# 5. [TRUE IMPACTS OF LATE DELIVERABLES AT THE CONSTRUCTION SITE (RS300-1)](https://www.construction-institute.org/the-true-impacts-of-late-deliverables-at-the-construction-site-821e6bd573d090e914e795b245e1eeaa)

**Report Summary:** This study developed [IR 300-2](https://www.construction-institute.org/late-deliverable-risk-catalog-version-2-0), Late Deliverable Risk Catalog (LDRC), to understand late deliverables and their impacts. The LDRC presents a set of lessons learned about late deliverables along with recommendations to prevent the most common types of late deliverables and suggestions for incorporating the LDRC into company processes. A greater understanding of the true impacts of late deliverables to the construction site will ensure the following improvements:

* Personnel that represent all project functions that support construction (e.g., engineering, procurement, startup, contracting, logistics, and business management) will understand that their schedule performance is of critical importance to the overall project success.
* Delivery dates to the construction site will be regularly monitored and proactively maintained by the appropriate parties.
* Construction personnel will take proactive and more comprehensive actions to mitigate the full range of risks that may arise when a late delivery arrives at the job site.
* Companies are encouraged to integrate and improve the LDRC in the following ways:
* Add new categories of late deliverables that are particular to a company or industry sector.
* Complete additional company-specific case studies by adding projects that are affected by late deliverables.
* Include costs of specific impacts in the database, either in dollar values or percentages.
* Add a new field to the LDRC that identifies a company contact person who has previously dealt with a specific situation.
* Incorporate solutions to common problems or company-specific lessons learned that relate to the impacts of certain late deliverables, suppliers, contractors, or subcontractors.

**Key Takeaways:**

## (1) Understand the features of the Late Deliverable Risk Catalog (LDRC).

## (Project Phase: Detailed Scope through Construction)

The LDRC does the following:

* Categorizes late deliverables into ten distinct types for streamlined risk assessment.
* Identifies project risks and impacts across cost, schedule, safety, quality, and organizational capacity.
* Provides an interactive database tool for querying and filtering late deliverable risks.
* Recommends mitigation strategies and best practices for preventing late deliverables.
* Supports knowledge sharing through case studies and survey-based industry insights.

## (2) Follow the recommendations for LDRC deployment.

## (Project Phase: Detailed Scope through Construction)

The areas for LDRC deployment are:

* Project risk assessment
* Dispute prevention and resolution
* Knowledge sharing and transfer
* Lessons learned

## (3) Incorporate and implement the LDRC in the construction organization.

## (Project Phase: Detailed Scope through Construction)

* Integrate the LDRC into project risk assessment workflows to identify and mitigate late deliverable risks proactively.
* Train project teams on LDRC usage for better recognition, prevention, and management of late deliverables.
* Utilize the LDRC during the planning phase to anticipate potential delays and optimize resource allocation.
* Leverage LDRC insights for contract negotiations to ensure accountability for deliverable timelines.
* Review LDRC data post-project to refine risk management strategies and improve future performance.

## (4) Understand the definitions of the LDRC’s ‘project pillars’.

## (Project Phase: Concept through Construction)

The LDRC does the following:

* Defines cost as the financial resources that are required to complete the project within budget.
* Measures the schedule by tracking project timelines, milestones, and deadlines for timely project completion.
* Ensures quality by maintaining standards, specifications, and performance expectations.
* Prioritizes safety to prevent accidents, protect workers, and comply with regulations.
* Enhances organizational capacity by optimizing teamwork, morale, alignment, and resource efficiency.

## (5) Understand the definitions of the LDRC’s late deliverable categories.

## (Project Phase: Concept through Construction)

The LDRC does the following:

* Classifies engineering documents, approvals, and responses as critical information that is required for design, procurement, and construction decisions.
* Describes engineered equipment as custom-built machinery that is essential for project operations and long-lead procurement.
* Defines fabricated materials as premanufactured components that are required for assembly and construction activities.
* Recognizes external permits as regulatory approvals that are necessary for legal compliance and project continuation.
* Views human resources as skilled labor, supervisors, and specialists who are essential for project execution.

## (6) Understand the definitions of negative impacts.

## (Project Phase: Concept through Construction)

Negative impacts on a project can do the following:

* Influence scope changes by altering the project requirements, work sequences, or deliverables that are due to late inputs.
* Disrupt productivity by causing inefficiencies, rework, or downtime from missing resources.
* Increase indirect/overhead costs through extended project durations, resource waste, and additional expenses.
* Delay critical path management by negatively impacting the key activities that are essential for timely project completion.
* Strain on-site team dynamics by increasing stress, misalignment, and communication breakdowns.

## [(7) Tool: Late Deliverable Risk Catalog, Version 2.0 (IR300-2).](https://www.construction-institute.org/late-deliverable-risk-catalog-version-2-0) Volume 1, Late Deliverable Risk Catalog: A User Guide

**(Project Phase: Concept through Construction)**

* Highlights risks: Emphasizes the impact of late deliverables on project pillars such as cost, schedule, quality, safety, and organizational capacity.
* Introduces the LDRC: Presents the LDRC as a tool for identifying and managing late deliverable impacts across projects.
* Facilitates communication: Encourages use of the LDRC for better alignment between owners and contractors, thereby supporting effective dispute prevention and resolution.
* Enhances training: Suggests using the LDRC to teach less-experienced staff to recognize and mitigate late deliverable risks.
* Recommends proactive measures: Advises adopting preemptive planning, coordination, and contingency strategies to prevent and reduce late deliverable impacts.

## [(8) Tool: Late Deliverable Risk Catalog, Version 2.0 (IR300-2).](https://www.construction-institute.org/late-deliverable-risk-catalog-version-2-0) Volume 2, The True Impact of Late Deliverables: Case Study Summaries

## (Project Phase: Concept through Construction)

* Highlights costly delays: Late deliverables, such as late permits, materials, and equipment, extend project timelines and budgets, thus leading to increased costs and schedule overruns.
* Stresses the negative impacts of late deliverables on workflow: Delayed resources lead to work resequencing, increased safety risks, and frequent crew relocations, which negatively affect productivity and morale.
* Emphasizes risk management: The case studies reveal a need for proactive risk assessments, especially for logistics, safety, and resource availability.
* Advocates for clear communication: Effective stakeholder communication and transparent contracting are crucial for managing unexpected changes and minimizing conflicts.
* Recommends strategic planning: Lessons learned emphasize comprehensive front-end planning to handle potential delays and ensure efficient project execution.