

GENERAL SPECIFICATION

Environment

GS EP ENV 501

GIS deliverables for HSE

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1. Scope

The objective of the present General Specification is to define the requirements to implement a Geographical Information System (GIS) with data generated in the context of HSE activities:

- Environmental studies as defined in [GS EP ENV 111](#), [GS EP ENV 112](#) and [GS EP ENV 120](#);
- Societal studies as defined in [GS EP SDV 101](#) and [GS EP SDV 102](#);
- The Oil Spill Contingency Plan (OSCP);
- The Health Plan;
- Crisis management.

The GIS for HSE shall allow to:

- Access to available HSE geographical data where any E&P activity occurs;
- Prepare Baselines or monitoring studies;
- Prepare a strategy and manage an Oil Spill Response;
- Provide reliable information for crises management;
- Measure potential changes happening in the surroundings of an E&P site.

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 supplements, is the latest revision published at the effective date of this document.

Reference	Title
Not applicable	

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Total General Specifications

Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and supplements, is the latest revision published in the applicable yearly collection.

Reference	Title
GS EP ENV 111	Environmental Baseline and Monitoring Studies: Onshore sites
GS EP ENV 112	Environmental Baseline and Monitoring Studies: Offshore and Nearshore sites
GS EP ENV 120	Environmental Impact Assessment of E&P activities
GS EP SDV 101	Social Baseline Study
GS EP SDV 102	Social Impact Assessment

3. Definitions

3.1 Data model

GIS data models provide templates for the management and delivery of GIS data. They describe how the data is organized in the geodatabase.

It helps to improve:

- The data structure: it defines how data is organized and related (hierarchical, network, relational, etc.);
- The data integrity: it provides implicit rules for maintaining data integrity in the data model instance;
- The data manipulation: it provides a standard format to help creating and updating data.

3.2 Geodesy (Coordinate Reference System)

Coordinates define a position unambiguously only when the Coordinate Reference System (CRS) to which those coordinates are part has been identified. CRSs shall be related to the Earth through a rigorous geodetic definition (georeferenced):

- Geographic 3D : a georeferenced 3D system with axes of latitude, longitude and ellipsoidal height;
- Geographic 2D: a georeferenced 2D system with axes of latitude and longitude. This is the horizontal subset of a geographic 3D CRS;
- Projected: a georeferenced Cartesian 2D system with axes of easting and northing. The axes may be referred to as for example E and N or in an alternative case as X and Y, and may be given in any prescribed order. Projected coordinates result from the conversion of geographic 2D coordinates through a map projection.