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STRONGERSK MAERSK MAERS

COLLABORATION CONFIDANTS | Jan Esbech (left) and Bo Lindberg Andersen are heading the efforts to improve synergies worth millions between APM Terminals and Maersk Line, squeezing more value out of each container by working together more closely.

MAERSK

- 05 Editorial: On the right course
- **06** An important step in the A.P. Moller Maersk strategy
- 08 Unfolding the fit
- 10 A big deal
- 12 When the screens went black
- 15 "The task was to speak with the customers"
- 18 When grounding is part of the job

20-29 THEME:

STRONGER TOGETHER

- · Siblings bury the hatchet
- No more Sunday calls to Buenos Aires
- · It takes two to tango
- Closer collaboration, sweeter grapes
- · The nerve centres
- 30 Switching off the engines
- 32 Reconnecting with the front-line
- 36 Back in business on the Silk Route
- 39 Practice makes perfect
- **40** All aboard the new Triple-E
- 42 The cost crusher
- 44 A leading light
- 48 Doing things differently
- 50 Switch, scrub, or just cheat?
- 52 Full metal jackets
- 53 The sailor from Captain Street
- 54 Financial report
- 56 It's a long way

MAERSK POST

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An important step

FUTURE OF MAERSK OIL | A material step in the strategy to separate out the oil and oil related activities and create an integrated transport and logistics company was taken in August, as A.P. Moller - Maersk signed an agreement to sell Maersk Oil to the leading global oil and gas operator Total S.A.



A voice for the front-line staff

NEW STRATEGY | Henriette Thygesen, CEO of the Svitzer towage company, is on a mission to make its size, and global presence, matter by empowering staff from offices to ports and on tugs around the world.



Photo: Christina Bode



When the screens went black

The worst cyber-attack ever | The fight against the most damaging cyber-attack Maersk has ever experienced was led from an 8-storey building in Maidenhead, England. Here, at Maersk IT's UK hub, the recovery is in its final stages, but the experience of those early days will not soon be forgotten.



Unfolding the fit

HAMBURG SÜD | Two of the world's major shipping companies look set to join forces later this year as Maersk Line is expected to acquire Hamburg Süd. Arnt Vespermann (left), future CEO in Hamburg Süd, and Søren Toft, COO in Maersk Line share their views on the strategic and cultural fit, and what to expect from the integration.

Back in business on the Silk Route

NUCLEAR DEAL LIFTS SANCTIONS | A nuclear deal with Iran has paved the way for Maersk Line to re-start its business in the country. But doing business in one of the world's most highly sanctioned countries comes with many challenges. "Today the economic situation is improving and I am sure things will continue to get better," says Shamim Rahami (picture), managing director of Iranian Silk Road, a logistics company.







On the right course

▶ It is now nearly a year since we announced the details of the new strategy for A.P. Moller - Maersk.

Looking at the progress, it is gratifying to see how much we have achieved in that time as we aim to become the global integrator of container logistics.

One of the most important steps has been the acquisition of the German container shipping line Hamburg Süd. This is a well-run and highly respected company with strong brands, dedicated employees and loyal customers and will support our growth by increasing volumes in both Maersk Line and APM Terminals. The transaction remains subject to regulatory approval and is progressing as planned towards closing in the fourth quarter.

More recently, last month we announced the sale of Maersk Oil to Total S.A. for USD 7.45 billion. The valuation and Total's commitment are a testament to the quality and standing of Maersk Oil, and the agreement will strengthen the financial flexibility of A.P. Moller - Maersk and free up resources to focus our future growth on container shipping, ports and logistics.

"Looking at the progress, it is gratifying to see how much we have achieved in that time as we aim to become the global integrator of container logistics"

We are continuing to assess different opportunities for Maersk Drilling, Maersk Tankers and Maersk Supply Service, and intend to define the structural solutions for these before the planned timeframe of two years.

In our current operations, we are also demonstrating growth ambitions. Maersk Line is profitable again and reported a year-on-year increase in revenue of USD 1 billion in the second quarter. Transport & Logistics is moving towards operating as one integrated division and delivering synergies, which are expected to create an improvement in return on invested capital of two percentage points by the end of 2019.

We have guided the market that we expect to improve results this year, both for the whole company and for Maersk Line in particular, by more than USD 1 billion. We remain on track to deliver on that.

With the results starting to come through, it is evident that we are on the right course. I look forward to telling you more about this exciting journey as we continue to make progress over the coming months.

An important step in the A.P. Moller - Maersk strategy

FUTURE OF MAERSK OIL | A material step in the strategy to separate out the oil and oil related activities and create an integrated transport and logistics company was taken in August, as A.P. Moller - <u>Maersk signed an agreement to sell</u> <u>Maersk Oil to the leading global oil and gas operator, Total S.A, for USD 7.45bn in a combined share and debt transaction.</u>

BY SAM CAGE

≥ Maersk Oil will become part of the world's fourth largest oil and gas company, and a company with a strong performance record and long-term growth and investment interest in the oil and gas sector. The combination of Total, the new owner, and Maersk Oil's global footprint and geographical overlap will ensure the continued development of Maersk Oil's worldwide strategic and selective assets.

Maersk Oil's worldwide organisation will be integrated into Total with respect for the technical know-how as well as the strong North Sea position. As a testament to Maersk Oil's capabilities and position, Maersk Oil's Copenhagen office will form the regional hub and head office for Total's activities in Denmark, Norway and the Netherlands ensuring a continued Danish stronghold in the North Sea.

Furthermore, Maersk Oil will remain close to its

technology and innovation partners at the Danish technical institutions and in the oil and gas service industry to the benefit of all parties.

Maersk Oil is the first of the four oil and oil related companies of A.P. Moller - Maersk for which the future structural solution has now been identified.

"The transaction, which is expected to close during first quarter 2018, will ensure that A.P. Moller - Maersk maintains its strong capital structure and frees up resources to focus our future growth on container shipping, ports and logistics," says Søren Skou, A.P. Moller - Maersk CEO. "Equally important, we have ensured that Maersk Oil becomes part of a company committed to long term growth in the oil and gas industry."

In determining the best future ownership structure for Maersk Oil, it has been important that the organisational competencies and the assets created in Maersk Oil continue to be developed, and that long-term investments are upheld, especially in the Danish part of the North Sea. Compared with other solutions investigated, including an independent listing, the sale offers very high value,



high deal certainty, transaction speed, low risk and a lot of opportunities for Maersk Oil's employees.

"The valuation of Maersk Oil and Total's commitment to ensuring that our criteria for the separation are met is a testament to the quality and standing of Maersk Oil. It is a difficult and emotional decision to let go of such an integral part of the A.P. Moller - Maersk family. However, we are certain that Total will be an excellent owner of Maersk Oil," says Claus V. Hemmingsen, Vice CEO of A.P. Moller - Maersk and CEO of the Energy division and continues:

"The capabilities, experiences and partnerships, which have made Maersk Oil a globally recognised technology leader and trusted operator will contribute to Total's position in the greater North Sea and worldwide."

Total will take over Maersk Oil's entire portfolio, obligations and rights with minimal pre-conditions, and is committed to upholding the planned development schedules and investments in strategic and sanctioned projects, such as Culzean, Johan Sverdrup and the Tyra redevelopment.

"I would like to thank all the employees in Maersk Oil. Your passion, efforts and devotion to Maersk Oil and A.P. Moller - Maersk has built Maersk Oil into the significant company it is today," Claus V. Hemmingsen adds. "You can all take immense pride over 50 years having developed Maersk Oil from producing the very first oil in the Danish North Sea into a highly reputed and extremely valuable oil and gas company."

Total in brief

- Founded in 1924, Total employs 98,000 people within the exploration, production, processing and selling of energy
- The company has operations in 130 countries spanning over five regions, and is committed to investing USD 15-17bn in its oil and gas business from 2017 and onwards.

Maersk Oil in brief

- Established in 1962, Maersk Oil is an international oil and gas company with a 2016 entitlement production of 313,000 barrels of oil equivalent per day
- Production comes from Denmark, the UK, Norway, Kazakhstan, the US Gulf of Mexico and Algeria.
 Exploration and development activities are on-going in Angola, Kenya, Brazil, Kurdistan Region of Iraq and in the producing countries



Welcome to the family

≥ For Total, it is truly a great honour and a privilege to be bestowed with the responsibility for taking Maersk Oil into its next exciting chapter, says Chairman and CEO Patrick Pouyanné.

On a visit to Esplanaden after the deal was announced with a team from Total, Patrick Pouyanné points out that it was the company's largest transaction since 2000.

"We made it for three reasons: First, Maersk Oil has high quality assets, which fit perfectly with our portfolio, in particular the footprint in the North Sea, which is also a strong point of Total. This will allow us to create the number two player and we will operate 500,000 barrels a day of oil and gas in the North Sea. It will be a big company and more competitive than each of us separately," he explains.

"The second one is that we know that Maersk Oil has strong and highly skilled people. We don't only acquire the assets but also the people. This is very

important, because we've been through a period with low recruitment so there are plenty of positions to welcome Maersk Oil staff into the company. This new blood that Maersk Oil will bring into Total is very welcome."

"The third point is that there is a Danish heritage.

Maersk Oil has developed the Danish resources for over 50 years, and we wish to benefit from that by establishing a new anchor point of the company here in Copenhagen."

Patrick Pouyanné also highlights Total's five values, when describing the company's culture: Safety, Respect for each other, Pioneer spirit, Stand together and Performance minded.

"You have my pledge that we will do our very best to ensure that the merging of our two great companies is handled sensitively, positively and seamlessly," he says, with a final word to Maersk Oil employees:

"Welcome to the Total family."

Patrick Pouyanné, centre, pledges that Total will do its "very best to ensure that the merging of our two great companies is handled sensitively, positively and seamlessly"

Identifying the best solution for the energy companies

The solutions for Maersk Drilling, Maersk Supply Service and Maersk Tankers remain to be defined before the end of 2018. There is no "one size fits all", as solutions and time horizons will differ, pending the individual business unit's current and future industry scenarios.

"As we assess the different opportunities for the individual businesses, we do not want to limit our options. We will ensure

that all recommended solutions constitute the most optimal development of the capabilities and assets built in the energy companies, whilst bringing optimal value to A.P. Moller - Maersk's shareholders," says Claus V. Hemmingsen, Vice CEO of A.P. Moller - Maersk and CEO of the Energy division.

A.P. Moller - Maersk has approached this process with an open mind to find the best structural solution for the individual businesses. Options can change during such a process due to the individual businesses' current and future position, the market and industry outlook, as well as the market interest. A.P. Moller – Maersk therefore continues to pursue several tracks for the individual businesses.

"We do not want to limit our choices or prematurely signal any solutions to the market. Therefore, we can unfortunately not be transparent about the process neither internally nor externally," says Claus V. Hemmingsen. "While we progress on finding the right solutions, it is imperative that we all continue to perform at our best level to maintain or even enhance the competitiveness of our business. This alone will enable us to approach the different structural options from a position of strength."

Unfolding the fit

HAMBURG SÜD | Two of the world's major shipping companies look set to join forces later this year as **Maersk Line is expected to acquire Hamburg Süd in a EUR 3.7 billion deal.** Arnt Vespermann (left), Member of the Executive Board and future CEO of Hamburg Süd, and Søren Toft, COO of Maersk Line, share their views on the strategic and cultural fit, the potential and what to expect from the integration.

BY JESPER TOFT MADSEN / PHOTOS: CHRISTINA BODE

Arnt Vespermann, Member of the Executive Board and future CEO, Hamburg Süd

How would you characterise Hamburg Süd as a company?

"We're a quality carrier trading worldwide, but with a focus on North-South activities. As we're fully family-owned, we have a personal top-down approach throughout the company. We have a high level of transparency and open dialogues between colleagues and with our customers. The latter describe us as a stable, reliable and service-focused partner, and we believe that our entrepreneurial spirit is higher than in many other companies."

What excites you the most about joining Maersk Line?

"Becoming part of the world's number one shipping company will create a lot of opportunities. We can expand Hamburg Süd's scope to the global playing field and grow our market share together, while keeping our focus on North-South trades. Maersk is an extremely professional organisation. It has a bigger, wider network. Here's a chance to develop a long-term perspective at very good cost levels within a great company."

How do you see the cultural fit between the two companies?

"I think the cultures are quite similar. We both have a very Northern European way of doing business, meaning we are very professional, open and transparent. We make our decisions very clearly and we stick to them. We're reliable and there's no backtrailing mentality. The way we serve our customers is also the way we negotiated this transaction. We came to an agreement quite smoothly and that's a testament to the cultural fit."

What separates Hamburg Süd from Maersk Line?

"We're different in our approach to customers. Maersk's service centre approach is very efficient, and I'm convinced that you can't be number one without it. However, some customers still prefer a more individualised, personal service approach and they might choose Hamburg Süd. This doesn't mean that one approach is better or worse, they're just different. To some extent, we operate

in different customer segments and being able to continue and expand this on more attractive terms is very important to us."

How should employees approach the integration?

"We need flexibility from everyone, especially from our employees. They should be open to change. Many employees have been with us for a long time and we have so far only taken over companies. Many procedures might change. We might have to learn

new ways of making decisions and cooperating. This takes more flexibility and openness.

Maersk is doing a great job in preparing this integration and giving our team the feeling that we're having discussions between equals, not between winners and losers. This is very important to become one, joint team. Decisions must be made and we don't like all of them. But decisions are made on good terms."

Ten years from now, how do you picture the Hamburg Süd brand and your global position with Maersk?

"I want to double the transport volume for Hamburg Süd. I know it's extremely ambitious, but you need an ambitious target. Not at the cost of Maersk, of course. We will expand the Hamburg Süd customer base, be globally active and grow together with Maersk. We want to deliver our part to Maersk's future success."

Integration milestones



Mobilise integration team



June: Create joint baseline and validate synergies



July and August: Design new Target Operating Model



September: Plan for implementation and synergy capture



Søren Toft, COO of Maersk Line

Why has Maersk Line decided to buy Hamburg Süd?

"First of all, it's a very well-run business. Hamburg Süd is known for delivering a high-quality product and Maersk can learn a lot from their way of working. For several years, we have been challenged by a fragmented market and with the acquisition of Hamburg Süd, we can generate significant cost savings and offer better products to our customers."

What will Maersk Line and Hamburg Süd be able to achieve together that they can't do on their own?

"By combining our networks, customers will experience even better coverage with more options.

We can leverage scale to bring down operational costs and increase volumes in APM Terminals.

Today, Hamburg Süd has a revenue around USD 6 billion. We want it to become a 10-billion-dollar company. However, we won't reap any of these benefits unless we keep a constant focus on our existing customers throughout the

What do the two companies have in common?

integration process."

"Both have a long and proud heritage as family-owned companies that have spread their activities across several industries. While we're international by heart, we both come from Northern Europe and the cultures in Northern Germany and Denmark are very similar. The people I've met so far are extremely professional, competent, experienced and pragmatic. Quality and orderliness have shaped the way we do business and how we both approach colleagues, customers and stakeholders. We keep our promises."

Where are the biggest differences?

"Commercially, we want to keep separate setups as we offer different value propositions. With its worldwide presence, Maersk Line has developed and refined global standards and processes over many years. Hamburg Süd has a more regional focus and is particularly strong in Latin America and Oceania. Therefore, they offer customers a deep understanding of local conditions and we

want to protect and nurture this unique brand position."

So some differences can be turned into commercial advantages. Where do you see the biggest challenges in this integration?

"We're all humans. Much of Hamburg Süd's growth and success have been achieved through acquisitions. Now it's the other way around and that takes a lot of adaptability – rationally and emotionally. Everyone must realise how great we can become together and for

What does the integration demand of employees?

"Courage. Especially from employees in Hamburg Süd. You must be able to cope with the changes and consequences of getting a new owner. The big difference is that we're committed to the future of this industry. For Maersk employees, the successful integration depends on our ability as leaders and employees to be open, transparent, approachable and respectful to our new colleagues and their situation. If we manage that, our common journey will be much smoother and we'll have plenty to be excited about."

A big deal \rightarrow



Q4 2017: Expected deal closing. The proposed transaction is subject to regulatory approvals.

After closing:

Implement the integration plan with focus on customer retention, synergy realisation and integration of Hamburg Süd colleagues into the organisation

Next steps:

Capitalise on synergies and best practices

A big deal

BY JESPER TOFT MADSEN

Christina Sauter, Customer Retention Lead, Hamburg Süd

"Protecting the Hamburg Süd value proposition and ensuring strong customer and volume retention are key objectives for

all of us. The Customer Retention team is responsible for achieving this by mitigating different risks such as a shrinking share of wallet, and presenting new opportunities to customers in the best possible way.

The cooperation between the companies in the various work streams is open, positive and constructive. We realise that all work streams contribute to customer retention, and we're learning from each other."





Philipp Niesing, Integration Manager for Procurement and Fleet Management, Hamburg Süd

"It's good to learn that Maersk Line, as the by far bigger partner in this transaction, is eager to learn how

Hamburg Süd is doing things and to adopt best practices after closing. Being part of the integration planning team helps understand why certain decisions have to be taken.

It's clear that both Hamburg Süd and Maersk will need to adjust. I'm quite confident that possible negative impacts this may have on some colleagues can be mitigated. A joint integration planning helps avoiding frictions and allows for a smoother transition.

Though Hamburg Süd is the takeover target, it's important to retain the strengths of the brand and its value proposition. Shipping is all about people – so communication and an appreciative approach towards our colleagues is key. To make the combined company even more successful in challenging markets, all employees have to work together to generate the synergies and to protect and grow our joint book of business."

David Gulik, Commercial Lead, Maersk Line

"While we have some significant change and work ahead of us, the outcome is truly exciting. Together we can offer different value propositions depending on customers' needs, a network that is better than anyone's

with faster transits and more direct coverage, and we'll have the biggest fleet in the industry.

The key success factor is that our customers continue to do business with all the brands and looking to grow with us. To achieve this, we need to keep



providing solutions to our customers, our network needs to be fit-for-purpose and our systems and processes need to be ready from day one."

Niels Gunner Schermer, Operations Execution Lead, Maersk Line

"We are solving a big operational puzzle and it's great working with new, like-minded colleagues from Hamburg Süd. We want to ensure that the integration planning teams interact to deliver value for both customers and our company after closing.



I hope that we can channel the positive energy from the planning team to the frontline organisations when we get the go-ahead. We have two really competent organisations and we can build something unique from this integration. We are teaming up with a shipping line whose

customers are loyal to the value proposition Hamburg Süd offers. To be successful, we need to ensure that we have a model that can deliver operationally for both businesses." **PLANNING THE INTEGRATION** | While the proposed acquisition of Hamburg Süd awaits final approvals, work continues behind the scenes to prepare the integration of one of the biggest deals in shipping history. Integration planning team members share reflections on their current work, their expectations and what it will take to make the integration a success from day one.

Ida-Marie Skotte, Customer Retention Lead, Maersk Line

"What I find most exciting is learning how another organisation with another history and culture solves problems and communicates with its customers. We are so different and yet share many fundamental attributes – commercially it will be a strong combination.

Everyone has a role to play in an integration of this size, from Sales and Customer Service to capacity management and finance. And we need to keep focus on the customers rather than ourselves. Look at it from their perspective: if they ship a large part of their volume with both brands today, does it feel like a risk to them when we integrate? After closing, we need to be ready to talk about this concern with them, and help them to see concrete benefits.



For the customers that will leave, we need to plan to replace them. Our joint global market share will be around 18%, so there is plenty of business out there."

Niels Uffe Svane Nielsen, Procurement Lead, Maersk Line

"Integration success in my book is that we capture the best of both worlds and put it into



action in the new setup. It's also very interesting to see, from an integration planning perspective, how a different company has gone about solving the issues that you face in daily business—it provides you with a good perspective on your own understanding and beliefs.

The thing I have noticed most is the great people that work at Hamburg Süd. It is clear that the way Hamburg Süd keeps its customers happy is by going the extra mile every time. Ensuring that we keep the engagement to work on the significant challenges after closing is to me the most important thing."

Stefan Dühring, Operations Execution Lead, Hamburg Süd

"The integration planning work doesn't just give me a good insight into the Maersk processes and organisation, it also makes me reflect about the many strengths of Hamburg Süd's operations and the areas where we may have room for improvement.

I really enjoy the unbiased exchange of many ideas and arguments with great professionals in the integration planning team. We need

these open
discussions to
plan for day one
and, in the longer
term, develop the
best practices
that should
benefit the
service delivery
and cost base of
all brands within
the bigger and



better A.P. Moller - Maersk.

Be positive, be curious, be prepared. The first two I find in every individual I have dealt with in the integration planning team and I know we're all working very hard on the last one."

Looking back to 1913 - with Hamburg Süd

Hamburg Süd has been a partner for Maersk for more than 100 years. The steamer LAURA MÆRSK joined the Maersk fleet in January 1913 and her first voyage was on a time charter for the Hamburg-Südamerikanische Dampfschifffahrts-



Gesellschaft. The voyage started in Hamburg and LAURA MÆRSK made several port calls in Brazil and Argentina before returning to Europe – this was the first time a Maersk vessel called South America.

What you need to know

- Maersk Line will acquire Hamburg Süd for EUR 3.7 billion on a cash and debt-free basis.
- The proposed transaction is subject to regulatory approvals with expected closing of the deal in the fourth quarter of 2017.
- The preparation is handled by a designated integration planning team. The team consists of both Hamburg Süd and Maersk Line employees working in different work streams across operational, commercial and corporate functions, including a clean team to handle commercially sensitive information.

When the screens went black

THE WORST CYBER-ATTACK IN COMPANY HISTORY | The fight against the most damaging cyber-attack Maersk has ever experienced was led from an 8-storey building in Maidenhead, England. Here, at Maersk IT's UK hub, the recovery is in its final stages, but the experience of those early days will not soon be forgotten.

BY JOHN CHURCHILL

▶ While it was the fourth day of the worst cyber-attack in company history, <u>Tim Ferguson</u> could not help but crack a smile at the present situation.

Recovery teams were finished preparing a critical piece of the recovery, a master image of the Microsoft Windows 10 Operating System, that would bring 50,000 employee computers back to life. But how to get it out to the company's nearly 600 global office locations?

"Less than half of those locations have the bandwidth needed to download it from the internet.
So, we needed 2,000 USB sticks and a postman, right away," says Ferguson, who on a normal day is Head of Programme & Service Transition but was taking a shift as Manager on Duty in charge of

approving all decisions made by the recovery teams. "It turns out that shops carry no more than fifty USB sticks. So we sent people out in cars to buy every single one and these replicator machines so we could load them in big batches."

The next morning Ferguson estimates they posted 300 DHL packages, with five or six USB sticks in each, to every corner of the globe. "We bought every USB in a 25-mile radius of the office. I'm sure someone out there got one shaped like Homer Simpson."

An eerie silence

Three days before was Tuesday, 27 June 2017, a day that quickly went from normal to code-red for the more than 400 employees who work on six floors of an eight-storey building in **Maidenhead**, **England**.



Are we prepared for next time?

When the malware struck on 27 June 2017, the Maersk IT organisation was in the process of centralising control of the Group's IT estate in Maidenhead. From the security of systems to upgrades and improvements, centralisation will lessen the likelihood of a similar attack happening again. At the same time, it will also enable the company to upgrade and improve (or remove) servers, applications and systems more easily.

The cyber-attack sparked some immediate improvements to security, most of which cannot be shared for security reasons. But the subsequent shutdown and reboot of global systems has helped speed up the process of centralisation and modernisation.

"Cyber-attacks are not going to go away and technology is becoming a more strategic asset in the future of our business," says Adam Banks, Chief Information Officer at A.P. Moller – Maersk. "That means we need to continue what we've started and finish building a more secure and reliable infrastructure that can support the growth strategy of this company. We will have more to share about what this will look like and what it will mean for employees and the company when we announce the new IT strategy."



This is <u>Maersk's IT</u> hub in the UK and Maersk Post visited in August to better understand what occurred in the last days of June.

While roughly half the people here work on maintaining the IT architecture and applications that run the global business, the other half work on developing new functionality and services. It is only now that they are beginning to be released from recovery teams back to their regular jobs.

Many Maidenhead employees were on holiday or working from home the day the malware hit. John Ashley was enjoying the view of his garden from his new home office when his screen went blank and the "notPetya" ransomware text appeared. After a phone call to his manager, he was in his car heading to the office.

When he arrived, Maersk IT had consolidated on the fourth and fifth floors of the building. The Command and Control Centre is on the fourth floor. Resembling NASA's Mission Control Centre, it constitutes the eyes of the Maersk IT estate. Here, employees monitor the status of over 200 critical business applications, networks and servers on a sweeping 10-metre

The screens were blank.

"It was eerie to come in and see everything powered down, blank screens. I immediately noticed the quiet, the hum from all the machines was gone, it was jusays Ashley. "There panis just an air of the communication of the series is a series of the communication of the communication

was gone, it was just voices," says Ashley. "There was no panic, just an air of intense focus. There was a 'war room' and the analysis of what we were facing

"It was a heck of a way to start a job, it was actually really exciting. We could see how much pressure everyone was under, so to be able to help out in any way was great," says Michael Crawley, on his second working day of a two-year apprenticeship.

was underway. Work streams were put in place with leaders, shifts, and key supporting roles such as communication and administration. People just got to work, doing anything to help."

Battle positions

Ashley and his colleague, Nallathambi Theogarajan, were among the technically skilled ones who were put to work right away on the task of safely restoring thousands of servers, Cekalla. "Michael and I don't know what 'normal' is like here yet, so it will seem odd when everyone is back to their everyday jobs."

Crises tend to bring out the best in people. From natural disasters to corporate crises such as this, studies and reports show that collaboration and creativity tend to rise and everyone pitches in to find solutions to problems. From talking to the employees at Maidenhead, this crisis was no different. Everyone has a story about a quiet colleague who

out a video message of gratitude, thanking them for their hard work, dedication and creativity.

Employees here say top management was supportive throughout the crisis. Tim Ferguson recalls that one of his first tasks as Manager on Duty was to contact CEO Søren Skou and ask to borrow the company jet. They were trying to fly in colleagues and others from outside Maersk to help with the recovery but the flights into London were completely full. "He said 'Of course, that's what it's there for!" says Ferguson.

Emotional rescue

After the first couple of weeks, the emotional toll of the crisis was beginning to show on the faces of everyone, recalls Adam Goodall, Head of IT Operations. Caffeinefuelled days followed by poor sleep on couches or in hotels away from family was wearing everyone thin.

"Every day we wanted to show our people how their efforts were having an impact. Usually it was in the shape of numbers, sites back online etc. Then we saw this video come up on our WhatsApp feed," says Goodall.

"It showed this guy at a PC with his colleagues huddled around him as he starts up GCSS, a core application used to support bookings in Maersk Line. Everyone cheers and this guy is literally in tears. We showed that on our big screen here and it just gave this building a huge boost to keep going."

Stephen Barraclough has been with Maersk for the past 40 years and while officially retired he was back in the building on a six-month contract as Head of Business Services Management.

"I haven't really thought about it, about what happened. Looking back, what I think has struck me the most, is how people behaved. It didn't matter what someone's normal job consisted of, people just did absolutely everything they could to help. This is a young organisation and this experience, while not enjoyable, has certainly made it a heck of a lot stronger."



"This was the worst crisis I think any of us have experienced. And we were never alone, so many hands helped in this recovery. From the very first days, we got phone calls from all over the organization from people who wanted to fly in and help, but also from technology partners and other companies," says Adam Banks, Chief Information Officer, A. P. Moller – Maersk.

50,000 computers as well as all the business applications.

Tayler Cekalla and Michael
Crawley were on their second
day on the job as apprentices.
They were scheduled to meet
with their manager about initial
tasks in business administration
and internal communication,
respectively. Instead, they became
"runners," doing whatever was
needed for the teams which would
operate on 14-18 hour shifts every
day for the next three weeks.

"It was a heck of a way to start a job, it was exciting. We could see how much pressure everyone was under, so to be able to help out was great," says Crawley. "It was inspiring to see the commitment of all the people at this company we had just joined," he says.

"Senior people were sleeping on couches after 20-hour shifts just in case they were needed," says Tayler took charge or of senior managers fetching coffee and taxis that it will surely become part of company folklore.

"This was the worst crisis I think any of us have experienced. We were never alone, so many hands helped in this recovery. From the very first days, we got phone calls from all over Maersk from people who wanted to fly in and help, also from technology partners and other companies. Everyone pitched in. The level of support was a huge positive surprise for me," says

Adam Banks, Chief Information Officer, A. P. Moller – Maersk.

As reports rolled in from Maersk offices around the world that employees were making use of other tools like WhatsApp to communicate and do business, and local organisations were posting videos of employees fighting the good fight, CEO Søren Skou sent



Søren Toft, COO at Maersk Line, at work to bounce back from the cyber-attack: "It was a great experience to see the immense efforts and amazing teamwork."

"The task was to speak with the customers"

CYBER-ATTACK | When the screens went black around the world, employees and executives alike found new ways to support one another each other and serve customers. Their ingenuity, adaptiveness and determination not only kept the business moving, but also show that A.P. Moller - Maersk is indeed stronger together.

BY JACK RODGERS AND ANDERS ROSENDAHL

"We planned and scheduled vessels with marginal data, without incurring delays outside of our normal planning. Many people used their own equipment and took late night phone calls to make this happen. It was a team effort across the board," says Stephen Davis, Maersk Line's Marine Manger on the US East Coast.

This description of the reaction to the cyber-attack that hit A.P. Moller - Maersk on 27 June 2017 is echoed around the world. Most employees will recall where they were and what they did, be it setting up a chat group, helping a colleague or carrying out entirely new tasks. Each initiative is a part of the bigger picture that shows

how the company bounced back, while focusing on its customers.

15% of global trade

In the wake of the cyber-attack, Maersk had to take down between 1,500–2,000 systems. Immediately, countless employees from across the globe, in all functions and brands, went out of their way to help their colleagues in the recovery effort. This was fundamental to Maersk being able to keep 15% of global trade moving with the help of Twitter, Excel, WhatsApp and Gmail.

Lia Tamara Jaspe, Network Design Manager in Panama, was one of many who took on new roles to help the recovery. She says "initially everyone was terrified when the virus struck, but then the management team began to react with creativity to find solutions, using WhatsApp, Macs, Gmail, etc. The cargo team needed help so I volunteered."

"From then on, there was a spirit of everybody working together, of being creative and doing whatever it took to find a way to make it work," she adds. "To me it proved that Maersk is so much more than containers in a terminal. I have worked here for 25 years, and honestly, it made me so proud to have dedicated my life to this company."

Spreading the word

Shereen el Zarkani, Global

Head of Sales at Maersk Line, was working from Egypt at the time of the attack and that represented an additional challenge. After new channels of communications had been established, the massive task of reaching out to thousands of customers could start:

> "We had to make sure that the sales people knew what was going on globally. In particular, we have the

> > key clients who have executive sponsors from across the business, and this was exactly the time when we needed them," she says, adding:

"Whether an executive call or a sales representative in the frontline, the task was first and foremost to speak with the customers and constantly update, reassure and appease them."

Depending on the progress of the recovery, sales personnel were

helping their colleagues in customer service answer queries from many customers as to the whereabouts of

> their containers. Here, Shereen el Zarkani highlights the finance employees helping operation, emphasising that "it was very cross-functional".

> > Employees, across

the board, were keen to lend a helping hand wherever needed. For Leonardo Veintemilla, Sales Channel Manager at Maersk Line, plunging into Customer Service Support in Panama was

a learning experience:

"It was gratifying to step in and

the frontline team – especially at that

learn a different perspective from

difficult time where we didn't have

customers the way we would like to.

However, having the right attitude went a long way in making them feel

that we were doing everything we

could to provide an excellent service

the tools available to support our

teams took charge, brought forward a can-do attitude and worked across organisational boundaries to find making was fast and innovative brought to bear," he says.

of the front line, responding to



"The silver lining, if any, to the crisis, is that we have a renewed sense of purpose and a pointer to a different way of working," says Navneet Kapoort, Head of the Global Service Centres.

Shereen el Zarkani, Global Head of Sales at Maresk Line, on the organisation's reaction to the cyber-attack: "It was very cross-functional".

with the resources we had available," he says.

New roles and new countries

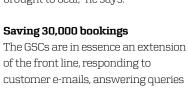
Others threw themselves into not only new roles but also new countries. Manjini Balanarayanan, an Operations Team Manager working in the Global Service Centre in Chennai, was one of many who were flown to frontline terminals to assist. There, the containers had arrived, but, with so many systems down, no one knew where they needed to go.

"Initially, we didn't even have good Wifi to get connected with additional resources, so we had to be creative while management in Maersk Line Asia Pacific and MCC provided good support with innovative ideas," says Balanarayanan of his arrival in Malaysia. "We tried using lots of alternative ways to communicate with one another, using WhatsApp and Google Drive in sending the data information."

"However, everyone was in the same situation, and with the terminal, MCC and Maersk Line working together, we found alternative ways to solve the problem," he adds. "Over the two weeks we reduced the number of containers with unknown destination from 7,500 to 400. By working innovatively and as one team we came back strong and really worked well "

In Mumbai, Navneet Kapoor, Head of the Global Service Centres (GSC), found himself in a uniquely challenging situation, having only joined the company some weeks prior to the attack.

"I was amazed at how the GSC solutions for our customers. Decision ideas, which involved leveraging data assets or technology differently, were







In the days and weeks following the cyber-attack, a huge number of employees have gone to enormous lengths to help their colleagues, the business and our customers.

and managing disputes. Kapoor points to the fact that the cyber-attack reminded the entire organisation of what it could do to manage the customer experience.

"If we took it upon ourselves, we could truly be frontline people. So instead of waiting for directions and, asking 'what should we do?', we asked ourselves how we could step up and serve the customers. This was when the entrepreneurial spirit really came to the fore," Navneet Kapoor says, pointing to bookings as an example of a problem, where quick thinking and initiative solved a big problem.

The situation was as follows:

Maersk Line was unable to take bookings because the systems were down. Every hour represented a huge inconvenience for the customers and a loss for the company. Hence, customer service and the commercial team took it upon themselves to build a stand-alone, independent booking system, reaching out to some team members who knew programming. A solution was launched within 24 hours and it took no less than 30,000 bookings over the next couple of days.

"This, and the many other examples, reflect how we were able to break down boundaries across teams and brands, forcing ourselves to prioritize what's most important," says Navneet Kapoor, adding: "If I were to boil it down to the very basics, what our colleagues did is quite simple but powerful: Put customers first, then A.P. Moller - Maersk, then team and then self. The silver lining, if any, to the crisis, is that we have a renewed sense of purpose and a pointer to a different way of working."

Pulling together

Just after the cyber-attack hit the company, Søren Toft, COO at Maersk Line, was on a business trip to China:

"I saw how all colleagues across all functions were pulling together, working hard and doing their very best for the company to recover and get us out of the situation as quickly as possible. It was a great experience to see the immense efforts and amazing teamwork," says

When grounding is part of the job

AN UNUSUAL VESSEL | A grounded vessel is generally the last thing a seafarer wants to be involved with. For the crew on Maersk Connector, however, it is part of the job. They go on ground with the low tide, lay cables from offshore wind turbines to shore and pull back to sea with the high tide.

BY ANDERS ROSENDAHL

Never once having grounded a vessel, Captain Peter Grøn was going against his nature and 20 years of experience when he steered Maersk Connector closer to shore, deliberately getting stuck with the low tide.

"We had planned it for a long time and gotten used to the idea, but actually doing it was very unusual," Peter Grøn explains after having successfully completed the first Maersk Connector's first expedition went to **Morecombe Bay** in the Northwest of England and everything went according to the meticulously prepared minute-by-minute plan. The vessel and its 75 man strong crew completed the job, connecting the extension of the Walney offshore wind farm to shore, and grounding no less than five times over the course of three days in the process.



Captain Peter Grøn and Jacob Westh Olsen debrief at Maersk Supply Service headquarters in Lyngby after the successful pulling off the first 'engineered grounding" in Maersk Supply Service's

history.

Photo: Peter Flmholt

so-called 'engineered grounding' in Maersk Supply Service's history in late May.

In and out

The unusual situation called for an unusual vessel. Maersk Connector is the first large power cable layer that can sail right up to the shore and go aground fully loaded with cable, allowing the crew to lay cable from offshore wind turbines to shore in single length, before easing safely back to sea with the high tide. This process is cost-efficient and a single length cable creates a better flow of power than does a cable with a larger number of connecting joints.

"If we didn't get it right, we would have had to wait a full month for the next high tide," says Peter Grøn.

No trial run

"This operation raised the industry standard for cable laying," says Jacob Westh Olsen, Operations Supervisor at Maersk Supply Service.

Olsen was the focal point of the month-long planning, which lead to the grounding and involved the client, third party surveyors along with technical and fleet teams at Maersk Supply Service.

The grounding was planned around the cycle of the tide, which peaks twice a month. Thus, the tide would behave differently just a day or two before or after, making it a different operation altogether.

"We did some practicing and simulations, as much as we could, but a real trial run, dealing with the whole package in the environment and also taking in the weather was not possible," says Jacob Westh Olsen.

As a part of the preparations, a corridor on the seabed was surveyed and checked for obstructions and suitability to ensure the vessel would be safely grounded. A smaller anchor-handling vessel was needed to place four anchors around the vessel and then the tide took over, placing the vessel





Photo: Maersk Supply Service

Grounding a vessel

Grounding a ship is a technically complex operation, requiring precise positioning, detailed planning and very detailed survey of the seabed

The advantage of going close to shore and ground is that the cable can be pulled ashore in one piece which mean more cost effective cable laying and better utilization of cable capacity

The success of Maersk Connector indicates the practice could become more widespread in the industry $\,$

on the seabed, giving the crew its window to lay down the cable.

Teamwork is key

The planning process intensified in the final two months before the

grounding and the pressure was also heating up – not only for the crew on Maersk Connector, but also for the offshore team, including Jacob Westh Olsen.

"The vessel is built for it and we

were prepared, but we still had to pull it off. I stayed close to the phone, and when they called, it was with good news," he recalls, pointing to teamwork as the key to the success.

"It was a great success and a first step to building a solid track-record for Maersk Connector."

Maersk Connector is on a 7-year contract with a client, which will see the vessel making more groundings and other complex operations across Europe while working on new renewable and interconnected power cable projects. Hopefully also allowing Captain Peter Grøn to get used to the situation.

"But I'll probably still have butterflies in my stomach the next couple of times," he says.

THEME STRONGER TOGETHER

Working closer together

Maersk's Transport & Logistics division's 'must-win' battles are grouped under the 'Stronger Together' headline, indicating that one company with many brands is stronger together. The ambition is to create an integrated container, logistics and ports business that can deliver profitable growth, improved products and a better customer experience. This theme presents examples of how strong brands can work closely together.

SIBLINGS BURYTHE HATCHET

WORKING AS A TEAM | Wins are emerging, slowly but surely, across the Transport & Logistics division. This bodes well for the expected multi-million dollar synergies from integrating five businesses into one company. Working together across the division is also unleashing a new wave of creativity.

BY ANDERS ROSENDAHL

APM Terminals in Salalah, Oman is seeing a lot more Maersk Line containers than it did only a year ago.

The number of moves is up by 80% after Maersk Line transferred volumes from nearby terminals.

Both parties are gaining financially, adding a combined USD 5 million on the bottom line every year, and the case works well to illustrate how businesses across Maersk's Transport & Logistics division can find synergies and money by working together.

"The potential to make deals like this has always been there," says Jan Esbech, Head of Global Marine & Inland at Maersk Line and the co-head of the 'collaboration team' that has been set up between Maersk Line and APM Terminals.

"We needed the willingness to compromise, which we have now where we are working together to make as much of Maersk Line's volumes as we possibly can," he adds.

Bo Lindberg Andersen, Global Client Director at APM Terminals and Esbech's counterpart in the collaboration team, explains that the Transport & Logistics division has essentially seen Maersk Line and APM Terminals turn their relationship upside-down:

"We used to be two very individual companies, a seller and a buyer, which gave us two completely different sets of incentives and a lot of internal competition," he says. "With a dedicated collaboration team and combined targets, we've been able to set a new tone and help push a new way of doing things."

Change takes time

Last year, when A.P. Moller - Maersk announced its intention to become an integrated container shipping, logistics and ports company, it broke with a long-standing principle of operating each business as a stand-alone company. By integrating the





businesses and working together, synergies like the case in Salalah and others across the division, are expected to improve the division's return on invested capital by two percentage points over a period of three years starting in 2017.

"Last year's financial result was unsatisfactory, and we are in a recovery phase. The result from the first quarter shows that we on the right track. The same goes for the second quarter where we are beginning to see some cost-synergies and collaboration wins start to kick in," says Jakob Stausholm, Chief Financial, Strategy & Transformation Officer at A.P.

"We can see Maersk Line and APM Terminals working together to drive more volume to terminals, and Maersk Container Industry's turnaround thanks to better coordination with Maersk Line is also a good story," he adds.

He points to the fact that it takes longer to see the result of revenue growth initiatives – although increased volumes and better freight rates did see Maersk increase revenue year-on-year in the first quarter for the first time since 2014.

"It's still early days, and we shouldn't be discouraged by the fact that it takes time to fundamentally change a company of this size.

There's a lot more to come,"

Stausholm says, as he also points to the acquisition of Hamborg Süd, which will help add new volumes to APM Terminals as well as the potential in digitisation across the Transport & Logistics division:

"We'll be able to offer new and unique customer experiences, linking different services across the division, as we digitise our assets and use the data in entirely new products," he says.

A natural, next step

A key part of the collaborative efforts is to optimise value across the Transport & Logistics division instead of the individual brands, essentially driving a new mindset and pursuing deals where it's okay for one business to lose one



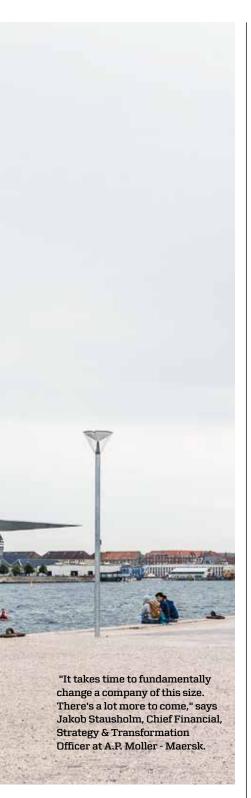
Photo: Christina Bode

dollar if another makes ten. Being the division's two largest brands, both in terms of invested capital and revenue, the close collaboration between Maersk Line and APM Terminals is essential to the success.

This is a new approach compared to the thinking that established APM Terminals as an independent company in 2001,

moving its headquarters to The Hague in the Netherlands in 2004. Then, Maersk Line was by far the main customer and annual throughput had just exceed 20 million TEU. Today, Maersk Line accounts for less than half of APM Terminals' activity, which in 2016 had reached 37.7 million TEU.

"When APM Terminals was



separated from Maersk Line, it was the right thing to do because it was part of the process for both companies, focusing on the core activity, and it allowed both to become a lot sharper. But at some point, instead of optimising, you start to sub-optimise. I think that is the point we had reached, and that's why it makes so much sense to work more closely

together again," says Bo Lindberg Andersen of APM Terminals.

Jan Esbech agrees, explaining why a deal like the one in Salalah was not struck before the integration - even if it represented a win for both parties.

"It all depends on the mindset. If two parties enter a negotiation and push in opposite directions to maximise profit individually, the deal space gets very narrow. However, going into the discussion with a crystal clear instruction and mandate to optimise value for Transport & Logistics, then it's much more important to get a total extra

Line, which is of course conducted in a compliant way. We cannot afford to be accused of unfairly treating Maersk Line better than any of our other customers. I wouldn't say it's a challenge. It's just a given."

Even with everything done by the book, concerns that the close collaboration between Maersk Line and APM Terminals would alienate other customers at APM Terminals have been voiced. Jakob Stausholm, however, is not worried about a potential perception issue.

"We're not the only company that owns vessels and terminals, so this is nothing new. We believe that the

"Last year's financial result was unsatisfactory, and we are in a recovery phase. The result from the first quarter shows that we on the right path. The same goes for the second quarter where we are beginning to see some cost-synergies and collaboration wins start to kick in"

Jakob Stausholm, Chief Financial, Strategy & Transformation Officer at A.P. Moller - Maersk.

value of USD 5 million by moving more volume at a slightly higher rate than you'd ideally have wanted."

Staying strong individually

Esbech also dismisses any risk of complacency, i.e. seeing APM Terminals take Maersk Line volumes for granted:

"There'll always be a drive to get the lowest possible cost at Maersk Line and we know what the alternatives are," he says.
"Besides, if we pay too much for our network, absorbing higher cost, we'll be worse off against the competition. In short, it will become really difficult to create value for Transport & Logistics if Maersk Line's network suffers."

The same goes for APM
Terminals, which is unable to fill
its terminals without the volumes
that come from carriers other than
Maersk Line.

"We need to be competitive and have a value proposition that sees customers choosing our terminals," says Bo Lindberg Andersen. "That matters more than a closer relationship with Maersk customers at terminals will look at the total offering and price and not too many other things. In today's stiff competition you can't really afford to do anything else," says A.P. Moller - Maersk's Chief Financial, Strategy & Transformation Officer.

Currently, the Collaboration
Team has six value streams and 25
individual projects, including Hub
Excellence, local synergy plans and
inland initiatives. A project is added to
the list when additional Transport &
Logistics value is identified, and while
the responsibility is pushed locally,
where the impact is felt, Jan Esbech is
delighted to be part of the process, and
the collaborative approach.

"Maybe you have to be in it all the time to see it, but I think one shouldn't underestimate that it's a lot more fun to work together with the colleagues at APM Terminals than it was in the past. It's not a competition any more, we actually like working together and I think that's a really good enabler of good financial results that we have a common task to make money for the company. It makes a big difference in meetings and in creativity. I can tell you that for sure."

No more Sunday calls to Buenos Aires

BETTER COLLABORATION | Local synergy plans are one of the most recent initiatives in the collaboration between Maersk Line and APM Terminals. The idea is to look at individual terminals and have an open discussion about opportunities for better collaboration. A workshop led to 30 projects, big and small, to work on in Buenos Aires.

BY ANDERS ROSENDAHL

≥ "The first workshop was a good start; a good first step," says Silvia Iglesias, reflecting on the 'local synergy plans' workshop she attended in March.

Along with her team from
APM Terminals and counterparts
at Maersk Line, Silvia Iglesias,
Managing Director at T4, a container
terminal in Buenos Aires, Argentina
that is owned and operated by APM

Terminals, helped identify no less than 30 projects to work on together and, which could potentially add USD 5 million to the terminal's annual revenue.



Silvia Iglesias, Managing Director at T4 in Buenos Aires: "It's extremely valuable to have the opportunity to improve our services by getting a better understanding of our quayside customers."

Some wins are quite straightforward; for instance, the one whereby two parties now coordinate on a vessel-by-vessel basis, so that Maersk Line can avoid calling at the port on Sundays, which saves the terminal USD 50,000 per call. Others are more complex, like approaching customers with a shared value proposition: "While the vessels cross seas and connect trades, the terminals are very much focused on local markets and their specific needs. Combining our strengths, we have the potential to simplify the complex supply chain for end-users," says Silvia Iglesias.

Loosening up

In recent years, local meetings between Maersk Line and APM Terminals have been tense, weighed down by their often conflicting agendas whereby Maersk Line has pursued lowest cost at the terminals and APM Terminals has worked to increase revenue from the shipping line.

As a part of the collaboration efforts between the two, a series of local synergy plans' workshops has been launched with the exchange of ideas, seizing opportunities and finding better ways to work together at the individual terminals as their focal point.

"These are three-day workshops and the atmosphere is usually tense before lunch on the first day," says Mark Rosenberg who, in addition to being Maersk Line's Head of Procurement in West Central Africa, is responsible for facilitating the workshops around the world. "But then things loosen up and people start sharing ideas. By the time we leave, scepticism has been replaced by excitement."

A new channel

Oriana Simone is Maersk Line's Marine Procurement Manager for the East Coast of South America. She





is responsible for negotiating prices with the terminals and as such, she is Silvia Iglesias' counterpart, both in her day-to-day work and at the 'local synergy plans' workshop.

"It helped a lot to remove our reciprocal negative perceptions. In the past, we didn't have any channel to communicate about operational challenges. So, whatever it was, it was a problem, and that was it. Now we had the opportunity to say, 'okay, I have this problem, how can we solve it together?' This is very constructive," says Oriana Simone.

While wins for APM Terminals translate into increased revenue, so far the benefits for Maersk Line are emerging in the shape of better service e.g. priority service for key customers, and higher productivity levels.

And, while things are looking good now, Oriana Simone acknowledges that changing mindsets has been quite a journey. In one case, the terminal was making money on stuffing reefers (refrigerated containers) for a Maersk Line customer that Maersk Line was not making a profit on.

"The Maersk Line employees working with the customer asked me if this was what 'Stronger together' meant. My answer was that in this case it was. Even if Maersk Line wasn't making money, it's okay because the Transport & Logistics division was," she says.

Today, their combined energy and focus is being deployed into making sure that the potential wins of the identified projects materialise. And, even if there is a lot of work to get started on, Silvia Iglesias also has an eye on the next step for the collaboration.

"Together, we can approach logistics opportunities in the local market much more aggressively. We can offer end-to-end solutions to the customers, using intermodal benefits, rail connections to the factories as well as our container forwarding stations. We can achieve a lot more together," she says.

It takes two to tango

AN INTEGRATED APPROACH | After some turbulent years, Maersk Line and APM Terminals have found a new way to collaborate at the Port of Salalah. Today, increased volumes from Maersk Line and better productivity at the port drive a healthy partnership – seeing both parties emerge as winners and the Port of Salalah attract other carriers as well.

BY ANDERS ROSENDAHL

≥ On paper, the Port of Salalah in Oman and Maersk Line are a perfect match. The port, a typical transhipment hub partly owned by APM Terminals, is situated between the Far East and markets in Europe, the US and Africa, where Maersk Line needs transhipment services to discharge millions of containers from the Far East, and have them loaded onto other ships to be taken to their final destinations.

However, when it came to negotiating the fee and terms for the discharging and loading of containers, each defined as a separate 'move', the relationship between the Port of Salalah and Maersk Line left at lot to be desired.

"Our negotiations were hard as nails, even brutal, and we didn't approach those talks any differently than we did with those we had with their competitors," says Mark Rosenberg, Head of Procurement at Maersk Line in West Central Africa. "Our ambition was to obtain lowest possible cost for the benefit of Maersk Line."

Thus, up until 2016, Maersk Line would send about as many containers to the competing ports, in which APM Terminals has no ownership, as it did to Salalah. Then, a new incentives-based contract turned things upside down, seeing Maersk Line's number of moves at Salalah increase by a whopping 40%, up from 820,000 between January and July 2016 to 1.2 million over the corresponding period in 2017.

Helping each other

"It's quite a journey we've been



Photo: Port of Salalah

through," says Laura Kooijman, APM Terminals' Commercial, Strategy and Pricing Manager for Africa and the Middle East. "We've gone through the phases from treating each other like two independent companies to becoming gradually more integrated in our approach. Basically, we have more trust in the fact that we will come to a solution that is in the interest of both parties, which will be a win for the company as a whole."

Today, the agreement between the Port of Salalah and Maersk Line is set up in a tier system, so that pushing more volume through the port gives Maersk Line better rates. In return, Salalah sees more volume pass through the terminal, allowing it to make better use of its capacity

and fixed costs. The deal has a built-in productivity incentive for Salalah and the combined, bottom line win amounts to USD 5 million annually.

Moving the volumes from the competing terminals to Salalah, Maersk Line ships have – naturally – had to call at different ports, thereby adjusting its network, which is an expensive exercise and according to Mark Rosenberg not something that is taken lightly:

"We look at the cost-side and the upside for APM Terminals, but there's also the commercial element for Maersk Line. We look at potential changes to the transit time and reactions from existing and potential customers. We don't want to lose any business in the Container Manager at the Port of Salalah, Prakash Krishnamoorthi, is seeing more Maersk Line ships and containers these days - to the benefit of both companies.

process, so there are a lot of things to consider," he says, adding:

"However, the current deal has also driven a performance based mindset for the Port of Salalah, and clear incentives to deliver above the agreement. This is a two-way street, and the port has been very responsive when we have voiced our expectations."

Winning new business

The collaboration can even make the Port of Salalah more attractive to other shipping lines.

"Today, we have open and trustful discussions about how we can help each other. In other words, our collaboration has led us to a synergetic relationship whereby real savings can be realised through network optimisation," says

Prakash Krishnamoorthi, Container Manager at the Port of Salalah.

"It can be as simple as adjusting a berthing window, minimising peaks in our operations and reducing turnaround times for Maersk Line or helping develop Maersk Line's value proposition on the basis of services that Salalah can offer. What can be a small detail for one of us can have a big impact on the other."

The Port of Salalah has not lost business from other shipping lines after the closer collaboration with Maersk Line was initiated. On the contrary, volumes from other lines have increased.

"It's important to say that we're still very much open for business from all shipping lines. In fact, the closer collaboration with Maersk Line is a means to help us improve the services we provide to others. We have the capacity to service additional customers, and they've been interested so far, as long as our business proposition remains interesting enough," says Prakash Krishnamoorthi.

Closer collaboration, sweeter grapes

BETTER VALUE | A new reefer services facility in Mumbai is the first tangible outcome of the 'inland' collaboration between APM Terminals Inland Services and Maersk Line in India. The guiding principle – for future projects also – is that the combined service must be worth more to customers than what the two entities offer separately.

BY ANDERS ROSENDAHL

☑ "It was easy to see that we could
do a lot more together," says Ajit
Venkataraman, Managing Director of
APM Terminals Inland Services, South
Asia, of the tentative beginnings to their
'inland' collaboration with Maersk Line
in India.

"The hard part, we quickly realised, is that if joint services are going to make any sense to the customers, they need to be more valuable than the individual parts," he adds.

His counterpart in the project, Chandrasekar Santhanam, Head of Equipment Maintenance & Repair, Maersk Line West Coast Central Asia, says:

"With approximately 70% of the India reefer (refrigerated container) volume coming out of the port in Mumbai, it was only natural for the team to start looking for opportunities to improve our equipment maintenance and repair setup in the region."

A new services facility in Mumbai The closest APM Terminals Inland Service facility to the port in Mumbai

was focused on dry containers and located a considerable distance from the port. Other container care players in the region had limited capabilities. Hence, the opportunity to build a specialised reefer services facility close to the port, in Dighode, Mumbai, was identified as being a good opportunity.

Identified and implemented in six months, today the facility offers services such as reefer technical repairs, body repairs and software management amongst others – and the initiative has not gone unnoticed by the

country's largest exporter of grapes: "We are extremely happy with the quality of reefer containers from their Dighode facility," says Deepak Trivedi, Managing Director at Ace Clearing, adding:

"The quality, backup service and turnaround time were all much better than those of any of the competition and this is also acknowledged and appreciated by our shippers."

For Maersk Line, who enjoys a 40% share of India's reefer market, having an efficient and effective setup to maintain and repair the fleet of containers is critical.

All new revenue

Chandrasekar Santhanam says
"And our collaboration doesn't end
with implementation. Today, we are
conducting performance management
and on-site training together, seeing
the facility reach its 2017 quality goals
within the first six months of operation."

Meeting global standards, the reefer services facility was handling 80% of Maersk Line's reefer volume through the port in Mumbai within two months and it is expected to bring an additional USD 2.5m in revenue to the Transport & Logistics division in 2017.

"We have just started the collaboration journey and it is adding significant value," says Ajit Venkataraman. "What we have also observed is that, it has brought us closer to the end-users. It has ignited an entrepreneurial spirit in the respective teams. We are experimenting, and venturing into territories that we have not entered before."



BY SAM CAGE

≥ Captain Niels Larsen orders a course adjustment, and Madrid Mærsk nudges in towards the mountains that tumble down to **Tangier port**. Once berthed, the APM Terminals cranes drop down over the stacks of containers, taking off cargo for distribution to customers in Morocco, across the Mediterranean, Africa and even Latin America.

On the far side of the water, the Rock of Gibraltar rises up above Tangier's twin port of Algeciras, facing Morocco from the southern tip of Spain. The two APM Terminals operations work in tandem as an integrated Western Mediterranean transshipment hub. They have also begun to cooperate more closely with Maersk Line, bringing benefits across the business.

"What I need them to deliver first of all, is safe operation. Where disregarding speed, the containers are discharged and loaded in a safe way so the port workers, stevedores, lashing people and my crew are safe," says Captain Larsen.

"Sometimes speed can compromise that in the pursuit of good results, but in Algeciras and Tangier they seem to have a good balance between the two."

Trade hub

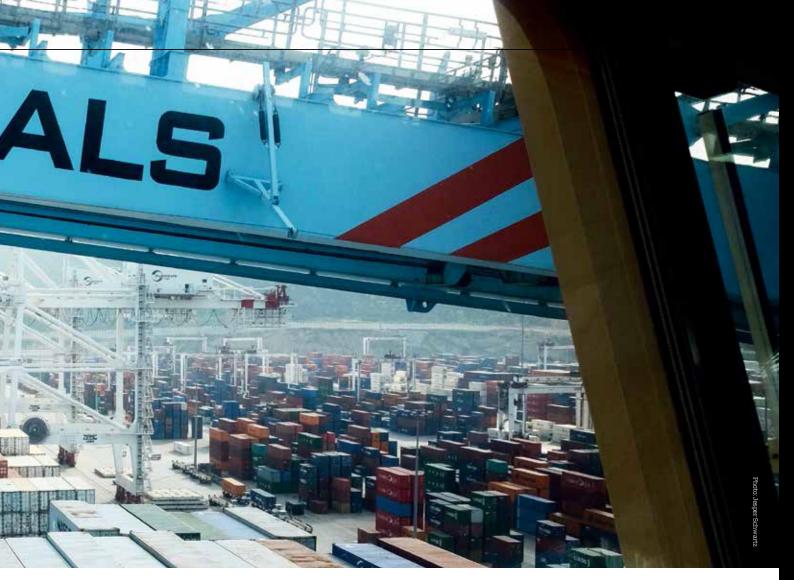
The Strait of Gibraltar is one of the choke points of global

trade, with over 200 cargo vessels passing through daily on major liner services linking Asia, Europe, the Americas and Africa. It is a critical point in the Maersk Line network and a focus of the Hub Partnership Programme, an effort put in place by Maersk Line and APM Terminals to foster closer working relations. Without losing focus on import and export business, where Algeciras and Tangier offer unmatched gateways to and from the world, the vast majority of containers are transshipment cargo – cargo on its way to somewhere else in the world.

The teams looked at how they could better manage, plan and utilise assets on both sides of the straights and have shared goals and incentives across the businesses, explains Jack Craig, Head of Hub Terminals.

"When we took a look at the underlying synergy pools, one thing that became clear was that elevating the performance of the hubs, from both the APM Terminals and Maersk Line perspectives, created a tremendous amount of network value and Transport & Logistics synergies," Craig says.

Both APM Terminals and Maersk Line are now included in a joint berth planning process. Doing this well can free up capacity and means resources can be better allocated. It is a significant change in culture for many in both businesses.



The two APM Terminals operations at Tangier's twin port of Algeciras, work in tandem as an integrated Western Mediterranean transshipment hub.

"We are currently in the process of implementing these changes," Craig adds. "With time, such kinds of initiatives will drive much of the value creation."

Tangier expansion

As part of preparations to receive Triple-Es in 2013, Algeciras embarked on a complex project that required the acquisition of four new, specially designed cranes, making another four higher and upgrading and dredging the main quay. In Tangier, dredging work ensured a draught of 18 metres along the quay.

"Above all else, to me the key success factor of the project was the close collaboration between Maersk Line and APM Terminals. This was crucial to successfully completing a project that would create the value needed by our customers," says Jesus Caceres, COO of APM Terminals West-Med, Algeciras berth. "I strongly believe that collaboration is one of our main competitive advantages."

Now, APM Terminals is constructing a new facility at Tangier, which is to open in 2019 and will complement the existing port. Under the terms of a new contract, Svitzer will be responsible for all container towage services at the new port for the next 20 years – a team effort across APM Terminals, Svitzer

and Maersk Line. Cooperation makes a big difference for those at the sharp end.

"The closer the two desks are to each other, the less misunderstandings one experiences, both in terms of cargo and in terms of schedule efficiency," says Captain Larsen. "If people don't speak together there will always be misunderstandings."

A pivot point for trade

- Maersk Line is a key customer of APM Terminals Algeciras and Tangier, whose strategic location provides a natural transshipment point for cargoes moving on vessels on the primary East/West shipping route
- There are seven transshipment hub ports: Algeciras and Tangier; Maasvlakte 2 and Rotterdam (the Netherlands); Tanjung Pelepas (Malaysia); Salalah (Oman); and Port Said (Egypt)
- APM Terminals is investing EUR 758 million in the new APM Terminals MedPort Tangier, which will increase the complex's overall capacity to over 9 million twenty-foot equivalent units (TEUs)
- 33% of all Maersk Line container moves are with APM Terminals; 43% of all Maersk Line container moves are transshipment moves
- 36% of global Maersk Line business is operated or passes through the Western Mediterranean hub

Switching off the engines

ADVANCED TECHNOLOGY | Maersk Invincible is not only the world's largest jack-up drilling rig, but also the first to be run entirely on power supplied from shore. The rig, which has the flexibility to adapt to different tasks, is hard at work for AkerBP in the North Sea on a five-year

BY SAM CAGE AND BENJAMIN NEHAMMER

► The diesel engines on Maersk Invincible are switched off.

That doesn't mean it isn't working – in fact, far from it. The world's largest jack-up drilling rig has started a five-year contract in the North Sea with AkerBP and is running entirely on hydroelectric power from the shore.

At 3.00pm on Sunday 28 May, Maersk Invincible became the world's first harsh environment jack-up drilling rig to operate entirely on shore power, supplied through a 294km cable from Lista in Norway. This means reduced emissions along with cost savings for customer AkerBP in terms of fuel and maintenance.

"The testing and commissioning of the high voltage shore-power installation has been thorough," says Christian Adamsen, Technical Section Leader on board. "Maersk Invincible is now a hydropower rig."

Lower emissions

Maersk Invincible has been tailored specifically to meet the customer's needs on a five-year contract on the Valhall complex in the Norwegian sector of the North Sea, and has the flexibility to adapt to different tasks. The unique power system is possible because the functionality was built-in from the start - the electrical power system was designed and prepared to be able to receive power from shore.

AkerBP will use shore power for all the drilling rigs in the Valhall complex in a pioneering project that is being supported by a grant of up to NOK 42 million from the Norwegian business sector's NO_x fund.

It is estimated that switching to shore

power will save 28,285 tonnes of diesel, 89,602 tonnes of CO_2 and 1.3m kg of NO_x .

"This is a pioneer project for AkerBP. By electrifying the drilling rigs, we are significantly cutting local $\mathrm{CO_2}$ emissions and $\mathrm{NO_x}$ emissions. This is in line with our strategy of developing solutions that help reduce the environmental impact of our activities," says Per Mikal Hauge, Managing Director of Aker BP.

A better place to work

At 11,000 volts, the high voltage shore-power supply is capable of supplying up to 10 megawatts, corresponding to the consumption of up to 20,000 households. It will significantly cut local $\rm CO_2$ emissions and $\rm NO_x$ emissions.

"We are pleased that we have been able to implement this innovation successfully in collaboration with our client and together become first movers in introducing shore power operation on jack-up drilling rigs," says Peder Norborg, Head of the XLE Newbuilding Project. "It is Maersk Drilling's ambition to conduct environmentally responsible operations, and it is our belief that this ensures a sound and viable business for the future."

Another benefit of shore-power is a much quieter work environment for the crew, since the diesel engines were one of the main sources of noise.

"This will not only reduce emissions from the rig, but also reduce the cost and time associated with maintenance on diesel engines and generators and give a better working environment in the engine rooms," says Maersk Drilling's Adamsen.





Reconnecting with the front-line

SIZE MATTERS | <u>Henriette Thygesen</u>, CEO of the Svitzer towage company, is on a mission to make its size and global presence matter, by empowering staff from offices to ports and on tugs around the world.

BY MONIKA CANTY

Description Every Every Morning Henriette

Thygesen cycles the 6km from her home to work at Svitzer H0 in Copenhagen. On the way, she often stops to talk to the crew on-board Svitzer Hermod, Svitzer Bjorn or one of the other tugs frequently moored directly outside the head office in Nordhavn in Copenhagen.

Thygesen took the helm at Svitzer in September 2016 from the previous CEO, Robert Uggla, following a 23-year long career working across different businesses in A.P. Moller Maersk. Her most recent role being that of CEO at Damco Americas.

Back at head office today, having spent years working on the front line herself, it is clear that strengthening the connection between onshore staff and those at sea is an issue close to Thygesen's heart.

"Clearly I'm impacted by having spent most of my life working outside of corporate headquarters, and I do see myself as a voice for the front-line staff," says Thygesen.

"The attitude I would like to install is that we in the leadership team all need to maintain that link, and the humbleness to recognise that there are a lot of things we don't know – you always have to be open to learn and develop."

"We have a lot of dedicated and capable people in Svitzer," she

"Clearly I'm impacted by having spent most of my life working outside of corporate headquarters, and I do see myself as a voice for the front-line staff"

Henriette Thygesen, CEO of Svitzer

Photo: Christina Bode



adds. "We need to ensure that as a company we have a leadership style that empowers them to do their job as best as possible."

Learning from the port managers

As Svitzer's new strategy "Staying Ahead" is launched around the world, Thygesen recognises that it's the teams at the forefront of the business who will be key to making it a success.

As a result, port managers around the world play an important role. "Port managers are a vital link in reconnecting with the frontline to leverage their operational expertise and benefit from what they know," says Thygesen. "We want to empower these frontline leaders across Svitzer in making the new strategy relevant on the tugs and in engaging the crews in the best way."

In the European region for example, port managers were given a first look at the strategy and encouraged to prepare relevant activities and initiatives in their own ports before the actual launch.

"It's our people at the front-line who will know if there's an un-serviced opportunity with a customer, or who can spot an under-utilised cost-saving opportunity. We have to learn from them and capitalise on their experience. Imagine if we had crews in 135 ports around the world actively identifying the opportunities and feeding them back?"

Making size matter

As a global company with operations in 32 countries, Thygesen is on a mission to leverage what she refers to as Svitzer's "global ownership advantage". The new strategy aims to use the company's size to stay one step ahead of the competition, rather than becoming a cost drain.

"We have an advantage that sets us apart from our competitors," explains Thygesen. "In some places we compete with the local towage firm that may just have one or a couple of tugs. We have much bigger overheads and we need to ensure that this is being put to good use."

As she bluntly puts it: "If we don't use our size to make a difference, this office and our regional offices are all just overheads, just an extra cost to the frontline."

"This involves collaborating as a global team; and sharing assets, capabilities and best practice across ports and regions."

Examples could be to cut costs by procuring spare parts or fuel globally, or to negotiate global agreements with preferred vendors around dry docking, which is a major part of the maintenance costs.

Thygesen mentions clustering as a special area of opportunity: "There is big potential in the way we manage our fleet and assets across ports, countries and regions. Operating more ports in the same geographical area allows us to move tugs and crews around to best meet the demands of our customers, optimise working hours and reduce cost. A single port operator does not have that same lever."

Getting closer to customers

With the new strategy Thygesen insists she is not



Every morning Henriette Thygesen cycles the 6km from her home to work at Svitzer HO in Nordhavn in Copenhagen. On the way, she often stops to talk to the crew on-board Svitzer Hermod, Svitzer Bjorn or one of the other tugs frequently moored directly outside the head office – here together with Anders Bak Pedersen, master of Svitzer Hermod.

Who is Henriette Thygesen

Henriette Thygesen is a veteran of A.P. Moller-Maersk, having had a 23-year career working across different businesses – from Maersk Line to Maersk Oil, starting as a MISE trainee in 1994.

Her varied career has taken her around the world, from Asia to the US – and her most recent role in Damco as CEO at Damco Americas.

She holds an Executive MBA from Columbia University, an MBA in Intl Management from ECCIP Paris, a Master of Science from Copenhagen Business School and a Ph.D. in Applied Mathematics from Copenhagen Business School.

Svitzer: Facts & Stats

- Svitzer has been taking care of towage since 1833
- Operating 440 vessels across 32 countries
- 3,900 employees in total, ~2,300 offshore
- Four regions: Europe, Australia, Americas and AMEA (Asia, Middle East & Africa)
- Global Head office in Copenhagen, Denmark

looking to revolutionise things or as she puts it "to put tugs on the moon". Her main focus is on improving the customer relationship and strengthening the foundation of the business.

One new initiative is to develop a key account

programme to work with big customers in a more structured way.

"Coming in to Svitzer, what I found was that we talked surprisingly little about our customers," says Thygesen. "To me this is the core of any business. If you are not close to your customer there is a big risk over time that you can lose sight of what is developing in the market. Suddenly, there may be a new product or a new competitor out there that you weren't ready for."

Part of the Transport & Logistics family

One of these customers is, of course, Maersk Line - although today it is only a relatively small part of Svitzer's revenue.

That could change through closer collaboration with the other brands in the newly formed Maersk Transport & Logistics division. "There is definitely potential in the Transport & Logistics set-up. We are learning to work together in a new way and are experiencing a lot of goodwill and collaboration from the other brands," says Thygesen.

However, she remains realistic about her expectations regarding the new Transport & Logistics. "Clearly, there is less direct overlap between Svitzer and other brands so it's not an avalanche of opportunities that will come just from being part of Transport & Logistics. It doesn't remove the fact that

"If we don't use our size to make a difference, this office and our regional offices are all just overheads, just an extra cost to the frontline"

Henriette Thygesen, CEO of the Svitzer

there's still a business case to be made in each port and we need to demonstrate the value we can deliver in reducing turnaround times and improving the service level."

At the forefront of technology

As Svitzer looks for ways to modernise the business for the future using technology, one recent innovation is the TugApp. The app allows crews to log every point in their interaction with a customer in real-time.

"It's part of the drive for data-driven decision-making," says Thygesen. "It means we have more reliable statistics and concrete data, which we can show to the customer and use to improve our relationship with them."

Further exciting developments are in the pipeline, thanks to a newly expanded IT function, put in place to support all Transport & Logistics brands in digitalising their business.

"I definitely see potential in a more integrated approach to IT and closer collaboration between Svitzer and Transport & Logistics in that field," says Thygesen. "Apart from cost savings and the sharing of capabilities and resources, the integration will empower the digital innovation we need to stay ahead in the industry and not have the future dictated to us by our competitors."

News in brief

Targeting growth through cold chain logistics

Using its existing strengths in reefer capacity and terminals, A.P. Moller - Maersk has launched a cold chain business initiative. It will simplify customers' supply chains and support top line growth.

The cold chain business initiative is being led by Venture Partner Peter Votkjær Jørgensen from the Growth team, who will be working in close collaboration with the Global Reefer Marketing team, which is headed by Anne Sophie Zerlang Karlsen and is a key part of the Centre Trade and Marketing organisation in Maersk Line.

"Cold chain is an embodiment of our aim to become the global integrator of container logistics," Jørgensen says. "It is a natural next step for us to take this unique opportunity to strengthen the value chain."

The global cold chain market is estimated at USD 175 billion, and is growing at a rate of 10% annually. The Transport & Logistics division is already an integral part of this with Maersk Line having the world's largest reefer capacity and APM Terminals providing specific solutions to customers.

This means offering more comprehensive customer value propositions throughout the entire cold logistic supply chain, and thereby supporting A.P. Moller - Maersk's top line growth.

Customers will further benefit from improved cold chain systems, which will enable the growth of global trade in perishable products through growing volume and accessing new markets.

Smart containers - now for customers

Remote Container Management (RCM) went out to reefer customers as a product on 24 July after more than a year of operational use within Maersk Line. Pilot tests with customers confirm expectations that RCM will redefine supply chain visibility.

After many years in development and more than a year in operational use, **Remote Container Management ("RCM")** is rolling out to refrigerated cargo customers of Maersk Line and the Maersk family of container lines.

"RCM has the capabilities that our customers have wanted from us for a very long time. It is going to insert an unprecedented level of visibility and reliability into their supply chains that will make their business better," says Vincent Clerc, Chief Commercial Officer for Maersk Line.

"The old days of waiting, hoping and reacting are over. Our customers can now monitor and make decisions about their supply chain as their cargo moves along, as well as use the data to study and improve their entire supply chain. This is particularly helpful for our customers with very sensitive, higher value refrigerated cargo and, as such RCM is raising the total value proposition of refrigerated container trade significantly."



Back in business on the SILK ROUTE



NUCLEAR DEAL LIFTS SANCTIONS | <u>A nuclear deal with Iran has paved the way for Maersk Line</u> to re-start its business in a country viewed by many as the world's biggest potential market. However, doing business in one of the world's most highly sanctioned countries comes with many challenges, not least compliance with foreign trade controls

BY MONIKA CANTY

"Back then, we all suffered from the sanctions," says Shamim Rahami, managing director of <u>Iranian Silk Road</u>, a logistics company dealing mainly with the import of building materials and auto parts to Iran, and export of bitumen worldwide.

"Many industries were forced to shut down because nobody would sell commodities and materials to them, and companies could not work with the international banking system. But today, the economic situation is improving and I am sure things will continue to get better"

Iranian Silk Roads was one of the first companies to resume business with Maersk Line when it re-entered the Iranian market last year, having been forced to pull out in 2012 due to global sanctions on Iran.

Opening up to the world

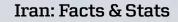
The comprehensive sanctions programme placed on Iran

by the US and the EU hit the country hard, crippling its economy and leading to shortages and high prices for commodities such as food, fuel, and medicines.

Yet now, with the announcement of a finalised nuclear deal, which has lifted sanctions in exchange for Tehran curtailing its nuclear program, Iran is once again opening up to the world.

With a population of 80 million, and known oil reserves among the top-five globally, there is great optimism in terms of what the deal means for the economy in the long-term. The market is viewed by many analysts as being today's 'single largest investment opportunity'.

For Maersk Line, it was an opportunity to re-establish the business it had been forced to exit when the US blacklisted the Iranian operator of several ports, including Iran's biggest container terminal **Bandar Abbas** – making shipping to Iran impossible.



Capital: Tehran (picture)

Population: 75 million

Main exports: Oil and natural gas - Iran has the third largest proven gas reserves and oil reserves in the world. Other exports include chemicals, plastics and fruits. Iran mainly exports to Taiwan, China, Turkey, South Korea and India.

Main imports: Machinery, cereals, iron and steel, chemicals. Main import partners are the UAE, China, South Korea, Turkey and Germany.





countries in the world," says Alasdair Adam, Customer

"However, with the internationally supported Joint Comprehensive Plan coming into effect from January 2016, and several trading restrictions being lifted, Iran is increasingly open to international commerce and trade. Whilst there are challenges, it is an economy with enormous potential, and a growth story we want to facilitate and be a part of."

"Today, Iran is still one of the most highly sanctioned

A huge compliance task

Service Manager at Maersk Line Iran.

Restarting export and import services to Iran has been far from easy, as many sanctions continue to be in force. Most trade between the US and Iran, as well as commercial involvement by US persons in Iranian trade is still prohibited.

A mammoth compliancy task had to be completed before the business was ready.

"Re-entry to Iran took around six months to a year of pre-work and setting up," explains Christian Juul-Nyholm, Managing Director of the United Arab Emirates cluster.

"We all suffered from the sanctions. But today, the economic situation is improving and I am sure things will continue to get better"

Shamim Rahami, Managing Director at Iranian Silk Road.

"We already had a license, but setting up the organisation, staffing the office and ensuring we are fully compliant with all international regulations and foreign trade controls was a major task.

"Sanctions target people, entities and even commodities. There's a 76-page list of parties you cannot deal with. It's also easy to forget that many countries aside from the US have sanctions on Iran. We discovered that Malaysia does for example, so transshipment through Malaysia posed an issue."

Another challenge was the Iranian banking system.

"Iran is still one of the most highly sanctioned countries in the world. But whilst there are challenges, it is an economy with enormous potential, and a growth story we want to facilitate and be a part of"

Alasdair Adam, Customer Service Manager at Maersk Line Iran.

"Tranian banks have yet to catch up with international banking systems and most international banks are still extremely cautious in dealing with Iranian businesses in light of potential penalties," says Mozhgan Tafreshi, Sales Manager at Maersk Line, Iran.

Technology issues

One of the most significant barriers was the restricted use of Maersk Line global systems. Any IT or software that contains more than 10% US components is blacklisted in Iran, which means that most of the standard systems cannot be used.

"The team does not have access to the same systems as our colleagues in the rest of the world," says Adam. "We cannot use any Windows applications or the internal instant messenger for example. At times it can be a challenge to connect with internal stakeholders—something which is often taken for granted—as our communication channels within the organisation are limited."

Colleagues travelling to Iran must always be careful to leave their iPhones at home. "If we were to use an Apple system, being a US product, we would be liable to penalties – and fines could start at USD 250,000 per violation. That's a lot of money just to bring a phone into the country."

If we spot a risk, we say no

Besides proactive checks by a specialised team in the Global Service Center (GSC) in India, supported by the legal compliance team in Dubai and Copenhagen – additional due diligence measures have been introduced that screen every customer and commodity and their acceptability as per international sanctions regulations.

The teams ensure that there is no US link to transactions with Iran and has a separate invoicing and collection system for its business to Iran.

"Maersk Line is well-known for its consistent compliance program and adherence to the international regulatory framework," says Alexandra Belmonte, Group Rule Owner of Foreign Trade Controls. "But we apply extra caution to the Iranian project, through the deployment of a thorough due diligence review prior to commencing any type of business relationships with vendors of any Iranian background. At every step, we leave no stone unturned to validate any piece of information related to Iran transactions."

"If we spot a risk we just say no to the request," adds Georgios Vamvourellis, Regional Head of Legal & Compliance, West Central Asia. "It's a constant process,



Photo: Jesper Schwartz

it happens throughout the day. Training is so important and we try to keep a small team – it's about constantly monitoring the changes and ensuring we keep up. It's not an easy process but we are now in a position where we understand what needs to be done. But it's been a learning curve."

A huge potential market

Despite the challenges, there is huge optimism for the future of the business in Iran. The current market size is estimated to be 700,000 FFE and Maersk Line is running four weekly foreign feeder vessels into Bandar Abbas and Bushehr. While reinstating a direct call to Iran is in the pipeline, it is at least a year away.

Maersk Line's strong reputation for compliance has proved to be a valuable selling point with potential customers in Iran.

"100% compliance is non-negotiable for us," says Christian Juul-Nyholm. "It enables us to offer a competitive advantage to our customers. Maersk is the name you choose to show you are doing things 'by the book' – that's the reputation we want. It's part of our brand – reliable, trustworthy, and being a responsible corporate citizen."

Iranian Silk Roads agrees this has proved crucial in the business relationship.

"We cannot put our company in a dangerous place," sums up Shamim Rahami. "We appreciate the work Maersk Line does to check all consignments and the many policies and regulations it has for accepting shipments."

Practice makes perfect

PLANNING AHEAD | Putting an offshore wind installation in place can be a complicated task. Collaboration between Maersk Supply Service, Maersk Training and client Seaway Heavy Lifting, to simulate the work before sailing out, helped to save money and increase safety.

BY SAM CAGE

What's the secret to a job well done? Practice – before you do it for real.

When **Seaway Heavy Lifting** contracted a Maersk Supply Service vessel to help with an offshore wind installation, the work was fully scoped beforehand in Maersk Training simulators. That meant the crews were already familiar with each other and the tasks ahead, and potential problems could be flagged before they became reality in the North Sea.

"The training and familiarisation session between both vessels revealed that from the start there was a good mutual understanding of the scope, workmanship and capability of both vessels," says Michiel Goedkoop, Operations Director at Seaway Heavy Lifting.

"There were, as with every project, lessons which needed to be overcome but both crews showed great appreciation and understanding. This improved the learning curve and ensured safe operations."

Fine tuning

Maersk Supply Service's Maersk Trader was chartered for two campaigns in the North Sea and Irish Sea on behalf of multiple clients. The safety and professionalism of the crew was high on Seaway's list of priorities. Both crews were given the opportunity to work with the coming operational procedures in a simulated, safe and realistic environment, which helped them to review, interpret and comment on these.

"The simulators were developed for the oil and gas industry, but they can also make the renewables industry much safer," says Tonny Møller, Operations Manager at Maersk Training.

There were two days at Maersk Training followed by visits by members of each crew to the other's ship and offices, to develop interpersonal rapport and deepen their reciprocal understanding of how one another worked. They simulated the towing of barges with equipment for a heavy crane lift, running out anchors and trained ways of communicating between the heavy lifter and the Maersk Trader.

"Now they have seen each other, know each other, and have familiarised themselves with each other's jobs. They witnessed the limitations and know what's possible and what's not," says Seaway's Goedkoop.

Safety first

The result was the safe and professional completion of the project.

"In Maersk Supply Service we are constantly looking



When Seaway Heavy Lifting contracted a Maersk Supply Service vessel to help with an offshore wind installation, the work was fully scoped beforehand in Maersk Training simulators.

for ways to improve safety and operational performance in offshore operations. Every hour of every day we operate under unpredictable conditions at sea that have to be managed correctly," says COO Claus Bachmann.

Simulation training greatly reduced the learning curve and while it is difficult to estimate the direct cost and time savings of the training, it certainly contributed to the goal of zero incidents and carrying out effective and efficient projects in a competitive environment.

"The simulation training with Seaway Heavy Lifting at Maersk Training highlights our mutual commitment to high quality and safe operations," Bachmann adds. "Careful preparation, whereby potential risks are identified in advance together with our customers, is critical for delivering the best possible results."

Maersk Trader

- A multi-purpose <u>Anchor Handling Tug Supply Vessel (AHTS</u>), uniquely designed for a variety of work roles
- That includes deep water anchor handling and mooring operations, towing of rigs, subsea and remotely operated vehicle (ROV) support work, as well as general supply and cargo support operations for customers world-wide.
- These specialised vessels have highly skilled crews, optimal safety conditions and state-of-the-art equipment to help customers achieve their goals in a professional and cost-effective manner.
- It has dynamic positioning, a 173 tonne bollard pull, 600 square metre open deck space and 400 tonne anchor handling/towing winches

All aboard the new

SERVING CUSTOMERS | <u>Madrid Mærsk</u> is the first of the second-generation Triple-E container ships to join the fleet. Maersk Post joined her first voyage from Asia to Europe, bringing even more cargo from production to eager consumers on the other side of the world.

BY SAM CAGE

The crew gather in a corner of the bridge, near the coffee machine, waiting for Captain Niels Larsen.

"We said we'd have a debrief after leaving the <u>Suez Canal</u>, but I have a problem," Larsen says, as the Madrid Mærsk finalises the exit into the Mediterranean on her maiden voyage, emerging from a narrow passage where sandbanks and rocks lurk just metres from the side of the ship.

The atmosphere becomes a little tenser as the Captain holds the moment.

"I have nothing to say. It was the smoothest passage through the Suez Canal I've ever experienced."

Steering a straight course

Madrid Mærsk is the first of the secondgeneration Triple-E container ships, and will be followed by 10 more joining the fleet this year and next. These vessels bring more efficiency to shipping with the ability to carry more containers, which means lower energy usage and costs.

Maersk Post spent five days on board during Madrid Mærsk's maiden voyage, from the Suez Canal to Tangier, just a small part of her journey from China to Northern Europe with containers filled with clothes, toys and fruit.

At nearly 400 metres in length and with a capacity of 20,568 twenty-foot containers (TEUs), the size of the vessel means that through the Suez Canal, there are only a few metres

spare on either side – so navigation has to be spot on. GPS cannot help with such small distances, Captain Larsen explains, so the ship is steered manually with advice from pilots.

"You have to be humble to the elements and to the size of the vessel. Don't be afraid of it, but have a huge respect for it," says Captain Larsen, a genial man with a wealth of stories from his time at sea, yet who speaks with a clear air of authority and total dedication to the job at hand. "I'm fortunate enough to have a really great crew on board, and without them my life would be significantly more difficult."

Checking the reefers

After leaving the Suez Canal, the onboard routine resumes through the Mediterranean Sea. For much of this journey, there are surprisingly few other vessels to be seen, but many are steaming along this important trade route, just out of eyesight.

Chief Officer Marcin Kulas makes a round of the ship every morning, to check that everything is in working order – anything

from the huge stacks of containers that descend far below the waterline, and almost as high as the bridge, to something as apparently small as a deck door that cannot be held open.

"These are the kind of things that are easy to overlook, but are really important to keep in good working order – because when you need it, you really need it immediately," Kulas says.

Smudges of land are visible on the horizon – a Greek island here, the hills of Sicily and Andalucía to starboard and the desert mountains of Tunisia and Algeria to port. When a phone signal kicks in, crew members take to the bridge wings to talk to family back home.

The daily routine of shipboard life continues — tidying up the decks, minor paint jobs, preparing the paperwork for the next port call, logistics around crew members arriving and departing, checking the temperature and condition of the reefer containers.

Franklin Galinato, an able seaman from the Philippines, is working on greasing the wires for the lifeboat, just one of the hundreds of routine jobs that contribute to keeping the ship running smoothly.

"Working here is really different, as it's such a big ship and the first of its kind," says Galinato.
"For example, this lifeboat is a different type from the other ones. And of course, it's a big ship, so it's really demanding. It's nearly 1 kilometre just to go round the deck, so you can imagine how long it would take you."

rs. would take you."

It is 5.30am and dark on the bridge. The lights of Gibraltar are ahead, but the famous rock is not yet visible. Madrid Mærsk is about to call her next port, APM Terminals at Tangier Med in

"I love sailing, especially when you have days like this, beautiful weather and you see the sea all around – the sea is one of things you can keep looking at and never get tired of," says Second Officer Thomas Pedersen. "Out here in the Mediterranean, she handles just like any other ship. The difference comes when bringing something this size into port."

As the sun rises, Captain Larsen and his Chief Officer arrive on the bridge, soon to be joined by pilots from the port. Tug boats flock to the vessel's sides and help to nudge her towards the berth.

Soon after, Madrid Mærsk is safely berthed and the light-blue cranes of APM Terminals are already taking off the cargo as the mist drifts around the mountains along the shore.

"Very nice approach, Captain," says the pilot, as he prepares to disembark. \blacksquare



The daily routine of shipboard life – tidying up the decks, minor paint jobs, preparing the paperwork for the next port call, logistics around crew members arriving and departing, checking the temperature and condition of the reefer containers.

Morocco.



The cost crusher

VESSEL EFFICIENCY | The new generation of Triple-E ships can carry more containers than their predecessors, even with the same dimensions. The added engine efficiency can reinforce Maersk Line's market and cost leadership positions.

The new Triple-Es are **399** metres long

The two main engines have seven cylinders each. In addition, both of them have a piston that is 80cm in diameter and drive two propellers, each of which has a diameter of about

10 metres

Efficient engines help to make the next generation Triple-Es about

35% more efficient than the average vessel on Asia-Europe trades

20%

Bigger rudders help manoeuvrability Two giant, **41,5** horsepower engines
Triple-Es through th



A leading lig

CARBON PACT | Maersk Line is supporting **Philips Lighting** in its mission of making the planet more sustainable through a pact to lower the carbon footprint of its supply chain.

BY MONIKA CANTY

≥ In a warehouse in Eindhoven in the Netherlands, Philips Lighting products are being loaded into a Maersk container ready for shipping. Many of the products produced by the Dutch lighting company are low-energy LEDs – key to the company's mission of making the planet more sustainable.

Replacing traditional bulbs with LEDs would reduce global energy consumption from lighting by over 50%, and Philips Lighting has pledged to sell more than 2 billion LED lamps by 2020.

"Sustainability lies at the heart of our company," explains Maurice Loosschilder, Head of Sustainability Strategy & Reporting at Philips Lighting. "We see a huge opportunity to mitigate climate change via a global shift to LEDs."

The supply chain impact

For Philips Lighting, being sustainable is not only about selling low-carbon technology. It is about changing the way business is done entirely. Last year the company introduced strict targets for its operations – publicly committing to becoming carbon neutral by 2020, with zero waste to landfill from its manufacturing facilities.

Maersk Line is helping Philips Lighting realise these ambitions thanks to a Carbon Pact - that pledges to reduce the carbon emissions from shipping by 20% by 2020.

Currently, 44% of Philips Lighting's total carbon footprint comes from its supply chain logistics – making this the biggest total contributor, even more so than its industrial sites - so any reduction would make a huge dent in the company's carbon footprint.

"The supply chain is one of the first places a company needs to look to make sure it is doing everything possible to bring down its carbon footprint," says Greg Boyle, Global Director Ocean Freight & Distribution at Philips Lighting.

"The partners we use are key to helping us reduce our footprint. Today it's a prerequisite when we decide who to work with. If a company doesn't have a proper sustainability programme in place,



Photo: Rud Taal

ht

Maurice Loosschilder (left), Head of Sustainability Strategy & Reporting at Philips Lighting and Mark Cairns, Maersk Line Country Manager in The Netherlands discuss the Carbon Pact signed between the two companies at the Philips Lighting warehouse in Eindhoven.





we won't even consider doing business with it because sustainability has become embedded in how we do business."

A pact to lower carbon

The Carbon Pact commits both companies to transparency regarding carbon emissions, sets a concrete target on reducing $\rm CO_2$ and to the development of new tools and practices, which could lower emissions further.

Maersk Line introduced the concept three years ago and now has 15 different Carbon Pacts in place with companies from various industries. Maersk Line can reduce CO2 emissions on behalf of the customer

"Carbon pacts such as this one are helping us to win business in a world where sustainability is increasingly on the agenda. We're showing that responsible business is good business"

Mark Cairns, Maersk Line Country Manager in the Netherlands

through sailing the most efficient vessels and providing customers with transparency on the carbon efficiency of different routes.

"Such Carbon Pacts have proved a useful tool for Maersk Line in bringing something different to the customer relationship", says Mark Cairns, Maersk Line Country Manager in the Netherlands.

"Carbon Pacts such as this are helping us to win business in a world in which sustainability is increasingly on the agenda," says Cairns. "It allows us to bring something new to the table. By committing to reducing supply-chain emissions, we're not only demonstrating our long-term commitment to the environment, we're also showing that responsible business is good business."

Shining a light on climate change

Every month, Philips Lighting receives a report detailing its precise carbon footprint performance. Since the pact was signed in 2016, Philips Lighting has saved around 1,200 metric tonnes of CO_2 compared to the industry average by shipping with Maersk Line.

"The Carbon Pact content and CO2 reduction targets we develop are specifically tailored to the customer,"

Ethical Corporation Responsible Business Awards 2017 Nomination

Philips Lighting and Maersk Line have been shortlisted for the Ethical Corporation Responsible Business Awards 2017 in the 'Business to Business Partnership of the Year' category with the Carbon Pact. The award is given to a partnership, which demonstrates leading sustainability-performance through long-term, mutually beneficial collaboration. The winner will be announced 16th October 2017.

explains Kaisa Helena Tikk, Global Sustainability Advisor in Transport & Logistics Sustainability. "We discuss customers' sustainability challenges and identify actions to be worked on jointly, as well as look at trading patterns and developments in our fleet to suggest how we can reduce our carbon footprint five years from now."

The two companies are working together in other ways too, for example by running a joint workshop at The New York Times *Energy for Tomorrow* conference in Paris last year on the de-carbonisation of the supply chain.

"We shared what we had learnt with several other like-minded companies such as IKEA, Nestle and Dell," says Tikk. "Thereby bringing attention to the issue of climate change and much-needed transparency to carbon emissions in logistics."

More room to collaborate

In its quest to become carbon neutral, Philips Lighting now hopes to sign similar pacts with other suppliers.

"I think the Maersk Line perspective is one that other carriers can aspire to," says Loosschilder, Head of Sustainability Strategy & Reporting at Philips Lighting. "Currently this Carbon Pact is unique for us, but when we assess the positive impacts it's definitely a best practice that we should apply to other suppliers as well."

"We are very happy with the progress made so far," adds Boyle, Global Ocean Director Freight & Distribution, Philips Lighting. "The Carbon Pact has been instrumental in bringing down the carbon footprint of our biggest mode of transport. For a company of our size to have already reduced our total ocean freight emissions by 1% is a fantastic success to claim. The more we can work together to bring down emissions, the more it becomes a win-win situation for Maersk as well as for us."

Clean Cargo Working Group

The Clean Cargo Working Group is a business-to-business collaboration between more than 40 global customers and container carriers dedicated to accelerating sustainability in container shipping. This is achieved by aligning environmental standards, tools and comparable performance data, enabling customers to benchmark environmental performance and integrate environmental performance indicators in their procurement decisions.

Maersk Line has long been among the leaders of the shipping industry on environmental performance, with a 10% advantage over the global industry average on CO_2 emissions. In 10 out of 19 trades, Maersk Line is a top-3 performer, and its performance is better than average on almost all major trades. In total, Maersk Line has reduced its CO_2 emissions by more than 42% since 2007.

News in brief

Transport & Logistics to have new Headquarters in Q1 2018

In Q1 2018, the majority of the Transport & Logistics business units based in the smaller locations around Copenhagen will move to <u>Esplanaden 50</u>. A few Transport & Logistics business units will stay at their current location.

Maersk Oil's upcoming move to Amerika Plads in October 2017 has made moving Transport & Logistics' business units into Esplanaden 50 possible. When Maersk Oil has vacated buildings 3 and 4 at Esplanaden 50, the buildings will be refurbished. The Energy division will remain at Esplanaden when Maersk Oil relocates to the new office building at Amerika Plads.

A.P. Møller Holding A/S will move to Esplanaden 19 from its current location at Jens Kofods Gade 1. The move is expected to take place in Ω 2 2019 once the oremises have been renovated.

The home zones allocated to the individual business units are being carefully coordinated with relevant parties from each Business Unit. User group meetings are ongoing with a view to ensuring that the home zones meet individual needs. We will provide more detailed information about the practicalities of the moves when we get closer to the time when they will take place.

The Energy Division to remain at Esplanaden

The Energy Division will stay at Esplanaden, when Maersk Oil relocates to the new office building at Amerika Plads by October.

As the work to find sustainable solutions for our Energy businesses progresses, it has become evident that to uphold flexibility and efficiency in the daily interactions between key functions in the Energy division and corporate functions, the division's current placement at Esplanaden is the most optimal one.

"Daily interactions between key functions at corporate level will escalate as we move forward towards our deadline at the end of next year. Combined with a cost benefit analysis of moving the Energy division's staff of around 30 people in the midst of this important work, we have decided that the Energy division will remain at Esplanaden," says Vice CEO at A.P. Moller-Maersk and CEO of the Energy division, Claus V. Hemmingsen.

The Energy division, will remain in its current office space at Esplanaden 50, Building 4 B and C. Apart from Maersk Oil HQ, it is expected that the other business units under the Energy division will remain at their current sites for now.

Tangier welcomes largest ship to call African port

Munich Maersk, the second in the series of Maersk Line's next generation Triple-E vessels, is the largest container ship to call an African port in a regular rotation. This confirms the strategic importance of Tangier as a transhipment hub.

As Munich Maersk nudged up to the quay at APM Terminals Tangier, it marked an important point in the development of the port – and of Morocco as a whole.

At the end of July, she became the largest container vessel to call an African port as part of a regular rotation – arriving a day after the terminal, the largest and most modern facility in North Africa, marked its 10th anniversary with employee festivities and a gala reception for customers, officials and the media.

"We are delighted to welcome this latest addition to Maersk Line's fleet in Tangier, just as we celebrate the 10th anniversary of our operations," says Hicham El Alami, Chief Operating Officer at APM Terminals Tangier.

"This is yet another confirmation of the strategic importance of APM Terminals Tangier, not only as the gateway to Morocco, but as a leading transhipment hub in the region."

Doing things differently

BIG SAVINGS AND A BIG WIN | When looking at ways to simplify logistics for one of its big customers, Maersk Line found a solution by working with General Motors and bringing in Damco's expertise. This customised logistics solution created big savings for GM and a big win for Maersk Transport & Logistics.

South Korea

China

BY JOHN CHURCHILL

▶ The problem: 8,000 forty-foot containers full of car parts travelling from Vancouver to Michigan every year, and returning empty.

The solution was a creative one – and by using the Transport & Logistics structure to bring in

Damco Distribution Services (DDSI),

Maersk Line reduced the complexity involved and created savings for one of its biggest customers, General Motors.

"There just isn't much cargo going back to Asia from Michigan, so we needed to include in our ocean freight prices the cost of getting those empty containers back to where we needed them," says Neil McGuire, Senior Key Client Manager for Maersk Line.

Joint business plan

Maersk Line has been the recipient of GM's Global Supplier of the Year award for four years and that strong relationship enabled McGuire to work with his counterparts at GM on a joint business plan to address the issue. And, after nearly 12 months of planning, the result was an end-to-end package with Maersk Line handling the ocean transport and DDSI taking over the inland

logistics once the car parts arrived in Vancouver, Canada.

The mechanics of the agreed arrangement are simple: Once in Vancouver, instead of sending the 40-ft ocean containers inland across the United States to have them sent back again empty, all of them would remain in Vancouver. Using its nearby facility, DDSI would take

25%

Moving the same volume with a quarter less containers means a significant reduction in fuel emissions for GM.

the car parts out of the 40 footers and "transload" them into 53-foot containers owned by Canadian railroad operator, CN Rail, to be sent by rail to Michigan.

"A key value of this solution is the fact Maersk used its sister company to form a fully integrated approach under a single umbrella, where strong trusted relationships and ownership of process both within GM and Maersk are well

established," says Maersk Line's McGuire. "It's a single contract between Maersk Line and GM, with Damco Distribution Services as supplier and party to the process and operational decisions."

Growing reach

The transloading solution served everyone's purposes: General Motors saved a bundle of money by reducing its costs on inland transportation and equipment handling costs since the car parts in the 8,000 forty-foot containers fit neatly into only 6,000 of the larger 53-footers – essentially saving the inland cost of every 1 out of 4 containers for GM.

For Maersk Line, receiving an award only presented to 1% of General Motor's global pool of suppliers is a feat and honour in itself. By applying constant innovation and care to a partnership that has grown closer over the years, this new joint planning process not only introduced GM both to DDDS, but also to how Maersk Transport & Logistics can provide a package of services that others cannot.

"Maersk Line and DDSI have

Fast and efficient: The simple math of transloading

Car parts in 40ft containers sail from China and Korea to Vancouver, BC. There, they are transloaded into 53ft containers at Damcos facility and CN trains take them the 4,500 km to Michigan GM plants. The 40fts stay in the port for quick return.



Maersk containers

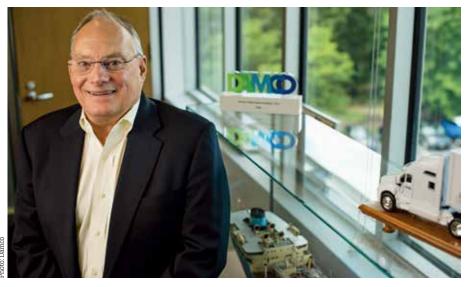
return to harbour



Vancouver

Michigan GM plants





"Maersk Line and Damco
Distribution Services Inc. (DDSI)
have done this before, but on a very
limited scale. Transloading is a
perfect fit for Maersk Line where
they can't go or be competitive but
have good volume. DDSI can put
the package together and make
it economical for everyone," says
Nick Taro, President of Damco
Distribution Services Inc.

done this before, but on a very limited scale," says Nick Taro, President of Damco Distribution Services Inc. (DDSI), who worked closely with McGuire on the GM deal. "Transloading is a perfect fit for Maersk Line where they can't go or be competitive but have good volume. DDSI can put the package together and make it economical for everyone."

USD 3.5 million

Savings the new model delivered to GM in 2016.

Besides transloading, the DDSI arm of Damco provides services like cross-docking and warehousing as well as the operational management of warehouses on behalf of some of the world's biggest e-commerce companies and is enjoying revenue growth of 15% year over year as more companies seek out more than the ocean carriers can provide.

"The bigger importers are seeing that, depending on where their factory, warehouse or store is located, their menu of shipment options is getting limited," says Taro. "With transloading and crossdocking we can create cost advantages and routing advantages the customers are often not aware of."

For Edgar Pezzo, Executive Director of Global Logistics for General Motors, the value of the collaboration is clear. "Over the last 4 years, GM Logistics has been challenging the way we do business and our Global Logistics Operations was the first to start with this transformation," says Pezzo. "We have trusted Maersk with their initiatives and proposals to achieve this vision. The transloading initiative was a result of Maersk's response to a challenge to improve the way we do business. This is a great proof of how strategic partnership creates a roadmap for innovation that leads to a resilient supply chain."

Switch, scrub, or just che

THE "SOX CHALLENGE" | In 2020, new regulation will force the shipping industry to nearly eliminate sulphur from its fuel. This will help improve air quality and many shipping lines are supportive—despite the higher costs. However, they are also worried that without proper enforcement the rule will create more losers than winners.



BY JOHN CHURCHILL

▶ If shipping is the most efficient way to move goods, the industry's smoke-belching reputation is not made up, either. Starting in 2020, it will get a big chance to improve its image with the arrival of the new global sulphur regulation.

The 2020 sulphur rule, introduced by the International Maritime Organisation (IMO) – the UN's special agency that governs shipping – will slash the allowable sulphur content in the fuel of vessels sailing the open ocean to 0.5% m/m from the current 3.5% m/m limit.

Maersk and other shipping lines have voiced support for the rule since it was agreed back in 2008. There is just one major problem: No one knows how to enforce it yet.

"For the rule to work and reduce sulphur emissions, everyone needs to abide by it and that means there needs to be a way of policing the emissions of all vessels on the open sea And no one has that solution yet," says Simon Bergulf, Regulatory Affairs Director at A.P. Moller – Maersk.

The incentive to cheat

The shipping industry already faces strict sulphur emission rules in certain coastal zones, the so-called



How The shi 0.5%: Buy Char Invervess Based of Switching because solution maintened to tests

Photo: Colourbox

Emission Control Areas (ECA), which include the coasts of the United States, and parts of Europe and Asia. Policing these defined areas along the coasts is not easy, but the open sea is a far bigger challenge.

"In coastal areas around states such as Denmark, we can use drones and so-called sniffers to identify cheaters by analysing the ships' chimney smoke, but there are no solutions yet for surveilling the open sea" says Annette Stube, Head of Sustainability at A.P. Moller – Maersk.

"And since the rule will increase fuel costs significantly for companies like Maersk that comply, it wouldn't be an exaggeration to say that the incentives to cheat will be big and the savings cheaters could reap would provide a considerable competitive advantage," says Stube.

According to the Organisation for Economic Cooperation and Development (OECD), the cleaner fuel will cost the container shipping industry an extra USD 5 – 30 billion, annually.

Sharing responsibility and technology

One possible solution to the enforcement challenge was introduced as an amendment to the rule in July at a $\,$

How to comply? Three options

The shipping industry has three options for compliance with the 2020 global sulphur limit of 0.5%:

- Buy more expensive fuel with lower sulphur content
- Change the fuel type entirely
- Invest in filters, also known as "scrubbers" that remove the sulphur particles from the vessel engine's exhaust

Based on tests, Maersk believes the low sulphur fuel is the better option for the industry. Switching to another fuel is a possibility for some vessel types with short-sea voyages, but because of the cost associated with retrofitting and supply constraints, it is not a viable solution for a fleet like Maersk Line's at this point. Scrubbers entail installation, running and maintenance costs that make them less attractive than the low sulphur fuel and, according to tests Maersk Line has carried out, they also reduce fuel efficiency by as much as 2%.



hoto: Rene Strandbygaard

"In coastal areas around states such as Denmark, we can use drones and so-called sniffers to identify cheaters by analysing the ships' chimney smoke, but there are no solutions yet for surveilling the open sea," says Annette Stube, Head of Sustainability at A.P. Moller – Maersk.

meeting of the IMO's Marine Environment Protection Committee. The amendment stipulates that ships cannot legally buy fuel with a sulphur content higher than the 0.5% limit unless they are fitted with a scrubber or some other technology that has been approved for exhaust gas cleaning.

"What that does is broaden the responsibility for compliance and risk of being caught and punished to the suppliers of the fuel, not just the shipping lines that are buying it. It's a step in the right direction," says Bergulf.

In addition to collaborating with the IMO and other shipping authorities on regulation, Maersk is actively looking for technology solutions that may help with enforcement.

One example is the "Sox Challenge," held in June at the Danish Technical University and sponsored by Maersk and several other companies, where students competed to come up with innovative solutions to the enforcement challenge. Ideas included a tamper resistant black box mounted on ships to collect emission data, and mounting sensors on all ships to crowd-source data as ships pass each other.

"Shipping is the most efficient mode of transporting goods, but there is more for us to do," says Annette Stube. "Our industry must continue to do its part and this rule has significant potential. With effective enforcement, it can be a positive development in the reduction of harmful sulphur particles by ensuring everyone is playing by the same rules."

Full metal jackets

PROJECT DELIVERY | In July, the final two jackets for the Culzean development were successfully installed on location in the North Sea. It is a major milestone for one of Maersk Oil's key projects, which is expected to meet 5% of total UK gas demand.



Photo: Maersk Oil

BY SAM CAGE AND DANIELLE O'DONNELL

The two huge, yellow structures were towed out on barges from the construction yard in the Netherlands. Sitting horizontally on the barges, they were then lifted by the world's largest crane vessel, upended and lowered

These two jackets — the steel structure that supports the deck and topside of a fixed offshore platform, in this case for the central processing facilities and the utilities and living quarters and each weighing more than 7,000 tonnes - have now joined the third, which was installed

The Culzean project

- Maersk Oil operates the Culzean development with a 49.99% interest. Its co-venturers are BP (Britoil) 32% and JX Nippon, 18.01%
- The field has resources estimated at 250-300 million barrels of oil
- Production is expected to start in 2019 and continue for at least 13 years, with plateau production of 60,000-90,000 barrels of oil equivalent per day

last year for the early drilling phase. That means all are now in place and awaiting the topsides of the platforms for the Culzean gas development.

"Ever since the design phase we've been concerned with future proofing the Culzean installation – these jackets will have a design life of over 40 years, much higher than a typical jacket," says Mike Shirron, Deputy Culzean Facilities Manager.

An advanced GPS system helped steer the jackets into the correct position and once set-down, piling operations began to secure them to the seabed. Piles were placed in each corner, with each of them being driven 50-55m into the seabed using a hydraulic hammer and then secured

"We installed them using a tried and tested lift method," says Shirron.

Culzean is a complicated high-pressure, hightemperature (HPHT) field requiring specialised equipment and expertise and its development has now passed the half way mark.

Maersk Oil has reduced the capital costs of Culzean by USD 500 million through improved drilling efficiency and robust upfront design and planning.

"We're in a great place across the board, the project is comfortably on schedule, we've developed effective relationships with our suppliers and we're doing this safely," says Martin Uruqhart, Culzean Project Director.

Right on schedule

The installation of the jackets is only one part of the busy activity taking place on Culzean . The deck stacking of the topsides was completed in May. Each deck can weigh up to 1,000 tonnes so they were constructed at ground level and then stacked.

"The next big challenge for the topsides' construction is installing the more intricate equipment – we're installing 28,000 pipe spools and 900km of cabling," says

Stuart McAuley, Culzean Engineering Manager.

With construction spread across six different shipyards in Singapore and Indonesia, the floating storage and offloading (FSO) vessel Ailsa is taking shape. In the UK North Sea, work has finished to lay the 52km of pipework required to transport gas produced from Culzean to the CATS pipeline that will bring it to a processing terminal in the UK along with the 3.6km pipeline, which will be used to export condensate to Ailsa.

"There is a lot of activity, both onshore and offshore," says Claus Vissing-Jorgensen, Culzean Deputy Project Director and Facilities Manager. "This is a vitally important year in this development, so it's great that we're on schedule."

The sailor from Captain Street



MyMaersk

The sea was part of Marcin Kulas's family from a young age – not least because he lived by the Polish coast. As Chief Officer of Madrid Maersk, he now holds a big responsibility for the safe and efficient management of the new Triple-E vessel.

BY SAM CAGE

Marcin Kulas was six when he first went sailing with his father.

Marcin's father worked as a sailor and in the first of many trips, they travelled from Szczecin in Poland to Rotterdam via the Kiel Canal. Now 31, Marcin is the Chief Officer on Madrid Maersk, the first of the second-generation Triple-E vessels in the Maersk Line fleet.

"I liked travelling on ships, so I decided to go to sea," says Marcin, whose friendly personality does not mask his close eye for detail and dedication to duty. His father still works at sea, currently on a dredger in the North Sea.

The nautical links go deeper, as the family house is situated close to the light-house on Kapitanska, or Captain Street.

Eye for detail

The Polish Chief Officer - who still lives on **Poland's Baltic coast in the village of Niechorze** - joined Maersk in 2011 as a third officer and quickly worked his way up. Marcin's close working relationship with Captain Niels Larsen of Madrid Maersk is the foundation for good teamwork all over the ship.

"We have worked together for a long time, and in fact Niels promoted me," says Marcin. "We are friends at home too, but when we are working we make sure our relationship stays professional."

Each morning after breakfast, Marcin sets out on his rounds of the ship, looking for anything that might be out of order or need attention, including the containers. Even on a new ship like Madrid Maersk, there are maintenance jobs and other work that needs to be done. He spots dirt that has not been swept up, and a bench that is preventing a door from being tied back, which constitutes a potential safety hazard, and checks all the way to the bottom of the cargo holds.

Marcin has plenty of paperwork that needs to be kept in order – ensuring the ship is ready for port and in line with regulations – and in the evening, he has watch on the bridge after dinner, plotting the course and keeping a wary eye out for other ships. From 04.00am, he is back on watch through the sunrise.

On approach to port in Tangier, Marcin is on the bridge with the Captain and pilots, helping to ensure the huge ship navigates the tight turn required and arrives safely at the dock.

The home stretch

After two and a half months on duty, Marcin returns home to Poland, his wife and three and half-year-old son, Maksymilian. They enjoy driving in Marcin's Mercedes, and he takes time to enjoy the household routine and cook - particularly Indian food such as butter chicken or samosas.

Big machines and the sea are clearly a large part of his life. So will there ever be a captain living on Captain Street in Niechorze?

"I hope so, one day," says Marcin. "But I really want to be ready before I am promoted.

To be captain, you really have to be ready as there's no one on board to help you."

Who should we feature in the next MyMaersk?

If you have an inspiring colleague who leads an extraordinary life inside or outside of work, nominate them for MyMaersk by sending an email to maerskpost@maersk.com.

Positive underlying results delivered

Transport & Logistics and Energy highlights O2 2017

	Rev	Revenue		Profit/loss		Underlying result		Free cash flow	
	Q 2	Q 2	Q2	Q2	Q 2	Q 2	Q 2	Q 2	
(USD million)	2017	2016	2017	2016	2017	2016	2017	2016	
Transport & Logistics	7,671	6,690	247	6	442	-75	252	8	
Energy	1,978	2,178	-276	221	182	318	280	93	
Maersk consolidated*	9,604	8,861	-264	118	389	134	619	326	

^{*)} Including financial items and eliminations

A.P. Moller - Maersk delivered an underlying profit of USD 389m (USD 134m) based on an improvement of USD 517m in Transport & Logistics and a decline of USD 136m in Energy.

A.P. Moller - Maersk reported a loss of USD 264m (profit of USD 118m), negatively impacted by post-tax impairments of USD 732m (USD 123m) primarily relating to lower asset valuations in Maersk Tankers and a few commercially challenged terminals in APM Terminals. The return on invested capital (ROIC) was negative 0.3% (positive 2.0%). Gross cash flow used for capital expenditure was USD 1.2bn (USD 751m). The free cash flow was USD 619m (USD 326m).

Revenue increased by USD 743m to USD 9.6bn with a significant increase of USD 1.0bn or 21% in Maersk Line and an increase of USD 90m in Maersk Oil, partly offset by a decrease of USD 217m in Maersk Drilling and USD 75m in APM Terminals.

Operating expenses increased by USD 456m to USD 7.5bn mainly reflecting an increase of USD 545m in Maersk Line due to a 61% higher bunker price and 1.7% increase in volumes, and an increase of USD 44m in Maersk Oil, partly offset by a decrease of USD 42m in Maersk Drilling, stemming from cost saving initiatives across all cost categories. Focus on cost efficiency across all businesses remains high.



"Maersk Line is profitable again delivering in line with guidance, with revenue growing by USD 1bn year-onyear in the second quarter"

Søren Skou, CEO of A.P. Møller – Mærsk A/S

DEVELOPMENTS IN THE QUARTER

In June, **Maersk Line** and CMA CGM announced an agreement for CMA CGM to acquire Mercosul Line subject to Brazilian regulatory approval and the closure of Maersk Line's acquisition of Hamburg Süd. The transaction will ensure that the cabotage sector in Brazil remains competitive and that customers continue to benefit from a comprehensive choice of carriers.

APM Terminals completed 18 agreements for new volume while five existing agreements discontinued during 2017, adding to net positive volume growth.

The divestment of Pentalver, the UK based provider of container transport and other related service, was finalised in $\Omega 2$ with a gain of USD 35m.

Damco continued to strengthen its supply chain management products and capabilities, whilst improving competitiveness in forwarding through the development of a carrier management tool, a global pricing system and rolling out its digital platform Twill. Damco signed up new global customers on its 4PL Orchestrator solution and won new business within supply chain management, which will be implemented during the second half of 2017. Additional progress is being made on reinforcing Damco's base improving its core operational IT platform and standardising and simplifying global processes.

Guidance for 2017

A.P. Moller - Maersk's expectation of an underlying profit above 2016 (USD 711m) is unchanged despite the expected negative impact from the June cyberattack. Gross capital expenditure for 2017 is still expected to be USD 5.5-6.5bn (USD 5.0bn).

acquisition of Hamburg Süd.

A.P. Moller - Maersk's guidance for 2017 is subject to considerable uncertainty, not least due to developments in the global economy, the container freight rates and the oil price

TRANSPORT & LOGISTICS

(USD million)	Q2 2017	Q2 2016	Change	FY 2016
Meanels Line				
Maersk Line	0.4.00	E 004	040/	00.745
Revenue	6,100	5,061	21%	20,715
Profit/loss	339	-151	N/A	-376
Operating cash flow	788	89	785%	1,060
<u>Capital expenditures</u>	-579	-109	431%	-586
ROIC (%)	6.7	-3.0	9.7рр	-1.9
APM Terminals				
Revenue	989	1,064	-7%	4,176
Profit/loss	-100	112	N/A	438
Operating cash flow	131	163	-20%	819
Capital expenditures	-70	-173	-60%	-1,549
ROIC (%)	-5.0	5.8	-10.8рр	5.7
Damco				
Revenue	631	619	2%	2,507
Profit/loss	0	10	N/A	31
Operating cash flow	-6	19	N/A	4
Capital expenditures	0	-3	N/A	-8
ROIC (%)	1.0	18.5	-17.5рр	14.6
Svitzer				
Revenue	162	162	0%	642
Profit/loss	19	24	-21%	91
Operating cash flow	32	30	7%	144
Capital expenditures	1	-57	N/A	-192
ROIC (%)	5.8	7.8	-2.0рр	7.5
Maersk Container	Industry	7		
Revenue	285	108	164%	564
Profit/loss	15	-21	N/A	-55
Operating cash flow	9	13	-31%	-4
Capital expenditures	1	-4	N/A	-26
ROIC (%)	18.0	-19.6	37.6рр	-13.3

Maersk Line reported a profit of USD 339m (loss of 151m). Market fundamentals continued to improve in O2 as demand growth of 4% outgrew nominal supply growth of 1.4%. The improvement in market fundamentals in past quarters has started to be reflected in the freight rate, which increased 22% compared to O2 2016 and 7.6% compared to O1 2017. Transported volumes increased by 1.7% compared to O2 2016.

APM Terminals reported a loss of USD 100m (profit of USD112m), impacted by impairments of USD 250m (USD 8m) in a few commercially challenged terminals, partially offset by a divestment gain of USD 34m.

Damco reported a break-even result of USD 0m (profit of USD 10m), negatively impacted by increased product investments and lower ocean margins, positively offset mainly by supply chain management volumes, air freight volumes growth and productivity improvements.

Svitzer reported a profit of USD 19m (USD 24m), negatively impacted by USD 12m impairment on 11 idle vessels marketed for sale due to fleet optimisation.

ENERGY

(USD million)	Q2 2017	Q2 2016	Change	FY 2016			
Maersk Oil							
Revenue	1,368	1,278	7%	4,808			
Profit/loss	191	131	46%	477			
Operating cash flow	410	514	-20%	1,484			
Capital expenditures	-259	-330	-22%	-1,675			
ROIC (%)	18.5	12.1	6.4рр	11.4			
Maersk Drilling							
Revenue	349	566	-38%	2,297			
Profit/loss	28	164	-83%	-694			
Operating cash flow	150	129	16%	1,345			
Capital expenditures	-8	-220	-96%	-315			
ROIC (%)	1.7	8.3	-6.6рр	-9.0			
Maersk Supply Service							
Revenue	74	102	-27%	386			
Profit/loss	-10	-106	-91%	-1,228			
Operating cash flow	-17	7	N/A	81			
Capital expenditures	-33	-17	94%	-103			
ROIC (%)	-5.4	-24	18.6рр	-76.7			
Maersk Tankers							
Revenue	206	226	-9%	877			
Profit/loss	-483	28	N/A	62			
Operating cash flow	16	71	-77%	180			
Capital expenditures	10	-58	N/A	-190			
ROIC (%)	-133.1	6.9	-140.0рр	3.7			

Maersk Oil reported a profit of USD 191m (USD 131m) at an average oil price of USD 50 (USD 46) per barrel. The result was positively impacted by the higher oil price, cost reductions and one-off income totaling USD 66m related to tax and provisions, partly offset by lower production. Entitlement production was 284,000 boepd (331,000 boepd).

Maersk Drilling reported a profit of USD 28m (USD 164m), reflecting that ten of Maersk Drilling's rigs were fully or partly idle during the quarter, and that old contracts at higher day rates have expired. Furthermore, the result was impacted negatively by temporary downtime on two rigs during the quarter and positively impacted by cost reductions. By the end of O2 2017, Maersk Drillings' forward contract coverage was 61% for 2017, 46% for 2018 and 25% for 2019. The total revenue backlog was USD 3.1bn (USD 4.7bn).

Maersk Supply Service reported a loss of USD 10m (loss of USD 106m). The loss was due to the overcapacity in the global offshore industry.

Maersk Tankers reported a loss of USD 483m (profit of USD 28m) negatively impacted by impairments of USD 464m (USD 0m) due to an expected continuation of the lower asset valuations and due to declining spot market rates, which were the main driver for Maersk Tankers' average Time Charter Equivalent (TCE) earnings declining by 27%.

For more details regarding the financials for Q2 2017 please visit the Investor Relations website:

http://investor.maersk.com/financials.cfm

Unless otherwise stated. all figures in brackets refer to the corresponding figures for the same period of the previous year.

