

Voyage Planning with ECDIS



ECDIS Generic Training Course





Global service built around you

General Principles

Voyage planning using ECDIS is extremely effective if carried out correctly and the equipment is set up properly. The principles of voyage planning remain the same as always when using ECDIS.

APPRAISAL, PLANNING, EXECUTION, MONITORING.

We would also recommend an EVALUATION stage after the voyage to take account of any feedback.

Training

Officers on board vessels fitted with ECDIS must be trained in its use as per the STCW convention.

As well as the generic training course ashore, it is recommended there is also a familiarisation programme for the ECDIS fitted on board the vessel. This is usually referred to as type specific training.

Procedures

The vessels SMS should include a section that refers to voyage planning, this should include the use of ECDIS.

The Master should also outline the safe use of ECDIS in his standing orders.

Software

 ${\tt ECDIS}\ software\ should\ be\ up\ to\ date.\ Any\ {\tt ECDIS}\ abnormalities\ should\ be\ known\ by\ the\ users.$

Check your ECDIS software is up to date, or for any ECDIS specific issues here:

https://www.iho.int/srv1/index.php?option=com_content&view=article&id=585:news&catid =166:1news-links<emid=287&lang=en

Check for any known abnormalities on your ECDIS here:

https://www.classnk.or.jp/hp/pdf/activities/statutory/ism/imo/MSC.1-Circ.1503. pdf



Checklist

ECDIS VOYAGE PLANNING

Use with on board procedures, ECDIS manufacturers guidelines, and The ICS Bridge Procedures Guide.

Disclaimer

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The following points are for voyage planning with ECDIS in addition to the usual voyage planning requirements:

Appraisal Section (should include):

Relevant SMS section and Masters standing orders for voyage planning with ECDIS read
Latest software is uploaded to the ECDIS, and all abnormalities are known
Input sensors operational, such as Gyro and GNSS
ECDIS internal log checked for failures or abnormalities after update
Relevant ENCs, publications and licences are available and up to date
Digital chart catalogue checked for appropriate ENC requirements
Ship specific characteristics are known, for example draft, dimensions and turn radius
Any additional planning software on board ready and correctly used
Planning Section (should include):
The planning is conducted using an appropriate scale on the ECDIS
Any limitations of the ENCs in use considered - CATZOC or horizontal accuracy
The relevant layers of information are on the ENC during the planning phase
The correct safety parameters and contours are input for each leg of the voyage
A safe speed is decided for each leg
Alarm limits are decided for each leg of the voyage for use with the passage scanning function
Execution Section (should include):
Ships characteristics correctly input into the ECDIS
Ensure the correct scale is in use for executing the plan.
The appropriate layers are displayed on the ENC during the execution of the plan
All required course notes are input correctly
Appropriate cross track error input into the ECDIS for each leg
Alarm set points input as per SMS and Masters requirements
Under keel clearance requirements input as per SMS requirements
Plan scanning function activated to check for issues in the plan
Plan verified by Master both visually, and by plan scanning function
Monitoring Section (should include):
Monitor the alarm set points of the ECDIS, check each one before accepting and cancelling
The appropriate scale should be selected at all times and correct layers shown on the ECDIS
External inputs into the ECDIS are operational, for example Gyros, Radar and AIS
Overlays used as appropriate
Correct vector type and length used.
Take traditional range and bearings visually or by radar for plotting to cross check with GNSS system
Use look ahead alarm features to assess dangers, such as the anti-grounding cone
Handover of the watch procedure conducted as per SMS requirements
Evaluation (should include):
Once the voyage is complete, feedback should be collected and used when planning the same voyage in the future