



**TECHNICAL AND OPERATIONAL GUIDANCE  
(TECHOP)**

**TECHOP\_ODP\_00\_(O)\_(HIGH LEVEL  
PHILOSOPHY)**

**SEPTEMBER 2012**

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# 1 INTRODUCTION

## 1.1 PREAMBLE

1.1.1 The Guidance documents on DP (Design and Operations) were published by the MTS DP Technical Committee in 2011 and 2010, Subsequent engagement has occurred with:

- Classification Societies (DNV, ABS).
- United States Coast Guard (USCG).
- Marine Safety Forum (MSF).

1.1.2 Feedback has also been received through the comments section provided in the MTS DP Technical Committee Web Site.

1.1.3 It became apparent that a mechanism needed to be developed and implemented to address the following in a pragmatic manner.

- Feedback provided by the various stakeholders.
- Additional information and guidance that the MTS DP Technical Committee wished to provide means to facilitate revisions to the documents and communication of the same to the various stakeholders.

1.1.4 The use of Technical and Operations Guidance Notes (TECHOP) was deemed to be a suitable vehicle to address the above. These TECHOP Notes will be in two categories:

- TECHOP\_ODP.
- TECHOP\_GEN.

## 1.2 TECHOP\_ODP

1.2.1 Technical guidance Notes provided to address Guidance contained within the Operations, Design or DP Personnel

1.2.2 The TECHOP will be identified by the following:

TECHOP\_ODP\_SNO\_CATEGORY (DESIGN (D) OPERATIONS (O) DP PERSONNEL (P)).

- EG 1 TECHOP\_ODP\_01\_(O)\_(HIGH LEVEL PHILOSOPHY).
- EG 2 TECHOP\_ODP\_02\_(D)\_(BLACKOUT RECOVERY).

## 1.3 TECHOP\_GEN

1.3.1 MTS DP TECHNICAL COMMITTEE intends to publish topical white papers. These topical white papers will be identified by the following:

TECHOP\_GEN\_SNO\_DESCRIPTION.

- EG 1 TECHOP\_GEN\_00 (TECHOP GUIDANCE).
- EG 2 TECHOP\_GEN\_02-(POWER PLANT COMMON CAUSE FAILURES)

1.3.2 TECHOP as described in 1.2 and 1.3 above will be published as relevant and appropriate. These TECHOP will be written in a manner that will facilitate them to be used as standalone documents.

1.3.3 Subsequent revisions of the MTS Guidance documents will review the published TECHOPs and incorporate as appropriate.

1.3.4 Communications with stakeholders will be established as appropriate to ensure that they are notified of intended revisions. Stakeholders will be provided with the opportunity to participate in the review process and invited to be part of the review team as appropriate.

**1.4 MTS DP GUIDANCE REVISION METHODOLOGY**

1.4.1 TECHOP as described above will be published as relevant and appropriate. These TECHOP will be written in a manner that will facilitate them to be used as standalone documents.

1.4.2 Subsequent revisions of the MTS Guidance documents will review the published TECHOPs and incorporate as appropriate.

1.4.3 Communications with stakeholders will be established as appropriate to ensure that they are notified of intended revisions. Stakeholders will be provided with the opportunity to participate in the review process and invited to be part of the review team as appropriate.

## **2 SCOPE AND IMPACT OF THIS TECHOP**

### **2.1 SCOPE**

TECHOP\_ODP\_01\_(O)\_( HIGH LEVEL PHILOSOPHY)

incorporates high level philosophy statements and addresses the following

- Identifying DP as a Safety Critical Element
- Additional information to be incorporated in Operations Manual
- Establishing a Vessel Specific Drive off to Drift off strategy
- Reinstatement of equipment post failure

IMPACT ON PUBLISHED GUIDANCE:- This TECHOP impacts Part 2 Appendix 1

### **2.2 IMPACT ON PUBLISHED GUIDANCE**

2.2.1 This TECHOP impacts MTS DP Operations Guidance Document Part 2 Appendix 1

### 3 CASE FOR ACTION

#### 3.1 CHANGES MADE TO PART 2 APPENDIX 2 AND 3

- 3.1.1 Part 2 Appendix 1 of the DP Operations Guidance Document was revised and published in April 2012
- 3.1.2 USCG made reference to this document in FR Notice number DP\_FR\_2012\_10669 dated 4<sup>th</sup> May 2012.
- 3.1.3 Subsequently Part 2, Appendix 2 and 3 were revised and published in July 2012.
- 3.1.4 During the revision of Appendix 2 and 3 elements identified in Section 2 were incorporated.
- 3.1.5 Stakeholders attention to the changes made was needed.
- 3.1.6 This TECHOP addressed the changes made and draws the stakeholders attention.

#### 3.2 RECOMMENDED ACTION

- 3.2.1 Stakeholders are to cascade this TECHOP to the operational teams.
- 3.2.2 The following text is to be added to the Guidance notes in section 4.7 which addresses DP Operations Manuals

Development of the DP Operations Manual should consider the following

Station keeping should be identified as a Safety Critical Element

By recognition as a Safety Critical Element relevant focus is to be provided by

- Appropriately addressing DP equipment in Inspection Repair and Maintenance Requirements
- Level of detail in procedures and contingency plans
- Appropriately addressing training and specifying drills that must be carried out

- 3.2.3 The following *text to be added as a bullet under guidance notes in 4.7 under Section 1*

- Vessel specific Drive off to Drift off Strategy. (Drive off to Drift off strategy - The vessel specific philosophy to attempt to address a Drive Off situation with a view to convert it to a drift off event. Detailed procedures to achieve this are to be developed and incorporated into the DP Operations Manual

- 3.2.4 Section 5 Intervention Role of the DPO and Engineer:- The following text to be added as a note under topic " Faults requiring Operator intervention ( after 19<sup>th</sup> point)

*Note: There have been several DP incidents (Observed or reported) where loss of position has resulted during reinstatement of equipment, post failure. The triggering event of loss equipment on these vessels did not result in a loss of position demonstrating robustness of the redundancy concept and fault ride through capability. However when equipment was being reinstated, post failure and repair (if applicable), in some instances, this has led to an escalation by subsequent failures leading to loss of position. Vessels should bring themselves to the "ASOG Yellow Status" prior to reinstating equipment to minimize the potential for undesirable consequences.*

## **4 SUGGESTED IMPLEMENTATION METHODOLOGY**

- 4.1.1 Stakeholders may consider adding this TECHOP as an addendum to the MTS Guidance document.
- 4.1.2 Stakeholders to draw the attention of relevant 3Party vendors to this TECHOP guidance.

## 5 MISCELLANEOUS

Stakeholders	Impacted	Remarks
MTS DP Committee	✓	To track and incorporate in next rev of MTS DP Operations Guidance Document Part 2 Appendix 1. Communicate to DNV, USCG, Upload in MTS website.
USCG	✓	MTS to communicate- FR notice impacted when Rev is available.
DNV	X	MTS to Communicate- DNV RP E 307 impacted.
Equipment vendor community	X	
Consultant community	✓	MTS members to cascade/ promulgate.
Training institutions	X	
Vessel Owners/Operators	✓	Establish effective means to disseminate information to Vessel Management and Vessel Operational Teams.
Vessel Management/Operational teams	✓	Establish effective means to disseminate information to Vessel Operational Teams.



