Fewer books on the bridge, more information

Ben van Scherpenzeel, initiator and project leader, IHMA Nautical Port Information Project

Nautical port information
For many reasons, nautical port information is of great importance to masters, shipping lines, trading floors, agents and publishers of such information. Why is this information important and what is it used for?

Rules and regulations
- Masters must comply with IMO requirements for berth to berth passage planning. IMO resolution A.893 requires voyage or passage planning, which is essential for all ships engaged on international voyages. The aim of passage planning is the preparation of a ship’s navigation plan so that the intended passage can be executed from the departure port to the arrival port (‘berth to berth’) in a safe and efficient way, in respect of both the vessel and the environment. The significance of this activity is highlighted by the fact that most accidents happen between the pilot station and the berth. Additionally, ships will grow even bigger in size. As a result safety margins are getting smaller, increasing the need for more detailed nautical port information.
- Information used in this process may differ from source to source and the master is then faced with the difficult task of selecting the right information.
- The vessel also has to comply with provisions and stipulations laid down by insurance companies that port information should come from a reliable source (the harbor master). P&I clubs have reiterated the advice on the exchange of information ahead of pilotage.

Environment
Next to the rules and regulations, there are also environmental reasons for having correct port information.

- Reducing emissions at sea – With proper tidal window and berth availability information one could sail to the pilot station at optimal speed, saving bunker fuel and hence reducing emissions. The reduction of greenhouse gas emissions at sea has become an important driver. By sailing to the pilot station at economic speed with proper tidal window information, one can save up to 50 percent of bunker consumption.
- Reducing emissions in port – With proper terminal information one could prepare the ship properly for mooring and loading or discharging operations, saving time in port and hence reducing emissions. The reduction of greenhouse gas emissions in port has become more and more important. By preparing the ship properly for port, not only is operational safety improved, but one can decrease the need for tugs, auxiliary and main engines, and the amount of hours in port can be reduced.

Commercial
There is a commercial reason as well; trading floors, where a ship’s destination and amount of cargo is decided, also need nautical port information. If trading floors are not certain about the exact depth, they apply an additional safety margin, resulting in less cargo for the port and a tremendous inefficiency in the logistics

Background on The International Harbour Masters’ Association (IHMA)

Alan Coghlan, president, IHMA
The IHMA is a professional association for harbor masters. Founded in the 1990s, it is a non profit organisation, with 200 members throughout the world. Our beginnings lay in the European Harbour Masters’ Association (EHMA), which was founded at Cork in Ireland in 1985. Following that occasion there were constant contacts from outside Europe asking if they could become involved. It soon became clear there was a demand for such an association to cater for harbor masters throughout the world and a little more than a decade after the founding of the EHMA it was decided to cater for those outside Europe and the IHMA was formed. The association is governed through an executive committee of seven full members and a permanent secretary. To cater for the individuality of regions, a European Harbour Masters’ Committee (EHMC) exists with IHMA and as numbers grow in other regions it is intended to follow that regional committee model. We also maintain very close official links with ‘sister organizations’ such as the International Maritime Pilots’ Association (IMPA), the International Association of Lighthouse Authorities (IALA) and the Nautical Institute (NI).

Our principal aim and objective is the promotion of safe, secure, efficient and environmentally sustainable operations within ports. To date this has mainly been spread through our Congress, which is held every two years. Another important vehicle for the promotion of our aims is attendance at IMO as an NGO. As an observer at IMO, the ability to positively contribute or influence is limited. However, in our opinion, attendance is important, as it is the one place where all international maritime interests meet. We have become aware that in order to further contribute to worldwide safety of operations within ports we must develop and publish credible position papers and initiate meaningful projects which will be of benefit to both ports and their customers.
Electronic charts and publications

The increasing number of digital publications and Port ENCs contribute to an efficient voyage. Ships have been fitted more and more with satellite communication systems, enabling them to log on to port and terminal websites and plan a port visit whilst at sea. These digital publications raise the frequency of updating dramatically and enlarge the users’ expectations on the correctness of data. Having correct digital data available becomes an absolute necessity.

One would think that this information is sufficiently available. However, IHMA found that this is not the case, at least not in a worldwide uniform standard; the information many times is incomplete for many ports, and it is not always accurate and certainly not easily accessible.

IHMA investigated the root cause of this lack of information and found three main causes:

- Harbor masters receive many different questionnaires from all sorts of publishers of nautical information. Completing these questionnaires is administratively cumbersome, resource intensive and leads to different information about the same port as not every questionnaire is completed by the same person.
- On top of this, many cross links between parties will always result in miscommunication.
- Apart from many questionnaires and cross links, a lot of people in the nautical chain are not always aware of the importance of this information.

In an ideal situation, nautical port information will originate from an authorized source, will be reliable, up to date and available online. However, to date most of this information is gathered from ship’s agents and distributed by private parties. To keep this information accurate and up to date is a challenge. The various, sometimes inconsistent sources of nautical information required for port entry and berth or terminal usage may lead to confusion as to the user bearing directly on ship and port safety and efficiency of port operations. The lack of uniformity and availability of reliable port and terminal information originates from the fact that this information is generally published in printed documents which generally do not contain the most recent information. Publishers gather this information by sending questionnaires (in different formats) to port authorities, ship’s agents and terminals. In general ports do not have a central source for this information.

Ships have been overwhelmed with Safety Management Systems in the last decade in a rather hasty way. As a result the maritime industry has now the impression that a ship, laden with documents and procedures, sails into a port or terminal, and finds itself in an environment with not even the basic information available, nor transparent procedures or certification. There is a strong call that ports should catch up with the ships. The first part is general port information for the port as a whole, giving general nautical port information such as:

- harbor entrance and exit, fairways, directions, navigation warnings and notices to mariners.
- contact information and port regulations
- notifications, arrival and departure checklists
- port description and navigation
- port safety
- port security
- environmental information
- nautical services and communication
- port operations and services

The information in question

The required nautical port information consists of two parts. The first part is general port information for the port as a whole, giving general nautical port information such as:

- contact information and port regulations
- notifications, arrival and departure checklists
- port description and navigation
- port safety
- port security
- environmental information
- nautical services and communication
- port operations and services

The second part of nautical port information is port information for each berth or fairway section, giving specific nautical port information per section of the port – approaches, anchorages, exits, fairways, berths and covers information, such as:

- position
- UKC policy
- wind, tidal, visibility restrictions

There is an important difference between the information in sailing directions, navigation warnings and notices to mariners. All those have a focus on seas. The IHMA information on the other hand has a focus on ports, providing information between piloting station and fenderline.

Knock-on benefits

Nautical knowledge that is explicitly available will not only serve ship masters and maritime industry. Also the port organizations benefit, because, as Alan Coghlan, president IHMA, points out: “Looking into the future it is likely that the numbers of qualified mariners in the port industry will decrease. Therefore we believe...
it to be very important to create a standard of nautical knowledge that will serve ports, ship masters and all other stakeholders of the chain well into the future. Through the chain we are creating awareness of our world, therefore it is now time to share our world and our knowledge in an accredited standard. This is what is expected of us."

Benefits for the port organization are as follows:

• Specifying explicitly all nautical knowledge in one document can improve processes in harbor masters’ organizations.
• An explicit inventory of all the knowledge that a whole generation in the port authority may have is made before this knowledge gets lost.
• New people entering harbor masters’ organization have a solid instrument to get acquainted with all admission policies.
• Admission policies will be communicated to agents and vessels in a uniform and unquestionable way, also when port officers change watch.
• Knowledge on admission policy will no longer be kept to the port authority alone, but will be transparent and shared with the outside world for better planning and more safety.

Good nautical port information is the foundation of safe, efficient port use in the most environmentally sensitive and collaborative manner. Good quality information and data means that all information is consistent, accurate, up to date, complete and most importantly, is based on a port industry standard. By improving the information within the supply chain, trading partners will improve safety, reduce costs, improve productivity and accelerate product access to the market.

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