

Soga Product Information Sheet

Integrity Management System Application (IMSA)

Name:	Integrity Management System Application
Acronym:	IMSA
Brief Description:	Integrated application carrying all functionality involved in the integrity management process. Can be used for any static equipment class.
Front End Software Options:	MS Access 2000 or MS Access 2003
Database Software Options:	MS Access (any version) or Oracle (any version) or SQL Server (any version)

Functionality Details:

IMSA is a software application designed as a one-stop shop application for integrity management. IMSA can be configured for all static equipment classes and has been successfully implemented for onshore and offshore pipelines, subsea systems and other underwater assets. This system creates a repository of inspection data taken during a survey; using data upload tools and presents it in a user-friendly querying and browsing screen.

IMSA is capable of performing RBI calculations to generate due dates for future inspection requirement. It is configurable software that allows for a generous degree of flexibility in terms of RBI rules used by various clients.

IMSA carries the following modules:

- **Survey Data**
- Stores and displays survey/inspection data with logical filters by asset tree, event/anomaly type, Kp, and configurable conditions allowing for easy retrieval of desired information even from very large record sets. Inspection records can be linked to Multimedia or reference documents. Anomalies are cross-linked to inspection records and integrity assessments can be carried out.
- **Anomaly Module**
- Used for raising, assessing, tracking, closing out and auditing of integrity related anomalies.
- **Integrity Management**
- Used for tracking progress against a pre-configured Integrity Management process and comparing actual completion dates with planned target dates.
- **Risk Based Inspection Module**
- Used to input and update risk elements (consequence and probability of failure and confidence levels), register failure threats against assets, assign mitigation actions against asset/failure threat pairs, assign frequency levels to mitigation options apply RBI rules to derive next mitigation due dates and extract inspection and maintenance workscopes accordingly.
- **Design Data**
- Used for storage and easy, filterable retrieval of design information by asset at various levels in the asset hierarchy.
- **Drawing Module**
- Used to configure asset drawings to link to asset related information such as inspection data, design data, anomalies, reference documents and multimedia. Such information can be retrieved by locating assets (at any hierarchical level) by browsing the linked drawings.
- **Reference Libraries**
- Used for storage and easy, filterable retrieval of reference documents, drawings and multimedia, either asset-based or not. Keyword searches and thumbnail and preview displays allow users to quickly locate the desired reference. Can be used as a stand-alone library or linked to corporate document storage systems.
- **Event Triggered Actions**
- Used to monitor events that might trigger integrity mitigation actions and manage the response. Configurable automatic emails are triggered when events occur. Simple to use event location module allows users to quickly plot the location of events and their distance from the nearest asset.
- **Data Loading/Management**
- Allows for manual loading of survey data and configurable data integrity auditing.
- **Trending Module**

- Carries out trending of time-based integrity parameters deriving predicted retirement dates. Trended parameters are: anode depletion, CP potential, separation at crossing, chain wear, burial, fishing activity, encroachment frequency, in-line thermal movement, marine growth, scour, span length and wall thickness.

- **Quality Assurance Module**

- Used to compile annual QA plans, schedule internal audits; produce audit checklists and raise and track observations and non-conformances.

- **Report Builder**

- Used to configure recurring reports such as annual pipeline reports.

- **Survey Data Upload Module**

- Allows for electronic loading of survey data.