

GENERAL SPECIFICATION

PIPELINES - RISERS

GS EP PLR 001

Documentation requirements

Rev.	Date	Purpose of the revision
08	10/2019	General Update
07	08/2016	Content from GS EP PLR 002 transferred
06	10/2015	Added references to PJC General specifications related to project documentation. Added List of typical deliverables for each project phase
05	10/2012	Update of Datasheet with reference level for pressure and operating conditions associated with frees pan allowable lengths
04	01/2012	Update following the EP reorganisation, March 2011. Addition of Data Sheet in Appendix 5. Addition of excel datasheets to main file
00	10/2003	First issue
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Owning entity: DSO/IP/TEC	Managing entity: DSO/IP/TEC/PLR
Other Approving entity(ies):	

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1. Scope

This General Specification presents the minimum requirements for the technical scope, organization of the design works and management of the documentation related to onshore and offshore pipeline systems - further on referenced as the System.

2. Reference documents

The reference documents listed below form an integral part of this General Specification.

External Documents

Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and addendums, is the latest revision published at the effective date of this document.

Reference	Title
Not applicable	

Total General Specifications

Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and addendums, is the latest revision published.

Reference	Title
GS EP EXP 153	Operating Manuals and Handbook
GS EP EXP 203	Maintenance and inspection documentation preparation during project phase
GS EP GEO 202	ROV Survey Work for the Installation and/or the Inspection of Offshore Structures and Flowlines
GS EP GEO 402	GIS Requirements for Field Development Project
GS EP PJC 701	Document identification & numbering at project execution and field operations phases
GS EP PJC 702	Requirements for electronic documents at project execution and field operations phases
GS EP PJC 703	Requirements for Contractor Final Documentation

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Reference	Title
GS EP PLR 100	Submarine pipeline systems

3. Definitions and Abbreviations

For the purpose of this document, the following definitions and terms shall apply.

3.1 Definitions

Design	Means the design of the System either of conceptual, pre-project, Basic, FEED, or detailed nature.
System	Means a pipeline system comprised between one single entry point and one single delivery point; so that any other tied in pipeline shall be treated as another individual System.
Third Party	Means a Certifying Authority or an independent Company in charge of any independent design review, appraisal, or analysis.
Certifying authority	Means the Third Party in charge of the certification of the System and of issuing of the relevant certificates.
Battery Limits	Means the extremities of the System as specified by the Basis of Design
Component	Means any permanent or temporary component incorporated into the System(s) as necessary for its construction, installation and operation
General Specification	Means any Company E&P General Specification part of the E&P Technical Standards, of mandatory application on any new project.
Particular Specification	Any particular specification based on Project requirements and on instructions for the performance of the works. May be also referred to as: job specification or particular project specification or PPS.
Company	Means Total SA or any of its affiliates.

3.2 Abbreviations

EPRS	Emergency Pipeline Repair System
GIS	Geographical Information System
MDR	Master Document Register

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MTO	Materials Take-Off
NDT	Non Destructive Test(s)
PFD	Process Flow Diagram
P&ID	Process (Piping) & Instrumentation Diagram
PLET	Pipeline End Termination
PLR	Pipelines and Risers
PPS	Project Particular Specification(s)
QA/QC	Quality Assurance / Quality Control
ROW	Right of Way
UTM	Universal Transverse Mercator

4. Organization of the design works

This part represents the minimum organization to be put in place for the performance of the design works in relation with the Pipeline Systems that are covered by the GS EP PLR series.

4.1 QA/QC Plan

Before the commencement of the design works, a formally approved QA/QC Plan shall have been put in place.

Each and every document issued in the frame of the design works shall be approved by its QA/QC system.

Document verification shall be performed at several levels:

- Discipline checks
- Inter-discipline checks
- Project engineer checks.

Each level of verification shall be materialized by a box in the document title block.

This box shall be signed-in by the lead engineer in charge of the discipline or the project manager.

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At each issue of a new revision of a document, changes in the document shall be clearly identified according to the following:

- At the beginning of the document, the list of changes in terms of section number, page number and reason for the change are to be tabulated
- In the course of the document, mark-ups are to be used to clearly indicate the location where the changes occurred and the corresponding revision index.

4.2 Design Plan

Before the commencement of the design works, a formally approved Design Plan shall have been put in place.

The Design Plan shall include - in this order of precedence:

- A comprehensive review of all the Reference Documents, outlining any potential conflicts and areas not covered by these documents
- A detailed review of the design basis, outlining potential discrepancies, outstanding data, and other sources of potential concerns deemed to have an impact on the design works, either on a technical or on a time schedule basis
- Any alternatives deemed to resolve these issues
- An outline of any specific areas deemed to receive a dedicated qualification scheme (eg. qualification of a component/material for a particular application, qualification of non standard or innovative technical solution) and the dedicated Qualification Plan
- Elements from section 5.2.

4.3 Design Reviews, Quality checks

As soon as any reviews such as:

- Project Reviews
- Design Reviews
- Third Party Reviews
- Third Party Quality checks

are required, the following principles shall apply:

- Each deliverable to be submitted with an agreed notice period for comment and approval
- No reviews of any fabrication drawings is to be performed without first having reviewed their associated design and calculation notes
- At every occurrence of a Design Review, the duly implemented Pipeline Data sheet to be made available for the review
- Quality checks of calculation notes, drawings and any other documents may also have to be checked or verified by a Third Party and/or a Certifying Authority.