative approach in safeguarding marine assets and personnel.

"I am delighted that Radicos is joining Consilium. Consilium has set a clear strategy to extend our SafetyTech leadership, and Radicos is a great contribution to this journey," says Philip Isell Lind af Hageby, CEO of Consilium Safety Group.

Heibl emphasizes the long-term impact of the collaboration, stating, "with our technology, we address unsolved problems and venture into unexplored territories in infrastructure and industrial settings. Our mission is to address industry-wide challenges. In the container shipping sector, our innovation is truly groundbreaking."



Thobias Ernfridsson



Bernhard Heibl

Sensor-actuator-system →



TWIN SYSTEM

Powerful and fault-tolerant sensor-actuator-system

TWIN is a powerful and fault-tolerant sensor-actuator-system: It is able to collect data from thousands of sensors over kilometer distances, process them locally or in the cloud, and reversely drive actuators at the site of the sensors. TWIN's new and unique approach provides sensors inside a cable, encapsulated and well protected. At its core is our Computer-In-Cable-Technology™.

Massive array: thousands of sensors in one TWIN system.

Very high speed: samples 1,000 sensors per second.

Extremely precise: temperature resolution of $\pm 0.025^\circ\text{C}$.

Fault tolerant by design: short-circuit the cable, cut it, or destroy a sensor node and the system retains its full function.

Extreme low power consumption: typically < 5W (could drive several hundred sensors even from a battery).

Distributed Intelligence: local computing power at each system level, even at node level. To these powerful features, add reliability and quality resulting from industrial production methods. TWIN systems are easy to document, maintain, extend and repair.



Furthermore, the system has complete remote configuration and maintenance capabilities.

TWIN is a game changer, enabling solutions for many problems, which are infeasible with conventional technology.

MEET AMANDA GRAHN

THE NEXT GENERATION OF SAFETY

••• In the heart of Sweden's vibrant capital, a new generation of safety engineers is emerging. Supported by the innovative educational framework at Säkerhetsuniversitetet and its partnership with Consilium Safety Group, which was established last year.

TEXT: RAMIN RAHMANI > PHOTO: JONAS GRATZER

On a typical Stockholm morning, beneath a clear northern sky, the corridors of Säkerhetsuniversitetet hum with a tangible energy. In one room, a teacher and students engage in discussions, connecting academic theories with real-world safety scenarios.

This scene captures the essence of Säkerhetsuniversitetet's partnership with Consilium, introducing a fresh dimension to safety engineering education.

The collaboration blends Consilium's industry experience with the university's academic rigour creating a curriculum that marries theory and practice.

"Our educational mission is to cultivate competent professionals for the industry," says Jeanette Lesslie Wikström, CEO at the industry organization Säkerhetsbranschen. "Our efforts with Consilium mark a significant stride toward this goal."

In the university's laboratory room, provided with fire and gas detection solutions by Consilium, we meet Amanda Grahn, who studies the safety engineer program, which includes a five-month LIA internship.

In the lab, students like Amanda work hands-on with fire detection systems. Their experiments and simulations are key to developing essential real-world skills for their future careers.

In her own words, Amanda shares her experiences as a student.

WHAT ATTRACTED YOU TO THIS FIELD?

"I worked as a security guard where I was drawn to the opportunity for a career in safety technology. Working as a security



←... Collaborating with technicians on detailed security and fire safety projects and applying theoretical knowledge practically is a great experience for Amanda as a student at Säkerhetsuniversitetet.



Whether in a preschool, restaurant, office, or when walking home, safety is always a consideration«

Amanda Grahn, Student

guard interact with this kind of system. I wanted to explore the technology behind it and contribute to enhancing safety measures.”

ANY STANDOUT EXPERIENCES DURING YOUR EDUCATION?

“So far, all our projects have been fascinating. Collaborating with technicians on detailed security and fire safety projects and applying our theoretical knowledge practically was a highlight.”

YOU WERE ON AN INTERNSHIP WITH CONSILIUM?

“Yes, I interned at Consilium. After connecting with them at a safety event, I received an invitation for a three-week

internship in Stockholm. Working closely with their service engineers’, I gained valuable insights into the technology and responsibility for fire and gas detection systems.”

YOUR PLANS POST-EDUCATION?

“I aim to work in project management or product design. Right now, I’m leaning towards fire safety due to my prior experiences. I’m enthusiastic about contributing to new security and safety solutions like camera systems, fire detection, or access control.”

YOUR VIEWS ON TECHNOLOGY’S ROLE IN FIRE SAFETY?

“Technology has significantly improved and shaped safety measures. At the S akerhetsuniversitetet, we’ve explored smart detection and automated suppression systems, and the use of real-time monitoring. I believe technology will play an even larger role in the future.”

YOUR IDEAL WORKPLACE?

“A place where I can contribute to advancing safety initiatives. I value a community-focused environment that encourages continuous learning and development.”

ANYTHING ELSE ABOUT YOUR EDUCATION?

“Studying safety engineering is fascinating and diverse. Studying here has made me aware that safety permeates almost every aspect of society. Whether in a preschool, restaurant, office, or when walking home, safety is always a consideration. Also, learning from experienced teachers has been invaluable. I’m excited to apply this knowledge in the real world.”

ANY ADVICE FOR PROSPECTIVE STUDENTS?

“If you’re passionate about safety and pursuing a career where you can make a difference, apply. Don’t let fear of stepping into a new industry deter you. It might seem intimidating, but with the right determination, you can handle most challenges. It’s about embracing opportunities.”

As we look at the advancements in safety education alongside emerging technologies, the industry’s growth is evident. Anna Skanse, Human Resources Manager at Consilium Safety Group, comments on this evolving landscape.

“There has been significant development within both safety technology and the real estate industry, and it is therefore important that competence keeps up pace with this progress. We want to provide future safety engineers with the opportunity to understand how these systems work, and we’re pleased to be able to participate and contribute by educating them,” says Skanse.



At S akerhetsuniversitetet, Amanda explores smart detection, automated suppression systems and real-time monitoring.



» **Our educational mission is to cultivate competent professionals for the industry«**

Jeanette Lesslie Wikstr om, CEO at the industry organization S akerhetsbransch



Amanda Grahn believes that technology will play an even more significant role in the future.

FIKA WITH PHILIP

»WE SHALL BE NUMBER ONE IN SAFETY TECH«



It has been two years since Philip Isell Lind af Hageby took on the position as CEO of Consilium Safety Group. We had the opportunity to have a fika with him and discuss his experiences and visions as the leader of the hidden champion.

TEXT: RAMIN RAHMANI > PHOTO: JONAS GRATZER

Human and results-oriented. That's the impression you get of Philip Isell Lind af Hageby after an hour, a cup of coffee, and a wheat bun later in the interrogation room.

He barely had time to sit down before he got up again, went out of the room, and inspected the fire alarm system in the building.

"This is a Consilium system," Philip said as he proudly pointed out the fire detectors and explained how Consilium Safety Group's fire safety system works.

The image emerges of a person with an enormous desire to create development and improvement by challenging old truths. His key to success is collaboration, and his strategy for getting employees to perform at their peak is communication, delegation, and trust.

Rising at six o'clock, he indulges in a healthy breakfast comprising yoghurt, muesli, and an abundance of nuts, accompanied by a glass of juice. Afterwards, he immediately dives into his day by checking his emails.

Around 7:30, when he finds himself in the vibrant city of Gothenburg, he heads to



» *Our vision is to protect lives, values, and our planet through technology. It is a cause we are genuinely passionate about.«*

Philip Isell Lind af Hageby,
CEO of Consilium Safety Group



↑ Clear goals and teamwork drive Consilium's success, with every team member playing a key role.



↑ Philip on leadership: "Identifying what motivates each person is essential—whether it's positive feedback, a push, or intellectual stimulation, most often it's a combination that achieves full potential." In picture, Zikolo, Ahmed, Ludvig, Anwer, and Oliver at Consilium's production in Gothenburg.

»
I love taking on tasks with great potential, and I believe I found that potential in Consilium. We are operating in an exciting global industry with life-changing solutions that enhance safety and make the world safer and better. «
 Philip Isell Lind af Hageby,
 CEO of Consilium Safety Group

a café. There, he settles in front of his computer, dedicating the first hour to tackling important tasks before making his way to the office.

By the time he arrives, Philip exudes a sense of cleanliness. Having already accomplished a substantial amount of work in the morning, he is primed and ready to engage in conversations.

He does not rush to his desk and engages in his computer screen. Instead, he ensures his availability to colleagues and fosters an open and approachable atmosphere.

STEERING CONSILIUM THROUGH UNCERTAIN TIMES

In February 2022 – a turbulent month in Europe, to say the least – he stepped in as CEO of Consilium. He could see huge potential in a company with great competence and knowledge.

“Consilium is a great company to be CEO at, a global leader known for top quality and competence in the fire, flame, and gas safety industry. It’s a solid foundation to build upon. I love taking on tasks with great potential, and I believe I found that potential in Consilium. We are operating in an exciting global industry with life-changing solutions that enhance safety and make the world safer and better.”

He took over a business that, like many other companies, was shaken up with supply chain problems after the pandemic.

“In April 2022, we faced a challenging situation due to component shortages. We had to decide whether to push through by

taking on more deals, redesigning products, finding new components, maintaining close relationships with suppliers, or slowing down production and cooling down our supply chain.”

“The management team engaged in a constructive dialogue, ultimately choosing to accelerate ourselves through the challenges. This decision proved successful and was one of the most challenging moments I’ve faced in my career. And it also showcases the true strength of our company and the fighting spirit of going forward”, says Philip.

Immediately after joining the company, Philip and his management team embarked on a journey of strategic insight and collaborative brilliance. In his own words, Philip articulates the profound impact of their cohesive efforts:

“Together, we defined a clear target state, stretched financial targets and a corporate strategy that we broke down into clear value creation avenues and strategic initiatives that move the needle so that everyone would recognise their importance and role in our value creation journey. We had the answers in the company and came together as a solid team, taking on a full potential mindset and agreeing on our goal to go from good to great.”

COMMITMENT TO SUSTAINABILITY AND SOCIETY

Consilium Safety Group was founded in 1912 in the harbor city of Gothenburg in Sweden. Despite its relative anonymity,

Consilium stands out as a hidden champion, shaping the fire, flame, and gas safety industry through a strategic blend of innovation, specialised knowledge, and a commitment to achieving excellence in fire and gas safety.

“Our vision is to protect lives, values, and our planet through technology. It is a cause we are genuinely passionate about. When I joined Consilium, I realised there is an extensive reflection on our societal impact: we create value that is good for society. There is a sense of pride associated with this, including for myself. It is rooted in everything we do. We approach our work wholeheartedly.”

Philip pulls the chair from the table, lowers himself, and clasps his hands together. He asserts that their safety solutions are crucial in safeguarding essential infrastructure, saving lives, and reducing the chances of catastrophic environmental incidents.

“Let me give you an example of when we protect a tanker on the ocean. As the saying goes, prevention is better than cure. Our safety solutions embody this philosophy by expanding the range of detection to identify the initial stage of a fire before it escalates. This allows the crew to act before an accident occurs. Our digital services, such as Early Action, can further enable this.”

“This, in turn, saves the seas from environmental disasters. We don’t receive much credit for the accidents that do not occur,” Philip says and smiles.

Because no one can see an accident that hasn't happened, right?

"Exactly. I am sure that throughout our years of operation in the market, and we have been around since 1912, we have successfully averted numerous environmental disasters," asserts Philip.

"In line with our vision, we provide products and services designed to protect lives, values, and the planet in fire or gas leak emergencies. Our emphasis on safety underscores our contribution to sustainability beyond our operations. Sustainability is pivotal for long-term value creation. Last year, we proudly earned an EcoVadis Silver medal—a recognition of our focus. Our upcoming initiatives target the gold medal, positioning us as leaders in sustainability in our industry. I assure you, we're on track to get there soon," Philip asserts confidently.

CRAFTING THE FUTURE OF SAFETY TECH

One critical factor that sets Consilium apart is its focus on research and dedication to innovation. The company invests a lot in technological developments. According to Philip, his industry has yet to adapt and take advantage of the digital benefits that are out there.

"Accelerating R&D output and innovation activities are of utmost importance for the industry, and Consilium should be in the forefront here – a technology industry pioneer, as we say, and number one in Safety tech."

Through collaboration with leading experts and research institutions, Consilium wants to be a pioneer in emerging trends and evolving safety standards.

"To be a technology industry pioneer is one of our strategic pillars. This pillar focuses on collaborations with research institutes within our industry and others and participation in innovation projects. We invest resources in these areas to gain external insights and make meaningful contributions. We must innovate and have a high level of ambition. As market leaders, we are responsible for driving this forward."

GLOBAL REACH, LOCAL TOUCH

Consilium's success can also be attributed to its customer-centric approach. The company places great emphasis on understanding the requirements of each client and tailoring its solutions accordingly.

"Today, we have 55 offices in 28 countries across all time zones. Customer closeness, being available wherever and whenever, is vital in the aftermarket, enabling local accessibility and swift response to our customer's needs in the local language. Whether it's system calibration, disabling certain features in

buildings or ships, or solving an issue, we prioritise being there, optimising their up-time and giving them peace of mind. That is why we are here."

By offering customised safety technology solutions, Consilium has gained the trust and loyalty of its customers, resulting in long-standing partnerships.

"We understand the urgency in dealing with system failures, such as those on a cruise ship accommodating 7,000 passengers. Taking immediate action is vital to avoid leaving these individuals stranded in port," Philip explains.

Philip emphasises their distinguishing factor: "Our local and global presence is key. We are only a phone call away, ready to address and resolve issues swiftly, guaranteeing unmatched customer satisfaction. Regardless of the industry—hotels, cruise ships, railway cars, or any other sector—we have the expertise to handle our customers' specific requirements. If you bring that into an environmental perspective, it is far more sustainable to have a global aftermarket organisation, with local service engineers, rather than flying service engineers worldwide."

He sees immense potential in several markets across all segments. The future is bright, and with the stern focus on aftermarket, innovation, R&D and the new products and solutions coming, he can barely wait.

"By combining expertise, investment, and a deep understanding of local dynamics, we are poised to become a key player in shaping the future of safety worldwide."

ANTIN INFRASTRUCTURE PARTNERS INVESTMENT IN CONSILIUM'S VISION

In November 2023, Antin Infrastructure Partners agreed to acquire Consilium from Nordic Capital. Philip highlights that Antin was drawn to Consilium's strategic objectives.

"We wanted to understand their perspective - to see if there were any aspects we could improve", Philip explains.

"Instead, Antin confirmed that they fully shared our strategic goals and direction. They are dedicated and ambitious, qualities we deeply admire. They're in it for the long haul, looking beyond a decade, which fits perfectly with our vision. I often tell our team that this is the type of committed ownership we need to drive our mission forward. To ensure our customers have complete confidence in us so they can focus on their operations and create the most value."

Our fika comes to an end, and it's time for Philip to catch a train. He proudly comments that it is equipped with a Consilium fire detection system.

"It's so satisfying to work on the train and, every now and then, look up from my screen to see a Consilium fire detector mounted

55

OFFICES in 28 countries,
covering all time zones

in the roof. Makes you feel safe", Philip says with a smile.

Before he leaves, I ask Philip what makes a great leader.

"First of all, having a genuine passion for what they do. You need to love what you do. Besides that, having the ability to look through

the strategic noise to identify a path ahead, defining a clear target state and stretched, yet achievable targets, while outlining the fundamental value creation avenues, simple enough to be understood by an entire organisation."

"Then having the eye for what motivates people and the perseverance to challenge the individual to their full potential. Recognising there are different ways to that – most need positive feedback, others need a push, and some need intellectual stimulation, but most need a combination. Communication skills are also essential for great leaders and should never be underestimated," Philip answers.

What advice would you give to young people who want to follow in your footsteps and become successful leaders?

"I have always been genuinely passionate about what I do and felt there was no place where I would rather be. I love my job, and where I am, so it is about finding something you genuinely care about. Surround yourself with great managers who want to develop you, see your potential, and are willing to give you early responsibility. I have been fortunate to have managers who have entrusted me with significant responsibilities at an early stage. Then, it comes down to hard work. There's no way around it."

Consilium has a strong focus on research and innovation, investing significantly in technological developments. →



I am sure that throughout our years of operation in the market, and we have been around since 1912, we have successfully averted numerous environmental disasters. «

Philip Isell Lind af Hageby,
CEO of Consilium Safety Group



»WE'RE CONFIDENT EARLY ACTION WILL HELP US AVOID FUTURE FIRE«

... It's been two years since Quality Hotel Waterfront in Sweden implemented Early Action, an AI-based service capable of preventing fires. According to Mathias Wahlberg, the hotel's Technical Manager, Early Action has successfully averted potential fires and avoided the costs associated with emergency fire brigade interventions.

TEXT: THEO MARTINS > PHOTO: JONAS CRATZER & NORDIC CHOICE HOTELS

The importance of fire safety in the hotel industry can't be overstated. Ensuring the safety of guests is a fundamental requirement for all hotel operators.

Aside from the potential threat to the safety of hotel guests and employees, fires can cause extensive damage that risks the brand's integrity and can even damage the hotel's structure. The harm to the hotel's reputation might be even more remarkable and take longer to repair.

Implementing a reliable, integrated fire protection system can assure hotel operators that guests and staff are safe and well protected. Early detection can help prevent the disruptive effects of false alarms, such as costly use of the fire brigade, and evacuation of full-scale evacuations wrongly undertaken.

In a new era of digital fire safety, technologies that can help existing solutions have emerged. It is an AI-based software service developed by Consilium Safety that can be integrated with fire alarm systems.

The system can continuously collect the status of all detectors and, from the app installed on a mobile phone, warn

responsible persons who manage the fire alarm system about incidents that risk leading to a fire.

In the event of a fire, time is the most crucial factor. If the fire department can count in a few minutes, it can make all the difference.

"Early Action's immediate value is getting a quick indication when something is about to happen. Instead of being surprised by a fire alarm, the customer receives a warning, a fire prediction. This allows the user to solve the cause before an actual fire alarm is activated, with the risk of high costs and inconvenience as a result", says Isak Nordberg Global Product Line Manager at Consilium Safety Group.

RAPID INCREASE IN USERS

The number of Early Action users in different businesses and facilities throughout Sweden has increased rapidly in the past year. One is Quality Hotel Waterfront, suited at the river Göta Älv in Sweden's second biggest city Gothenburg.

Mathias Wahlberg works as a Technical Manager at Quality



The Swedish Civil Protection agency (MSB) statistics show that around 95–96% of all automatic fire alarms in Sweden are unwanted. Early Action has been valuable in that sense since Quality Hotel Waterfront reduced the number of unwanted alarms and calls.

At Waterfront, receptionists and technicians use Early Action. Extending it to staff is advantageous, aiding faster incident response and enhancing efficiency in covering large areas.

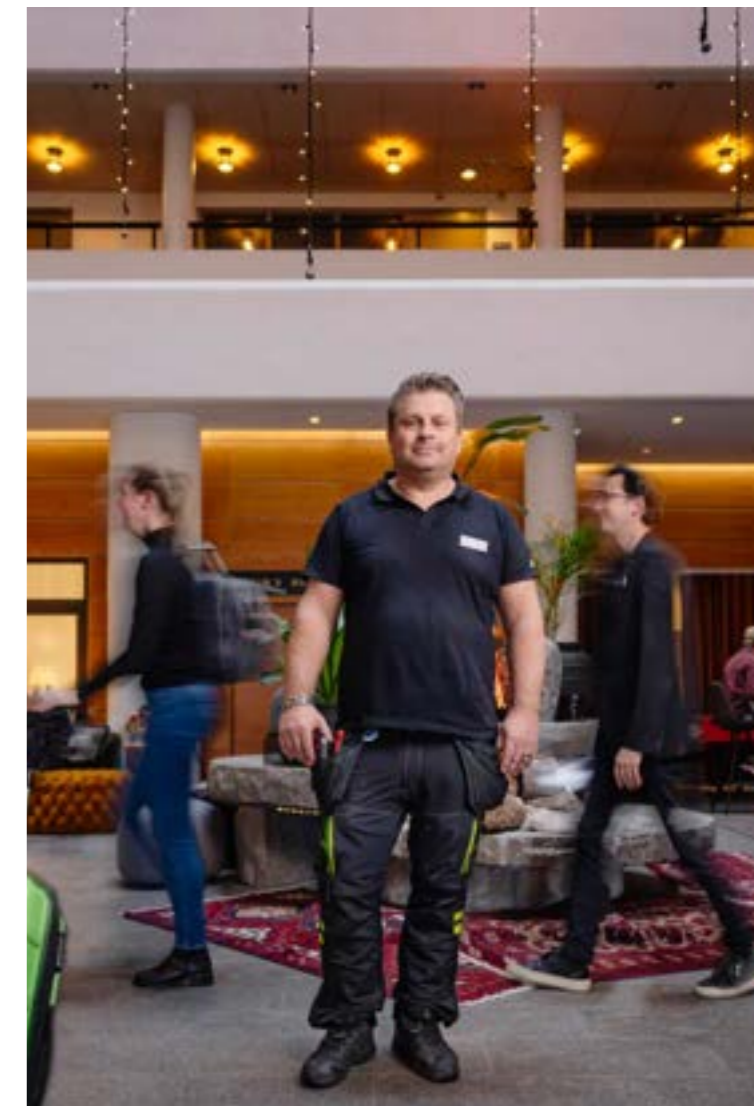
Hotel Waterfront. He demonstrates that the application is user-friendly and requires no significant test effort.

"When I received the 'Early Action' app, I just installed it and followed the instructions on how to use the service", says Mathias.

So far, he is pleasantly surprised by how Early Action operates. "We have been using Early Action for the past six months and have received numerous alarms, such as guests smoking in the rooms, which we have been able to identify faster than before. I received a notice on my phone. It warned of an ongoing smoke development in one of the hotel rooms. I replied directly in the app that I was looking into the matter and went to the room.

Early Action can continuously read the collected data from all the facility's sensors and precisely analyze what is happening in the system.

In this case, regarding smoke levels, it can automatically alert the person or persons who have the app. Early warnings and incident signals in case of heat or when smoke values behave abnormally."



95-96%

OF ALL automatic fire alarms in Sweden are unwanted.

Source: The Swedish Civil Protection agency (MSB)

“We had another incident when the power center got overheated; it was a loose contact we discovered before a fire started. The consequences in the power centre could have been severe”, says Mathias Wahlberg.

Quality Hotel Waterfront has 151 rooms, suites, conference rooms, banquet facilities, a restaurant, a bar, and a wellness area with a gym, jacuzzi, steam bath, and sauna. According to Mathias Wahlberg, Early Action is an invaluable tool for improving fire safety at their hotel.

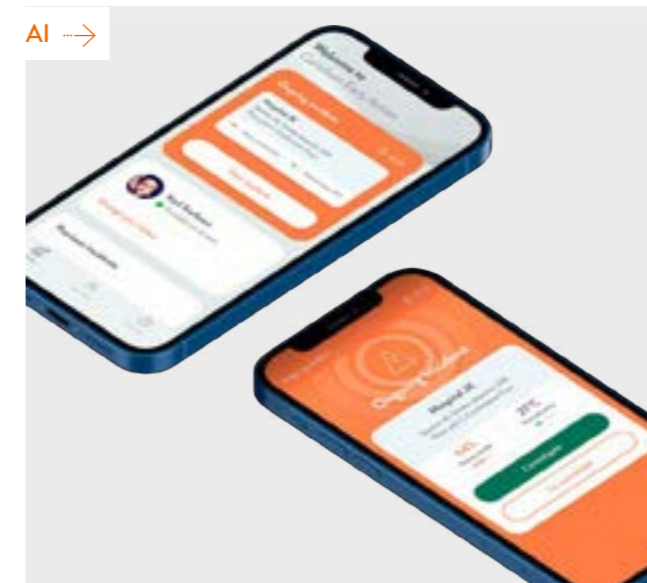
“It is a significant milestone for our fire safety work. The good thing is that I receive the message directly on my phone. I don’t need to rush back to the station. Most of the time, I’m out and about at the hotel, so I can go straight to the incident scene as soon as it occurs. We are confident that Early Action will help us avoid future fires”, says Mathias Wahlberg.

Since the implementation of Early Action, the number of users that use the application at Quality Hotel Waterfront has increased steadily.

“We have rolled it out to our staff, such as receptionists and housekeepers. Outsourcing it to more people in the organization is a great advantage. We can get to the incident faster. Now it is always staffed in case someone is out from work; it is also more efficient if everyone can contribute to covering our large areas”, says Mathias Wahlberg.

The Swedish Civil Protection Agency (MSB) statistics show that around 95-96 percent of all automatic fire alarms in Sweden are unwanted. According to Mathias Wahlberg, Early Action has been valuable in that sense, too, since Quality Hotel Waterfront reduced the number of unwanted alarms and calls.

“We don’t need to evacuate the entire hotel when we



EARLY ACTION

Act before the accident happens

Thanks to connected systems and advanced sensors, you can constantly read what is happening in the facility. When something outside of the usual pattern occurs, an incident is created with the help of AI.



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“Early Action allows the user to solve the cause before an actual fire alarm is activated, with the risk of high costs and inconvenience as a result”, Isak Nordberg Global Product Line Manager Services at Consilium Safety Group.

receive a message from Early Action. It only applies to the staff members who connect to the app. It also makes it easier for the fire brigade to avoid unnecessary calls, and we avoid many unnecessary costs, but that is a secondary concern. Our primary focus is ensuring the safety of our guests and staff members.”

IS EARLY ACTION RESOURCE INTENSIVE?

“No, not at all. Instead, it facilitates our work. We are talking about human life here, and with 151 rooms, many guests are here for the first time and may not know where to go. Even though the information is highlighted in each room, I know, based on experience, that guests may not notice it”, says Mathias Wahlberg.



Mathias Wahlberg and Lina Fernando share a laugh after the popcorn machine triggers the Early Action alarm, moved too near a smoke detector.

GLOBAL IMPACT, LOCAL SPIRIT

••• At the bustling heart of global trade, Singapore harbor, located at the southern tip of the Malay Peninsula, serves not just as a crucial player in commerce but also as a testament to the ethos of Consilium's customer closeness approach.

TEXT: SIXTEN NYHLÉN & RAMIN RAHMANI > PHOTO: JONAS GRATZER

In the early morning light, the Singapore harbor awakens with a steady rhythm. The air carries a subtle blend of saltwater and industry, forming a distinctive marine atmosphere. The intense movements of ships and cargo give a hint of the harbor's significance in the world of commerce. As a key nexus connecting Asia, Europe, and the Americas, Singapore Harbor symbolizes efficiency in global logistics, with most cargo here destined for transshipment. One of Consilium's earliest international service hubs was established here.

A LOCAL TOUCH WITH GLOBAL OPERATIONS

Down by the harbor, we are welcomed by Edmund Shen, Managing Director at Consilium Singapore. With over 23 years of tenure at Consilium's Singapore Office, a key provider of fire and gas detection systems for several decades, Edmund emphasizes the growing importance of local expertise in their operations.

His experience reflects a broader industry trend where localized knowledge and capabilities are increasingly vital.

"Given Singapore's role as a pivotal transportation hub, prioritizing speed and efficiency becomes paramount. It's crucial to understand our customers' needs and respond swiftly; prioritizing local support, we build trust and ensure system uptime and peace of mind."

Edmund guides us onboard one of the ships that Consilium recently installed, a fire and gas detection system, and

thoroughly explains how the system works. This ship, poised to depart for Australia shortly, exemplifies that quick access to service and expertise is essential.

Edmund highlights the importance of understanding diverse markets and cultures in global operations. "In a multifaceted business landscape, local expertise is not just beneficial; it's essential for customer satisfaction and safety," he says.



Edmund Shen

FROM SINGAPORE TO OMAN

As we make our way to the control room, Edmund shares insights into Consilium's expanding global footprint. He mentions his colleague Manu Potty, Senior Vice President MEIA, who recently opened a new office in Oman last spring.

Nestled along the Arabian Sea, the Port of Duqm in Oman stands as a crucial marine hub and plays a fundamental role in linking Oman to the broader demands of global trade. With an advanced infrastructure, it efficiently manages logistics, facilitating the swift movement of cargo on both national and international scales.

One of the key features of Duqm is its dry-docking facilities, a critical aspect of marine maintenance and repair. The integration of these facilities within the natural and commercial landscape positions the Port of Duqm as a leading





↑ Whether in Asia, the Middle East, or the Americas, we are dedicated to being within arm's reach of our clients, Marcus Andersson says, CCO at Consilium.

dry-docking hub in the Middle East, bridging continents in the narrative of global marine commerce.

During the pandemic, Manu Potty, Senior Vice President MEIA, observed a mounting demand for local partners capable of delivering rapid, reliable solutions, particularly fire and gas detection systems.



Manu Potty

The travel restrictions emphasized the need for access to service providers, and the aim was to address gaps in accessibility and provide essential resources and support to businesses in Oman.

“Expanding our footprint into new markets is not just about business growth, it’s a reflection of our commitment to understanding and meeting our customers’ needs. Establishing a local presence has been crucial in this endeavor. Through this, we gain invaluable insights into market dynamics, enabling us to tailor our services more effectively and go beyond our customers’ expectations,” says Manu Potty.

Manu Potty elaborates in the broader perspective of their local engagements.

“It involves recognizing the dynamic interaction between technology and the broader communities it serves. Everything we do revolves around safeguarding assets and people’s well-being.”

BRIDGING THE AMERICAS: STRATEGIC EXPANSION INTO COSTA RICA

The very same month as the Oman office was established, Consilium opened an office in another part of the world, Costa Rica. A country that boasts a central position in marine

commerce due to its proximity to the Panama Canal, one of the world’s busiest shipping lanes.

Martin Steen, Senior Vice President Americas at Consilium Safety Group, recently emphasized the strategic nature of opening the Costa Rica office.



Martin Steen

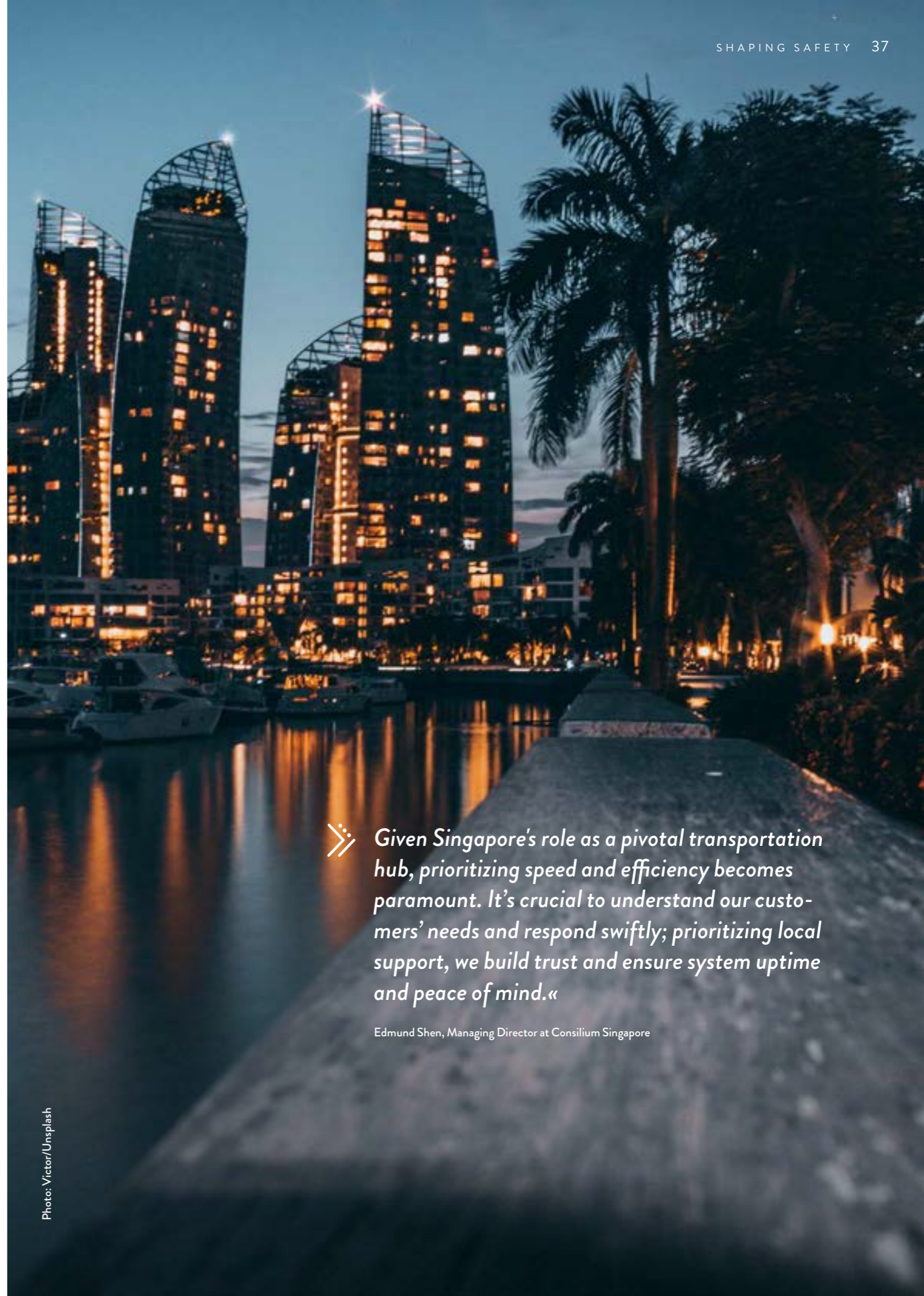
“The expansion into Costa Rica extends beyond geographical reach,” Steen noted. “It significantly enhances our capacity across central, south - and North America, fostering stronger customer relationships and closer collaboration with local partners,” he says.

Building on this point, Marcus Andersson, Chief Commercial Officer, shed light on the company’s wider strategy.

“Whether in Asia, the Middle East, or the Americas, our fundamental goal remains the same,” Andersson explains. “We are dedicated to being within arm’s reach of our clients, understanding their unique challenges, and delivering tailored, responsive solutions. This approach of close customer engagement is the thread that connects all our global operations, ensuring that our commitment to customer closeness remains strong.”

After touring the ship with Edmund, we head back to the office, walking along the bayside The Singapore Harbor unfolds around us serving as a sweep reminder of the importance of safety in marine operations. As the sun sets over Singapore, casting a warm glow on the bustling harbor, Edmund looks towards the horizon.

“It’s truly incredible to think that, as we speak, Consilium’s dedicated employees all over the world are working to enhance safety.”



➤ *Given Singapore’s role as a pivotal transportation hub, prioritizing speed and efficiency becomes paramount. It’s crucial to understand our customers’ needs and respond swiftly; prioritizing local support, we build trust and ensure system uptime and peace of mind.*»

Edmund Shen, Managing Director at Consilium Singapore

Photo: Victor/Unsplash

DISCOVER THE WORLD
OF CONSILIUM

> 55

offices across the world, well-positioned to provide fire, flame and gas safety solutions on an global scale.

> 900

employees who work together to ensure safety and security across the world. Each employee plays a crucial part in ensuring that we provide comprehensive safety solutions to our clients.

> 85 000

delivered safety systems around the globe in 2023, designed to provide cutting-edge safety solutions for an array of security challenges.

SAFETY TECH FOR A SUSTAINABLE FUTURE

••• Consilium Safety Group offices in 28 countries across all time zones, providing fire, flame and gas safety services and products worldwide.

We are shaping the future of safety.

Our innovations are the silent guardians of everyday life.

They keep the wheels of society turning. From the corridors of schools to the carriages of trains, the halls of public buildings, and the decks of ships. We simply make the world safer and better by delivering smart safety technology solutions.

Protecting lives, values, and our planet is crucial for the future, and we at Consilium are at the epicenter of that. That's why we are so optimistic about the future.

Join us, we are always looking for talented people.
Find out more at consiliumssafety.com