

DEP SPECIFICATION

MARINE OPERATIONS REQUIREMENTS - LOADOUT, TRANSPORTATION AND INSTALLATION DEEPWATER STRUCTURES (AMENDMENTS/SUPPLEMENTS TO ISO 19901-6 or API RP 2MOP)

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DESIGN AND ENGINEERING PRACTICE



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PART I INTRODUCTION

1.1 SCOPE

This new DEP specifies requirements and guidance on the planning and execution of marine operations, during the temporary phases of construction, transportation and installation of the various structures and their components. The overall goal is to ensure that risks are tolerable and as low as reasonably practicable throughout the performance of these operations, under normal circumstances or while reacting to accidental events. Specific project requirements and any changes to the standard specifications are presented in the project variation DEP (included as a separate document). Where a conflict exists between the Project specific documents and this DEP, the project specifications shall govern. It is envisioned that this DEP and the project variation DEP will be required for most projects.

This DEP is based on ISO 19901-6:2009 or API RP-2MOP, 1st edition 2010. Part III of this DEP amends, supplements and deletes various clauses of ISO 19901-6 or API RP-2MOP. Part III follows the clause numbering of ISO 19901-6 or API RP-2MOP for easy reference.

All clauses of ISO 19901-6 or API RP-2MOP not modified by this DEP remain valid as written.

This DEP supersedes and combines SIEP Supplement 55 Rev 3a dated 2004 and SIEP Supplement 56 Rev 2 dated September 2000; see (1.5) regarding the changes.

1.2 DISTRIBUTION, INTENDED USE AND REGULATORY CONSIDERATIONS

Unless otherwise authorised by Shell GSI, the distribution of this DEP is confined to Shell companies and, where necessary, to Contractors and Manufacturers/Suppliers nominated by them. Any authorised access to DEPs does not for that reason constitute an authorization to any documents, data or information to which the DEPs may refer.

This DEP is intended for use in facilities related to oil and gas production. Application in other facilities may also apply.

When DEPs are applied, a Management of Change (MOC) process should be implemented; this is of particular importance when existing facilities are to be modified.

If national and/or local regulations exist in which some of the requirements could be more stringent than in this DEP, the Contractor shall determine by careful scrutiny which of the requirements are the more stringent and which combination of requirements will be acceptable with regards to the safety, environmental, economic and legal aspects. In all cases the Contractor shall inform the Principal of any deviation from the requirements of this DEP which is considered to be necessary in order to comply with national and/or local regulations. The Principal may then negotiate with the Authorities concerned, the objective being to obtain agreement to follow this DEP as closely as possible.

1.3 DEFINITIONS

1.3.1 General Definitions

The **Contractor** is the party that carries out all or part of the design, engineering, procurement, construction, commissioning or management of a project or operation of a facility. The Principal may undertake all or part of the duties of the Contractor.

The **Manufacturer/Supplier** is the party that manufactures or supplies equipment and services to perform the duties specified by the Contractor.

The **Principal** is the party that initiates the project and ultimately pays for it. The Principal may also include an agent or consultant authorised to act for, and on behalf of, the Principal.

The word **shall** indicates a requirement.

The word **should** indicates a recommendation.

1.3.2 Specific Definitions

Term	Definition
AISC	American Institute of Steel Construction
ASOG	Activity Specific Operational Guideline
CoG	Center of Gravity
DP	Dynamically Positioned
FMEA	Failure Modes & Effects Analysis
FPS	Floating Production System
GBS	Gravity Base Structure
IMCA	International Marine Contractor Association
JSS	Jacketed Spiral Strand
MBS	Maximum Breaking Strength
MT	Mega Ton
NTSC	National Television System Committee
PAL	Phase Alternating Line
PFD	Process Flow Diagram
PNR	Point of No Return
ROV	Remote Operated Vehicle
SATCOMM	Satellite & Facsimily Communications System
SSB	Single-Side Band
TMS	Tether Management System
VHF	Very High Frequency
WSD	Working Stress Design

1.4 CROSS-REFERENCES

Where cross-references to other parts of this DEP are made, the referenced section number is shown in brackets. Other documents referenced by this DEP are listed in (Part IV).

1.5 SUMMARY OF MAIN CHANGES

This is a new DEP that is based on a combination of SIEP Supplement 55 Rev 3a dated 2004 and SIEP Supplement 56 Rev 2 dated September 2000. The following are the main, non-editorial changes.

Old section	New section	Change
11.3	11.3	Deleted last sentence of second paragraph
11.13	11.3	Rewording of inspection requirements for seafastening welds
12.3.2	12.3.2	Rewording of the bollard pull certificates requirement
13.1	13.1	Add additional sentence in the column to the right of the 1 st paragraph (Introduction).
17.4.7	17.4.7	Replace the text of the first two bullets
17.9.1	17.9.1	Replace the listed "HSC Guidance Note PM20" with IMCA guideline text
18.10	18.10	Replace text

1.6 COMMENTS ON THIS DEP

Comments on this DEP may be sent to the Administrator at standards@shell.com, using the DEP Feedback Form. The DEP Feedback Form can be found on the main page of "DEPs on the Web", available through the Global Technical Standards web portal <http://www.shell.com/standards> and on the main page of the DEPs DVD-ROM.

PART II GENERAL

Part III of this DEP is written as amendments and supplements to ISO 19901-6:2009 or API RP-2MOP 1ST Edition 2010. Wherever reference is made to ISO 19901-6 or API RP-2MOP, it shall be understood to mean ISO 19901-6 or API RP-2MOP as amended/supplemented by this DEP.

For ease of reference, the clause numbering of ISO 19901-6 or API RP-2MOP has been used throughout Part III of this DEP.

Clauses in ISO 19901-6 or API RP-2MOP which are not mentioned in this DEP shall remain valid as written.

PART III AMENDMENTS/SUPPLEMENTS TO ISO 19901-6 or API RP-2MOP

In general *Replace "Owner" with "Principal" throughout the entire text, except in Table A1 line 11.*

3.0 TERMS AND DEFINITIONS

Add new definitions:

Contractor

The party which carries out all or part of the design, engineering, procurement, construction, commissioning or management of a project or operation of a facility.

Manufacturer

The party which manufactures or supplies equipment and services to perform the duties specified by the Contractor.

3.12 *Replace definition with:*

Temporary structure designed to protect structures or modules during the initial fitting stage of an installation operation or to guide the structure or module being installed into a pre-determined set-down location.

3.61 *Replace definition with:*

Principal

The party which initiates the project and ultimately pays for its design and construction. The Principal will generally specify the technical requirements. The Principal may also include an agent or consultant authorized to act for, and on behalf of, the Principal.

5.3 HSE PLAN

Delete this section.

5.4 RISK MANAGEMENT

5.4.1 Introduction

Add at end of section:

Hazard study (ies) results shall be submitted.

6.2.1 Project organization

Replace 2nd bullet with:

- contractor's organization and project management for the project;

6.2.2 Operational organization

Add 2nd bullet:

- contractor's representative;

6.3 QUALITY ASSURANCE AND ADMINISTRATIVE PROCEDURES

Delete this section.