

The role of navigators is less and less about navigating ships and more and

more about paper-shuffling and box-ticking. Some have argued that the rising administrative burden is eroding the job satisfaction of the current generation of bridge officers. Therefore any system capable of reducing the amount of bureaucracy involved in contemporary navigation practice is likely to be welcomed.

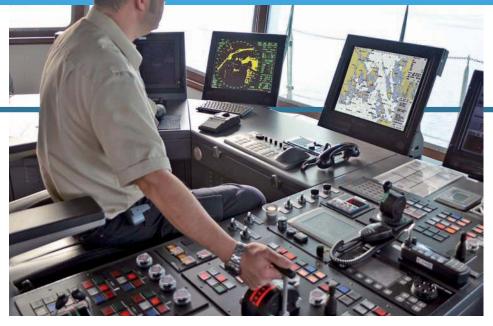
One of the biggest issues is chart management and more specifically checking that the licences and permits to access the electronic charts needed for the upcoming voyage are in order. While most chart suppliers today offer some kind of software intended to streamline this task, Navtor's Willy Zeiler believes more can be done.

'With a traditional ENC service, the navigator had to plan the voyage and then order a calculated portfolio of ENC chart cells by email for the route. He then has to obtain the permits or license files and make sure these are installed prior to setting sail,' he explains. 'This is mainly due to the way ECDIS evolved as a technology to mirror the practice with paper charts.'

The team at Navtor believe the time is now right to completely rethink the mechanisms for chart supply. 'What we are proposing is a subscription service in which all ENCs and their permits are preloaded and immediately available, for convenience, but not least for safety and security as well!

This may sound similar to the Pay-As-You-Sail (PAYS) concept pioneered by Netherlands-based Datema. But, in fact, takes it one step further. The ENC Track by Datema requires additional hardware to be installed on-board in the form of a GPS transponder, which monitors the vessel's location in order to determine which charts have been accessed and charge the owner accordingly.

In contrast to Datema, Navtor does not need to install a transponder on the vessel to get



## Breaking A Reducing the admin related to chart licences would let bridge officers look out the window

Planning with electronic charts is cumbersome because it mirrors the practice with paper products. It does not need to be this way, argues Navtor's **Willy Zeiler** 

the exact position, but takes advantage of and uses existing equipment. Hence, the shipowner will negotiate a contract that fits the trading patterns of his vessels. 'One owner might opt for coverage of, say, European waters on a yearly subscription, while another with less predictable routes might choose a global portfolio on a threemonthly plan. Our objective is to free officers from the burden of managing hundreds of permits.'

'Accessing charts for planning purposes when the vessel is alongside dock and not moving is free of charge. The rules state that navigators must plan their voyage on the charts they will sail on. Once underway, we invoice only for the chart cells actually used for navigation. The invoice will be generated after usage!

In the case of additional coverage being needed, it is not necessary to send an email to the chart supplier placing a new order. Everything is already available onboard. Likewise, should the vessel's destination change after setting sail, it is not necessary to get in contact with the supplier to request a credit note for charts no longer required. Portfolio renewal is also more straightforward.

Navtor's approach is built on the premise that conventional methods for obtaining charts are on the way out. Electronic charts are not subject to the same limitations as their physical paper predecessors. The technology for PAYS exists and there is increasing awareness of the concept within the industry. It is true there has been resistance to the idea, from some hydrographic offices and mainly by those that are "doingvery-well-thank-you" from the traditional business model, but that will crumble eventually.

Zeiler believes that the introduction of compulsory ECDIS will drive the commercial acceptance of PAYS. 'Until now ECDIS uptake has been limited to a subset of the world's fleet. But when carriage becomes mandatory on more and more vessels, so more and more owners and operators will be confronted with the administrative headache that comes with managing a chart portfolio. Some may plod on, but others will look to systems that can eliminate some or all of the drudgery and hassle.'