BUSINESS CASE

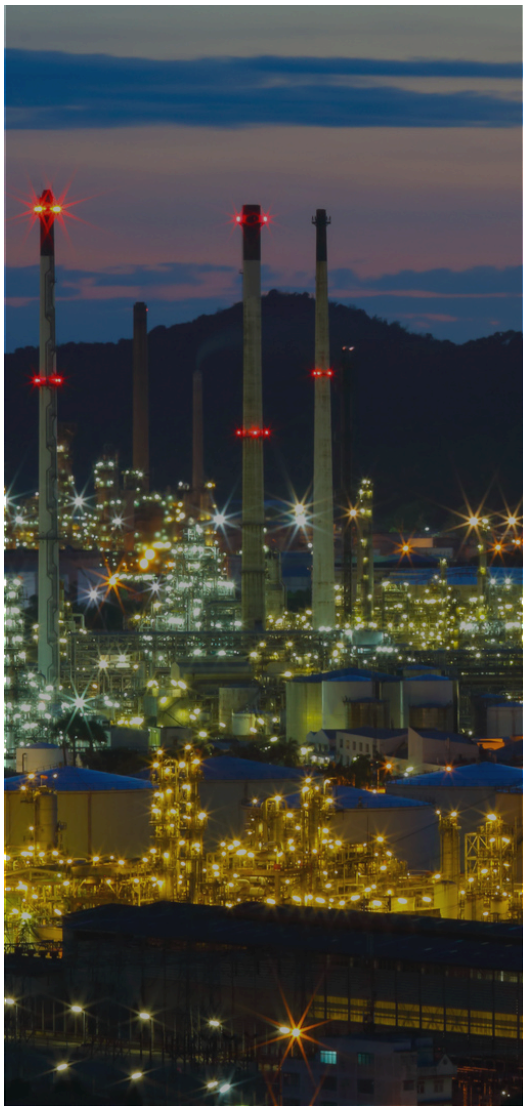
Elevating Asset Integrity Management for a leading North Sea Upstream Operator

Product: IMS PEI, IMS Civil, IMS PLSS
Sector: Oil & Gas
Subsector: Upstream

THE THREE PILLARS

An industry leading North Sea upstream operator chose Cenosco's Integrity Management System (IMS) software suite to streamline their operations. In this business case, we explore the value they attained through their use of IMS, including:

- Improving Visibility and Integration
- Advancing Digital Transformation
- Deepening Asset Integrity Management



"During the annual 3-day UKAS accreditation audits last March, the auditors spent a day exploring Cenosco's IMS and our inspection records in IMS. Despite initial unfamiliarity, the auditor went from not knowing it to loving it. The Audit team was particularly impressed by the depth of detail IMS offers, from corrosion rate calculations to robust inspection data management capabilities. This positive experience reinforces IMS as a valuable asset in maintaining the highest asset management standards at our the company offshore and onshore gas plants."

IMS Site Coordinator and Head of Inspection
A North Sea upstream operator

IMPROVING VISIBILITY AND INTEGRATION

In response to challenges posed by a siloed approach and limitations linked to anomaly management especially performance standard breaches, the company embarked on a transformative journey to enhance visibility and integration in asset management. This initiative aimed at fostering a more dynamic and efficient system, resulted in their adoption of Cenosco's IMS Software (Integrity Management System) which integrated their degradation management strategy and Risk Based Inspection (RBI) processes.

Transition and management of anomalies in IMS

Recognizing the limitations associated with the previous anomaly management system, the company strategically shifted to managing anomalies via Corrective Action Inspection Recommendations (CAIRs) within the Integrity Management System (IMS). The reliance on the previous anomaly management system meant that defect assessments, inspections, and corrective actions were managed separately, leading to disconnected systems. Now, with anomalies being managed via CAIRs in IMS, a more dynamic and efficient system emerged, streamlining defect assessments and corrective actions while eliminating manual and paper-based processes.

This shift marked a strategic move towards a more dynamic and efficient system for managing corrective actions and inspections. The digital nature of CAIRs within IMS eliminates the manual and paper-based processes, significantly reducing the time and effort required for defect resolution.

CAIR Management Journey

The initiative successfully implemented at one of their gas plant, facilitated by training from Cenosco, included redesigned inspection checklists and a dedicated anomaly approval dashboard. This effort also fostered a culture of continuous improvement and innovation within the organization by enhancing the visualization of the anomalies.

IMS for Integrity Management

Adynamic dashboard was crafted to provide real-time visibility into anomaly approval and inspection workflows. This initiative was complemented by the integration of Degradation Management Framework and Risk Based Inspection (RBI) processes into the Integrity Management System (IMS), establishing a foundation for comprehensive asset management. This strategic integration not only enhanced the efficiency of workflows but also ensured a holistic approach to managing and maintaining assets.

ADVANCING DIGITAL TRANSFORMATION

In addressing complex challenges, the company implemented innovative solutions to optimize field inspections and enhance asset management. Beyond this, IMS will serve the company as a means to scale their digitization.

Innovative Field Inspections

Preparing for Pipework Inspection with AIR3D and Remote Inspection Technologies
The company is now adopting cutting-edge technology for pipework inspections using advanced software such as AIR3D which recognizes integrity issues on images captured by inspection drones, ensuring a comprehensive and efficient approach to field assessments.

Inspection Data Collection on iPads for anomalies
Leveraging remote offline inspection data collection on iPads for Corrective Action Inspection Recommendations (CAIRs) streamlined the inspection process, enhancing efficiency and responsiveness to corrective actions.

Advancing their digitalization journey

Digital Twin, AIR3D and Remote Inspection Technologies
The company plans on embarking on the journey of powering digital twins using AIR3D, remote inspection technologies, and establishing inspection reporting via Equipment Condition Histories (ECHs) within IMS for Corrosion Under Insulation (CUI). This forward-looking approach is aimed at enhancing integrity management through remote field inspections through drones and a digitally driven asset management strategy.

Enhancing Asset Integrity Management Through Remote Field Inspection
The integration of digital twins and remote field inspections will represent a strategic shift towards a more efficient and digitally driven approach to managing asset integrity.

The impact of the company's digital transformation is evident in various aspects. Offline inspection data collection on iPads and the use of AIR3D for autonomous integrity recognition signify a leap in streamlined data gathering, reducing reliance on traditional manual methods. The adoption of digital tools, including Air3D, Digital Twins, and remote inspection technologies, ensures universalized documentation, promoting consistency and compliance with the company’s UKAS accreditation standards. This digital transformation not only streamlines processes but also aims to minimize personnel presence in high-risk environments, aligning with the company's commitment to safety and efficiency.

DEEPENING ASSET INTEGRITY MANAGEMENT

In its commitment to fortifying asset integrity management, the company has embarked on a transformative journey marked by strategic solutions, forward-looking initiatives, and substantial business impacts. This comprehensive approach unfolds across three key dimensions, each contributing to a more efficient and future-ready asset management strategy.

Integration with Degradation Management Framework

The company's first strategic move involved seamlessly linking the Degradation Management Framework with the inspection process, setting the stage for enhanced asset integrity. This integration not only streamlined the inspection workflow but also played a pivotal role in contributing to more effective Risk Based Inspection (RBI).

Future Focus

Looking ahead, the company has set its sights on deepening the use of the Integrity Management System (IMS) in various facets, including RBI, corrosion management, fabric maintenance, reporting, and dashboards. The organization is aiming for a seamless connection between IMS and SAP to achieve synchronized defect management. In the coming year, a trial will begin to integrate SAP with IMS on one of the company’s FPSO project. The successful integration during this trial will pave the way for scaling the integration of IMS and SAP across the other company sites.

Business Impact

By positioning IMS as the one-stop-shop for the entire inspection and integrity management process, the company has not only streamlined its operations but has also future-proofed its approach in the dynamic oil and gas industry landscape. This transformative journey outlines the company's significant improvements in visibility, digital transformation, and deepened asset integrity management, culminating in a robust and future-ready approach to asset management.

Cenosco and the IMS Suite

INTEGRITY MANAGEMENT SYSTEMS

Cenosco is the leading provider of asset integrity management software.

For over 20 years, we have been leading the way in product innovation across asset-heavy industries, including Oil and Gas, and chemical manufacturing. Our IMS Suite of solutions was designed to support users in making smart inspection and maintenance decisions to increase safety, maximize asset availability, and optimize asset management costs.

Meet IMS

IMS is a unified asset integrity management solution suite for all your equipment types and processes. The range of IMS products can be deployed individually or together, and each component complements the others seamlessly.

IMS PEI
Pressure Equipment Integrity

Manage equipment integrity using RBI methodology and advanced corrosion calculations.

IMS RCM
Reliability Centered Maintenance

Optimize preventive maintenance plans based on risk and take advantage of our library of maintenance strategy templates.

IMS SIS
Safety Instrumented Systems

The perfect solution for your end-to-end Safety Life Cycle analysis.

IMS FCM
Flange Connection Management

Manage critical flanges with a strict guided maintenance protocol.

IMS PLSS
Pipeline and Subsea Systems

Manage pipeline and subsea system integrity, performing In-Line Inspections (ILI) and Fit-For Service (FFS) calculations.

IMS CIVIL
Manage Civil Structures

Manage equipment integrity with RCM and RBI methods adapted for civil degradation dynamics.

Learn More

Why IMS?

The IMS Suite of solutions was designed to support users in making smart inspection and maintenance decisions to increase safety, maximize asset availability, and optimize asset management costs. Our domain expertise goes deep into the assets, and with our fully integrated software, you can centralize your maintenance and inspection efforts.

- Keep your people safe
- Gain control over your assets
- Manage your assets with ease
- Comply with regulations
- Avoid leaks and other disasters
- Exclusive Methodologies and Libraries

OUR SOLUTIONS ARE USED GLOBALLY

We're deployed in over 40 countries across the globe.

11,000+ ACTIVE USERS

200+ DEPLOYED ASSETS

20+ YEARS OF EXPERIENCE

Proven Results

- 20% Inspection cost reduction
- 30% Turnaround time reduction
- €100K - € 100M Savings per leak prevented

Trusted by world leaders