

DEP SPECIFICATION

**DESIGN OF OFFSHORE TOPSIDES FACILITIES AGAINST
FIRE AND BLAST LOADING
(AMENDMENTS/SUPPLEMENTS TO API RP-2FB)**

DEP 37.01.10.11-Gen.

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(DEP Circular 59/12 has been incorporated)

DESIGN AND ENGINEERING PRACTICE

DEM1



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PART I INTRODUCTION AND GENERAL REQUIREMENTS

1. INTRODUCTION

1.1 SCOPE

This new DEP specifies requirements and gives recommendations relating to the design of offshore topsides facilities exposed to Fire and/or Blast loading. Recommendations are also provided on issues relating to assessment and mitigation of the risks associated with fire and blast events.

This DEP is written in the form of amendments and supplements to API RP 2FB. Additional guidance is provided in the Oil & Gas UK guidelines "Fire & Explosion Guidance" (also sometimes referenced as UKOOA/HSE). The approach taken in the UKOOA/HSE documents is mainly consistent with the approach in API (ref OTC 17700).

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

1.2 DISTRIBUTION, APPLICABILITY 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. This DEP may also be applied in other similar facilities.

This DEP is intended for use by Shell Structural Engineers and design contractors or consultants working on behalf of the Principal. The DEP shall be used in conjunction with API RP-2FB and other relevant national and international standards, codes of practice on structural design and pertinent HS&E legislation and shall take precedence except where design requirements in the latter standards are more stringent or onerous or where deviations are approved.

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 capitalised term **SHALL [PS]** indicates a process safety requirement.