



**Asset Guardian<sup>®</sup>**  
**SOLUTIONS LIMITED**

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# CASE STUDY

**Reliability Analysis and Maintenance Solution  
for Global Oil and Gas Operator**



## BACKGROUND

A leading Oil and Gas Operator was seeking to find a solution for analysing maintenance data to determine actual failure rates of control and instrumentation equipment.

The Operator has been using Asset Guardian since 2004 and was in need of a tool that could take the existing event data from Preventative Maintenance and Corrective Work Orders, to build a picture of real world failure rates of their instrumentation and valves.

Globally this data runs to millions of records, and it had never been analysed before to extract this valuable information, and no other solution was in place for this. Asset Guardian was a first.

## SOLUTION

AGSL provided a fully customised Reliability Analysis and Maintenance module.

The module takes data, and analyses it across facilities, regions and globally against device classes to compare actual failure rates with manufacturer data.

Asset Guardian ensures compliance with safety standards (IEC 61508, IEC 61511) and all local regulatory controls in each region.

The system interfaces to a database where all future maintenance orders are entered.

The module is an extension to their existing system around Software Backups and Change Management, Obsolescence Management and Cyber Security Management.



## THE RESULT



The client is now able to confirm that their maintenance schedules and operations are in compliance with regulations.



Considerable savings are made where some maintenance schedules are very onerous, and can safely be extended.



The last 5 years of historical data was reviewed, classified and exported directly from works maintenance systems like SAP PM and Maximo.



The module is now being used across 10 regions and multiple facilities, providing a global, regional and individual view across all of its facilities.



The solution is unique and it can be applied across industries wherever the reliability of control and instrumentation equipment is of interest.

**Global Analysis  
of Data**

**In compliance with  
IEC 61508  
IEC 61511**

**Automatic  
Calculation of failure  
rates**

**Used Globally across  
10 Regions**