

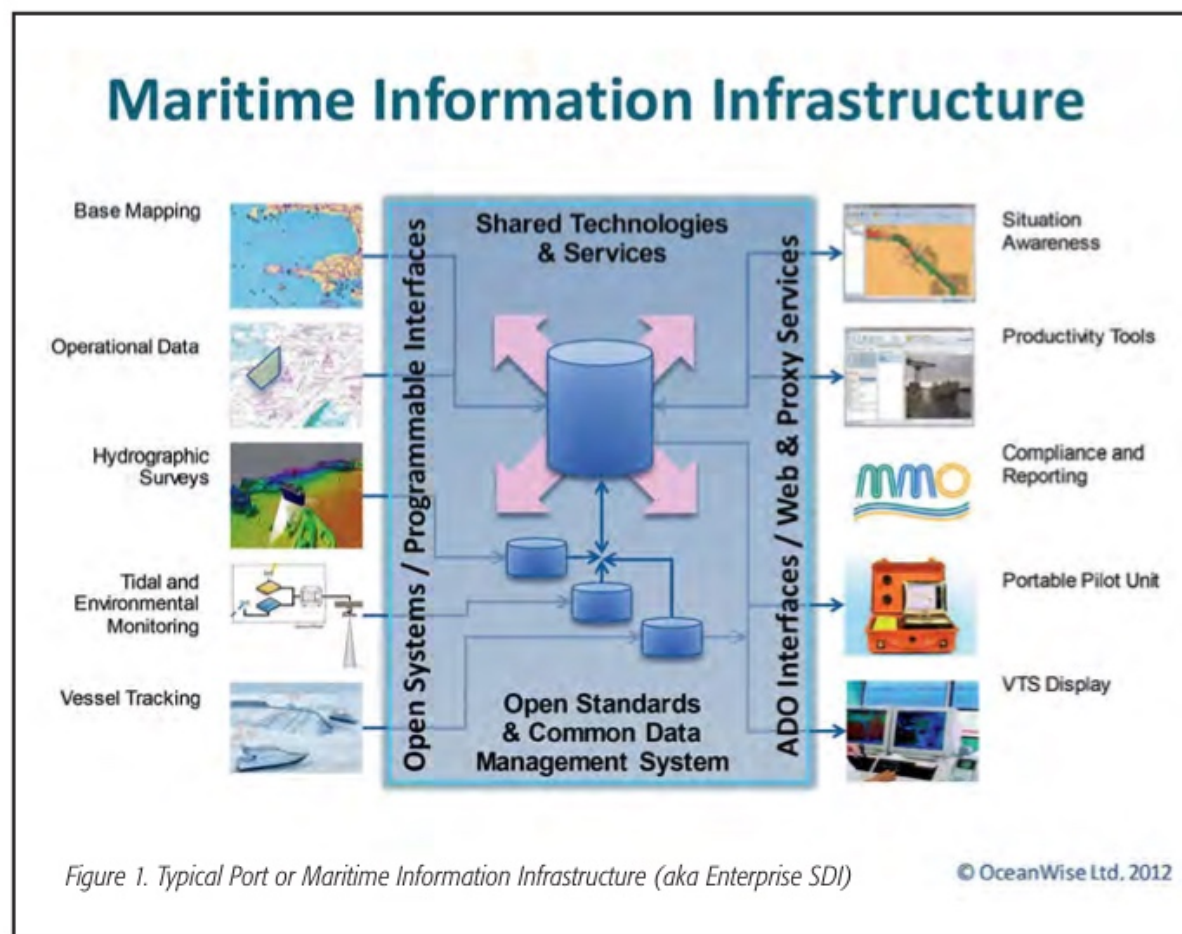
Don't just monitor i

By Dr Mike Osborne, managing director, OceanWise Ltd, Hampshire, UK

OceanWise delivers a new approach to environmental data sharing and publishing. Discover how UK ports and other organisations responsible for maritime operations are improving how they acquire and use data by adopting a modern, data-centric approach to information management

Reliable and up-to-date data on water level and weather is critical to most maritime operations. The data is required in real-time in Vessel Traffic Services (VTS) centres, by pilots and onsite superintendents, and as a historical record for reporting and to update tidal predictions. Often though, many ports and other operators find that, while their sensors continue to work satisfactorily, the telemetry, management and display of data is often poorly implemented or overlooked. Furthermore, the ability to use this data in external applications, such as to calculate under keel clearance or vessel motion dynamically, to assimilate the data into numerical forecast models, or to broadcast the data to vessels at sea automatically via AIS, for example, is non-existent or limited.

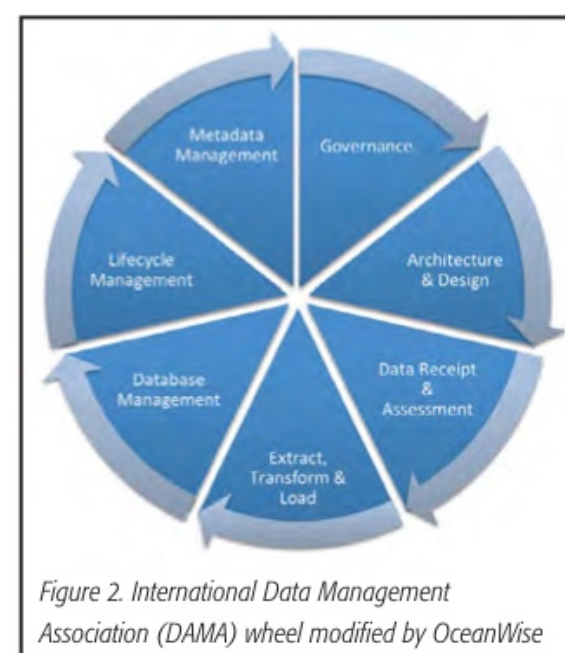
Streamlining how an organisation considers and manages its environmental data, by adopting a more data-centric approach, can bring major benefits. OceanWise has been working with ports and other maritime operators for more than five years and has pioneered the concept of a port, or when considered



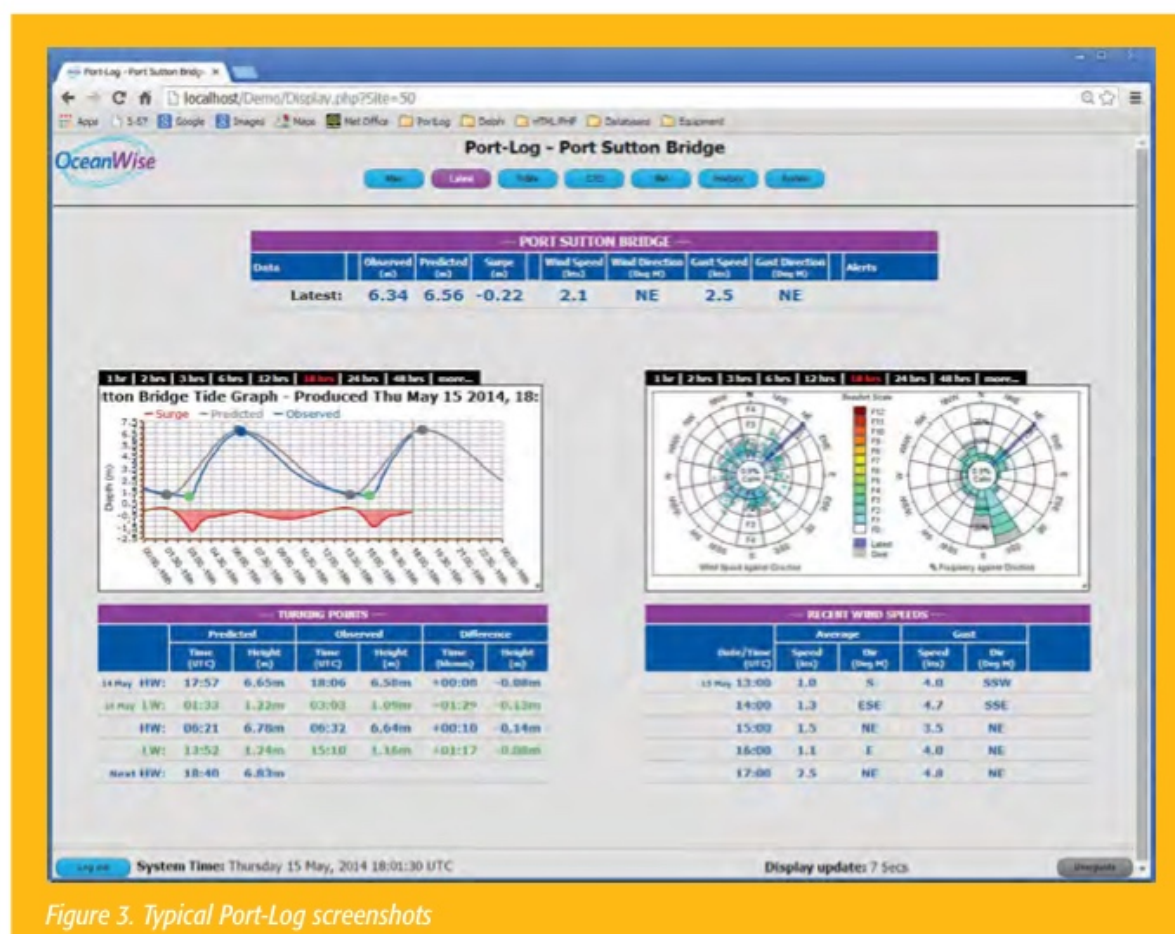
more widely, a maritime information infrastructure (Figure 1). This infrastructure is based on sound data management principles and best practices, which can be described as a Spatial Data Infrastructure (SDI) operating at an enterprise level and encompassing land and marine, as well as commercial and logistical, components. By developing this concept over time, an organisation can consider its data and information as a centralised and valuable asset, connecting disparate sources of data (for example, sensors), and thus making data processing and information exchange more effective and, in doing so, realising business improvements for all its stakeholders.

The means of achieving these benefits is endorsed by adopting a data governance framework, policy and management system which sits alongside and supplements other business management systems, such as for quality, environment and health and safety. Whilst it is feasible –

and OceanWise has assisted many organisations in doing this – to improve how data and information is managed without a data policy and management system in place, it does encourage the high level buy-in and managerial commitment that is necessary for long-term investment and success. Whilst there is presently no international standard for data



t, manage it!



management, similar to ISO 9001 for Quality Management, there is plenty of reference material and examples of best practice to draw on (Figure 2).

OceanWise's environmental data sharing and publishing platform, Port-Log.net, uses open standards and a data-centric approach to help many organisations globally achieve the above aims (Figure 3). It provides access to reliable data on a 24/7 basis for multiple purposes and provides a reliable long-term record. The online or cloud-based system means there is no need to install new servers or worry about upgrading existing hardware and software. Also, the system provides for the integration of almost any sensor, meaning it can use existing monitoring equipment, resulting in large cost and time savings, and with the security and comfort of a fully supported flexible system.

Our consultative approach is much appreciated by our customers. Often, the

customer does not require a completely new monitoring system and a phased upgrade will suffice. As Russell Bird, Peel Ports Group hydrographer, explains: "This is a big attraction as it means lower front-end costs and a much quicker installation."

Port-Log is being rolled out across Peel Ports and Associated British Ports (ABP), as well as being used by the Port of London Authority (PLA), which replaced its old system in 2013. By June 2017, all major ports in the UK, as well as wind farm and other maritime operators and agencies globally, will have adopted OceanWise's way of working and will be realising the incremental benefits that result from not just monitoring their environmental data but managing it as well.

OceanWise will be exhibiting at Ocean Business 2017 on stand R5 and hosting a workshop on Wednesday, 5 April from 1500-1600 in Access Grid Room 124/14.

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