

DEP SPECIFICATIONS

MOBILE MOORING SYSTEMS

**(AMENDMENTS/SUPPLEMENTS TO API RP 2SK,
API RP 2SM AND API RP 2I)**

DEP 37.91.10.11-Gen.

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DESIGN AND ENGINEERING PRACTICE

DEM1



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PART I INTRODUCTION

1.1 SCOPE

This DEP specifies requirements and gives recommendations for the assessment of mooring systems for mobile offshore units.

This DEP is based on API RP 2SK:2005, API RP 2SM:2001, and API RP 2I:2008.

- Part III of this DEP amends and supplements various clauses of API RP 2SK:2005.
- Part IV of this DEP supplements various clauses of API RP 2SM:2001.
- Part V of this DEP supplements various clauses of API RP 2I:2008.

Parts III, IV, and V follow the clause numbering of the API RPs.

All clauses of API RP 2SK:2005, API RP 2SM:2001, and API RP 2I:2008 not modified by this DEP remain valid as written.

This DEP applies to mobile offshore units (MOUs) whose primary method of station keeping is provided by a mooring system which includes catenary, semi-taut and taut-leg mooring systems.

MOUs covered by this DEP include:

- a. Emergency support vessels (semi-submersible or ship or barge shape).
- b. Mobile accommodation units (semi-submersible or ship or barge shape).
- c. Mobile offshore drilling units (semi-submersible or ship or barge shape).
- d. Moored construction vessels.

Vessel types, which are not covered by this DEP, include:

- a. Dynamically positioned vessels. (these are covered by DEP 37.90.10.32-Gen.)
- b. Permanently moored floating production units
- c. Transportation barges that are moored offshore
- d. Pipe laying barges that use moorings to lay pipe

This DEP contains mandatory requirements to mitigate process safety risks in accordance with Design Engineering Manual (DEM) 1 – Application of Technical Standards.

This is a revision of the DEP of the same number dated February 2015; 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 facilities and other facilities which employ floating offshore platforms. This DEP may also be applied in other similar facilities.

When DEPs are applied, a Management of Change (MOC) process shall 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 capitalised term **SHALL [PS]** indicates a process safety requirement.

The word **should** indicates a recommendation.

The word **may** indicates a permitted option.

1.4 CROSS-REFERENCES

Where cross-references to other parts of this DEP are made, the referenced section or clause number is shown in brackets (). Other documents referenced by this DEP are listed in (5).

1.5 SUMMARY OF MAIN CHANGES

This DEP is a full revision of the DEP of the same number dated February 2015. The following are the main, non-editorial changes.

Section/Clause	Change
All	Restructured and clarified requirements, enforced use of shall/should/may for normative statements