



## INSURANCE OF CONSTRUCTION OBJECTS AGAINST CONSTRUCTION RISKS IS ONE OF THE EFFECTIVE METHODS OF RISK MANAGEMENT

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### Abstract

It is clear that the implementation of construction projects is not safe and spontaneous. In most cases, an incorrect assessment of the current situation in construction, errors in the application of construction technologies and calculations, as well as imperfection of the primary documents permitting construction, lead to risks in construction. In order to prevent construction risks when designing construction projects, it is necessary to take into account the necessary insurance from the economic and technological side. Therefore, during design, costs are calculated, estimates are drawn up, technical and economic aspects of construction are analyzed, and then provided to insurance companies to determine insured amounts. This serves as a necessary measure to allow the client to avoid construction risks, especially those associated with loss of property.

**Keywords:** construction risks, design, construction and installation works, insurance.

### Introduction

The socio-economic development of the country cannot be imagined without construction. In any region of the republic, you will witness the construction of multi-storey residential complexes, social facilities and industrial enterprises. It is clear that the implementation of construction projects is not safe and spontaneous. In most cases, an incorrect assessment of the current situation in construction, errors in the application of construction technologies and calculations, as well as imperfection of the primary documents permitting construction, lead to risks in construction.

**Main part.** Construction risks can be associated with uncertain situations. However, risk is the likelihood of it happening and cannot be ignored.





**Risks in construction** can be global (large-scale) or local in scope [1]. Of course, it all depends on the place of work and the economic situation. Risks in construction have their own indicators and criteria, and it is important to have a clear understanding of them. Failure to properly assess or account for risks can lead to various frustrations during the construction or operation of projects.

For example: on September 16, 2023, on the Tashkent-Jizzakh section of the 10-kilometer A-373 highway of international importance, passing through the territory of the Okoltinsky district of the Syrdarya, a crack appeared in 5 beams of the intermediate device. Cracks on the bridge appeared as a result of heavy truck traffic. The beams of this bridge broke and the Tashkent-Termiz highway was temporarily closed [3].



Picture 1. In the Akaltin district of the Syrdarya region, a bridge broke and the road collapsed.

Preventing risks and losses in construction requires builders to learn something new every day, pay attention to something, be aware of many industrial, technical and economic innovations, and always work on themselves and learn. In addition to being highly skilled professionals, builders also need to understand many other areas of their job. Builders, despite their extensive experience and qualifications, must be apprentices throughout their careers in order not only to have a personal advantage over their colleagues, but also to serve to meet customer requirements.

Risks in construction are the main factor in the relationship between the developer and his customer related to the implementation of design, survey and construction processes. At the same time, useful or dangerous situations begin to arise at different levels.



Another example: on August 12, 2023, by order of the United Support Service Investment Company of the Tashkent City Hall, Bridge Construction Trust UK is constructing a road leading to the Islam Karimov Tashkent International Airport from Babur Street in the Yakkasaray district the city of Tashkent and Sadyk Tolipov Street. This happened at the site of the reconstruction of a highway overpass, which allows you to drive up and down the hour based on modern construction standards. When installing intermediate reinforced concrete devices (hammers) using a crane, 5 hammers accidentally fell from the installation site [5]. According to the authorities, this situation resulted in budget losses in the amount of 2 billion 760 million soums [4].

The examples show that the construction and operation of construction projects are not without risks and dangers. During the construction period and during the operation of construction projects, unforeseen situations may arise. In the current situation, the most important task that interests us is to prevent and ensure the occurrence of construction risks during the construction process, during construction, installation and repair work. To carry out this work, we need the same insurance companies and cooperation with them.



Picture 2. Five beams of an overpass under construction near the airport in Tashkent collapsed.



Let's look at the term “**risks in construction**” and give it a definition. Risk itself is a danger, a failure, a wrong situation that can result in losses and shortages.

To assess risks in construction, it is necessary to analyze each stage: Stage I: Development of pre-design and design and estimate documentation.

Stage II: Construction and installation and construction and production processes

Stage III: Installation of technological processes and equipment

Risks in construction, like any other risks, are negative phenomena. Therefore, in order to avoid risks associated with the operation of constructed buildings and structures, it is necessary to carefully study the territory before starting construction.

**Obtaining engineering-geological and climatic details of the area**, information about seismic activity and engineering research - the composition of the earth and subsoil, studying groundwater levels, connections with the lithosphere, atmosphere, hydrosphere and even space get rid of risks in time.

**Some conditions for the emergence of risks are associated** with economic, political, legal, sociocultural, scientific and technical environmental factors, as well as with various methods of corporate governance, employee motivation, and the quality of use of marketing and logistics at the enterprise [2]. These factors influence the activities of many participants in the construction market.

**The occurrence of construction risks can be grouped as follows:**

**Background information** – pre-project documentation is not ideal;

**Design** – short design time and low cost of developing design and estimate documentation;

**Construction quality** – delays in updating codes and regulations, requirements and standards;

**Time** is the unreality of determining the construction period;

**Materials** – disproportion of quality indicators and prices of building materials and structures;

**Costs for construction participants** - untimely execution of mutual settlements between the customer, designer, general contractor and subcontractor and suppliers;

**Testing of building materials** - unreliable testing of building materials, products and structures, the presence of fake quality certificates;

**Control** – a large number of entities controlling construction, and unreasonable interference of residents not related to construction;

**Labor resources** – lack of production capacity and inexperience of contractors;

**Relationships** - interruptions in the provision and performance of other services.



In modern society, construction risks, if they are associated with long-term and short-term, acceptable or significant risks in construction, are determined by the level of personal decision-making by the client about the amount of possible losses.

Also, most importantly, to prevent construction risks, it is necessary to take into account **the necessary insurance** from the economic and technological side when designing construction projects.

**Construction risks** were discovered during the Industrial Revolution under Adam Smith, the founder of political economy, who focused consumer attention on insurance that guaranteed at least material compensation for damage.

It should also be taken into account that the size of the financial portfolio of insurance companies is limited, since insurance is not a charity. Therefore, during design, costs are calculated, estimates are drawn up, technical and economic aspects of construction are analyzed, and then they are submitted to insurance organizations to determine insured amounts. This ensures that the client has the necessary measures to prevent construction risks, especially risks associated with loss of property.

Few people succeed in insuring all construction risks, because insurance companies do not want to take on such responsibility and understand the intricacies of construction. Also, the construction budget is measured by the amount of solid insurance, despite the fact that risks in construction are an irregular process.

The most convenient form of maintenance, in which engineering research is not very expensive, is turnkey maintenance of the facility. When all the client's tasks are solved comprehensively, and construction is carried out in stages, there are more guarantees to get rid of unforeseen dangerous situations. This allows the general contractor to ensure compensation to insurers in the event of unexpected losses on object.

### **Recommendations and suggestions**

It is desirable to increase the customer's interest in order to prevent and reduce risks in capital construction and minimize all losses as much as possible. In this case, it is recommended to set up a system for assessing situations that may happen to the customer. In particular, regardless of the type and cost of construction, it is necessary to reconsider the procedure for construction insurance and its financing. Responsibility for completing the construction of the facility on time and putting it into operation should be determined on the basis of mutual agreements and contracts between the general contractor and insurance organizations. Using the experience of advanced and leading countries of the world, it is desirable to develop and implement



a mechanism for the attractiveness of insuring construction projects against construction risks for insurance companies. This will prevent the artificial rise in price of construction goods and services during the construction process and the incompleteness of the construction project, as well as ensure economic efficiency.

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