



DP SOFTWARE POLICY

PURPOSE

Software is used onboard dynamic positioned vessels to measure and respond to changes in the environment maintaining the vessel position. Due to the operational environment of most DP vessels and asset high cost of platform/vessel the consequences of a position based incident are massive. Therefore it's vital that we control the software and any associated updates which interact with the dynamic positioning system as a means of good practice.

OBJECTIVE

This procedure's main objective is to:

- Ensure that all software is controlled and effectively backed up
- Ensure that version control is maintained and tracked
- Ensure that software updates are assessed and authorized by a competent person
- Ensure any updates made were successful and that no adverse effects are created elsewhere in the DP system

SCOPE

This procedure covers the control of any software that is part of the integrated dynamic positioning system of the vessel. This includes but is not limited to the following software's:

- Dynamic Positioning Software
- Reference System Software
- Power Management System Software

SOFTWARE REGISTER

All vessels shall maintain an accurate register of the software used on the dynamic positioning system, reference system and power management system where fitted. For each software in the register an associated master DVD or alternative storage device shall be maintained on board in the controlled software folder. The folder will be controlled by the Master.

REPLICATION OF MASTER DISCS

Master disks shall only be used for storage and back up purposes only. Any times the software is to be used then a controlled replica needs to be made and the software used for replication must have the ability to verify the data is replicated correctly.



CHECKING FOR UPDATES

Once per year the company shall check with the suppliers of the DP Reference and Power Management Systems suppliers for software updates that affect the hardware installed onboard the vessels in the fleet.

MANAGEMENT OF CHANGES FOR SOFTWARES UPDATES

The company has a clearly defined process for the Management of Change (MOC) in company's safety management system. All software updates shall be classed as an MOC situation where the risk of the alteration has to be assessed, control plan developed and the authorization must be obtained before the change can occur. Before any software update is scheduled to be made then authorization of the update must be given. All software updates are to be made by the manufacturer's representative where possible.

BACK UP AND ROLL BACK REQUIREMENTS

As a recovery measure for all updates the master/senior DPO must ensure that a backup of the present software and system data (where possible) is made prior to the update. Some systems allow for roll back features. If possible then ensure the system has the capability to roll back to a previous working version before commencing the update.

SOFTWARE UPDATE VALIDATION

After any update of the software on any of the equipment falling under the scope of this procedure, then is the responsibility of the master and SDPO to validate the effectiveness of the update as well as verify that no other adverse effects are occurring elsewhere in the DP or related power management system. To do this the Master/SDPO is to complete the software validation form and file onboard.

FMEA DOCUMENTATION

The FMEA documentation that has been created for the vessel is a live document which must be reviewed and updated as necessary on a regular basis. Any alternation to software which is forms part of the DP system or associated sub parts such as the power management system need to be reflected in the FMEA documentation. Class have taken the stance that the life cycle management of the FMEA documents shall be assessed on a case by case basis depending on the alternations which are being made the potential effects they can have on the vessels ability to maintain position. To ensure are made to the DP system are to be informed to class for their assessment. Based on their review either no change, a document update or full new FMEA document may be required.

REFERENCE

- IMCA M109 A Guide to DP Related Documentation for DP Vessels
- MICA M163 Quality assurance and quality control of software
- ABS-Guidance note on FMEA for Classification

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