



INDUSTRY

MATURE ASSETS

Extend the life of ageing facilities

Oil and gas production fields are facing the natural decrease of production due to maturing of the wells and the ageing of the production facilities. Our goal is to maximize your production and lay the ground for further growth.

RAM analysis

One of the biggest challenges of the oil and gas industry is to develop and implement new technologies to enhance recovery from mature fields and extend the life of ageing facilities.

DNV GL's RAM software products, Maros and Taro, will provide a complete vision of the mature field and/or ageing asset, including:

- A quantitative picture of the asset's performance over its remaining life
- Identification of critical equipment and systems which provide focus to improve the asset's performance
- Quantification of the impact and/or threats from potential investments

How do you benefit from Maros and Taro

Optimizing the performance of an asset is far from a simple task. Maros and Taro will help you to develop a better understanding of the performance behaviour by describing pertinent parameters such as produced volume, availability, maintenance, resources usage and operational constraints:

- Identify which equipment and units require focus from performance improvement initiatives
- Rank optional initiatives by considering the greatest return on investment
- Improve the performance safely and responsibly
- Give a full picture of yearly production efficiency over the asset's life



There are numerous benefits of running Maros and Taro, including:

- Quantitatively rank the potential success of operation and maintenance initiatives based on production efficiency impact and return on investment
- Assess initiatives' impact on safety and asset integrity
- Give these initiatives a voice in the business plan through assessing their combined impact on production efficiency for future years
- Identify the impact on the asset's performance due to changes in the design and new developments at the field
- Identify the point at which production from the asset is no longer economically feasible

By using Maros and Taro you will be able to:

- Support your decision-making process based on the actual performance of the asset
- Give an efficient and effective evaluation of possible scenarios
- Quantify the gap between current and best-in-class performance
- Review and check effectiveness of on-going improvement initiatives
- Integrate all assets in the portfolio and check the influence of each asset to the whole performance
- Provide a portfolio forecast of production year-on-year

What parameters should you take into account?

- Failure and repair distributions for each equipment item
- Ability to model logical events to represent operational strategies or constraints e.g. specific re-start time
- Maintenance philosophies
- Impact of seasonal constraints in regards to intervention strategies
- Export constraints, for example, seasonal issues, number of vessels, etc.
- Individual well production profiles, including variable demand profiles
- Wells phasing in and out over the asset's life
- Resources availability such as vessels, spare equipment and crews
- Economic parameters such as mobilization costs, daily cost for operations, oil price, and more