



MTS DP Committee

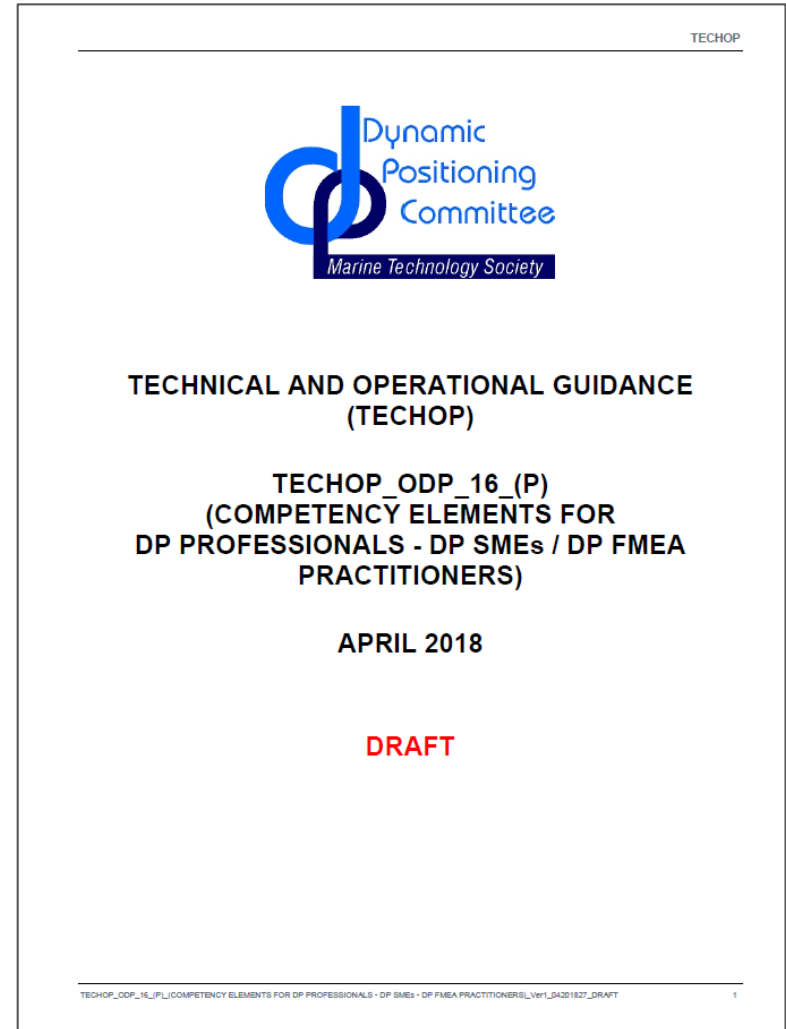
Workshop in Singapore 2018

Session 2 – Day 1

Elements of Competency for DP Professionals

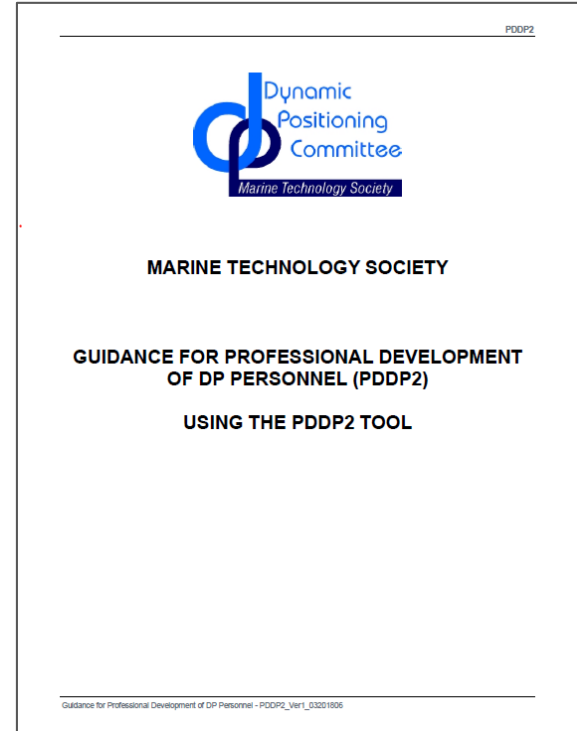
TECHOP_ODP_16_(P) COMPETENCY ELEMENTS

- Three-part Techop
 - Competency Elements
 - Appendix for DP SMEs
 - Appendix for DP FMEA Practitioners



The Techop formerly known as MDAT

- Mapping Delivery Ability Tool (MDAT)
- Professional Development of Dynamic Positioning Personnel (PDDPP or PDDP2)
- The original Techop has been retitled



Core Competencies – SME & FMEA

COMPETENCY NUMBER	DP SME CORE DP COMPETENCY	FMEA PRACTITIONER CORE DP COMPETENCY
1	Deliverables and decision support tools	Deliverables and decision support tools
2	Barrier philosophy & defense in depth	Barrier philosophy & defense in depth
3	DP concepts	DP concepts and engineering
4	DP guidance & basis of requirements	DP guidance & basis of requirements
5	Verification and Validation	Verification and validation
6	In Execution Support	Power Plant configured as a Common Power System (Closed Busties)
7	Impacts on Station Keeping on the Industrial Mission	Cross connections, External Interfaces and Influences
8	Impacts of the industrial mission on station keeping	In execution support
9	Defining, Identifying and managing interfaces relevant to DP station keeping	Industrial Mission (Impacts and Management)
Required Competency Levels	<ul style="list-style-type: none"> • Four at Mastery • Three at Skilled • Two at Knowledgeable 	<ul style="list-style-type: none"> • Four at Mastery • Two at Skilled • Two at Knowledgeable • One at Aware
<ul style="list-style-type: none"> • Competencies marked in red font are required to be at Mastery level. • DP FMEA practitioners intending to carry out unsupervised work on analysis of vessels operating with closed busties must have Mastery in Competency 6 – ‘Power Plant configured as a Common Power System (Closed Busties)’. 		

Pilot Project

Participants	Company Affiliation
Chris Richardson*	Aqualis Offshore
Richard Purser*	DNV GL
Rupert Bambach*	
Dr Steven Cargill**	
Dr Steven Cargill***	
Brian Haycock*	DP Expertise
Doug Phillips **	DP Expertise
Dan Endersby*	DPD Marine
Mat Bateman*	Keelsonline
Pete Fougere**	Chairman MTS DP Committee
	<ul style="list-style-type: none"> • *Assessee (Pilot Project) • **Assessor (Pilot Project) • ***Adaptor and Contributor of FMEA Practitioner section

Proof Points for Skill Levels

Level	Proof Points
Knowledge	<ul style="list-style-type: none"> • Able to interpret and evaluate information and advice from experts in an area of expertise. • Able to use the correct terminology (vocabulary) of the area of expertise. • Able to hold an informed debate with experts in the area of expertise. • Able to ask questions that test the viability of proposals in an area of expertise. • Able to carry out some of the activities with help.
Skill	<ul style="list-style-type: none"> • Able to perform consistently and satisfactorily the majority of activities of an area of expertise. • Able to translate guidelines and standards for the area of expertise into practical actions. • Able to solve imaginatively, common technical/operational problems in the area of expertise. • Able to guide and advise others in technical/operational aspects of the areas of expertise.
Mastery	<ul style="list-style-type: none"> • Troubleshoot / adapt / evaluate alternate and / or novel solutions objectively. • Be able to diagnose and resolve significant complex, non-routine problems in the area of expertise. • Able to creatively solve significant, complex, non-routine problems in the area of expertise. • Able to adapt practices from other markets or countries for use in the area of expertise. • Able to generate substantial improvements to local practices and procedures for the areas of expertise. • Demonstrate experience in applying technical and operational expertise to achieve business objectives safely and predictably. • The ability to objectively evaluate proposals (including alternate solutions) or offer alternative solutions and risk mitigations to resolve DP-related issues.

Guide for self development and assessment

Competence 1 - Deliverables and Decision Support Tools								
Themes	Description	Key Themes / Subject Matter	Reference	Competence Scale		Evidence		
				Self-Assessment	From Competence Assessment	Theory / Principles	Actions	
ASOG / WSOG	1. Activity Specific Operating Guidelines (ASOG) are a form of decision support tool designed to assist crew in safely managing the conduct of the DP operation. The same tool is titled Well Specific Operating Guidelines (WSOG) for use on MODUS. 2. Information is present two or four column for where each column is associated with 'traffic colors indicating DP system status. 3. The four-column 'Criteria' section supports decision making in response to events, observation and environmental limits. The user is guided to advise stakeholders, continuing or suspend operations and implement contingency plans. 4. Green – Normal operations. 5. Blue – Abnormalities exist or limited are being approached 6. Yellow – Redundancy has been lost or is at defined operational limits. 7. Red – Position is being lost or contingency plan is in operation. 8. The two-column 'configuration' section is a go-no-go for being in Critical Activity Mode configuration. 9. Green – Normal operations. 10. Blue – Risk assess and inform. 11. An ASOG requires the following five elements: i. CAM and TAM configuration ii. Yellow status rationalization iii. Suitable modes and features iv. Position reference systems v. Manage the vessel's worst-case failure capability	ASOG / WSOG	MTS DP Ops Pt2 Appendix 1 Section 4.8					
		Watch circles	MTS DP Ops Pt2 Appendix 1 Section 4.8					
		Riser analysis	API RP16Q & Company Riser Analysis doc					
		What-breaks-first?	API RP 16Q & Company Riser Analysis doc					
		SIMOPS	MTS DP Ops Pt2 Appendix 1 Section 4.8					
			sign Pt2 Section 3.13					
			sign Pt2 Section 3.13					
			sign Pt2 Section 3.13					
			sign Pt2 Section 4.2					
			Footprints	MTS DP Ops Sec 1.2.12				
			ASOG Development Process	MTS DP Ops guidance document				
		Statement of Verification	Company standards e.g. Shell DP DEP Appendix F					
		Process for ASOG implementation	Coaching and Mentoring (Future ASOC development course)					
		Title Block – Background & Why	Coaching and mentoring					
		Triggers for Yellow and Red	MTS DP Ops Pt2 Appendix 1 Section 4.8					
		Position References Sensors	TECHOP_ODP_14_(D)_PRS & DPCS handling of PRS					
		Modes and features	MTS DP Design Pt2 Section 14.7					
		Offset from wellhead	MTS DP Ops Pt2 Appendix 1 Section 4.7					
		Drive off to drift off conversion	Company - DP SAFE Course					
		Traffic Lights - Colours	MTS DP Ops Appendix C					
		Fault tolerance	MTS DP Design Pt2 Section 2					
	Station keeping integrity	MTS DP Design Pt2 Section 3.3						
	Loss of position & position excursion	MTS DP Design Pt2 Section 4.2						
	Industrial mission	MTS DP Design Pt2 Section 4.0						
	Contingency plans and recovery measures	Coaching and mentoring						
	Positioning standby	MTS DP Ops Pt2 Appendix 1 Section 4.8						
	Proactive yellows	Coaching and mentoring						
	Legacy blues	Coaching and mentoring						
	ASOG refresh	Coaching and mentoring						
	Question Tracking Sheet (QTS)	Coaching and mentoring						
	Vessel Overview Document	Coaching and mentoring						
	Back to work - Reinstatement	Company standards e.g. DP - DEP Informative Annex A & B						
	Escape routes	MTS DP Ops Pt2 Appendix 1 Section 4.8						
	Manning	MTS DP Ops Pt2 Sec 4.14						
	Cross Connections	TECHOP_ODP_11_(D)_CROSS CONNECTIONS)						
	External Interfaces and influences	TECHOP						

Subject matter with which to be familiar

Self and external assessment

Evidence

Reference Materials

Workshop Exercise

- Review of draft Techop



Thank You