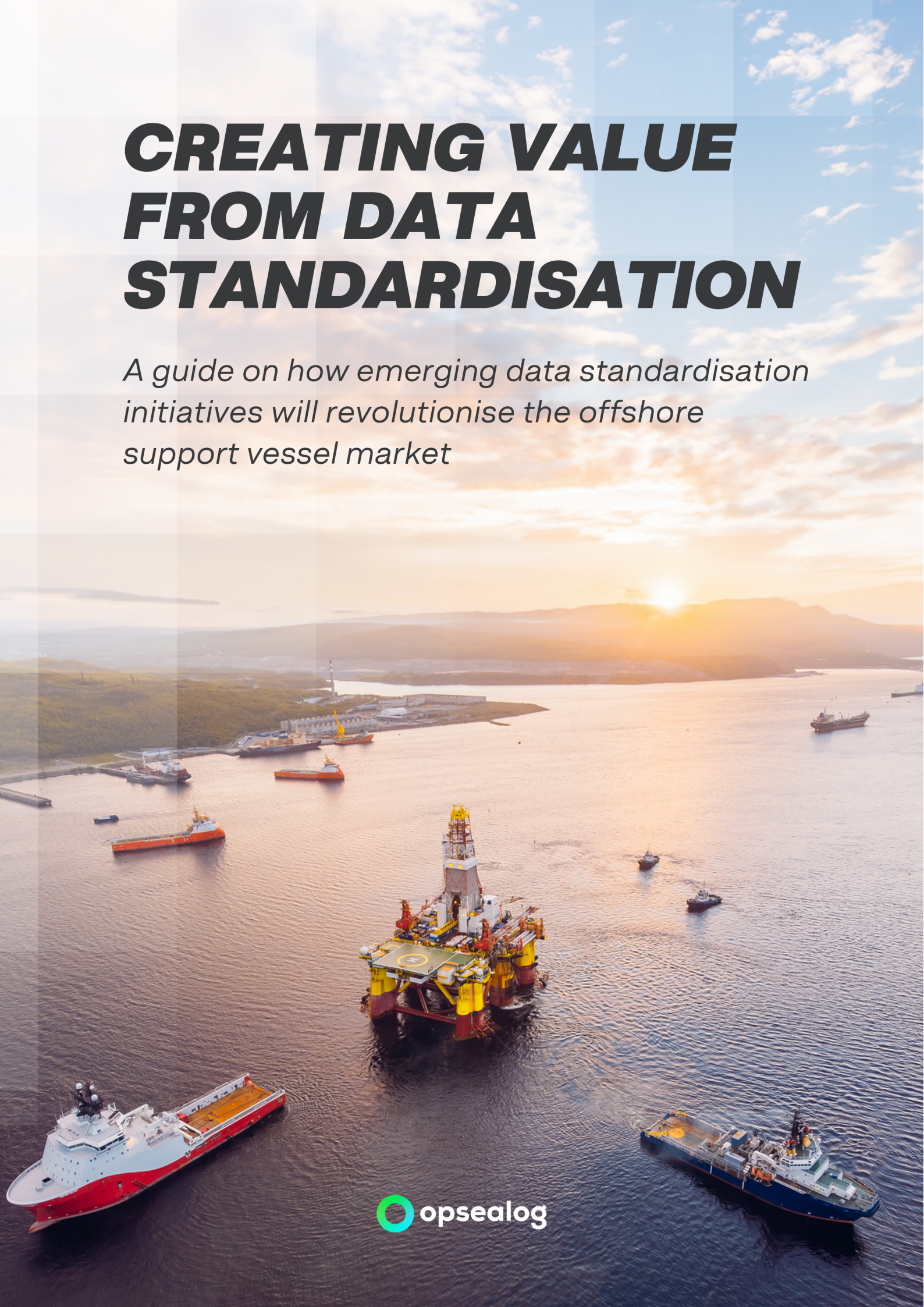
CREATING VALUE FROM DATA STANDARDISATION

A guide on how emerging data standardisation initiatives will revolutionise the offshore support vessel market



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FOREWORD



Data gathering and reporting processes for the offshore marine industry are about to undergo change that, even in this decade, will be significant. Just as the shipping container revolutionised cargo handling in the 1950s, there's a new revolution emerging out of the need to meet environmental reporting mandates: data standardisation.

Data standards define the format and meaning of data elements, and they support a common understanding and exchange of digital information. Just as English is the international language of shipping and trade that enables people from all over the world to communicate and collaborate, data standards can become the international language of digital communication and collaboration.

The development and implementation of data standards is a much-needed revolution. Imagine if all engine and equipment manufacturers agreed on a standard for onboard sensor data, and every dashboard offered standard methodologies for calculating KPIs.

Much like shipping containers, ship operators would have building blocks that they could fit together to suit their specific needs without the costly, time-consuming software development currently needed to ensure that different systems and subsystems can gather, transfer and analyse information reliably. Anyone who has considered a digital project will understand just how complex that can be.

There is so much data that is currently not creating value simply because it's not yet standardised. Seafarers are doing their part by collecting and inputting information, often in a plethora of formats and reports that only increase their workloads. Yet their hard work too often goes to waste because the data is stuck on paper, spreadsheets and emails. As the number of reports continues to swell, this isn't sustainable.

Here, in the mid-2020s, we are beginning to see a fundamental change. Data standards are being developed by industry groups, including shipowners, charterers, software providers and OEMs. The aim is twofold: easing the burden of meeting regulatory requirements whilst also enabling companies to turn the challenges of enhanced reporting into opportunities for commercial and ESG success. In addition, the industry is making steady progress in defining standards for automatic data gathering and exchange, which is complementary to e-reporting standards.

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This is collaboration at its best, and it's an opportunity not to be wasted. With industry-wide standards, operators can be confident that their performance is being measured by data that is clearly defined, quality-controlled, and complete. Charterers can be assured that everyone is working to the same level of accuracy, enabling optimal contracting and efficient project execution. Ultimately, shipowners and charterers will be more in control of their data and able to capitalise on it to improve performance.

This will transform the industry beyond facilitating the data collection process needed to meet new regulatory requirements from the International Maritime Organization (IMO) and the European Union (EU). It will enable operators to benchmark new operational practices, new technologies, and new fuels. It will not only give shipowners better access to the data collected on their fleets, but also enable them to share relevant operational data with charterers throughout a contract. This will progressively bring a new level of transparency between operators and charterers that will change the bidding process, contractual obligations, and conflict resolution.

Any operators left behind on this digital journey won't have established the strong foundation needed to be ready for the regulatory and commercial challenges ahead. They will struggle to justify their credentials in the market, and they will fail to achieve the high standards of efficiency they are capable of.

Data standardisation is about more than compliance; it is an opportunity to turn reporting obligations into a performance accelerator. It is a collaborative journey, led in large part by the industry itself, that can deliver better outcomes for businesses and for the environment. The purpose of this white paper is to outline where this journey can take the industry next.

By Arnaud Dianoux,
Founder & Managing Director of Opsealog

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INTRODUCTION

THE GROWING IMPORTANCE OF DATA STANDARDS

The offshore supply vessel (OSV) fleet constitutes approximately 6% of the entire maritime fleet, so its role in shaping sustainable practices is significant. Initiatives such as the IMO's data collection system (DCS) and Carbon Intensity Indicator (CII) requirements have already laid the initial foundations for the decarbonisation of the fleet. The EU's emissions trading system (ETS) and Monitoring, Reporting, and Verification (MRV) regulations will add another layer of complexity to this by putting a price on carbon emissions at a fleet level and making it crucial for shipowners to have verified, reliable data on their well-to-wake emissions.

The EU MRV, which currently applies to ships above 5,000 GT, will extend its scope to cover vessels above 400 GT from 2025 onwards. From 2027, offshore ships above 5,000 GT will be included in the ETS, and the European Commission is expected to decide whether OSVs between 400 and 5,000 GT should also be included by 2026.

Accurate data collection and e-reporting will be critical to compliance. Reporting lays the groundwork for any decarbonisation plan, as highlighted in the white paper *10 Principles to Decarbonise the OSV Industry*, which was the result of a collaboration between Chevron, Shell, TotalEnergies, Equinor, ABS and Maersk Supply Service. As the report states: "It is with transparent and standardised data sets that we can track our progress towards ambitious, strong, yet feasible targets."

Indeed, data enables companies to be both proactive and pragmatic. By tracking data on factors such as fuel consumption, emissions and operational patterns, operators gain the advantage of knowing what their starting point is. From there, they can identify where the opportunities for improvement lie. They can prepare for the regulations ahead and make strategic decisions with confidence. That is how data can be a performance accelerator, enabling them to recognise and seize opportunities to perform better operationally, financially, and environmentally.

Commercial challenges are adding to this pressure to perform. After several years of low costs, charterers are seeing their global costs increase sharply due to high fuel prices and daily rates. This is driving a push towards digital systems that enable the monitoring of operations to improve fuel efficiency in the immediate term, and identify the right vessels and fleet size to fulfill their needs in the longer term.

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For owners, vessel shortages and attractive rates are incentivising them to maximise vessel availability and make the most of a favourable market. The re-activating offshore market is triggering reconsideration of fleet composition and upgrades. However, high interest rates make finance more challenging and newbuild orders less attractive. The ability to save fuel is central to any investment, but given the current uncertainty around new fuels, propulsion systems and ship designs, much of the industry is instead focusing on improving existing vessel performance. Many are considering ways of extending the life of their existing vessels, notably through retrofits, energy-saving devices and digital systems. Each of these installations should be an opportunity for shipowners to ensure that they will own their data and that it will be accessible to them in a format that they can use.

Industry-wide standards for data collection and reporting are being developed as digital optimisation strategies gain momentum. Any shipowner who ignores this risks costly reworking of their e-reporting solutions to keep up. Looking ahead, multi-fuel fleets and vessels with a variety of clean technologies will require even more granular data to evaluate their performance. This will make standards even more important.



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THE STARTING POINT

WHERE TO BEGIN WITH IMPROVED DATA REPORTING AND STANDARDISATION

The specifics of vessel performance data reporting have traditionally been established by individual operators who develop methods suitable for their own fleet. Data may be collected via multiple systems and then reported to different stakeholders within and beyond the company. But the maritime industry is now transitioning to more integrated digital reporting systems, and this is providing the motivation for industry stakeholders to get together and develop data standards.

TACKLING DATA POLLUTION UPSTREAM

Industry stakeholders are coming together despite confidentiality concerns because they recognise that standards will benefit everyone. Think of a river providing water for a village. Somewhere, upstream the river is being polluted. Is it easier to find the source and stop it there or to have everyone in the village try to clean the water each time they drink it?

Tackling pollution at its source makes more sense, and in an analogous way, it makes more sense to get together and agree on how data is created and presented than for each stakeholder to have to find ways of working with disparate definitions, formats, and levels of data integrity later. Standards enable processes to be harmonised, integrated, and, when required, shared transparently and traceably.

The 2023 Thetius report *Decarbonisation Toolkit*, commissioned by Inmarsat, provides an illustration of why they are important:

> *Collaborative digital data is heavily reliant on common units of measurement and frames of reference. For example, in speed measurement, one 'nautical' mile-per-hour (1 knot) is very different from one 'statute' mile-per-hour (1 mph). In fact, 1 mph is about 15% faster than 1 knot. Confusing these velocities could cause a sizable cumulative error in the data unless naming conventions and definitions (known as "nomenclature") are agreed and understood between senders and receivers from the outset.*

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Some data standards are rooted in work already completed at the IMO including, for example, resolution MEPC.282(70), adopted in 2016, which provides guidance on the methodology for collecting data on fuel consumption, distance travelled and hours underway for Ship Energy Efficiency Management Plan (SEEMP) development. The EU MRV requirements also include reporting on distance sailed and fuel consumption, but they differ from IMO requirements by requiring transport work calculations, and they only apply to voyages to and from EU ports.

Industry-wide data standardisation at scale will take time. However, it can be done, as was already demonstrated with the maritime single window for data exchange in ports, which has become mandatory on 1 January 2024. Public authorities must now establish, maintain, and use single window systems for the electronic exchange of information required on arrival, stay, and departure of ships in ports. In addition, public authorities have to combine or coordinate the electronic transmission of the data to ensure that information is only provided by the ship once and then re-used to the maximum extent possible.

This has required data standardisation and system interoperability, but it has been worth the effort. Digitising and sharing information in near real-time is enhancing the efficiency of ports and is likely to improve the visibility of maritime activities globally.

The OSV industry is already moving beyond compliance reporting in its own standardisation efforts. For example, the Offshore Vessel Inspection Database (OVID) was developed in response to the desire of Oil Companies International Marine Forum (OCIMF) members to have a central database of OSV vessel inspection reports and history. Participating owners benefit from streamlined assurance checks by charterers, and the frequency of required inspections may also be reduced.



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Earlier this year, the cross-industry group Smart Maritime Council released Version 1.0 of the Standardised Vessel Dataset for Noon Reports after a 12-month consultation process involving BIMCO and the IMO. It includes over 100 data elements and is available on the Council's website. The aim is to provide a dictionary of standard names, units, and reporting formats to simplify data exchange between different stakeholders and to maintain consistency between different reporting and analysis applications. Wilhelmsen Group company Ceataec, a Council member, has built an open-source library of free tools for companies looking to apply the standard within their own digital projects.

Energy LEAP, an industry collaboration including energy majors such as Shell and TotalEnergies, released Version 1.0 of its Vessel Emissions Reporting Standard (VERS) in late 2023. The standard covers data elements and reporting events used for the IMO MRV and CII calculations, including events like cast-off and all fast, operational modes such as ship-to-ship operations and emergency transits, along with the associated onboard energy consumers and type and quantity of fuel used.

The International Support Vessel Owners Association (ISOA) is also discussing data standardisation initiatives within and beyond noon reporting. Its work follows on from the industry-developed white paper *10 Principles to Decarbonise the OSV Industry,* which states: "Performance data should be transparent and shared in a standardised format, ensuring credibility and ease of access."

Opsealog has developed its data standards based on the maritime experience of its founders and the company's 10 years of consultation with OSV operators, owners and charterers. With the ability to now analyse over 100 different vessel types and over 300 individual vessels, Opsealog has been putting its data standards to the test across a wide range of KPIs, some common to most clients, others extending beyond that to provide unique insights for a specific company or operation.

Using the noon report as a starting point, Opsealog has shown that data collection need not be extensive to be powerful. It has also, however, shown that inconsistent, poor-quality data buried in manual or disjointed digital archives can sometimes be largely useless. This demonstrates two important points:

- Firstly, ensuring data quality is essential. As the saying goes, "garbage in, garbage out."

- Second, standards are not just a "nice to have." Without them, it's not possible to make the most of the data generated onboard, whether it's from noon reports or high-tech engine performance monitoring systems.

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Opsealog is therefore offering its experience across a range of industry-wide standardisation initiatives as well as to individual companies looking to make the most of e-reporting for compliance and operational efficiency.

One example is its partnership with Bourbon Marine & Logistics, Predict, AMU-LIS, and Bureau Veritas under the CASSIOPEE (Collection and Analysis of Data for Operational Safety, Performance and Energy Efficiency) project, which is supported by the French Environment and Energy Management Agency (ADEME) as part of the France 2030 plan. CASSIOPEE aims to set up the infrastructure necessary for the collection and processing of data onboard to provide crews with real-time support for improving operational safety and efficiency.

The system will also allow the transfer of data to shore to feed a digital twin for continuous monitoring of the ship's health status as well as its operational capacity.

TAPPING INTO EXISTING DATA

There is a lot of data being generated every day, digitally and on paper, including noon reports and sensor data from equipment such as engines, thrusters, and cranes, as well as successor technologies, such as GPS, Dynamic Positioning systems and others. This data can be used to create value.

With data from electronic fuel monitoring systems, for example, insights can be gained on why some vessels aren't performing as well as others. However, this requires ensuring that the data is made available to the vessel owner, and is in the right format. Further, tapping into the information could require software engineering to automate what would otherwise become a prohibitive manual task.

Data standards that enable digital systems to operate seamlessly together are the way forward to overcome these challenges.

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THE OPPORTUNITY
TURNING DATA ASSETS INTO OPERATIONAL AND COMMERCIAL ADVANTAGE

Modern ships generate an estimated 20 gigabytes of data daily. That's 20 gigabytes of opportunity. As Inmarsat recently stated in its report *The Digital Wave*, no longer are people solely concerned with how they will use the data in front of them; they now also consider how it might be useful for others. With that comes the value of data standards.

Adopting data standards helps OSV operators enhance data quality and enables the use of digital solutions that can automate data capture, processing, and compliance reporting. Digital e-reporting solutions that use this consistent, good-quality data make it easier to visualise and share insights, and they support transparency and trust among stakeholders. Moreover, good data management plays a crucial role in supporting evidence-based decision-making and risk management. Analysing historical data enables informed decisions to mitigate risks and optimise performance for ship owners, operators, and charterers. Energy LEAP notes the time savings that come with data standards:

> *"Vessel operators and crew benefit by having a common pre-agreed set of data to gather and present to their interested counterparties without the duplication of overlapping data requests."*

Further, data standardisation can improve data quality as specific data elements of a digitalised report can be automatically filled with onboard sensor output, perhaps at a higher frequency than possible manually if the ship is equipped with a connected communications solution. Data need only be entered once, and from there, it can automatically be available for multiple reports and analysis purposes. While only a minority of OSV vessels have so far harnessed the opportunity to share data ashore in real time, this expected automation is an opportunity to free up crew working time and reduce time spent on repetitive tasks that can be vulnerable to human error. Here, too, ensuring that data is standardised and of good quality will be essential to seize its full potential.

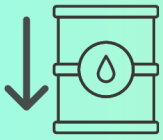
Shipowners can monitor their operations more effectively to understand what their vessels have been doing and how. The analysis need not be contemporaneous, as historical data, if available in digital format, can add to the depth of understanding of changes in fleet performance over time. For instance, by monitoring speed, route deviations, standby times upon arrival, engine configuration, equipment repairs, and more, operators can identify the reasons behind abnormally high fuel consumption, optimise vessel usage and minimise emissions during voyages.

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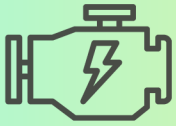
Real-time monitoring and data analytics empower shipowners and charterers to track crucial KPIs like fuel consumption, engine efficiency, and emissions. Once data is populated into a structured architecture, it is available for analysis that can reveal valuable insights. Operators can pinpoint improvement areas, apply targeted interventions, and gauge the impact of operational adjustments. It can also enable them to make use of other digital technologies, such as geo-fencing, that can alert crews to special areas or sanctuaries that require adherence to stricter environmental regulations.

BENEFITS OF REAL-TIME MONITORING & DATA ANALYTICS

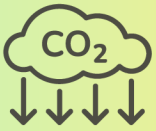
Track crucial KPIs on:



FUEL CONSUMPTION



ENGINE EFFICIENCY



EMISSIONS

ONCE STRUCTURED, IT CAN REVEAL VALUABLE INSIGHTS

Predictive analytics can enable condition-based maintenance strategies and detect potential equipment performance issues before they escalate into major failures. This can reduce downtime, extend asset lifespan, and improve overall operational reliability.

The development of unified reporting standards could also be an asset for companies as they face growing pressure to report their ESG performance to stakeholders. Digital reporting ensures that the required information is easily available, in the right format, and with widely accepted standards. Not only will companies be able to use the same benchmarks, but this will also facilitate data consolidation across the industry, with companies able to share high-level KPIs anonymously – therefore increasing transparency.

The digital analysis of even the most routine operations enables ship operators to add value to their vessel charterers by suggesting operational improvements to reduce fuel consumption and associated emissions. For charterers, who are generally the ones paying for fuel, enhanced data is key to managing their operational costs and reducing fuel consumption through efficiency improvements. They can use digital systems to ensure that the right vessel is assigned to the right task and used in an optimal way.

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Having reporting standards accepted by all provides an objective basis for ship operators and charterers to assess contract compliance and performance. Data analysis can help determine if the different performance clauses defined in charter party agreements (fuel performance, maintenance, crew management and requirements, etc.) have been met. Bringing the owner and charterer on the same page with a common digital base can also help determine if a vessel has abnormal fuel consumption due to operational practices (by the charterer or the shipowner) or a technical or maintenance problem

A step forward to reduce disputes would be to rely on a trusted third party (and/or third-party platforms) to monitor and report on all parties' contractual obligations, along with the agreed incentives and penalties to encourage performance standards. This would rely on shared data standards.

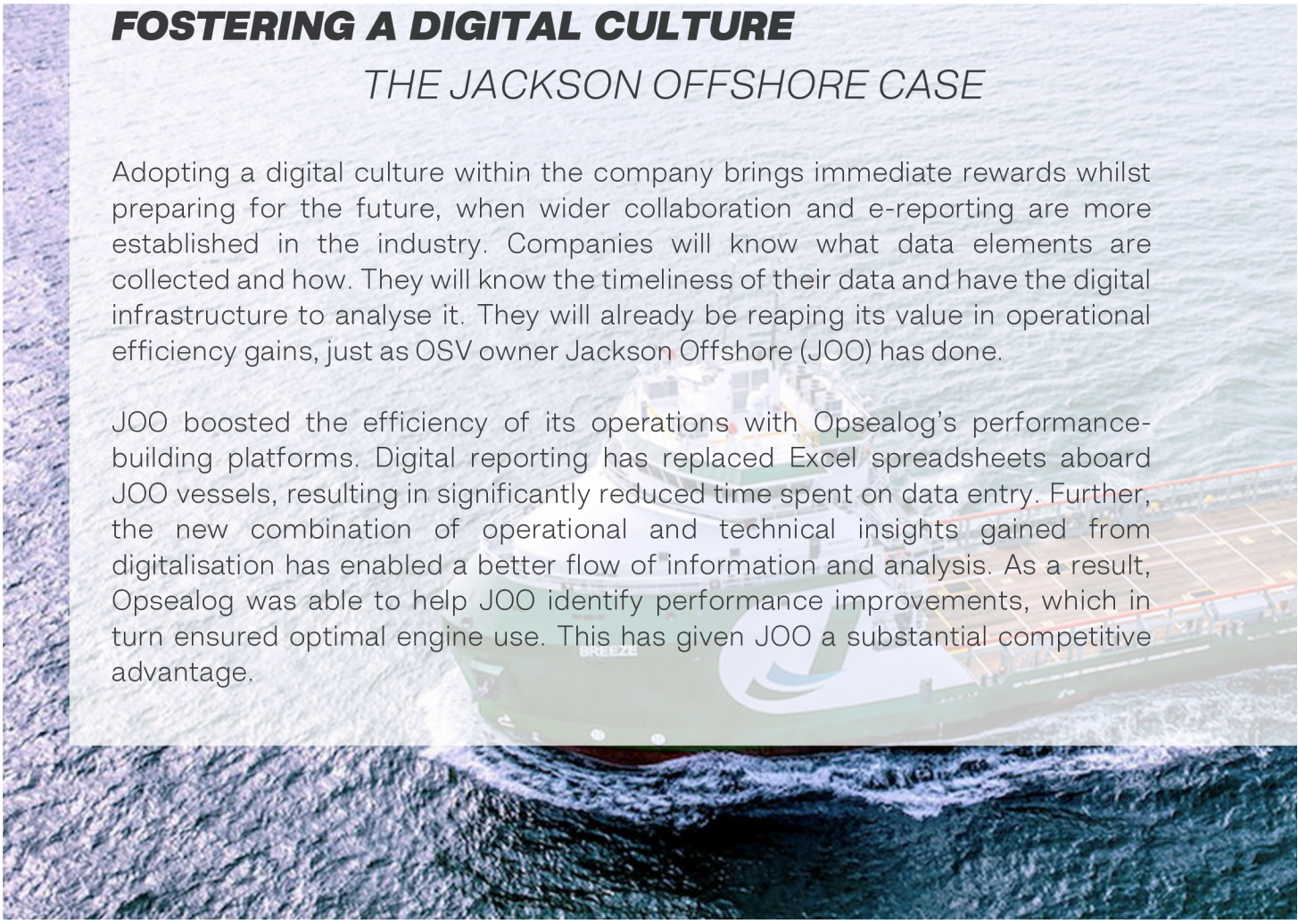
Industry-wide standards have a long-term strategic value as well. They are being developed by consensus, and the collaborative approaches required can be maintained to tackle other forward-looking goals, including decarbonization, and to apply technological developments such as artificial intelligence.

FOSTERING A DIGITAL CULTURE

THE JACKSON OFFSHORE CASE

Adopting a digital culture within the company brings immediate rewards whilst preparing for the future, when wider collaboration and e-reporting are more established in the industry. Companies will know what data elements are collected and how. They will know the timeliness of their data and have the digital infrastructure to analyse it. They will already be reaping its value in operational efficiency gains, just as OSV owner Jackson Offshore (JOO) has done.

JOO boosted the efficiency of its operations with Opsealog's performance-building platforms. Digital reporting has replaced Excel spreadsheets aboard JOO vessels, resulting in significantly reduced time spent on data entry. Further, the new combination of operational and technical insights gained from digitalisation has enabled a better flow of information and analysis. As a result, Opsealog was able to help JOO identify performance improvements, which in turn ensured optimal engine use. This has given JOO a substantial competitive advantage.



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THE CHALLENGE

NAVIGATING THE OBSTACLES TO OPTIMISED DATA MANAGEMENT

While digitalisation has made significant progress in the OSV sector, hurdles remain. A lack of certainty keeps many owners and charterers in "wait and see" mode. The abundance of digital systems available has shipowners calling for a clearer picture of the return on investment of solutions and how they differentiate themselves from others.

CIMAC, a global non-profit association promoting the development of ship propulsion, has convened a digitalisation strategy group which released a position paper late last year titled *On Enabling the Implementation of a Ship-wide Data Ecosystem*. Their concern is that there currently exist various monitoring solutions from sub-suppliers in the market, each with their own protocols for data production, and common, open, and secure ways for exchanging data among them have not been adopted. This is important, because "to remain competitive, ship operators/companies will experience increased pressure to achieve significantly higher levels of optimisation for the entire maritime shipping process than is currently undertaken." Developing standards for e-reporting in the OSV sector is particularly challenging because of the complexity and huge variety of operations that a single OSV, SOV, or cable-laying vessel may perform. Data collection platforms must reflect this complexity, and this requires a high level of knowledge of the sector.

OSVs are generally technologically advanced, with multiple onboard software applications. The abundance of data streams can lead to unforeseen challenges in the handling of data, ensuring its quality, and analysing the information. The complexity arises from the need to integrate and synchronize data from various sources, ensuring accuracy and consistency in the analysis.

The amount of raw data available will undoubtedly grow exponentially in the next few years. Standardisation is not just about the data structure itself but also the hardware and software infrastructure behind its collection, distribution and processing. This is raising concerns about the costs and difficulties of installing and maintaining several solutions on board or ashore.

Concerns about data protection and confidentiality may slow down the implementation of industry-wide data standards. Some people in the industry have expressed worry about losing control of their data, and these concerns need to be addressed. At Opsealog, we believe that the data (in its "raw" state, but also once it's been processed) must belong to the customer – the owner or charterer. Therefore, we must ensure that this data is safe, will only be used for the purposes within the scope of the contract, and will still be theirs at the end of the contract.

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Another key challenge will be to manage change and implement new standards in a way that makes sense for each individual working with the data. Data governance strategies need to be developed to establish policies and procedures to ensure that data standards are followed. These considerations should become part of corporate culture to ensure continued commitment.

OPTIMISATION OF OSV OPERATIONS

Opsealog worked with an oil and gas operator based in the Middle East to decrease the average fuel consumption of one of the Platform Supply Vessels (PSVs) in its fleet by 53%. Shortly after engine running data collection started, Opsealog identified a misbehaviour during in-port standby, prompting deeper analysis. The vessel was observed to be using its main engines contrary to standard procedures.

After consultation with the operations team and crew, the vessel's main engines were able to be operated for 356 hours less over a three-month period. This reduced fuel and engine maintenance costs enhanced the vessel's long-term operational efficiency and reduced emissions, while also minimising the risk of offshore logistics disruption.



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THE ROAD AHEAD

A STEP-BY-STEP APPROACH TO DESIGNING YOUR DATA REPORTING FRAMEWORK

The starting point for unlocking the potential of data standardisation will be different for different vessel operators. Some are currently bound to legacy systems, others newly entering the market, but each can only maximise the opportunities if they develop data standards and e-reporting systems that are ready for the industry-wide standardisation that is coming.

Many companies have small teams managing a fleet of 20 to 50 OSVs without the support of a huge technical department. Solutions therefore need to be turnkey, with providers clearly showcasing the business case for digitalisation – one that doesn't require major CAPEX investment but can deliver immediate efficiency gains and fuel savings.

Opsealog supports operators by focusing its e-reporting project planning and implementation advice on four principles:



Agree on the desired outcomes

Companies shouldn't report for the sake of reporting but have a proper conversation at all levels, from bridge to boardrooms, about what areas they want to focus on and improve, and where data can bring the most value with actionable recommendations.



Ensure data quality

Companies need to ensure that the data collected is of good quality, which requires a combination of having the right tools and algorithms to integrate it, along with monitoring and analysis from human experts (in-house or from an external party).



Test in real-life conditions

It is important to have a trial phase to ensure teams are familiar with the new data standards and know how to use the systems.



Change management

Change can have a significant impact on the people involved in the digital transition, and they should be included in goal setting and project planning to ensure that everyone is on board with what is to come.

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Opsealog believes that digitising noon reports is a good place to start an operator's digital advance. These reports contain lots of highly valuable information on a vessel's operational profile, including fuel consumption, location and crew movements, that can be combined with data on engine running hours, providing new insights into how it is operated. This data can show, for example, how much time vessels spend idling. By understanding what each ship has been doing and when, owners and charterers can assess how their fleet is performing and identify areas for improvement.

THE EXAMPLE OF ADNOC L&S

To maximise the fuel efficiency of ADNOC L&S' fleet, the Opsealog team leveraged daily data to propose improvements to fleet standby practices. These changes unlocked significant efficiency gains even though vessel practices were constrained by safety policies that prevented the crew from decreasing the number of engines used when within field limits. Some vessels were engaged in standby mode for as much as 80% of the time, and with at least two main engines required to run at all times, standby fuel consumption was high. At night, when operations were paused, vessels burned fuel to maintain their positions.

Opsealog found that a combination of shallow waters, with artificial and natural islands close to offshore assets meant there was potential for the installation of mooring buoys close to platforms and rigs. Working in close collaboration, the Opsealog and ADNOC L&S teams found ways of using them to reduce the time engines were operating in dynamic positioning mode without compromising safety or operational schedules.

The change management and project implementation skills developed by operators such as ADNOC L&S become part of company culture over time. While they demonstrate the potential for immediate gains based on data standardisation within a company, they also build capabilities that have long-term strategic benefits for adapting to change as new industry-wide initiatives mature.

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Opsealog believes that operators' level of digital maturity will directly impact their readiness for the changes ahead:

LOW E-reporting may be used for a few reporting functions, but many people in the company rely on manual reporting. Changes in regulations, such as the need to meet EU MRV requirements, will put strain on these people and lead to data redundancy, wasted effort, and confusion.

MEDIUM Reasonable progress has been made in adopting data management standards, but some manual reporting remains and systems are not fully interoperable. Meeting new regulatory requirements or corporate KPIs will require significant lead time and project coordination.

HIGH Most reporting functions are delivered through digital platforms, with high levels of data interoperability, good data management, knowledge sharing, and security standards. Projects for meeting new regulatory requirements or corporate KPIs will be familiar to everyone, and their smooth implementation creates a positive corporate culture that fosters new ideas. These ideas won't be just pipe dreams – they will be achievable thanks to the data standards that underpin the company's operations, and they will boost the company's reputation and success.

In short, digitalisation and preparedness for upcoming regulation are intertwined. Now is the time to prepare. With the right digital structure, shipowners and charterers can already understand how their fleet is operated and make the most of their existing assets to reduce greenhouse gas emissions. And when the time comes, they will be equipped with the right insight to make the best possible decisions for retrofits and newbuilds. Data grounds decision-making in evidence and enables every company to determine its own pragmatic journey towards compliance in a way that makes sense for their businesses.

MOVING AT DIFFERENT SPEEDS

The OSV sector, much like other commercial shipping sectors, has owners and operators who view the need to decarbonise with various degrees of urgency. Frontrunners have set net-zero operation as a strategic priority within their company. Some have set specific targets and dedicated budgets to achieve them. Others are more likely to adopt solutions only when the immediate value is clear. Others lack the resources to assess new technologies and wait for change to be forced on them by regulation.

This fragmentation in ambition levels is mirrored by the different speeds at which companies are embracing digitalisation. This will become a key differentiator going forward. Companies that build a strong digital foundation today will be able to thoroughly understand their fleet and operations, take action to reduce their emissions, and demonstrate their results, giving them a head start when regulation on GHG emissions comes into force. Meanwhile, those that lag behind will lack this agility and risk losing their standing in the market as the impact of data standards currently under development takes hold.

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CONCLUSION

THE FUTURE OF DATA STANDARDS IN THE OSV SECTOR

The data standards that are being developed in meeting rooms around the industry are one important way of overcoming the challenges that could otherwise reduce the impact of vessel optimisation, new fuels, and clean technologies. They are a vital part of building the capability to measure and report emissions accurately and transparently, and everyone is set to gain from that. You can't manage what you don't measure.

The EU's MRV regulation is the next leg of the e-reporting journey that many operators of offshore service vessels will need to navigate as part of their emissions compliance program. Data standards are already being developed by shipowners, charterers, software providers and OEMs, to ease the burden.

With industry-wide standards, operators, ship owners and charterers can all be confident that their performance is being measured by data that is clearly defined, quality-controlled, and complete. If everyone reports on fuel usage in the same way, using the same accuracy and timeliness of data collection, initiatives such as the EU's EU's Emissions Trading System (ETS) will work fairly – the playing field will be level. Additionally, charterers can be assured that everyone is working to the same level of accuracy, enabling optimal contracting and efficient project execution.

This will transform the industry beyond facilitating the data collection process needed to meet IMO and EU requirements. It will enable operators to benchmark new environmental initiatives and will bring transparency between operators and charterers that will change the bidding process, contractual obligations, and conflict resolution.

As a company, Opsealog is taking part in several industry-wide initiatives. But standards shouldn't be a top-down process; change must also come from the grassroots. Standards for noon reporting are well advanced, and Opsealog believes that digitising noon reports is a good place for companies to start their e-reporting journey. These reports contain highly valuable information on a vessel's operational profile which can lead to more optimised operations while also preparing for regulatory requirements such as the EU MRV.

The global OSV market is anticipated to grow from USD 19.37 billion in 2023 to USD 31.10 billion by 2030, at a CAGR of 7% during the forecast period. Industry-wide data standards will need to mature rapidly over that time. Their widespread adoption won't happen overnight, and it won't happen without challenges, but they will create positive environmental change. Every tonne of GHG that isn't emitted into the atmosphere is good news for everyone.

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TRANSFORM YOUR DATA INTO ACTION

Opsealog is a French technology company specializing in performance management for the maritime and energy industries. Since its foundation in 2015, Opsealog has become a key player in merging maritime knowledge with smart data solutions. With its unique concept of Efficiency as a service, Opsealog provides the energy and maritime sectors with innovative ways of improving performance and decarbonizing operations through digitalization, and consulting services offered in a turn-key solution to clients globally.

At the core of our business is the digitalization of fleet operations and enhancing performance management practices. We're committed to supplying charterers, shipowners, and industry partners with straightforward, effective tools necessary for improved efficiency, compliance, and environmental protection.

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