ENSI-project, test-bed for the exchange of Route plans in Gulf of Finland

1. Introduction

Finnish Transport Agency, in co-operation with other stakeholders in the Finnish maritime industry, is developing a new service where vessels can share their electronic route plans with maritime authorities. The safety of the route plans will be checked in advance. All anomalies or defects in the plans can be observed at an early stage, and vessels will be notified of these observations. The aim is to reduce the possibility of human errors made during route planning.

Currently the service is being piloted in the FTA's coastal VTS centres in co-operation with several shipping companies which have regular traffic to Finnish ports.

2. Description of the service

When using the service, vessels plan their route with ECDIS as usual, and using a simple chart application, they can send the route plan to VTS centre. Using the same application, they can also give the information that is required in the report for the mandatory Ship Reporting System in the Gulf of Finland, GOFREP. The aim is to lessen the administrative burden on board and the need for VHF communication when vessels enter the area. Also ordering a pilot for Finnish ports can be done at the same time.

An automatic route safety check will be done when route plan is received ashore, similarly as should be done on ECDIS by the mariners. Safety check will use largest scale enc's available from the area. To make sure that the chart material has the most recent information, system uses Primar's ECC remote update protocol for automated chart updates.
Several accident investigations have shown that results from on-board ECDIS safety check can be misunderstood or neglected. ENSI service provides additional maritime authorities observations for the safety of the route, all hazards along the planned route will be highlighted for the navigator. The same information is also given for VTS operators. If needed VTSO's will contact the vessel well in advance to make sure that navigators have taken the observations into account.

Parameters used for the safety check have been adjusted depending on the area and may thus differ from the ones that mariners have set on their ECDIS. This will make sure that sufficient under keel clearance and cross track corridor values are used. Also additional enc object classes can be used for the check; these include information about depths of the swept area and recommended depths for routes and fairways.

After navigators have sent their route plan, they will be able to easily see if the route plan is safe or if there is a need for altering the route. At the same time navigators can choose other information that will be displayed on the chart. This

includes information on weather and ice conditions, ice waypoints, navigational warnings and information about other possible hazards or anything unusual along the route for the planned voyage.

Route plans received from vessels are also incorporated in the VTS centres' real time traffic image. Detailed information about vessels plans helps to detect possible traffic congestions and risk situations in advance. VTS operators will also monitor vessels movements along the planned route. Automatic alarms will help the VTS operators focus their attention on areas where it will be needed.

The technology used for information exchange between shore services and vessels is developing rapidly. Experiences from the current ENSI test-bed will be used for further development of the route exchange services, in co-operation with other test-beds in the Baltic Sea area.

3. Actions for the BSHC 20th Conference:

The BSHC 20th Conference is requested to

- take note on this information