**ECDIS FAILURE DRILL & CHECKLIST**

To prepare for a true emergency, training in drills should ensure that required actions become automatic. This guide can also be used in the event of an emergency. This guide can be used in the event of:

1. ECDIS Input Failure (e.g. Position input failure, Heading input failure, Speed input failure)
2. ECDIS Failures (Both Software or Hardware Failures)
3. Failure of both ECDIS units

Analyze the results of the drill and debrief ship staff

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| 1. **ECDIS Input Failure** | | **Tick ()** |
| 1.1 | Inform Master |  |
| 1.2 | Identify the failed sensory input to ECDIS. Confirm the other ECDIS is fully operational and following the passage plan |  |
| 1.3 | Engage hand steering (if applicable) |  |
| 1.4 | Carry out a Job Hazard Analysis |  |
| 1.5 | Inform Engine room |  |
| 1.6 | Assess engine readiness requirements. Increase as required |  |
| 1.7 | Consider increasing Bridge Manning level to a higher Watch Condition as appropriate to the prevailing conditions |  |
| 1.8 | Master to ascertain amendment to vessels Passage Plan |  |
| 1.9 | Ascertain the closest navigational danger and time available |  |
| 1.10 | Determine if the failed sensory input affects any other electronic systems |  |
| 1.11 | Determine if it is possible to rectify/repair the sensory input |  |
| 1.12 | In case of Position input failure:   1. Manually change over to second GPS unit (if not Auto). Ensure that the secondary system is operating correctly 2. Increase frequency of manual position fixing using all available means 3. Notify TCC HK management via the emergency casualty notification First Alert |  |
| 1.13 | In case of Heading input failure:   1. Manually change over to second gyro if available and if no auto changeover 2. Observe magnetic compass heading, manually enter the heading into the ECDIS units 3. Switch the ECDIS to ‘Head Up’ mode 4. Verify magnetic compass error 5. Notify TCC HK management via the emergency casualty notification First Alert |  |
| 1.14 | In case of Speed Input failure:   1. Change the speed source to any alternative available source. E.g. GPS 2. Notify TCC HK management via the emergency casualty notification First Alert |  |

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| **2. ECDIS Failure (Both Software or Hardware Failures)** | | **Tick ()** |
| 2.1 | Repeat steps 1.1 to 1.9 |  |
| 2.2 | For Software Failure:   1. Rebooting the problematic unit 2. Contact the manufacture for remote trouble shooting and assistance. Re-Install the ECDIS software if practicable 3. Disconnect LAN connection between the ECDIS unit to prevent transfer of software issue to the other unit 4. Inform VTIS if applicable 5. Notify TCC HK management via the emergency casualty notification First Alert |  |
| 2.3 | For Hardware Failure:   1. Identify the failed hardware component of ECDIS unit 2. Contact the manufacture for remote trouble shooting and assistance. Replace the failed component if spare available 3. Inform VTIS if applicable 4. Notify TCC HK management via the emergency casualty notification First Alert |  |

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| **3. Failure of both ECDIS Unit** | | **Tick ()** |
| 3.1 | Repeat steps 1.1 to 1.9 |  |
| 3.2 | Master to consider stopping the vessel and drifting if the circumstances of the case allow |  |
| 3.3 | Use the charts onboard to complete the voyage or to a safe anchorage or proceed to a convenient port to carrying out repairs on the ECDIS Unit |  |
| 3.4 | Notify the Office using the emergency casualty notification |  |
| 3.5 | Broadcast “Securite” message of a navigational warning to all traffic in the vicinity |  |
| 3.6 | Comply at all times with The Rules Of The Road and display appropriate signals by day shape / night lights |  |

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| **Comments, description of the scenario, recommendations for the next drill, if any:** |

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| **Drill Officer:** |  |  | **Master:** |  |
| **Signature:** |  |  | **Signature:** |  |