



Exploration & Production

GENERAL SPECIFICATION

Telecommunications

GS EP TEL 700

Telecommunications Engineering Services

04	01/2011	Add some deliverables
03	10/2008	Telecom Spec summary and revision
02	10/2005	Inclusion of ATEX standard clause + change of Group name and logo + addition of EP root to GS identification
01	07/2003	Commissioning procedures
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Rev.	Date	Notes

Owner: EP/FEI/SI

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1. Scope

This General Specification applies to engineering services to be supplied during the design and fabrication of telecommunication equipment intended for use in hydrocarbon production and/or processing plants.

The contracting parties mentioned in this General Specification are listed hereafter:

- **COMPANY:** the party which signs the contracts and purchase orders
- **CONTRACTOR:** the party which works for the COMPANY. In Basic Engineering phase, the contract is an Engineering activities contract. After EPCC contract award, the contract is an Engineering, Procurement, Construction, Pre-commissioning and/or Commissioning contract
- **SUBCONTRACTOR:** the Telecom integrator qualified by COMPANY which handles all Telecom EPCC discipline activities under a contract either from COMPANY or from EPCC CONTRACTOR
- **VENDOR :** the supplier of the equipment

The verbal forms used to indicate levels of requirement are specified in [ISO/IEC Directives, Part 2](#), and [Characteristics of good requirements](#) (INCOSE symposium 1996).

2. Reference documents

The reference documents listed below form an integral part of this General Specification. Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and supplements, is the latest revision published at the EFFECTIVE DATE of the CONTRACT.

Standards

Reference	Title
ISO/CEI Directives part 2	Rules for the structure and drafting of International Standards

Professional Documents

Reference	Title
Not applicable	

Regulations

Reference	Title
ATEX directive 94/9/CE	Equipment and protective systems intended for use in potentially explosive atmospheres



Codes

Reference	Title
Not applicable	

Other documents

Reference	Title
Characteristics of good requirements	Requirements Working Group of the International Council on Systems Engineering (INCOSE symposium 1996)

Total General Specifications

Reference	Title
Not applicable	

3. Engineer scope of work

The CONTRACTOR / SUBCONTRACTOR scope of work shall vary according to the phase of the project. The Basic Engineering phase of the project shall be based on the Pre-Project documents generally produced by COMPANY. The Detailed Engineering phase of the project shall be based on the Basic Engineering project documents.

3.1 Basic engineering study

3.1.1 Scope of work

During the basic engineering study, CONTRACTOR shall define the telecommunication systems architecture and performance substantiated by calculation sheets. CONTRACTOR shall prepare the telecommunication systems specifications, systems block diagrams, equipment lay out drawings and schedules.

CONTRACTOR scope of work shall include the following tasks:

1. Prepare the telecommunication philosophy, systems description and block diagrams. This study will also list the applicable regulations and standards.
2. Prepare the telecommunication shutdown philosophy, according to the SAF Company referential and to the project safety concept.
3. Determine the telecommunication systems architecture to meet the project requirements. This will imply liaison with other disciplines to define the additional requirements arising from the basic engineering design.
4. Prepare the design of the Satellite, Optical Fibre and/or microwave links. The design shall detail the overall link budget, the target transmission standards (from CCIR recommendations) such as link availability, noise level, data transmission performance and the like, and performance prediction.