

ICC INDIA PRESENTS A WORKSHOP ON Prolongation and **Disruption** Cost Claims

A comprehensive **3-day** technical workshop designed to equip professionals with practical knowledge and advanced techniques for analyzing Prolongation and Disruption Cost Claims in complex projects.

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WORKSHOP ON

PROLONGATION AND DISRUPTION COST CLAIMS



Prolongation and disruption are central components of construction claims, arising when projects face extended durations or reduced productivity due to unforeseen events. As modern projects grow more complex, professionals must understand how extended stay costs and inefficiencies affect timelines, budgets, and contractual entitlements.

Prolongation relates to time-related costs incurred when compensable events push the project beyond its planned completion date. This includes extended site overheads, staff retention, plant and equipment costs, and prolonged resource deployment. Effective analysis requires identifying critical delays, establishing responsibility, and quantifying extended stay costs using accepted industry standards such as AACE RP and the SCL Protocol.

Disruption occurs when work is executed less efficiently than planned due to factors such as design changes, restricted access, or late information. It increases the cost of performing the same scope of work without necessarily extending the project duration. Disruption analysis focuses on diagnosing inefficiencies, comparing planned versus actual productivity, and applying recognised techniques such as the measured mile or activity-based analysis.

A clear understanding of causation, concurrency, and evidence-based substantiation is essential for preparing credible prolongation and disruption claims. As projects become more complex and disputes become more data-driven, professionals must be equipped with reliable analytical techniques and strong documentation practices to demonstrate entitlement and quantify impacts accurately.

OBJECTIVE

- ✓ Industry-accepted techniques with case studies from real projects.
- ✓ Core principles of the SCL Protocol and AACE RPs.
- ✓ Build a firm understanding of extended stay costs, time-related impacts, and entitlement principles.
- ✓ Learn to diagnose productivity loss, inefficiencies, and cost impacts arising from disruptive events.
- ✓ Use structured methodologies to link events, delays, and cost consequences with evidence.
- ✓ Strengthen judgment in evaluating entitlement, responsibility, and cost impacts.
- ✓ Organise claim documents for clarity, evidence strength, and arbitration readiness.
- ✓ Calculate site overheads, staff retention, plant costs, and extended resource deployment.

BENEFITS

- Improve your ability to interpret project records, identify causation, and quantify impacts.
- Produce precise, evidence-based prolongation and disruption claims that withstand scrutiny.
- Gain confidence in interpreting delays, disruptions, and cost impacts.
- Learn through practical examples, case studies, and structured exercises.
- Learn to maintain and use contemporaneous records effectively.
- Increase your ability to justify prolongation and disruption damages.
- Understand how claims influence project outcomes, negotiations, and dispute strategy.
- Strengthen your profile for senior QS, Contract Management, and Forensic roles.

WORKSHOP ON

PROLONGATION AND DISRUPTION COST CLAIMS



This workshop will cover the following key activities with practical examples:

1.

Review of Contractual Provisions

Study time-related clauses, cost entitlement provisions, and the obligations of parties to establish the contractual basis for prolongation and disruption claims.

2.

Collection & Verification of Project Records

Gather progress reports, cost data, correspondence, RFIs, daily logs, productivity records, and site evidence required to substantiate time-related and productivity-related impacts.

3.

Identification of Prolongation & Disruption Events

Determine events causing extended stay or reduced productivity, such as late approvals, design changes, restricted access, resource shortages, unforeseen conditions, and operational disturbances.

4.

Assessment of Extended Stay & Time-Related Costs

Evaluate site overheads, staff retention, plant standing time, and prolonged resource deployment to quantify prolongation costs using accepted industry methodologies.

5.

Selection of Suitable Quantum and Productivity Analysis Method

Apply appropriate prolongation and disruption quantification techniques based on project data availability, including the Hudson, Emden, and Eichleay formulae for time-related cost assessment, and the Measured Mile, Activity-Based Analysis, Productivity Factor, and Total Cost approaches for disruption and productivity loss evaluation.

6.

Assessment of Causation, Concurrency & Responsibility

Evaluate overlapping events, determine Employer versus Contractor responsibility, and establish clear causation pathways to support entitlement for Prolongation and Disruption.

7.

Preparation of Prolongation & Disruption Entitlement

Determine entitlement to prolongation costs and disruption damages with clear, logical, and defensible reasoning aligned with contract requirements and industry protocols.

8.

Evaluation of Prolongation & Disruption Impact on Cost and Performance

Analyze how prolongation and disruption events influence project costs, productivity, resource efficiency, and overall performance, ensuring participants can interpret the results and support entitlement assessments confidently.

SESSION - 1**(10.00 AM
TO 11.30 AM)**

- Team Introduction
- Interactive Discussion / Brainstorming/ Collaborative Thinking -
 - Why Prolongation and Disruption Cost Claims Matter
 - Industry Challenges
 - Delay vs. Prolongation vs. Disruption

TEA BREAK**(11.30 AM TO 11.45 AM)****SESSION - 2****(11.45 AM
TO 01.15 PM)****Contractual Entitlement**

- Legal Principles
- Cause-and-Effect Relationship
- Burden of Proof and Contemporaneous Records
- Evaluation of Entitlement

LUNCH**(01.15 PM TO 02.00 PM)****SESSION - 3****(2.00 PM
TO 3.30 PM)****International Best Practices**

- SCL Delay and Disruption Protocol
- AACE International Recommended Practices
- International Claim Philosophy
 - Common Mistakes in Claim Preparation
 - Good Documentation Practices

TEA BREAK**(03.30 PM TO 03.45 PM)****SESSION - 4****(03.45 PM
TO 05.15 PM)****Employer vs. Contractor Perspective**

- Employer's Responsibilities
- Contractor's Responsibilities
- Allocation of Risk
- Identifying Risks from Both Perspectives

SESSION - 1**(10.00 AM
TO 11.30 AM)****Entitlement to Quantum Assessment**

- Principles of Prolongation Cost Assessment
- Classification of Prolongation Costs
- Examples and Illustrations

TEA BREAK**(11.30 AM TO 11.45 AM)****SESSION - 2****(11.45 AM
TO 11.15 PM)****Prolongation Cost Assessment**

- Site Overheads
- Hudson Formula, Emden Formula, Eichleay Formula, and Comparison of Formulae
- Head Office Overheads

LUNCH**(01.15 PM TO 02.00 PM)****SESSION - 3****(2.00 PM
TO 3.30 PM)****Disruption Cost Assessment**

- Understanding Productivity Loss
- Measured Mile Analysis
- Total Cost Method
- Productivity Factor Analysis

TEA BREAK**(03.30 PM TO 03.45 PM)****SESSION -4****(03.45 PM
TO 05.15 PM)****Other Monetary Claim**

- Liquidated Damages (LD)
- Interest on Delayed Payments
- Interest on Claims
- Price Variation Clause (PVC)

SESSION - 1

(10.00 AM
TO 11.30 AM)

Records, Evidence & Documentation

- Importance of Contemporaneous Records
- Types of Records
- Required Documentation
- Common Deficiencies Leading to Claim Rejection

TEA BREAK

(11.30 AM TO 11.45 AM)

SESSION - 2

(11.45 AM
TO 01.15 PM)

Industry Best Practices

- Best Practices in Prolongation Assessment
- Best Practices in Disruption Assessment
- International Case Experiences

LUNCH

(01.15 PM TO 02.00 PM)

SESSION - 3

(2.00 PM
TO 3.30 PM)

Case Studies

- Prolongation Cost
- Disruption Cost

TEA BREAK

(03.30 PM TO 03.45 PM)

SESSION - 4

(03.45 PM
TO 05.15 PM)

- Open Discussion
- Summary of Key Learning Points
- Feedback and closer

Note:-

- The Speaker will co-relate every topic with real life challenges in EPC environment
- Every session will involve Question / Answer Session on the topics covered.

Ajay Kumar Saxena

COO & Managing Partner, Protecon BTG | B.E. (Industrial Engineering), IIT Roorkee



Professional Skills

- Project Management & Controls
- Cost Engineering & Management
- Financial & Economic Analyses
- Cost Estimation & Cost Control
- Risk Management & Analysis
- Dispute Resolution & Claims Management
- Procurement & Tendering Processes
- Contract Negotiation & Administration
- Budget Preparation & Control
- Reporting & Forecasting
- Asset Capitalization
- Project Closeout

Computer Skills

- MS Office (Word, Excel & PowerPoint)
- Primavera P6 & MS Project
- Oracle Risk Analysis (Pert-Master)
- @Risk Software
- ICARUS Kbase
- SAP MM/PS Module

Career Summary

Ajay Kumar Saxena is a Cost Engineering professional and member of **AACE International** with **30+ years of experience** in Cost Engineering & Management, Financial & Economic Analyses, Project Cash Flow & Fund Management, Optimization Modelling & Simulation Techniques, Enterprise Risk Management, Claim Settlement, and Dispute Resolution.

He has worked on major projects across the **Oil & Gas, Refineries, Petrochemicals, Cross-Country Pipelines, Ports, Airports, High-Speed Rail, Roads, Power Distribution Networks, Water & Sewage Distribution Systems, Buildings, and Townships** in both domestic and international markets.

Ajay has extensive expertise in **Capital and Life Cycle Cost Estimation, FEED and EPC Cost Estimation, Cost Control Systems, Change Management, Risk Management, Optimization Techniques, Claim Management, Dispute Resolution, and Asset Capitalization**. He has also developed and implemented cost analysis tools, cost databanks, and supported strategic investment decisions through financial and sensitivity analyses.

His professional experience includes providing **cost estimation services, financial modelling, tender cost estimates, cost optimization studies, claims management, delay analysis, arbitration support, and expert advisory services** for major national and international infrastructure and industrial projects. He has been actively involved in contract review, claim quantification, cost validation, documentation, and dispute resolution throughout the project lifecycle.

During his career, Ajay has worked with leading organizations including **Protecon BTG Pvt. Ltd., Protecon Consulting FZC, HPCL Mittal Energy Ltd., Qatar Petroleum, Dodsall Pte. Ltd., Technip, Higleig Petroleum Services, and Larsen & Toubro Ltd.**

He continues to share his international experience and technical expertise through **consultancy services, professional training, and capacity-building programmes**, helping project stakeholders strengthen their commercial, contractual, and cost management capabilities.

SPEAKER'S PROFILE

Arun Zutshi

Director (Contract Management), Protecon BTG | B.E. (Mechanical), MNNIT Allahabad



Professional Skills

- Program / Project Management & Controls Profit & Loss Management
- Project Contract Management
- Project Planning, Scheduling & Monitoring Project Cost Engineering & Management Corporate Planning & Monitoring
- Strategic Visioning & Alignment
- Governance Structuring
- Benefits Management & Analysis
- Stakeholder Management & Analysis
- Dispute Resolution & Analysis
- Risk Management & Analysis
- Qualitative / Quantitative Risk Analysis
- Change Management & Analysis
- Communication Management & Analysis
- Conflict Management & Interpersonal Skills Procurement & Tendering Processes
- Contract Negotiation & Administration
- Project Management Systems & Procedures Quality Management (QA / QC)
- Budget Preparation & Control
- Invoice Preparation / Certification
- Manpower Planning & Analysis
- Manpower Recruitment & Performance Review Reporting & Forecasting
- Asset Capitalization & Project Closeout

Computer Skills

- MS Office(Word/ Excel / PowerPoint)
- MS Project
- P3 & Primavera
- SAP / ERP Platform

Career Summary

Arun is a **Contracts Management Professional** with over **40+ years** of multi-sector EPC **contract** experience and multi-cultural exposure.

Arun has worked with growing organisations focused on continuous development, directing and leading **teams** in a fast-paced, result-oriented environment to achieve overall corporate and business objectives, effectively utilising his professional experience, including **heading** a Business Vertical, managing the **P&L (Profit & Loss)** for EPC Project Operations, and EPC Project Execution in India and abroad.

Arun has over **40+ years** of rich experience in executive and general management, delivering EPC responsibility for business development, implementation, and execution of projects, including **Project Management, Engineering, Supply Chain, Construction, and Commissioning**, through multiple project teams at multiple sites in India and abroad.

The responsibilities delivered by Arun include:

- Heading Business Verticals, including acquiring and executing business.
- Business Development, Marketing, Sales, and Proposal Management for EPC/LSTK and Consultancy Services' Contracts.
- Management of **P&L** for EPC Project Operations, including presentations to the Board of Directors.
- Managing the achievement of **top-line and bottom-line** targets for the Business Unit (SBU) by controlling the day-to-day commercials and operations for all projects.
- Formulating strategies to set up and manage complex, matrix-type global project organisations.
- Exposure to **high-technology** environments.
- Project Management, Project Engineering, and Project Control of EPC Contracts.
- Turnkey (LSTK) Projects and Consultancy Services' Contracts for both Greenfield and Brownfield Projects.
- Multi-sector expertise, providing a broader vision of industries in India and abroad, including **Refineries, Oil & Gas, Petrochemical Plants, Water & Waste Management, Chemical Industries, Mineral Beneficiation, Power, Steel, Cement, Collieries, and Material Handling Plants**.
- Multi-cultural exposure, having worked in or with clients and contractors from **India, France, Germany, Japan, Russia, the USA, the Netherlands, Italy, Korea, Sri Lanka, Iran, South Africa, Zambia, the Middle East, and Oman**.
- Managing cross-functional personnel/teams, including Task Forces, for project execution.
- Influencing and motivating stakeholders and employees.
- Implementing quality procedures as per ISO and/or Good Engineering Practices.
- Commitment to, and ensuring, HSE compliance and enforcement.

Manish Kumar

Consultant (Cost/QS), Protecon BTG | B.Tech (Civil Engineering), SHIATS



Professional Skills

- Project Management
- Cost Estimation
- Quantity Surveying
- Quantity Take-Offs
- Rate Analysis
- Value Engineering
- Contract Management
- Dispute Resolution
- FIDIC Contracts
- Procurement & Subcontract Management
- Cash Flow Analysis & Reporting
- Project Costing & Budget Monitoring
- Cost Control & Cost Tracking
- Vendor Management
- Team Management

Computer Skills

- MS Office (Word, Excel & PowerPoint)
- AutoCAD

Career Summary

Manish Kumar is a Cost and Quantity Surveying professional with over **14+ years of experience** in project cost management, quantity surveying, contract administration, procurement, and commercial management across major infrastructure projects.

He has worked on prestigious projects including **Mumbai-Ahmedabad High Speed Rail, Surat Metro, Mumbai Trans Harbour Link, Mumbai Coastal Road, Delhi-Vadodara Expressway, Nagpur-Mumbai Super Communication Expressway**, and several highway and metro projects.

His expertise includes preparing and reviewing **cost estimates, BOQs, quantity take-offs, contractor bills, rate analysis, variation orders, and contractual claims** while ensuring compliance with **FIDIC contract conditions** and industry standards.

Manish has extensive experience in **cost monitoring, budget control, value engineering, cash flow forecasting, tender preparation, procurement management, and subcontract administration**. He has also coordinated with clients, consultants, and multidisciplinary teams to deliver commercially successful infrastructure projects.

He has been actively involved in reviewing contractor submissions, validating claims, preparing documentation for dispute avoidance, and supporting amicable settlement processes. His strong analytical skills enable him to assess commercial risks, optimize project costs, and maintain effective contractual documentation throughout the project lifecycle.

Major Projects

- Mumbai-Ahmedabad High Speed Rail Project
- Surat Metro Phase I
- Parthla Chowk Cable Stayed Bridge
- Versova-Bandra Sea Link
- Indo-China Border Roads
- Mumbai Trans Harbour Link
- Mumbai Coastal Road
- Delhi-Vadodara Greenfield Expressway
- Kim-Vadodara Greenfield Expressway
- Nagpur-Mumbai Super Communication Expressway