
Case 1

Standard prompt:

Your task is to identify the risk type and give the corresponding explanation based on the project contract clause.

Project clause: ^^^The Contractor, as necessitated by the Scope, shall present their design details to the Project Manager for approval. Acceptance might be withheld if the design appears not to align with the Scope or prevailing legal standards. The Contractor may initiate the pertinent tasks pending the Project Manager's endorsement of the design. ^^^

The risk type could be one of the following types.

Ambiguity or contradictions: It contains imprecise or ambiguous terminology and phrasing which could result in misinterpretation between the parties of the intent meaning, scope, and requirements. Or the provisions contradict with each other.

Inappropriate distribution of obligations: It contains provisions that impose disproportionate responsibilities and risks onto the contractor, beyond what would be considered reasonable and customary for the Contractor.

No risk: No risk is found in this clause.

Answer: <Inappropriate distribution of obligations> or <Ambiguity or contradictions> or <No risk>.

Explanation: <The rational for giving this answer>

Your answer should less than 150 words""

LLM output:

Ambiguity or contradictions. Explanation: The clause lacks clarity on the criteria for design approval, potentially leading to differing interpretations between the Contractor and Project Manager. Ambiguity in design requirements can result in delays, rework, and disputes, posing a risk to the project's successful completion. Clarifying the approval process and design standards can mitigate this risk.

Vector database-enhanced prompt:

Your task is to identify the risk type and give the corresponding explanation based on the project contract clause.

Project clause: ^^^The Contractor, as necessitated by the Scope, shall present their design details to the Project Manager for approval. Acceptance might be withheld if the design appears not to align with the Scope or prevailing legal standards. The Contractor may initiate the pertinent tasks pending the Project Manager's endorsement of the design. ^^^

Retrieved knowledge (a standard provision in standard form of contract): ^^^ Project Manager gives an instruction to the Contractor stating how the event is to be dealt with.2. THE CONTRACTOR'S MAIN RESPONSIBILITIES. Providing the Works2020.1The Contractor

Provides the Works in accordance with the Scope. The Contractor's design21.1The Contractor designs the parts of the works which the Scope states the Contractor is to design. ^^

The risk type could be one of the following types.

Semantics ambiguity risk: It contains imprecise or ambiguous terminology and phrasing which could result in misinterpretation between the parties of the intent meaning, scope, and requirements.

Unbalanced obligation risk: It contains provisions that impose disproportionate responsibilities and risks onto the contractor, beyond what would be considered reasonable and customary for the scope of work.

No risk: No risk is found in this clause.

Answer: <Semantic ambiguity risk> or <Unbalanced obligation risk> or <No risk>.

Explanation: <The rationale for giving this answer>

Your answer should be less than 150 words""""""

LLM output:

No risk. The clause clearly outlines the process for design approval and the responsibilities of both parties. There is no ambiguity or unbalanced obligations present, as it is straightforward and fair in its requirements.

NCKG-enhanced prompt:

Your task is to identify the risk type and give the corresponding explanation based on the project contract clause.

Project clause: ^^The Contractor, as necessitated by the Scope, shall present their design details to the Project Manager for approval. Acceptance might be withheld if the design appears not to align with the Scope or prevailing legal standards. The Contractor may initiate the pertinent tasks pending the Project Manager's endorsement of the design. ^^

Retrieved knowledge (relevant knowledge from the contract context, definition or relevant constraint):

<<ckg: Contractor, ckg:doesNotStart ckg:work>> ckg:until <<ckg:ProjectManager ckg:accept ckg:design>>,<

<<ckg: partOfDesign, ckg:hasProperty ckg:assessedfully>> ckg:if-then <<ckg: Contractor, ckg:submit ckg:partOfDesign>>

The risk type could be one of the following types.

Semantics ambiguity risk: It contains imprecise or ambiguous terminology and phrasing which could result in misinterpretation between the parties of the intent meaning, scope, and requirements.

Unbalanced obligation risk: It contains provisions that impose disproportionate responsibilities and risks onto the contractor, beyond what would be considered reasonable and customary for the

scope of work.

No risk: No risk is found in this clause.

Answer: <Semantic ambiguity risk> or <Inappropriate distribution of obligations> or <No risk>.

Explanation: <The rationale for giving this answer>

Your answer should be less than 150 words."""

LLM output:

Inappropriate distribution of obligations. The clause imposes a significant risk on the Contractor by allowing the Project Manager to withhold approval of the design if it does not align with the Scope or prevailing legal standards, without specifying what constitutes alignment or providing a clear mechanism for resolving disputes. This could lead to delays and additional costs for the Contractor, who is also allowed to initiate tasks pending approval, potentially incurring costs for work that may later be deemed non-compliant.

Case 2

Standard prompt:

Your task is to identify the risk type and give the corresponding explanation based on the project contract clause.

Project clause: ^^The Project Manager certifies a payment within a reasonable time period following each assessment date. The certification by the Project Manager encompasses details on the methodology used to evaluate the amount payable. The initial payment corresponds to the determined amount due. Subsequent payments represent the variation in the due amount since the last evaluation. In instances where the change reduces the amount due, a payment is made by the Contractor to the Client. Conversely, payments are made by the Client to the Contractor. The currency for payments remains as specified in the contract, unless the contract explicitly states otherwise. ^^

The risk type could be one of the following types.

Ambiguity or contradictions: It contains imprecise or ambiguous terminology and phrasing which could result in misinterpretation between the parties of the intent meaning, scope, and requirements. Or the provisions contradict with each other.

Inappropriate distribution of obligations: It contains provisions that impose disproportionate responsibilities and risks onto the contractor, beyond what would be considered reasonable and customary for the Contractor.

No risk: No risk is found in this clause.

Answer: <Inappropriate distribution of obligations> or <Ambiguity or contradictions> or <No risk>.

Explanation: <The rationale for giving this answer>

Your answer should less than 150 words""

LLM output:

No risk. The clause clearly outlines the payment certification process by the Project Manager, including adjustments for any variations in the due amount, with a straightforward mechanism for both increases and decreases in payment. There's no evident ambiguity or contradiction, and the distribution of responsibilities regarding payment adjustments seems appropriate and standard for construction contracts.

Vector database-enhanced prompt:

Your task is to identify the risk type and give the corresponding explanation based on the project contract clause.

Project clause: ^^The Project Manager certifies a payment within a reasonable time period following each assessment date. The certification by the Project Manager encompasses details on the methodology used to evaluate the amount payable. The initial payment corresponds to the determined amount due. Subsequent payments represent the variation in the due amount since the last evaluation. In instances where the change reduces the amount due, a payment is made by the Contractor to the Client. Conversely, payments are made by the Client to the Contractor. The currency for payments remains as specified in the contract, unless the contract explicitly states otherwise. ^^

Retrieved knowledge (a standard provision in standard form of contract): ^^ The Project Manager certifies a payment within one week of each assessment date. The Project Manager's certificate includes details of how the amount due has been assessed. The first payment is the amount due. Other payments are the change in the amount due since the previous assessment. A payment is made by the Contractor to the Client if the change reduces the amount due. ^^
The risk type could be one of the following types.

Semantics ambiguity risk: It contains imprecise or ambiguous terminology and phrasing which could result in misinterpretation between the parties of the intent meaning, scope, and requirements.

Unbalanced obligation risk: It contains provisions that impose disproportionate responsibilities and risks onto the contractor, beyond what would be considered reasonable and customary for the scope of work.

No risk: No risk is found in this clause.

Answer: <Semantic ambiguity risk> or <Unbalanced obligation risk> or <No risk>.

Explanation: <The rational for giving this answer>

Your answer should less than 150 words""

LLM output:

Ambiguity or contradictions. Explanation: The clause lacks clarity in defining the specific

timeframe for payment certification, potentially leading to confusion and disputes between the parties regarding the assessment dates and payment schedules. This ambiguity could result in delays in payment processing and impact the project's cash flow.

NCKG-enhanced prompt:

Your task is to identify the risk type and give the corresponding explanation based on the project contract clause.

Project clause: ^{^^}The Project Manager certifies a payment within a reasonable time period following each assessment date. The certification by the Project Manager encompasses details on the methodology used to evaluate the amount payable. The initial payment corresponds to the determined amount due. Subsequent payments represent the variation in the due amount since the last evaluation. In instances where the change reduces the amount due, a payment is made by the Contractor to the Client. Conversely, payments are made by the Client to the Contractor. The currency for payments remains as specified in the contract, unless the contract explicitly states otherwise. ^{^^}

Retrieved knowledge (relevant knowledge from the contract context, definition or relevant constraint):

<<ckg:Project Manager ckg:certify ckg:payment>> ckg:hasTimeConstraint ckg: within1weekOfEachAssessmentDate; <<ckg: Contractor, ckg:submit ckg:paymentApplication>> ckg;ifNot-then <<ckg:amountDueAtAssessmentDate ckg:hasProperty ckg:changed>> . Amount1: the amount the Project Manager assesses as due at the assessment date. Amount2: the amount due at the previous assessment date.

The risk type could be one of the following types.

Semantics ambiguity risk: It contains imprecise or ambiguous terminology and phrasing which could result in misinterpretation between the parties of the intent meaning, scope, and requirements.

Unbalanced obligation risk: It contains provisions that impose disproportionate responsibilities and risks onto the contractor, beyond what would be considered reasonable and customary for the scope of work.

No risk: No risk is found in this clause.

Answer: <Semantic ambiguity risk> or <Inappropriate distribution of obligations> or <No risk>.

Explanation: <The rationale for giving this answer>

Your answer should be less than 150 words. ""

LLM output:

Ambiguity or contradictions. The clause's phrasing, particularly around the "reasonable time period" for payment certification by the Project Manager, introduces semantic ambiguity risk.

This term is subjective and could lead to disputes over what constitutes a "reasonable" timeframe, potentially delaying payments. To mitigate this risk, the contract should specify exact timeframes for payment certification post-assessment, aligning with the retrieved knowledge that certification should occur within one week of each assessment date. Clarifying this timeframe would reduce ambiguity and improve the predictability of payment processes for both parties. Additionally, the methodology for evaluating the amount payable is mentioned but not detailed, potentially leading to disagreements on payment amounts.

Case 3

Standard prompt:

Your task is to identify the risk type and give the corresponding explanation based on the project contract clause.

Project clause: ^^Where, prior to delivery, title to Materials and Equipment or Spare Parts passes to the Owner, the EPC Contractor shall set that Materials and Equipment or Spare Parts (as the case may be) aside and mark it as the Owner's property in a manner reasonably required by the Owner. Until such Materials and Equipment or Spare Parts have been so set aside and marked, the Owner shall be entitled to withhold any payment to which the EPC Contractor might otherwise be entitled. ^^

The risk type could be one of the following types.

Ambiguity or contradictions: It contains imprecise or ambiguous terminology and phrasing which could result in misinterpretation between the parties of the intent meaning, scope, and requirements. Or the provisions contradict with each other.

Inappropriate distribution of obligations: It contains provisions that impose disproportionate responsibilities and risks onto the contractor, beyond what would be considered reasonable and customary for the Contractor.

No risk: No risk is found in this clause.

Answer: <Inappropriate distribution of obligations> or <Ambiguity or contradictions> or <No risk>.

Explanation: <The rational for giving this answer>

Your answer should less than 150 words""

LLM output:

Inappropriate distribution of obligations. Explanation: The clause places the responsibility on the EPC Contractor to set aside and mark Materials and Equipment as the Owner's property before title passes, potentially exposing the contractor to delays in payment if not done correctly. This places a disproportionate burden on the contractor beyond what is customary, as ownership transfer should typically occur upon delivery.

Vector database-enhanced prompt:

Your task is to identify the risk type and give the corresponding explanation based on the project contract clause.

Project clause: ^^^Where, prior to delivery, title to Materials and Equipment or Spare Parts passes to the Owner, the EPC Contractor shall set that Materials and Equipment or Spare Parts (as the case may be) aside and mark it as the Owner's property in a manner reasonably required by the Owner. Until such Materials and Equipment or Spare Parts have been so set aside and marked, the Owner shall be entitled to withhold any payment to which the EPC Contractor might otherwise be entitled. ^^^

Retrieved knowledge (a standard provision in standard form of contract): ^^^ Where, prior to delivery, title to Materials and Equipment, Imported Items or Spare Parts passes to the Owner the Onshore Contractor shall set that Materials and Equipment, Imported Items or Spare Parts (as the case may be) aside and mark it as the Owner's property in a manner reasonably required by the Owner. Until such Materials and Equipment, Imported Items or Spare Parts have been so set aside and marked, the Owner shall be entitled to withhold any payment to which the Onshore Contractor might otherwise be entitled.\n\nInspection of Materials and Equipment\n\nThe Onshore Contractor shall permit the Owner at any time upon reasonable notice to inspect any Materials and Equipment, Imported Items or Spare Parts which have become the property of the Owner and shall grant the Owner or procure the grant of access to the Onshore Contractor's or any Subcontractor's premises or any other premises where such Materials and Equipment, Imported Items or parts may be located for such purposes. ^^^

The risk type could be one of the following types.

Semantics ambiguity risk: It contains imprecise or ambiguous terminology and phrasing which could result in misinterpretation between the parties of the intent meaning, scope, and requirements.

Unbalanced obligation risk: It contains provisions that impose disproportionate responsibilities and risks onto the contractor, beyond what would be considered reasonable and customary for the scope of work.

No risk: No risk is found in this clause.

Answer: <Semantic ambiguity risk> or <Unbalanced obligation risk> or <No risk>.

Explanation: <The rational for giving this answer>

Your answer should less than 150 words""""""

LLM output:

Inappropriate distribution of obligations. The clause imposes a specific obligation on the EPC Contractor to segregate and mark the Owner's property, with the consequence of withholding payment until compliance. This could place a disproportionate burden on the Contractor, especially if the requirements for marking are not clearly defined or are subject to the Owner's

subjective satisfaction, potentially leading to disputes over whether the conditions for payment have been met.

NCKG-enhanced prompt:

Your task is to identify the risk type and give the corresponding explanation based on the project contract clause.

Project clause: ^^Where, prior to delivery, title to Materials and Equipment or Spare Parts passes to the Owner, the EPC Contractor shall set that Materials and Equipment or Spare Parts (as the case may be) aside and mark it as the Owner's property in a manner reasonably required by the Owner. Until such Materials and Equipment or Spare Parts have been so set aside and marked, the Owner shall be entitled to withhold any payment to which the EPC Contractor might otherwise be entitled. ^^

Retrieved knowledge (relevant knowledge from the contract context, definition or relevant constraint):

<<ckg:Contractor ckg: hasLiability ckg: LossOrDamage>> ckg: hasConstraint ckg: worksPlantAndMaterialsEquipment

The risk type could be one of the following types.

Semantics ambiguity risk: It contains imprecise or ambiguous terminology and phrasing which could result in misinterpretation between the parties of the intent meaning, scope, and requirements.

Unbalanced obligation risk: It contains provisions that impose disproportionate responsibilities and risks onto the contractor, beyond what would be considered reasonable and customary for the scope of work.

No risk: No risk is found in this clause.

Answer: <Semantic ambiguity risk> or <Inappropriate distribution of obligations> or <No risk>.

Explanation: <The rational for giving this answer>

Your answer should less than 150 words. ""

LLM output:

No risk. Based on the provided clause and the retrieved knowledge, the responsibility has clearly been stated, stipulating that the Contractor needs to set aside and mark the Materials and Equipment or Spare Parts as the Owner's property. The contractor's liability for loss or damage only comes to effect if it is not stated as the Client's liabilities. As the liabilities are clearly outlined, this case is considered normal, and there are no risks associated with this clause.
