



PRODUCT DATASHEET

AVEVA[™] Contract Risk Management for Owner Operators

Gain complete control of contracts for complex projects and enterprise project portfolios

AVEVA Contract Risk Management is a contractual risk management solution that minimizes cost and schedule overruns on capex intensive projects & organizations. Contract administrative processes are governed through the pre- and post-award phases of contract administration and all stakeholders inside and outside the organization are connected via a secure collaboration platform to ensure contractual activities are performed at the right time by the right people.

The accompanying analytical platform provides oversight of the commercial activity across the organization with drill down insights by company division and function, or by asset or individual contractor. These insights provide the contracts and procurement teams with the necessary toolkit to ensure that all change has proper governance, costs are controlled, delays and bottlenecks are mitigated which leads to a reduction in costly claims and schedule overruns.

Business challenges

Owners undertaking industrial Capital Expenditure (CapEx) projects know that the lifecycle of a contract goes far beyond once the contracts are signed and scope is agreed. Change throughout a project is not just common – it's inevitable. But failure to take control of all changes and decisions, and still comply with contractual obligations can lead to project delays, unexpected cost and misunderstood scope, which can ultimately lead to the following business-critical challenges:

- 1. Poor project delivery** – most projects are executed using disparate solutions for engineering, materials, contracting and construction management.
- 2. Uninformed decision making** – change is inevitable throughout the project phase and can drive up costs and schedules immensely. Despite this, most project teams loosely manage their change management process, and approve or deny change requests based on little information on how it will affect the project. This creates the breeding ground for poor project outcomes and leaves teams pointing fingers to defer the blame.

- 3. Contracting teams are under increased pressures** – As the construction industry faces overarching skills gaps due the changing workforce, contracting and procurement teams are not immune. This leads to pressures and subsequent risks for organisations to ensure that their projects executed across the globe have appropriate governance and ample oversight that traditionally is only provided by the most experienced personnel.
- 4. Claims & disputes** – on average, 9.15% of project costs¹ are leaked due to poor management of change and unplanned legal costs resulting from escalation of disputes. Inefficient contract administration and payouts of penalties due to breaches in contractual obligations can not only lead to cost overruns, but also have major impact on projects and future business relationships.

Having a reliable, central contract management system, trusted and used by all parties, ensures complete control on a project. From enforcing processes to promote best practice, to improving working relationships, it also helps enable owners to maintain oversight of progress for key contractual obligations.

How prevalent is the problem?

98% of mega-projects are delivered late and 80% are over budget due to poorly managed risk and high levels of uncertainty and scope changes throughout the course of the project.*

- 56% of project owners link overruns to lack of effective change control**
- 64% of project overruns are due to untracked scope changes**
- 38% of OOs blame overruns on inadequate governance in contract management**
- 7.1% is the average amount of transactional (non-productive) waste attributed to claims defense on a project***

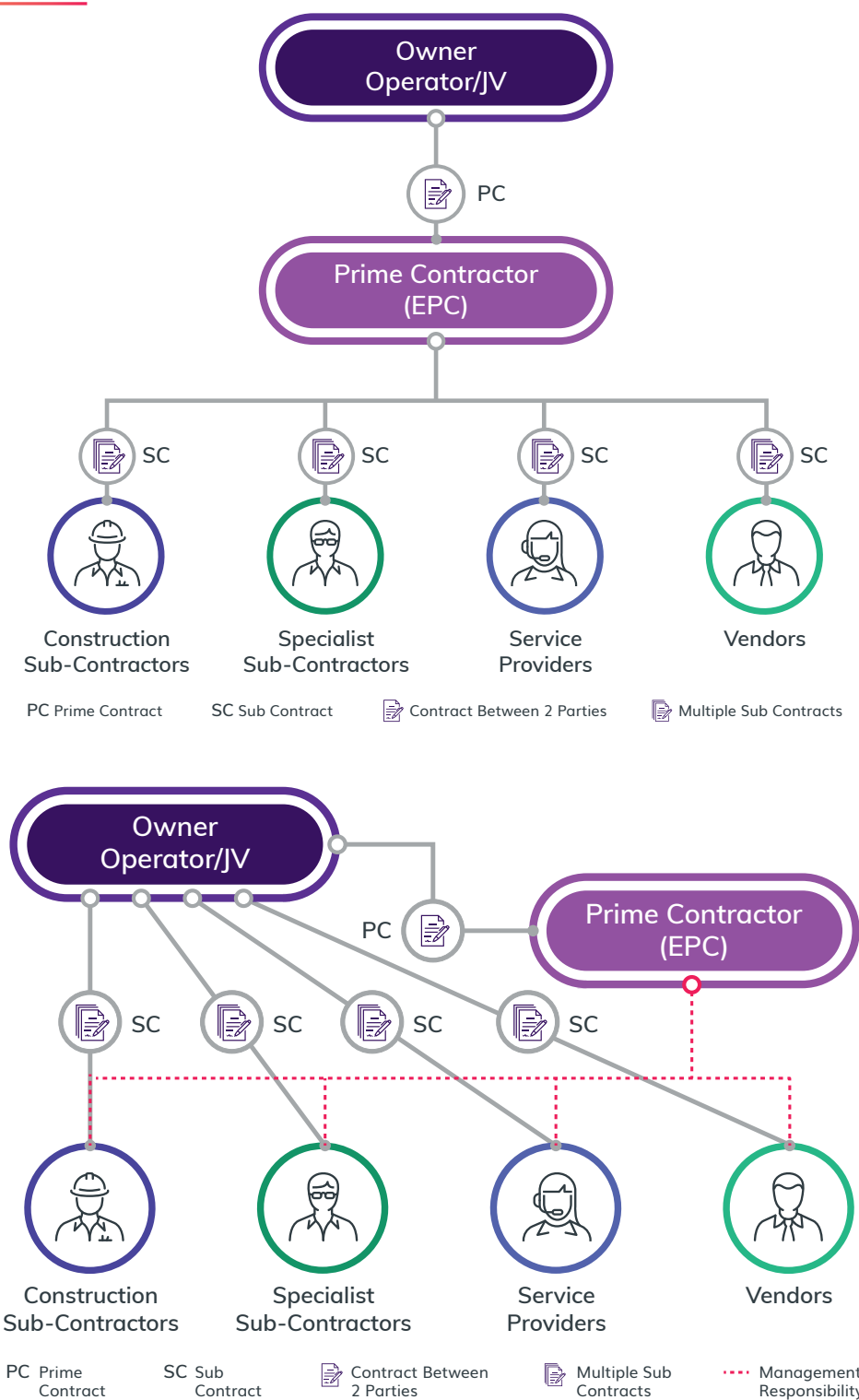
*Source: McKinsey – The Construction Productivity Imperative

**Source: IACCM – The Value of Contract Management

***Source: CII – Main Sources of Transactional Waste

¹Source: International Association for Contract & Commercial Management (IACCM)

AVEVA Contract Risk Management alignment for common project delivery structures



“9.15% is the average impact to bottom-line performance that results from weaknesses in contract management”

Source : March 2017, The Value of Contract Management Survey Results (IACCM)



Contract Risk Management key benefits for Owner Operators

Centralized contract register

Some of the biggest decision making errors, which result in avoidable project costs, are associated with a lack of awareness of the contractual terms.

AVEVA Contract Risk Management mitigates against this common issue by providing an online contract register that brings intelligence beyond file shares and SharePoint folders:

- Signed contract documents are stored within a smart digital contract representation that holds a digitized format of the key milestones, obligations, financial foresights of the past and future outlook of financial commitments and expenditures.
- Contracts are linked to the RFx process from which they originated within which ensures full traceability from the current state of the contract back to its draft origin.
- Organization outline framework agreements ensure governance that projects and departments are calling off validated suppliers using preferred rates and appropriate bid evaluation.
- The Contract Risk Management digital contract has embedded intelligence to help contract administrators ensure that Contractor's insurances, bonds and guarantees are in place, that obligations are prominent to the responsible parties and events such as contract renewals are planned with sufficient lead time.
- Complete audit control ensures all that not only is it easy to detect who made changes when but all of the events leading up to the changes is traceable as the associated communications, reviews and decision stage gates are all accessible within the same platform.

Controlled change management

Change is inevitable, but manual, disconnected and undefined processes or governance means the commercial impact of each change doesn't always surface until the opportunity to correct it has already passed.

With AVEVA Contract Risk Management's capital project-centric platform, project teams can:

- Take control of changes – manage potential, pending and approved changes by empowering users to identify and act, long before a commitment becomes a burden to the project
- Reduce the likelihood of over-commitment by ensuring the timely receipt, review and approval of changes

- Mitigate or defend against potential claims – Contract Risk Management provides early indicators for contract administrators and project teams that they have contractual obligations to, or risks that may develop during a project. Examples of obligations that are monitored within Contract Risk Management include:

- Requirement for Prime Contractor to respond to Technical Deviation Requests within a defined timeframe
- Requirement for Prime Contractor to pay subcontractor per the contractual agreed timeframe.
- Ensure scope changes are reviewed and approved by appropriate stakeholders and that the process of recovering change-related costs comply with the terms and conditions set out in the contract.

The screenshot displays the AVEVA Contract Risk Management web application. The top navigation bar shows the user is logged in as '100195CNT / VRC0004'. The main header indicates the current view is 'Contractor Variation Request' for 'Communication - VRC0004 - Revision 1 of 1'. A status bar at the top right shows '0 Outstanding Reviews', 'Not Agreed', and a 'Create Related Communication' button.

The main content area is divided into several sections:

- Not Agreed 31 Oct 2019:** A message stating 'Attachment needs complete backup. Please revise communication and resend.'
- Communication Details:** A table with the following information:

Communication Title	Contractor Variation Request
Date Issued	09 Nov 2018 03:46:11 (UTC - 6:00)
From	Emmet O'Reilly (Contractor Representative)
To	Melanie Fontenot (Company Representative)
Originated On	09 Nov 2018 03:38:00 (UTC - 6:00)
Description	See attached documentation
Currency	USD
Financial Impact (USD)	250,000.00
Schedule Impact (Days)	35
- Attachments:** A list showing 'Contractor Change Request.docx (12 KB)'.
- Supporting Information (Internal Only):** A message stating 'This communication has no attachments.'
- Communications Replied To:** A message stating 'This Communication has not been marked as a reply to any related Communications.'
- Associated Obligations:** A table showing 'VRC0004 - Requires Agreement' with a status of 'Completed'.
- State Transitions:** A table showing the transition from 'Awaiting Agreement from Recipient' to 'Not Agreed' on '31 Oct 2019 09:14:27 (UTC - 5:00)'.
- Process Chain:** A diagram showing the flow from 'VRC0004 Not Agreed' to 'VO0011 Approved'.
- Tags:** A message stating 'No tags have been added to this communication.'

Dispute mitigation and control

Through automated processes that compile a bulletproof paper trail and provide early detection of dispute and claims risk, owners and EPCs can collectively limit non-productive time and costs spent on mitigation and avoid litigation.

AVEVA Contract Risk Management mitigates against the escalation and impact of disputes through:

- **Early-warning indication of upcoming contractual deadlines** to reduce the likelihood of subcontractor claims. Examples of monitored obligations might include, but are not limited to:
 - Safety, environmental requirements, timely responses to Technical Deviation Requests, and subcontractor payment reminders.

- **Early identification of potential disputes** – ensuring preventative measures can be taken. Monitoring and reporting of leading indicators such as an increase in the “Number of Rejected/Disputed Site Instructions” or “Number of Technical Queries Raised” provides insights on claims that could be expected in the future.
- **Better alignment and a trusted relationship between the contractor and their client** with respect to contract management processes and procedures. When both parties align on a singular contract management platform, they are guided jointly by common methods and templates.

The screenshot displays the AVEVA Contract Risk Management interface. The top navigation bar includes 'AVEVA™ Contract Risk Management' and 'North America > Block 40'. The main header shows the communication title 'Additional Lifting Equipment and Manpower on Block 40' and its ID 'CLM0001'. A status bar indicates 'Agreed 04 Jan 2018'. The interface is divided into several sections:

- Communication Details:** A table with fields for Communication Title, Date Issued, From, To, Originated On, Description, Currency, and Financial Impact (USD).
- Attachments:** A section showing a file named 'Lifting Equipment Claim.docx (12 KB)'.
- Supporting Information (Internal Only):** A section stating 'This communication has no attachments.'
- Communications Replied To:** A section stating 'This Communication has not been marked as a reply to any related Communications.'
- Associated Obligations:** A table showing 'CLM0001 - Requires Agreement' with a status of 'Completed'.
- State Transitions:** A table showing 'Agreed' with a date of '04 Jan 2018 12:00:27 (UTC-6:00)'.
- Process Chain:** A flow diagram showing the sequence: VP0002 Analysis -> VO0002 Approved -> CLM0001 Agreed -> VO0009 Draft.
- Tags:** A section stating 'No tags have been added to this communication.'
- Communication Properties:** A table showing 'Revision' as '0'.

Trusted best practice and steadfast compliance

With built-in project execution best practises and process automation to steer contractor activity, AVEVA Contract Risk Management unlocks opportunity to improve project performance, and reduces the risk of cost overages and lost time due to litigation. It also reduces dependency on individual contract managers to enforce governance and oversight to contractual procedures.

Contract Risk Management empowers teams to:

- Ensure the utilization of world-class contracting processes, and enforce compliance and discipline in the execution of these processes. Once in place, contracting processes can be measured and managed to help drive a culture of continuous improvement.
- De-risk the project on regulatory compliance challenges, such as risk reduction of non-compliance with government legislation. (For example, the United States Sarbanes-Oxley Act (SoX) can lead to fines of up to \$5m and 20 years in prison for executives). This is achieved through consistent adherence to approved processes during both pre- and post-award phases.
- Decrease man-hour and third-party auditor costs when required by demonstrating compliance with procedures through easily accessible, trusted, and complete information from a single source.

Gantt Chart

Tender Summary

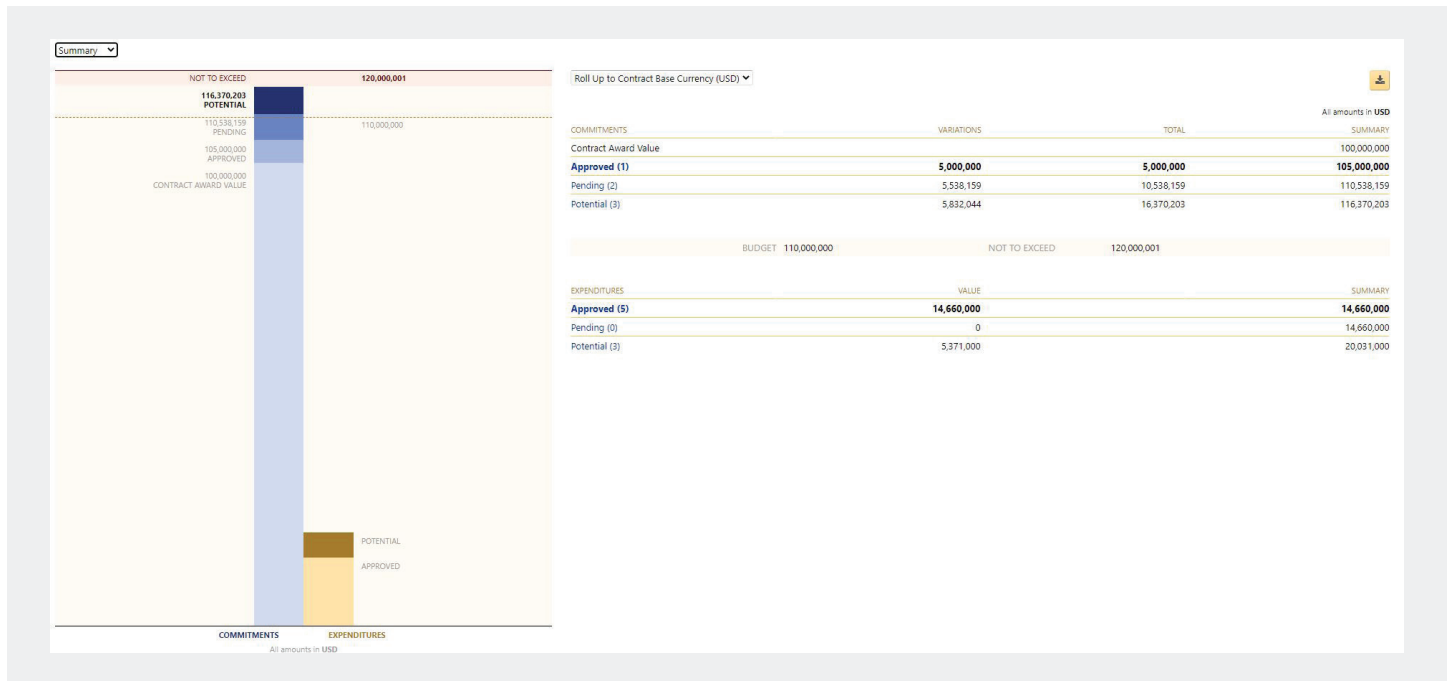
Tender Reference	100653T - Gas Pipeline Inspection
Description	Gas Pipeline Inspection
Estimated Contract Start Date	05 Jan 2020

Schedule Item	Planned Start	Planned End	Actual Start	Actual End	Planned Duration	Assigned Users	Timeline
Contracting Plan and Tender Approvals	14 Jan 2020	03 Mar 2020	16 Oct 2014	-	49	Declan Gribbin	
Prepare Contracting Plan	14 Jan 2020	28 Jan 2020	16 Oct 2014	16 Oct 2014	14	Harry McCarthy	
Review Contracting Plan	21 Jan 2020	28 Jan 2020	17 Oct 2014	-	7	Declan Gribbin	
Select Initial Bidder(s) List	27 Jan 2020	28 Jan 2020	17 Oct 2014	02 Apr 2015	1	Declan Gribbin	
Validate Bidder Information	20 Jan 2020	21 Jan 2020	-	-	1	Declan Gribbin	
Contracting Plan & Tender Approval (TB/CB)	28 Jan 2020	04 Feb 2020	-	-	7	Harry McCarthy	
Contracting Plan & Tender Approval (Management)	04 Feb 2020	11 Feb 2020	-	-	7	Declan Gribbin	
Contracting Plan & Tender Approval (Shareholders)	11 Feb 2020	18 Feb 2020	-	-	7	Harry McCarthy	
Contracting Plan & Tender Approval (Authority)	18 Feb 2020	03 Mar 2020	-	-	14	Declan Gribbin	

Gantt Key
 Completed Started Due To Start Overdue Actual days
 Total Planned Duration - 172 Days

Data-driven trend analysis

In-depth trend analysis can be performed on centrally-stored and structured contract, project and contractor performance data. Historical data in AVEVA Contract Risk Management's data warehouse can be used for further insights, while analytic APIs allow users to extract those insights to third-party business intelligence tools, such as PowerBI.



Contract Risk Management key features

Pre-award

- Manage the lifecycle of the pre-award tendering process with scheduling, process step workflow, review and approval stages
- Out-of-the-box, best-practice templates for tender process, structure and performance outcomes
- Share key data and decisions securely with a secure tender (ITT, RFx) and bid management collaboration portal
- Supplier sourcing and bid evaluation

Post-award

- One, centralized record of contracts, framework agreements and call-offs
- Contract administration lifecycle management for change, payment, claims and disputes

- Configurable review and approval workflows and stage gates
- Contract document templating with best-practice structure and content generation
- Secure collaboration portal for all contractual administration communications internally and with subcontractors
- Reporting on financial health with early-warning on potential changes and pending contractual obligations
- Contract obligation management based on contract milestones and events

Contractor management

- Contractor registration, qualification and performance evaluation workflows
- Reporting on contractor trading recommendation and performance across contracts
- Contractor portal to self-manage information and collaborate on qualification, tendering or contracting activities
- Integration capabilities with other master vendor databases

Platform

- Cloud or On-Premise deployment, multi-regional and language support, single sign-on authentication, and modern web browser support
- Out-of-the-box configuration with best-practice workflows, reporting and batch data uploading
- Securely authorize and revoke data access to various organisations for reporting functions, projects, tenders, contracts, roles and disciplines
- Delegate authority to support back-to-back working arrangements and handover of assignments during leave

- Record information aligned to existing business processes (i.e., set reference number standards, fields to capture, codifications, version control)
- Historical tracing and visibility of all activity and changes to support compliance checks from auditors and regularity bodies
- Document template and reference libraries
- System-wide search, with ability to search document contents
- Individual and management oversight of activities
- Automatic, customizable notifications of upcoming actions, key events and milestones
- Integration capabilities with finance, cost, project and document management systems through industry standard API protocols
- Configurable reporting on schedule, delays, bottlenecks, process deviations and non-compliance, decision-making and approvals
- Export data and project reporting into third-party tools such as Excel and PowerBI

For more information on AVEVA Contract Risk Management for Owner Operators, please visit: sw.aveva.com/engineer-procure-construct/contract-management