A client with an ageing asset (over 20 years old) was prompted to carry out an asset life review, due to issues with obsolescence and wear-out. The study was to consider changes in use from the original design, along with a projected 25 year extension to service.

The client also required the final report to be such that it could easily be absorbed into the organisation, it was to be in a ‘live and updatable’ format and could be used as the ‘bedrock’ for their future asset life management strategy.

As ABB has an international track record for delivering asset assessments including: criticality and vulnerability assessment, asset health checks, asset life studies and asset life extension studies we were approached by the client to help.

However, as the emphasis required by the client was novel, ABB had to adapt its established methodology to suit and demonstrate a high level of flexibility.

**Solution**

In accordance with ABB’s tried and tested approach and methodology the project started with a scoping study followed by a detailed assessment and reporting.

The overall duration for the study was over twelve months, and involved a combination of home office, site and offshore activities, all having to be planned for minimum impact on the day to day activities of the client’s personnel.

ABB consultants worked very closely with the client’s personnel as 'one team'. This ensured that the client understood and bought in to the process being used, understood the analysis and justification behind the decisions, and the client’s personnel were able to take the work to the implementation stage with full understanding and knowledge of ‘how we got there’.

ABB provided an asset life review to help secure the life of a platform for the next 25-30 years.
Because ABB’s methodology is flexible and adaptable it was easily tailored to meet the client’s requirements and the characteristics of the assets being assessed.

The project followed ABB’s pRIME philosophy. pRIME (process Reliability and Integrity Management Excellence) is about the asset and integrity management improvement journey; it’s recognising the symptoms, diagnosing the issues, and implementing improvement / treatment.

The pRIME approach is a consultancy programme supported by tried, tested, consistent and coherent methodologies and capability.

Following pRIME means a beneficial, cost effective sustainable solution. All processes are risk based, ensuring that effort is concentrated on areas that will give the highest return. This approach is supported by a coherent set of IT tools (pRIME toolkit), providing a consistent and efficient approach.

The final report was web-enabled providing the client with live information and an updating capability for future use or addition as well as to help implementation. Implementation of the recommendations by the client will secure the life of the platform for the next twenty five to thirty years.

As an illustration of findings or quick wins for the client:

- ABB identified issues with safety doors, which the client accepted as a priority issue
- The client had also been regularly replacing flare tips, ABB recommended a change of material to enable the flare tips to last longer - not something the supplier had recommended to date for obvious reasons

Benefits
The key objective of the study was to conduct an asset life review on the platform’s topsides that allowed the client to:

- Identify key concerns and issues from an asset life perspective
- Identify the costs and spend map to enable informed business decisions to be made with respect to future asset life investment
- Ensure that right actions could be planned and executed in a timely manner to enable the platform to be used safely for the foreseeable future and to provide demonstrable evidence of such