DIGITAL COMPLIANCE AND PERFORMANCE

ANYTIME. ANYWHERE. FROM ANY DEVICE.

My Fuel Consumption
Comply with EU MRV and IMO DCS

Veristar Dangerous Goods and Bulk
Generate lists of transportable goods

Approval Explorer
Locate approved suppliers and certified manufacturers

E-Certificates
Digital statutory and class certificates

Optimum Survey Planning
Surveys at the right time and place

Veristar Equipment
Manage equipment certification requests

PSC Ready
Meet statutory requirements

My Veristar
Manage your classed fleet

Bureau Veritas' end-to-end digital portfolio provides a range of online tools and applications that allow clients to manage their fleets, comply with regulations and improve safety both onboard and onshore.

marine-offshore.bureauveritas.com/digital-innovation
this month is on autonomous shipping: the cost and safety advantages it offers, the challenges to be overcome, and the projects driving technical advances. Staying on the topic of digitalization, we also take a look at how asset management has evolved over time, thanks to data availability and the increasing use of digital twin technology such as Bureau Veritas’ Veristar AIM® solution. Shell, a longstanding client, also discusses the benefits of using our digital compliance tool as part of their independent verification program.

On the environmental side we look at projects pushing the boundaries in Marine Renewable Energies and visit the VARD yard in Norway, where cruise operator Ponant has ordered the world’s first LNG-electric hybrid expedition cruise vessel.

Bureau Veritas Marine & Offshore has been helping clients navigate change for 190 years. If change is happening faster now than before, we’re ready for it. Bureau Veritas Solutions - Marine & Offshore was created a year ago to deliver high-performance solutions that go beyond compliance. Meanwhile, we are continually adding apps and tools to make regulatory compliance easy for our customers so they can focus on performance.

We will be attending a range of Marine and Offshore events this fall, including Offshore Europe, LISW2019 and Gastech, with experts on hand to discuss our services. We look forward to seeing you there!

Matthieu de Tugny
President
Bureau Veritas Marine & Offshore
Optimum Survey Planning tool improves survey request process

Bureau Veritas’ new digital survey planning tool makes sure you get the right survey at the right time, in the best place.

Optimum Survey Planning recommends the most convenient date and place for your surveys, helping fleet managers save time and money, while limiting disruption to ship operations.

The application offers proactive notifications for optimized survey times and locations, accounting for both surveyor availability and expertise. You’ll receive an optimized survey and audit scope proposal, enjoy visibility of your request status and get information on Bureau Veritas-approved service suppliers in each port.

iCheck for Cyber Vessel evaluates cyber resilience

Bureau Veritas’ new application, iCheck for Cyber Vessel, enables owners, designers, integrators and OEMs to evaluate the level of cybersecurity present in their onboard and offshore systems, and unit infrastructure.

As assets become increasingly connected, the threat of cybercrime is growing. With iCheck for Cyber Vessel, you can learn the basics of cybersecurity and gain a high-level overview of cyber risk in your assets. Once users have undergone the self-evaluation, they can undertake further detailed risk analyses of vulnerable systems and measure security procedures against industry best practice guidelines.

iCheck for Cyber Vessel is a first step towards cyber resilience, and assets that meet Bureau Veritas requirements can earn two new notations: CYBER MANAGED and CYBER SECURE.

Veristar Equipment facilitates equipment certification for manufacturers

Veristar Equipment, Bureau Veritas’ upcoming digital platform, allows manufacturers to manage equipment certification requests. Manufacturers can submit requests for survey online, monitor the process in real time, receive automated notifications, contact Bureau Veritas directly and download their certificates from the platform.

Veristar Equipment is the latest addition to Bureau Veritas’ extensive digital offer, and will be available for all connected devices in September 2019.
New guidance issued on reducing onboard systemic failures

Bureau Veritas, TMC Marine and the London P&I Club teamed up again to address risk in shipping, including injury, loss of life and damage to vessels and cargo.

The latest publication in their series on loss prevention focuses on systemic failures onboard ships in response to a global trend of increases in system deficiencies related to the requirements of the ISM code. The booklet provides practical advice for preventing systemic failures, highlighting key elements such as the management of change, planning meetings and the importance of a Permit to Work system.

Cruise Survey Technology report

The passenger ship sector has seen considerable growth in the last five years and by the end of 2019 berth capacity is forecast to have increased by well over 25%.

Bureau Veritas’ latest Technology Report shares the perspective of owners Ponant, MSC Group, Mystic Cruises and SunStone and reviews some of the main issues in the cruise market today, including the technical complexity of cruise ships and the direct involvement of cruise lines with the general public. The report also explores the challenges and risks of two key areas for cruise ships: digital technology and sustainable shipping (e.g. LNG, batteries, fuel cells).

Fuel 2020 Technology report

As January 1, 2020 nears, questions of fuel availability, quality and management abound, with asset owners confronting a range of technical and operational challenges.

Bureau Veritas’ 2020 Fuels and Beyond Technology Report tackles the reality of new fuel oils, scrubbers, LNG and more, from 2020-2050. Our fuel specialists at Verifuel offer insight into the transition, guided by NI 559, Bureau Veritas’ guidance note on the use of low sulphur fuel oils. Bureau Veritas experts dive into the emergence of LNG as a fuel option, growing demand for small-scale LNG facilities and challenges surrounding safe bunkering, fuel quality and gas contaminant systems. Additionally, the report addresses the long-term goal of decarbonization, offering thought leadership on the future of sustainable solutions.

To get a copy of any of our Technology Reports or Guidelines, visit the dedicated Bureau Veritas Marine and Offshore website: marine-offshore.bureauveritas.com
Bureau Veritas is classing six luxury expedition cruise vessels for PONANT, four of which have been delivered. We headed to Ålesund, Norway to spend a day with the team at the VARD Søviknes shipyard.

The PONANT, VARD and Bureau Veritas teams with PONANT’s Captain Jean-Édouard Perrot discussing the ships under construction.

Christopher Vaes (New Construction Manager), Sophie Deltour (Qualification Manager) and Andreas Ullrich (Global Market Leader for Passenger Ships and Ferries) board the vessel.

Inspections in the engine room with PONANT’s Chief Engineer.

Inspection of the ‘Blue Eye’ lounge: Christophe and Andreas discuss the sophisticated design and workmanship.

Fire safety is critical for passenger ships: Andreas and Christophe inspect the insulation, looking at the ‘pin distance’ of the material.

Bureau Veritas and PONANT teams discuss next steps before heading home at the end of the day.

An ambitious newbuilding program

Le Dumont d’Urville, delivered in June, is the latest in the PONANT EXPLORERS series to set sail, following delivery of Le Bougainville in April and Le Lapérouse and Le Champlain in 2018. All feature the Blue Eye, a multi-sensory lounge located in the hull below the waterline. Bureau Veritas is also classing Le Commandant Charcot (pictured here), set to be the first LNG-powered hybrid-electric polar exploration vessel when it sets sail in 2021.
Automation has the power to transform the way goods are moved around the world. But first, owners need to overcome some major technical, safety and cost hurdles. We take an in-depth look at smart shipping today, and the projects that are propelling the industry into a new era.
While advances in autonomous technology are making unmanned short seagoing ships, offshore survey vessels and military vessels possible, fully autonomous deep-sea ships remain a pipe dream. Shipowners’ twin priorities are operating costs and safety. The investment required to automate a bulk carrier or containership to a level where it could safely sail without crew is today still eye-watering. Compared to the regular cost of running a standard crew of 10-35 people, the numbers simply don’t stack up – yet.

What is a viable goal today is the automation and integration of some critical onboard systems, a move that could reduce crew size and significantly improve safety.

**Evolving from decision support to autonomous navigation**

Features that provide decision support – similar to driver-assist systems in the automotive industry – represent the most fruitful target in the short-term. Such technology offers clear safety benefits. By collecting and analyzing data, for example on nearby traffic, smart systems provide crew with better situational awareness. They can also offer advice on the best decisions to take in line with vessel traffic regulations.

The next logical target is autonomous navigation systems. In this scenario, a ship would be able to steer itself under the supervision of crew, much as a commercial airliner uses autopilot to reach its destination under the watchful eye of a pilot. The automated navigation system would need to be capable of situational awareness, route planning and steering. A system has been successfully tested as part of a JIP in the Netherlands (see opposite).

**WHERE DO WE STAND?**

The word “autonomous” tends to conjure up futuristic images of robot ships plying the world’s oceans, not a human in sight. The reality is likely to be more prosaic.

**Where do we stand?**

10+ billion tons of goods are moved by sea every year

At what point does autonomous demand AI?

From this point, however, further automation starts to look harder. Even fully autonomous navigation remains an elusive goal, as computers still tend to struggle with complex traffic around coastal areas. Automated navigation systems are built around the idea that traffic is relatively sparse, and that vessels are behaving in accordance with international regulations for preventing collisions.
NOVIMAR
Using automated vessels to optimize existing infrastructure

The €8 million NOVIMAR project, which will run from 2017-2021 as part of the EU’s Horizon 2020 program, is a cutting-edge R&D project that aims to create a new waterborne transport concept. Vessel platooning comprises a vessel train led by a manned vessel, followed by a series of digitally-connected, low-manned or unmanned vessels. The goal: to optimize waterborne transportation by reducing costs and boost the use of inland navigation infrastructure.

Alongside several marine industry partners, Bureau Veritas is providing cyber expertise for the project, producing a cyber safety and security risk analysis.

New EU project
Taking to the water to reduce carbon emissions

A new autonomous shipping project spearheaded by the EU is investigating cyber technology’s role in procuring greener shipping alternatives that reduce production of CO₂. A number of Europe’s largest maritime leaders and independent research organizations are teaming up to develop and demonstrate two fully autonomous vessels capable of operating in a realistic environment.

Bureau Veritas is creating a regulatory framework for autonomous ships and cyber systems to the project, based on BV NI 641 and International Maritime Organization developments.

Dutch JIP
Testing the possibilities for man-to-machine transfers

How to optimize vessel operations, such that crew members can focus on other tasks? Since 2017, a Dutch R&D JIP has been trying to answer that question, by working on a detailed study of man-to-machine task transfer. In March 2019, it conducted 11 full-scale nautical scenario trials in the North Sea, with the help of 17 consortium partners, including Bureau Veritas.

During trials, a vessel with an autonomous navigation system connected to autopilot and a machinery control system performed evasive maneuvers safely, demonstrating an autonomous decision-making process. This showed that some tasks can successfully be transferred from people to machines and offered valuable input for future developments in autonomous shipping.

A viable goal today is the automation of some critical onboard systems, a move that could reduce crew size and significantly improve safety.

(COLREGs). The issue is that around the coast, a ship can be confronted with upwards of four surrounding vessels, including pleasure boats which may be behaving erratically. Any onboard navigation system would require some level of machine learning to collect data, assess its value and use intelligent algorithms to analyze the pattern and make intelligent decisions suited to the situation. But the real stumbling block is propulsion. Ship engineers regularly check fuel oil powered propulsion systems, inspecting filters and unblocking them when necessary. This simple task, and other typical maintenance duties that form part of the day-to-day life of crew members, are beyond the capability of industrial robots today. To be fully autonomous, a ship would require a much more reliable propulsion system that rendered frequent maintenance unnecessary, with equipment driven by data and software. This means one word: electrification.

Overcoming regulatory hurdles

The barriers may be high, but the industry is moving inexorably towards higher levels of automation and remote access, and regulation will need to keep pace. IMO has launched a regulatory scoping exercise to understand autonomous technology and how it should be regulated going forward. Bureau Veritas, which is involved in the IMO developments, and a range of industry projects, is issuing the second edition of its Smart and Autonomous Shipping Guidelines this year. Even the economic argument may soon be flipped on its head: seaborne trade, having hit 10.7 billion tons in 2017, is expected to continue to grow at 2-5% per year, and operators are already struggling to find crew. This could provide the catalyst the industry needs to invest. Automation could be here sooner than we think.
Bureau Veritas’ Najmeh Masoudi-Dionne (Global Technology Leader – Smart Ships) joins Bourbon’s Cedric Menard (Smart Shipping Program Manager) and Ilia Maslov (DP Superintendent) to discuss the development of Bourbon’s smart shipping program.

**NMD:** The new partnership between Bourbon and Bureau Veritas includes development of smart shipping technology and a remote monitoring DP system. Why did Bourbon choose to pursue these initiatives?

**CM:** Smart shipping is one of the key pillars of our #BOURBONINMOTION transformation plan, which focuses on offering high-quality, integrated services. By connecting over 130 cyber-enabled vessels to a global network, we can offer a range of benefits to our clients, including remote access capabilities, decision-making support, data retrieval from vessel control systems, real-time reporting, cost reduction and minimal downtime for annual DP testing.

**NMD:** Data collection and access are both big themes in smart shipping and DP survey technology. How do you handle data protection in your remote monitoring DP system?

**IM:** With a remote DP monitoring solution, surveyors can access unparalleled amounts of data from the cloud, whether they are onboard or onshore. By combining industrial data with vessel-integrated automation, surveyors can produce a far more accurate assessment of vessels’ performance and technical capabilities. However, to achieve that level of accuracy, shipowners must implement strong cyber security and safety measures to ensure their equipment and data remain uncompromised.

**NMD:** Looking forward do you foresee Bourbon tackling further smart shipping challenges with Bureau Veritas?

**IM:** Of course. We have a full slate of cyber projects on the agenda - including achieving continuous improvement for our Digital Logbook solution and developing our Digital DP Annual Survey plan - and with Bureau Veritas as a partner, we are confident we can accomplish our goals.

**CM:** We have a long history with Bureau Veritas, which has always demonstrated an open-minded, quality-based approach to innovation. This makes Bureau Veritas an ideal partner for developing our #BOURBONINMOTION transformation plan.

Bourbon takes on digital inspection and survey audits

This March, the Bourbon 508, an offshore support vessel stationed off the coast of Angola, performed an industry first when it underwent a completely digital Dynamic Positioning inspection and audit survey using Kongsberg Maritime’s DP Digital Survey solution. Information was acquired directly from ships’ control systems and delivered to auditors via secure infrastructure, greatly improving the quality of services.
Marine and offshore asset management methods have undergone radical changes over the last decade thanks to technological advances. The key for owners is finding the balance between asset integrity and performance.

When it comes to corporate profitability, asset management has always been a key focus of senior and executive management. Sometimes confused with asset integrity management (AIM), which assures assets are being run safely, asset management is about return on investment (ROI).

This means finding the optimum balance between integrity assurance and performance assurance. Get it right, and your ROI is optimized. Get it wrong, and you risk reduced profitability and integrity breaches.

Riding a digital transformation

Automotive, aerospace, F1, medical and defense industries have both pioneered and embraced the digital revolution’s exponential pace of change. Digitalization has now come to the maritime industry, from supply chain optimization, to spares management, to maintenance and reduction of onboard personnel.

This digital wave comes with a changing of the guard, as a younger, tech-savvy generation moves into more senior positions. The days of Excel spreadsheets and being chained to a desk are gone; now machines do the grunt work for us, processing and analyzing massive amounts of data collected from assets.

This frees up asset management professionals to concentrate on value-added tasks and find solutions to relevant challenges. Where we once used only a quarter of inspection and maintenance data, we can now use 100%, rationalizing collated data and determining which data adds value.

Digitalization also enables us to easily maintain asset integrity and performance. From an OPEX perspective, owners can achieve 25% cost savings through resource management, maintenance, part replacement and planning. CAPEX can achieve similar savings if implemented at the detailed design stage.

How Veristar AIM®3D Twintelligence is changing the asset management game

Bureau Veritas Solutions – Marine & Offshore’s Asset Life Management solution, Veristar AIM®3D asset, creates an exact digital twin of an asset, allowing users to visualize and analyze data at any level. By inputting comprehensive condition monitoring, RCM, CBM and other maintenance techniques, Veristar AIM®3D helps asset owners make better and faster maintenance and repair decisions, saving time and money.

Veristar AIM®3D has generated seven digital twins for floating units (FPSOs, FSUs, FSRUs) for four different clients. One client has already calculated a 25% operating cost reduction over a five-year period.

Adopting digitalization in the maritime industry will be an adjustment moving forward, but technology like Veristar AIM®3D is here and ready to go. It’s just a matter of using it right.

Successful asset management is about finding the optimum balance between integrity assurance and performance assurance. Get it right and your ROI is optimized. Get it wrong and you can end up bankrupt, in jail, or both.

Neil Pickering
Director Asset Management
Bureau Veritas Solutions – Marine & Offshore
MARINE RENEWABLE ENERGIES

PUSHING NEW FRONTIERS

MRE MARKET SET FOR GROWTH
The Marine Renewable Energy (MRE) market should see consistent development and growth over the coming decades, with the potential to produce 101 GW from tidal sources and 236 GW from wave by 2050.

A commercial tidal array and river tidal farm are already operational in the UK and France. Last year, Ghana became the site of the first tender for a 100MW commercial wave power plant.

A major development factor will be the industry’s ability to achieve cost reduction, thus moving to commercial and utility-scale arrays. According to a May 2018 ORE Catapult study, the levelized cost of energy (LCOE) for tidal energy in Europe could drop from €170 per MWh by 100MW installed to €100 per MWh by 1GW and €90 per MWh by 2GW. Many countries have already established national policies or are on their way to adopting new laws favorable toward MRE development.

At this stage, research and innovation are keys to increasing the readiness level of these technologies as the march toward commercialization continues. Bureau Veritas Marine & Offshore plays an active role in many MRE projects, helping minimize risk in innovative design solutions for energy capture, power conversion or mooring-challenges that the industry is addressing.

Franck Sylvain is a convincing advocate for EEL Energy’s tidal energy converter. A financier by trade, he discovered EEL in 2012 when he was hired to raise capital to develop the company’s fledgling technology.

Franck was so convinced of the technology’s green energy potential that he quit the world of finance to become the company’s CEO.

“Tidal power is completely predictable, making it the greatest potential source of energy available. It’s an emerging sector, offering huge potential.”

Instead of relying on a spinning turbine, EEL Energy’s tidal energy converter features a membrane that undulates under moving fluid pressure. It is this motion that is transformed into electricity.

In 2015, the company chose Bureau Veritas to certify the convertor’s power curve and confirm performance.

“We have to prove that our machines are robust and durable. As a recognized independent certification body, Bureau Veritas helped us gain credibility, when we were the first in the world to certify the power curve on our onboard generator tidal energy converter. We chose Bureau Veritas for their extensive experience in marine and offshore classification, which we saw as a real plus.”

As the cost of marine renewable energies started to drop, EEL realized they needed to simplify the technology to make it more cost-effective.

TURNING THE TIDES... INTO ENERGY

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40% decrease in levelized cost of energy (LCOE)
We modified the tidal energy convertor to externalize energy generation. Our new solution is simple, effective and robust. Power transformation now occurs outside of the water, which solves the problem of an overdose of force on the membrane. Our 3-kW prototype is capable of generating electricity with a leveraged cost of energy under 150 euros per MW. It is particularly suitable for use in waters with relatively low current – it becomes optimal at around 2.5m/second. This means it can be used in a large number of applications, including rivers. Furthermore, it creates no visual pollution, nor does the undulating motion harm marine life.

EEL is pursuing its goal of developing a 30-kW machine by the end of the year and a 1-MW machine by the end of 2020. Franck believes that Bureau Veritas’ services have a valuable role to play in demonstrating the commercial viability of the technology.

“Certification will enable us to demonstrate that our updated technology is reliable and that our figures are accurate. We are confident working with Bureau Veritas as their engineers really know what they’re doing. Their reputation for quality is well deserved, and we know their seal of approval truly means something in our PASSPORT EU.”

Bureau Veritas experts were in touch with our needs, and work delivered was of the highest quality.

As work progressed on Saipem’s pendulum floater, so named because of the floater’s stabilizing pendulum motion, the company turned to Bureau Veritas for Approval in Principle (AiP) of their brand new technology.

“Gaining Bureau Veritas’ AiP is the first step towards certification of new technology. The process allowed us to verify that design assumptions corresponded to the market’s needs. It also enabled us to conduct a complete design review, getting feedback from experts in several disciplines. Even at the earliest stages, it’s crucial to show clients that we have already taken the first steps towards certification. It reassures them and anticipates what often becomes a contractual obligation further down the road.”

Years of experience working for the energy industry’s biggest names have made Thierry Delahaye the perfect person to spearhead Saipem’s R&D activities for new technologies in renewable energies.

Building on the company’s expertise in EPCI for fixed and floating offshore wind, Thierry is currently working hard to get its innovative pendulum floater technology on the road to commercialization.

“Over the last decade, following extensive research and development, as well as studies of our fixed wind activities, Saipem has become aware of a need for new floating solutions. Seeking to address that, we quickly realized we would need to develop our own new floater technology since existing solutions did not fulfill our requirements. We wanted solutions that could be rapidly available for commercial farms across the world. The technology had to offer the best possible stability-to-cost ratio and was developed with the specific aim of reducing leveraged cost of energy. We really started with a blank page.”

When choosing to begin the certification journey with AiP from Bureau Veritas, Saipem were swayed by the company’s experience with floating wind projects. “Bureau Veritas has a worldwide network and so offers clients a certain proximity. Their experts were in touch with our needs, and work delivered was of the highest quality. However, what really made a difference was Bureau Veritas’ long history of work with floating turbines. They have a wealth of knowledge - including existing technical guidelines - having worked on other projects. We were keen to leverage that expertise. We learned a lot from Bureau Veritas, and I like to think they learned from us too!”
A CREATIVE SOLUTION FOR REVOLUTIONIZING UK DECOMMISSIONING

Forth and Tay Decommissioning, a newly formed alliance created by public-private partnership Dundee.com, is developing an innovative, low-cost solution to keep North Sea decommissioning local.

When it comes to decommissioning large offshore oil and gas platforms, the UK has a problem. Traditionally, large assets are transferred to the nearest ultra-deep water (UDW) port – a quayside area where water depth reaches more than 24m – for decommissioning.

However, the UK lacks natural UDW ports, and the dredging process required to create sufficiently deep artificial ports is both expensive and environmentally unsound. This means that most North Sea oil and gas assets are transferred to Norway’s UDW ports for decommissioning.

To encourage local decommissioning, the Scottish government launched a feasibility study into building UDW ports. Through its Aberdeen-based subsidiary, Maritime Assurance and Consulting (MAC), Bureau Veritas Solutions Marine & Offshore is collaborating with Forth and Tay Decommissioning alliance (F&TD) to offer an alternative decommissioning solution for the North Sea.

Bringing the quay to deep water

One answer may be building what F&TD and BV Solutions M&O call “virtual deep-water ports”. These ‘virtual’ floating quaysides would be located in the UK’s natural inshore UDW areas. Heavy Lift vessels would bring assets to the floating quay, and transfer modules, or entire topsides, onto a system of barges, which would tow assets to reception facilities for cleaning and processing.

With a new approach, challenges and benefits

F&TD and MAC’s innovative concept prompts many questions. One of the biggest concerns is the risk involved in transferring modules and topsides weighing up to 25,000 metric tons onto barges. Another consideration is how many barges will need to be built or chartered.

A full cost benefit analysis will also be crucial. Decommissioning costs for the UK Continental Shelf exceed £50 billion, and the Oil & Gas Authority (OGA) wants to reduce that by 35%. As F&TD and MAC define the scope and execution of this project, the question of cost looms large.

However, the potential benefits are enormous. “If our solution works,” says Callum Falconer, Chief Executive of Dundee.com, “it could be used as a bi-directional transfer station. The same barges used for decommissioning could help with constructing offshore installations, including assets for the renewable energies market.”

A strong partnership pushing the limits of decommissioning

Bureau Veritas subsidiaries MAC, TMC Marine and MatthewsDaniel have and are offering their expertise in Salvage and Wreck Removal, Marine Claims and Accident Investigation, and Loss Adjusting and Marine Warranty Surveying.

“Bureau Veritas with its family of companies was the obvious choice for this project,” notes Callum Falconer. “We have a strong working relationship, and a partnership with BV Solutions M&O greatly elevates our project in the eyes of the offshore world.”
With North Sea installations varying in age and lifecycle, Shell UK requires independent verification to demonstrate that it is operating safely and under full regulatory compliance. Graeme Wylie, Technical Integrity and Verification Team Lead for Shell, explains.

At Shell, verification plays an important role in how the company manages safety on its assets on the UK Continental Shelf.

“Ageing facilities and ever-changing organizations mean independent verification is more important than ever. At Shell, it plays a key part in our ability to demonstrate clearly that we are safe to continue to operate as well as ensuring full regulatory compliance,” says Graeme Wylie, Technical Integrity and Verification Team Lead for Shell.

“Our current North Sea offshore portfolio consists of seven fixed installations and a host of normally unmanned installations. We require a number of different verification services ranging from operational, plant modifications, Safety Case and performance standard material changes to platform combined operations and decommissioning.”

Bureau Veritas has been Shell’s contracted independent verification body (IVB) for over ten years. The work includes operational verification of each asset via site visits and onshore maintenance management audits and verification of major changes, including decommissioning.

Graeme highlights a concrete example of the benefits of independent verification:

“Recently, Bureau Veritas identified some gaps in our performance standard management. This resulted in a company-wide improvement project.”

To help Shell accomplish its verification objectives, Bureau Veritas recently introduced a new online tool: BV Compliance. Both a desktop and app-accessible tool, BV Compliance enables operators to get complete maintenance inspection verification information through a single user-friendly interface.

Whether an operator is looking for a high-level view or wants to zoom in on individual assets and systems, BV Compliance responds accordingly. Its design offers clients ease of planning, ongoing verification and inspection, and historical data tracking, all with a much quicker turnaround than was previously possible.

“BV Compliance is a huge improvement,” Graeme says. “Having all the planning, work scopes, reports and findings in one database makes for huge efficiencies. With it, we can identify trends and themes from the findings and have one live version of visit work scopes.”

10+ Years
Bureau Veritas has provided Operational and Project Verification services to Shell

This has resulted in significant improvements in all areas, especially with planning. Bureau Veritas, our schedulers and offshore personnel have access to the latest, controlled version of verification work scopes.”

In the coming years, verification will continue to evolve, with an increased focus on digitalization. “I believe we will look for digital technology to allow more opportunities for remote, real-time verification,” Graeme says. “With easier access to data and manipulation of the same, we will look more to risk based, targeted verification.”

Credit photo: © Shell
TOGETHER WE BUILD ON WHAT WE KNOW TODAY TO CHANGE HOW THINGS ARE DONE TOMORROW...

FOR GOOD

FOR THE BUSINESS AHEAD

High-performance technical advisory, asset management and assurance solutions for the marine and offshore energy markets.