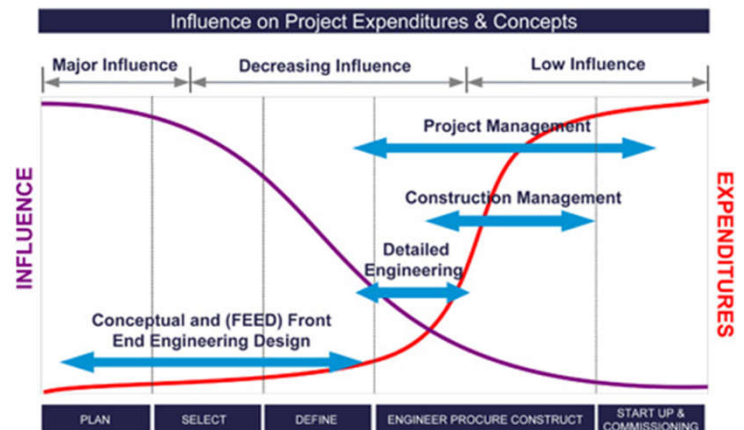


P&OA Methodology

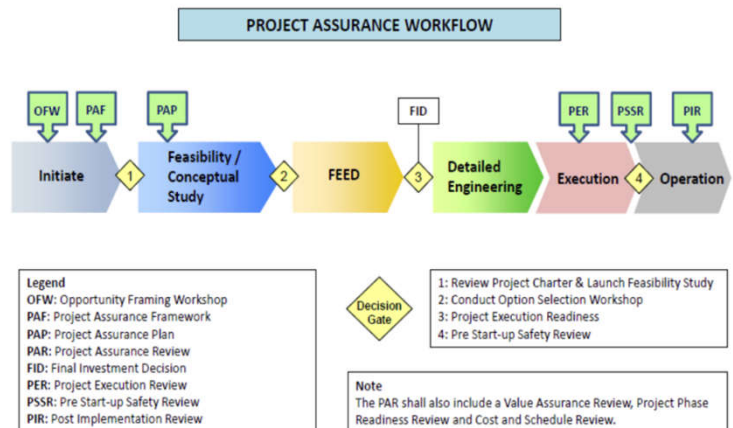
Aramis Project & Operations Assurance (P&OA) Methodology was developed to document, list, describe, schedule, define resources required and specify the deliverables of all assurance activities related to a capital development project.

Project & Operations Assurance (P&OA) is a process that consists in proactively managing the Risks & Opportunities that potentially erode or create value for the Owner across the project value chain. The P&OA Plan is implemented as follows:

- Short Term: Project Assurance (related to Project Execution phase)
- Long Term: Operations Assurance (related to Facilities Operation phase)



The “Project Assurance” covers the Project life cycle, providing a continuous process with discrete deliverables at specified Stage Gates Reviews (SGR) taking place at the end of each Project phase, from Initiation, Feasibility/Conceptual study through Front End Engineering Design, to the end of the Project Execution. Project Assurance covers as well the Project Technical and Control Reviews.




The “Operations Assurance” is a continuous process taking place from project inception through to steady state operations:

- To ensure that the installations are designed and constructed to meet Owner’s Safety, Operability, Reliability and Maintainability objectives.
- To support transition from EPC phase to start-up and initial operations phase.

Aramis P&OA methodology is compliant with international Oil & Gas Operators’ and other Industries’ Project Assurance and Operations Assurance best practices.




P&OA Methodology

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	Project & Operations Assurance Plan	
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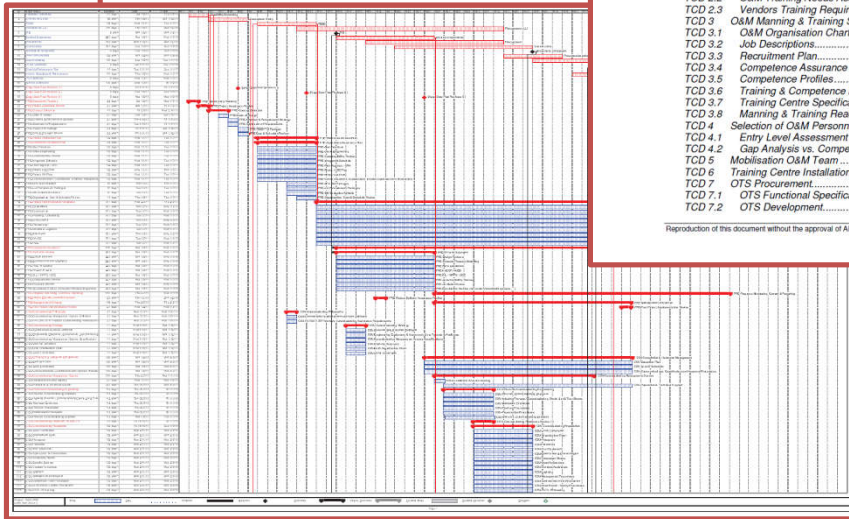
PROJECT & OPERATIONS ASSURANCE PLAN

Revision	Description	Prepared By	Reviewed By	Approved By	Date
0	Issue for Comments	DAB	AMB	JBG	23Oct13
A	Issue for Review	DAB / WOB	AMB		08Jul13

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P&OA Workshop Sample Worksheet (Pre-FID-Extract)

PROJECT ENGINEERING		Project Time-Line					
ID	ACTIVITIES	Feasibility/	FEED	Detailed Eng.	Construction	Commissioning	Normal Ops
PRE001	Project Assurance: Stage Gate Peer Reviews						
PRE002	Project Assurance: Plan						
PRE003	Concepts Evaluation						
PRE004	Risks Register Review						
PRE005	Concept Selection Workshop						
PRE006	HAZAR/HAZID						
PRE007	HAZOP NO.1						
PRE008	Safety Concept						
PRE009	Environmental Base Line Study						
PRE010	Cost & Schedule Review						
PRE011	Project Organization Review						
PRE012	Permitting & Statutory Approvals Plan						
PRE013	Basis of Design						
PRE014	Statement of Requirements						
PRE015	Contract & Procurement Strategy Workshop						
PRE016	FEED ITB Package & Evaluation Criteria						
OPE001	High Level Operation & Maintenance Philosophy						
OPE002	High Level Process Control Philosophy						
TOD001	Preliminary Manpower Market Survey						
TOD002	High Level Manning & Training Philosophy						
PRE017	Project Delivery Assurance: Technical Reviews						
PRE018	Project Execution Plan						
PRE019	Project Delivery Assurance: Plan						
PRE020	Best Practices						
PRE021	Value Engineering						
PRE022	Project Organization, Authority & Job Description Review						
PRE023	Project Interface Matrix						
PRE024	Communications, Coordination, Interface Management Procedures						