

Please fill in the name of the event you are preparing this abstract for.	International Petroleum Technology Conference	
Please fill in your 5-digit IPTC manuscript number and IPTC Control number.	19IPTC-P-2838-IPTC IPTC-19319-MS	
Please fill in your abstract title.	The Evolution of Completions Benchmarking in Malaysia: A New Way of Working	
Please fill in your author name(s) and company affiliation.		
Given Name	Surname	Company
Shahril Ridzaudin	Mohd Mokhtar	PETRONAS
Norjusni	Omar	PETRONAS
Siti Rodhiah	Fazilah	PETRONAS
M Farris	Bakar	PETRONAS
M Zaidan	Khalid	PETRONAS
M Zulkifli	M Zakaria	PETRONAS

## Abstract

In the recent years, the completions operations in Malaysia have shown irregular performance across all the operators and service companies. Low uptime level, exceeding budget, non-standardized design and unreasonable contingency level and excessive surplus material are among the identified elements that causes such irregular performance. The value leakage from these elements has become a huge concern to Malaysia Petroleum Management (MPM); the regulatory body of PETRONAS. A strategy was drawn up to set up a more uniform way to standardize, optimize and improve the efficiency of how completions scope are executed in Malaysia.

Based on the analysis of over 300 wells completed between 2013 to 2015, MPM have set up a 3-year roadmap on elevating the completions performance covering the pre-engineering design, operation execution, contingency computation and hardware inventory management. These sections are ultimately governed by a Completion Minimum Standards (CMS) that was set up to outline the performance benchmarking for all operators in Malaysia.

This paper will outline the strategy that MPM implemented to curb the value leakage that was effecting the completions performance. The strategy includes the establishment of an industry level collaboration known as Completions Standardization Technical Committee (COMSTEC) which comprises members from MPM, operators and service companies. This committee have jointly produced a guideline to standardize and optimize the whole end to end completion cycle in order to meet the performance benchmarking.

The impact of the strategy implementation can be observed after 1 year of implementation. The number of wells completed in 2017 that met the CMS improved by 45% compared to 2016. This optimized execution of completions scope created a value of 19% in cost efficiency throughout all the operators. Although there were challenges in the early stage of implementation, the value that all the stakeholders gained from it have exceeded the expectation and will continue to be used in the coming years. Astoundingly the benchmarking drives more new technologies implementation despite in low oil prices period. Both the performance benchmarking and the guideline are made relevant at all times as its effectiveness is constantly monitored to reflect the latest state of the industry.

The whole strategy is also going through a digitization evolution where the completions performance analysis will be automated through MPM analytical, predictive and cognitive digital platform. This will elevate the completion performance to an even higher level of efficiency.