



Vessel-Check

Aquatic Biosecurity Risk Management Tool



Invasive marine pests (IMS) pose a significant threat to the biosecurity of aquatic environments, fisheries and other maritime industries and the pathway for these pests are often through the biofouling of a vessel's hull.

Biosecurity Regulators are responsible for evaluating, assessing and managing of this risk



Challenges

- This risk is expected to increase as global shipping increases
- Lack of a consistent methodology to assess risks in line with international guidelines
- Lack of connectivity between regulators
- Ability to make informed decisions
- Understanding of the potential risk presented by the large amount of vessel entering jurisdictions

- Vessel Inspections are done on an ad-hoc basis
- Majority of systems are paper based
- Different methodologies for assessing biosecurity risk linked to biofouling



Ideal Solution

- Real Time data that assist and allow the proactively management of IMS risks
- Follows 'best practice' - IMO's guidelines
- Easy access to all of the Biosecurity information
- Easy access for vessel owners/operators to capture information
- Ability to assess a jurisdiction's overall risk profile
- Ability to share information between jurisdictions

- Reduce regulatory burden and IMS risk
- Going from Reactive → Proactive
- Real-Time Information
- Cost savings from efficiency
- Targeted staff interaction



Desired Outcomes

Cloud based solution that is user friendly and easily accessible by both Regulators and other stakeholders in the maritime industry. It provides centralised access to biosecurity information and the ability to consistently assess the potential risk of a IMS. The system is running live in Western Australia and Victoria and is being trialed by other Australian states, New Zealand, and in the USA.

- Improved Aquatic Biosecurity risk management, leading to reduced incursions
- Global and central visibility, reporting and communications producing efficiency across the marine industry
- Improved transparency and a reduction in the regulatory burden for vessel owners.



DHI, Vessel-Check



“Vessel Check Portal helps Regulators who want to understand Biosecurity risks by automating vessel risk assessments in line with IMO guidelines and providing them with Vessel profile information”

Risk Assessment Methodology

- Transparent and configurable risk assessment methodology
- Based on IMO guidelines
- Methodology focused on vessel management practices
- Re-use of information across jurisdictions
- Automatic risk calculation including near real time vessel arrival history

Elegant User Interface with Intuitive Work Flows

- Spatial and temporal information views
- Multi-user role based access
- Searchable and selectable map views and tabular views
- Modern UI/UX
- Sophisticated and Customisable reporting views

Centralised Management and data sharing

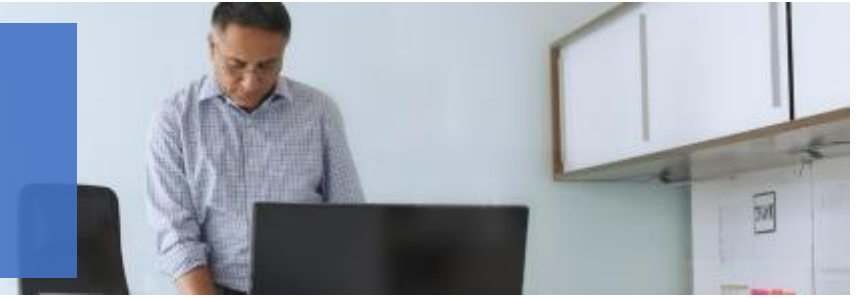
- Efficiency in information management across the marine industry
- Centralised storage of information for vessel owners
- Provides intuitive and secure functionality to allows data sharing and communication between regulators.

Online support and Maintenance

- Solution supported by internationally based environmental software company
- Flexible costing model
- Freemium access for vessel owners/operators

“Cloud Based Aquatic Biosecurity Risk Management Tool that support both regulators and the marine industry and provides a consistent, transparent and automated risk calculation of a vessel’s biosecurity risk in-line with IMO biofouling guidelines”

DHI, Vessel-Check in Azure



Having reliable and secure access to biosecurity information is essential to provide regulators the ability effectively and efficiently manage biosecurity risk. We chose Azure for enterprise-grade reliability and security which gives us the confidence that we can provide the level of service needed for this solution. Azure also allows us to rapidly expand and distribute new functionality.

Solution Alignment

Enterprise Grade Reliability

- Faster access by having the solution across various international zones.
- Failover redundancy
- Tighter integration between front-end and existing back-end systems.



Cloud Protection

- Increased security to safeguard sensitive information
- Leveraging Azure privacy features.



Enhanced Scalability

- Scalable capacity to adapt to variable demand
- Easily manage increased user base
- Increased capacity for storage, etc.
- Access to Application monitoring and insights

