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Araştırma Makalesi ● Research Article

A Review and a Case Study About Claim Management In Contracts During The Covid-19 Pandemic

Covid-19 Pandemi Sürecinde Sözleşmelerde Hak Talebi Yönetiminin Değerlendirilmesi Ve Örnek Olay Incelemesi

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ANAHTAR KELİMELER

COVID-19
Mücbir Sebep
Aşırı İfa Güçlüğü
Hak Talebi
Gecikme Analizi

ÖZ

Bu araştırma ile salgın hastalık (pandemi) olarak ilan edilen COVID-19 hadisesinin borçlunun sorumlu olmadığı yükümlülüklerin pandemi sonrası zorunlu yükümlülükleri arasına girmesi, sorumlu olduğu yükümlülüklerinin de imkansızlıklar ve aşırı ifa güçlüğü hükümleri doğrultusunda yerine getirilememesi ve/veya sözleşme süresi içerisinde tamamlanamaması hususları sözleşmelerde değerlendirilerek, bu doğrultuda sözleşmelerin mücbir sebep (force majeure) ve uyarlama (hardship) hükümleri ile yapılacak hak taleplerinin (Claim) irdelenmesi amaçlanmaktadır. Burada önemli olan sözleşme taraflarının karşılıklı uğradıkları olumsuz etkileri ortaya koyarak ve yine karşılıklı menfaatlerinin eşit olarak korunmasını esas alarak kazan-kazan ilkesinin (win win principle) işletilmesini sağlamak olduğundan, pandeminin ortaya çıkardığı riskin sözleşme tarafları arasında eşit şekilde paylaşılması önem arz etmektedir. Bunun ne şekilde yapılabileceği ise her bir somut sözleşme ilişkisinin özelliklerine göre ayrı ayrı tespit edilerek mümkün olabilir. Bu çalışmada; Sözleşmelerde bulunan mücbir sebep veya uyarlama maddelerinin, pandemi nedeniyle aşırı ifa güçlüğüne sebebiyet vermesi ve sözleşme tarafları üzerinde oluşan olumsuz etkilerin çözümleme uygulamalarının ve bu uygulamaların sürdürülebilirlikle olan ilişkisinin anlatılması amaçlanmaktadır.

KEYWORDS

COVID-19
Force Majeure
Hardship
Claim
Analysis Of Delay

ABSTRACT

This study aims to review the obligations in the contracts, which the obligor were not actually responsible for prior to the COVID-19 that was proclaimed as a pandemic, but which became mandatory obligations after the pandemic, as well as the failure to fulfill the obligations for which the obligor was responsible due to the impossibilities and hardship provisions and/or failure to complete these obligations within the contract term and to discuss the claims to be made based on force majeure and hardship provisions in the contracts. Since it is important here is to ensure that the win-win principle is applied by demonstrating the negative impacts mutually suffered by the contracting parties and protecting their mutual interests equally, it is essential to share the risk posed by the pandemic equally between the contracting parties. The method to be used to ensure such equal distribution is possible by determining it separately according to the characteristics of each concrete contractual relationship. This study aims to explain the force majeure or hardship provisions in contracts that cause impossibility of fulfillment of obligations due to the pandemic and the solutions that could be applied to solve the negative impacts on the contracting parties and the relationship of these practices with sustainability.

1. Introduction

An epidemic disease, which first broke out in December 2019 in Wuhan, Hubei, China and known as SARS-CoV-2, spread almost all around the world in March 2020. The outbreak, which was identified as the Coronavirus (Covid - 19) by the World Health Organization (WHO), caused the proclamation of the PANDEMIC. The outbreak, which was classified as a “public health emergency of international concern” by the World Health Organization, caused the

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proclamation of a state of emergency in Turkey with very significant impacts in every aspect of life.

All sectoral enterprises and public works and operations in the world were directly affected by the COVID-19 Pandemic that spread into many countries including Turkey and by the measures that were taken in this regard. While the public authority took a decision for the cessation or limited provision of work for certain service lines, it was decided to apply the restriction measures more flexibly for certain business lines/sectors. Due to the said breakdown and the measures taken by the public authority in this regard; the entire supply chain of products and services was disrupted, and the supply of products, materials, machines and equipment, workers and technical personnel required during the performance of the work under construction contracts and the realization of production and transportation were either not possible at all or realized with extraordinary difficulties. The same difficulties were also experienced in the supply of imported material inputs and qualified technical personnel.

On the other hand, we observed that contractors continued to operate by taking all types of health and safety measures in accordance with the provisions of the applicable occupational health and safety legislation and provided a healthy working environment to their employees according to the working conditions in accordance with the provisions of the legislation (cafeteria, camp sites, resting areas, working sites, offices, etc.).

The aim of this study is to obtain expert evaluations on the application of force majeure and adjustment clauses in the management of COVID-19 related claims in the construction sector. During this period, within the scope of contract management practices, official notifications, measures taken by central authorities, actions taken by companies during this process, and claim management processes will be examined through case studies. For this purpose, a case study will be conducted to address the following problems.

- How has the COVID-19 pandemic affected the construction industry and the project(s) you are involved in (i.e., general and adverse impacts)?
- Have there been new opportunities for the construction industry as a result of the COVID-19 pandemic? If so, what are they?
- What claims have been made in the construction industry to manage the challenges related to the COVID-19 pandemic?
- How has the COVID-19 pandemic affected the construction industry and sustainability criteria?
- Are construction contracts subject to force majeure or hardship provisions?

2. Impossibility of Fulfillment and Hardship Provisions in Contracts

Even if a contract covers all ordinary risks in detail, it should also contain sufficiently-defined force majeure risks for extraordinary and unforeseen risks. Indeed, certain issues that the parties or either party cannot foresee may arise during the contract term. Such unforeseen situations are among the most critical risks in contracts. For this reason, it is known that the contracts that do not contain sufficient details for unforeseen situations may cause major losses for the parties and even result in the failure to complete the project. We can briefly identify unforeseen situations, which are beyond the control of the contracting parties and which are an uncertain process, as force majeure events.

In the studies and doctrine, two possible impacts are discussed for such extraordinary events in terms of contracts:

(I) Impossibility of fulfillment due to force majeure

(II) Fulfillment of obligations does not become impossible, but the provision of products and services becomes excessively difficult.

Contracts contain provisions on force majeure and hardship regarding these two possibilities (Kolcuoğlu, 2020).

2.1. The Term Force Majeure

Force majeure is essentially a term that is shaped within the framework of judicial decisions and opinions in the doctrine. In its decision dated 18 January 2010 (Merits number 2009/8727, Decision number 2010/101), the 13th Civil Chamber of the Court of Appeal defined force majeure as "an unexpected, unpredictable and irresistible external event that prevents the fulfillment of the obligation and cannot be prevented despite the measures to be taken by anyone and occurs beyond the control of obligor" and "a phenomenon that cannot be generally perceived and resisted". When we review the recent decisions of the Court of Appeal, we conclude that the Court of Appeal examines whether a situation constitutes a force majeure event in each concrete event rather than making a clear definition of force majeure.

According to the Turkish Code of Obligations, force majeure events are actually events of permanent impossibility and they result in the termination of the obligation. In other words, in order to refer to force majeure in the Code of Obligations, the event must be an extraordinary event that cannot be prevented (irresistible) and cannot be foreseen (unpredictable). In this context, in order to treat an event as force majeure, it must contain the elements of being external, inevitable and unpredictable (Özçelik, 2016). The concept of unpreventability means irresistibility in terms of force majeure. In the element of unpredictability; the unforeseen matter is not the event itself, but the consequences that it will cause; sometimes it is possible to foresee the event to a certain extent.

In the doctrine, force majeure is generally defined as external events that are objectively impossible to be avoided or eliminated and that make the fulfillment of the contract impossible. In other words, force majeure is not an absolute concept, but a relative concept (Kolcuoğlu, 2020). The relative nature derives from the fact that certain events do not always constitute force majeure.

According to Ezeldin and Helw (2018), it is indicated that in most cases, force majeure only causes temporary impossibility of fulfillment. In other words, in this case, the fulfillment of the contract provisions is temporarily interrupted in general and it is foreseen that the fulfillment of the obligation can be resumed after the reasons or effects of the impossibility come to an end. In such a case, the contract is suspended instead of being terminated.

2.2. Hardship

According to the principle of loyalty to the contract, which is also recognized in Turkish Law, each obligor must fulfill the obligation stipulated in the contract in the same way despite the difficulties and obstacles that arise after the contract is concluded. This principle is a requirement in terms of the rule of legal security and integrity.

In certain cases, although the fulfillment of the obligation arising from the contract is not impossible, the fulfillment of the obligation may become very difficult and may become a much heavier financial burden than the obligation that would be fulfilled as a condition of the contract. As a result of this change, the balance in the contract may be disrupted to an unbearable extent against one party. In this case, the concept of "hardship" may arise.

In case of occurrence of an extraordinary situation which the obligor does not have any influence over and which cannot be expected to be foreseen; the fact that the creditor asking the obligor to fulfill the obligations and liabilities arising from the contract depending upon the circumstances existing at the time that the contract was concluded, and changing the contract provisions against the obligor would be in violation of the rules of equality and honesty under the contract. In this case, the obligor may request the competent court to adapt the contract to the new circumstances. The obligor may exercise this right before fulfilling its obligation or after fulfilling it by reserving its right to request adaptation. As a result, new adaptations may arise in the contract conditions in accordance with the Article 138 of the Turkish Code of Obligations.

According to the Article 138 of the Turkish Code of Obligations, in order to classify a situation as hardship, all of the following conditions must exist together.

(I) An extraordinary situation that could not be foreseen and could not be expected to be foreseen by the obligor must have occurred after the contract is concluded.

(II) The extraordinary situation that arose must not have been caused by the obligor.

(III) The extraordinary situation must have changed the facts existing at the time of the contract to the detriment of the obligor to such an extent that it would be against the rules of honesty to ask the obligor to fulfill the obligation.

(IV) The obligor must not have yet fulfilled its obligation or must have fulfilled it by reserving its rights arising from the hardship.

The conditions existing at the time of concluding the contract may subsequently change unpredictably, shaking the balance in terms of the obligations of the parties and causing hardship. This situation may indicate that the principle of pacta sunt servanda is not always fair. The balance of sharing the risk that has been disrupted under the changing conditions must be restored (Kolcuoğlu, 2020). In the cases not recognized as force majeure but considered as cas fortuit; if some other conditions have also realized, adaptation of the contract due to hardship might be possible (Tüzüner and Öz, 2015).

In other words, while force majeure is a problem of non-fulfillment and impossibility, the Article 138 of the Turkish Code of Obligations is applied if there is an obstacle encountered during the fulfillment and does not make fulfillment impossible, but makes it difficult. The boundary between them is quite blurred in terms of the COVID-19 pandemic (Yavuz & Uyanık,2029).

3. Perspective on The Pandemic as A Force Majeure Event in Contracts

Our world has faced various pandemics throughout the human history. The oldest recorded and known pandemic is the plague that affected the entire world in the 14th century causing the deaths of more than 200 million people according to the records. In the following years, the cholera epidemic that emerged in the 18th century is among the biggest epidemics in the history taking the lives of more than 100 million people. Our world, which was faced with various influenza epidemics in the 19th century, encountered another epidemic with the HIV/AIDS virus. Our world, which has faced epidemics such as the Swine Flu, Ebola virus, SARS virus etc. in the early 20th century, is currently experiencing its last epidemic period with the COVID-19 virus under the name of the CORONAVIRUS.

COVID-19, which is different than the other epidemics experienced in the world from the past to the present, has basically created different results than the other epidemics in terms of its ability to spread very quickly from person to person. The epidemic disease, which affected the entire world in a short period of 4 months, caused the states in the world to make extremely radical decisions, with an impact resulting in the cessation of all sectoral activities globally in a chain reaction.

According to the Turkish Code of Obligations, we conclude that in terms of commercial relationships, the coronavirus does not constitute a force majeure on its own. However, it can be considered that the practices implemented and/or to be implemented as a precaution in connection with the coronavirus may constitute a force majeure event. The measures such as quarantine, closure of country borders, import-export bans and travel bans, which were started to be imposed in almost all countries in the world, can be considered as force majeure event because they prevent the fulfillment of contractual obligations between the creditor and the debtor beyond the intention of the parties.

In order to qualify any measure as a force majeure event, the impacts of the implemented measure must be specifically assessed on the basis of each contract. For example, if the fulfillment of an obligation that was agreed upon within the framework of a contract becomes objectively impossible due to such measures, then the existence of force majeure can be mentioned. However, if the fulfillment of the relevant obligation is possible not in the agreed way, but by an alternative method or at a different time (in terms of temporary force majeure events), it can be qualified as hardship, in which avoiding the fulfillment based on force majeure would not be appropriate.

As mentioned in the Section 1.1., Force Majeure is defined in the Turkish Code of Obligations as a permanent impossibility of fulfillment. However, COVID-19 had different negative impacts on finalized costs, which were limited by contract periods, particularly in public or private enterprise investments and large construction projects. These impacts were both reflected to the contract process and brought additional expenses in addition to the contract value. We conclude that it made the execution of the work more difficult in certain work items, affected the temporary impossibility of the execution of the work in certain work items and completely changed the design, production and installation conditions in certain electromechanical work items that require special production and installation.

From this perspective, we can conclude that the COVID-19 Pandemic actually made the execution of the work more difficult temporarily, not permanently. This situation was reviewed in the case study described in this article, and the results were presented by following the steps below.

Pandemic Effects: Proving with the documents that the factors such as loss of workforce due to the pandemic, delays in the supply of materials and restrictions imposed in the project/worksite caused a delay,

Contract Review: Articles such as Delay, Force Majeure, Delivery obligations, limitation of responsibilities, penal clauses and indemnity conditions in the contract were reviewed and official notifications were sent in this regard,

Timeline Analysis: The timeline of the key milestones, along with the start and completion dates of the project, was reviewed and the phases in which the delays occurred were identified,

Calculation of Duration of Delays: The reasons and durations of the delays were determined and the impact of these durations on the total term of the project was calculated in terms of the both parties. At this point, the Main Contractor and the Subcontractor put forward different arguments.

Alternative Solutions: Alternative solutions and strategies were developed to compensate for the delays; Options such as additional workforce, increasing working hours or inclusion of technology were assessed.

Reporting: The delay analysis results were reported regularly to the relevant parties (management, investors, contractors). These reports include the progress in the project and the measures taken.

Communication: Maintaining constant communication with the project stakeholders is critical for the management of delays. It should be ensured that all parties understand the situation and contribute to the solution suggestions.

In this section of the study, the claim is defined regarding how much of the delay experienced during the commissioning of the signaling system as one of the subsystems of the metro project was caused by the pandemic, and the delays not attributed to the pandemic from the employer's perspective and their contractual position are discussed. After the examination, the reconciliation procedure followed by the parties is described in details.

4. Research Method

This section covers the research material and methodology used to conduct the study. The research explains how construction companies were affected during the pandemic period through a case study. In the application part of the research, a case analysis will be conducted, which can exemplify both force majeure and excessive difficulty in performance during the pandemic period in the construction sector. The case study describes the claims process between the Contractor and the Subcontractor in an ongoing metro project in Istanbul during the pandemic. By examining this claims process, the impact of the pandemic on construction work and the progress of the project will be analyzed.

4.1. Case Study

In this section of the article, a case study that can be demonstrated as an example for both force majeure and hardship during the pandemic period will be examined. First of all, the definitions section and general information about the project are provided in order to understand the delay experienced.

In this case study, the works that were ceased during the pandemic period, the works that continued to be executed and the method of managing the claim process were examined and the contractual positions are demonstrated. Following the examination, the claim management of contracting parties is compared with the situations explained

in the first section of the article.

4.2. Chronology of Events

Project: means the Metro Project to be executed under the main contract signed by and between the Main Contractor and the Administration.

Subcontractor: means the supplier that will provide the signaling system.

Company/Main Contractor: means the party purchasing the signaling system.

Administration: means the client of the Metro Project.

System: means the signaling system including the development of the software, provision of the hardware, installation, testing and commissioning, training and maintenance services.

Testing and Commissioning: means the execution of in-site tests of all systems and subsystems prior to the commercial operation according to the procedures.

SMB1: means the certificate confirming that the Project can be safely opened for operation without passengers.

SMB2: means the certificate confirming that the Project can be safely opened for operation with passengers.

Commercial Operation: means the date of opening of the metro system with passengers.

4.3. Project Information

A standard contract was signed by and between the Main Contractor undertaking the architectural and electro-mechanical works of the Istanbul metro line subject to the Public Procurement Law and the Administration. The works to be executed within the scope of the Project include architectural finishing works, energy system power supply and distribution, signaling, communication and automatic control systems, auxiliary facilities, escalator, elevator, environmental control system, track works, design services that would require minimum maintenance for all relevant systems and parts of the system, construction, procurement, installation, testing and commissioning works as well as provision of 24-month operation and maintenance supervision service related to the system, preparation of the operating and maintenance manuals, procurement of 2-year spare parts and consumables, special tools and equipment, provision of operational training in site and abroad.

A subcontract was signed by and between the Main Contractor and the Subcontractor for the execution of the Automatic Train Control (ATC) Signaling System, which is required to be provided for the control of train movements of the Metro System. This contract covers the execution of the design, installation, assembly, testing and commissioning processes of the Signaling System by the Subcontractor, which is also responsible for the safe operation of the System as a whole in terms of the hardware, software and data transmission systems.

4.4. Definition of Claim

According to the contract signed between the parties, the system procurement and installation, i.e. the assembly phase in the field, will be carried out after the completion of the system design and software process. Then, the system testing and commissioning process will be initiated for the safe operation of the system without any problems, and the testing activities are shown in the table below.

Table 1. Activity

ACTIVITY
Wayside installation test (PICO test)
Wayside ATC Installation Inspection Test Procedure - 401
Central Control Installation Inspection Test Procedure - 402
OCS950 Field Test Procedure - 404
Norming Point Civil Location Test Procedure – 710
Data Transmission System Test Procedure – 805
ATC Data Radio System Installation Verification - 810
ATC Field Cable Megger and Continuity - 001
Fiber Optic/Data Transmission Cable - 004
Vehicle ATC Installation Field Test Procedure for Trains
VATC TEST
VATC Static Field Test Procedure - 133
Vehicle ATC MDR System Installation Test - 141
VATC Qualification Field Test Procedure - 908 (Prototype Test)
VATC Dynamic Field Test Procedure - 904 (Series Test) -
SAT Test (Integration Test)
Vehicle ATC System Map Verification Test Procedure - 907
IO Data Test Procedure - 2001 -1
Train Initialization & Removal Test Procedure - 3951F
System Initialization Functionality Test Procedure - 3950F
Interlocking Test Procedure 3952F

Speed Restriction Test Procedure 3953F
Station Test Procedure 3955F
Automatic Train Supervision (ATS) Test Procedure 3960F
Automatic Train Supervision (ATS) Test Procedure 3960D
Routing Test Procedure 3956F
Failure Mode Functionality Test Procedure 3959F
Interlocking Test Procedure 3952D
Speed Restriction Test Procedure 3953D
Station Test Procedure 3955D
Routing Test Procedure 3956D
Failure Mode Functionality Test Procedure 3959D
Diagnostic Test Procedure 3961F
Diagnostic Test Procedure 3961D
External Interface Functionality Test Procedure - 3964F
Station Stopping Accuracy – 1008
External Interface Functionality Test Procedure - 3964D
SMA3 for Start Wayside SIT Test
SIT Test (Performance & Demonstration Test)
Performance Functionality - 3962F
System Demonstration Test - 4003-1
SM B1 (ISAR) Signaling System Safety Certificate
SM B2 Overall safety report

As indicated in the table below, the parties reached an agreement on this work schedule before the pandemic broke down, and the pre-conditions that must be fulfilled within the scope of the Project for the start of the Site Integration Tests indicated in the table above (hereinafter referred to as the "SAT Test") were agreed upon between the parties and signed in a list. (Annex-1).

Table 2. Work Schedule Before the COVID-19 Pandemic

Work Schedule Before the COVID-19 Pandemic			
SAT Test (Integration test)	42 Days	8.02.2020	20.03.2020
SMA 3 for start wayside SIT Stage 1	12 Days	21.03.2020	1.04.2020
SIT Test (Performance & Demonstration test)	7 Days	2.04.2020	8.04.2020
SM B1 (ISAR) (Signaling System Safety Certificate) *(A letter can be issued by indicating that the Project can be safely opened for operation without passengers)*	12 Days	9.04.2020	20.04.2019
Overall safety report (SM B2) - (A letter can be issued by indicating that the Project can be safely opened for operation with passengers)	30 Days	19.05.2020	
	15 Days (Reporting)	3.06.2020	

4.5. Development of the Claim

On February 04-07, 2020, the Administration and the Main Contractor conducted the ATS software testing of the signaling system at the Subcontractor's facilities; however, it was observed in the tests conducted that the software functions related to the ATS were still in the development phase in a laboratory environment, although there was a very little time left in terms of the opening target.

We learned from the notification sent by the Company on February 25, 2020 that the work schedule for the SAT Tests was not submitted, the other systems within the scope of the Project were ready for the integration tests and therefore, a testing plan had to be submitted and this caused a delay.

We learned from the relevant correspondence that deficiencies were identified in the Factory Acceptance Tests due the ATS software, and the ATS software had to be delivered on 17.02.2020 to avoid any disruptions in the working schedule of the Project, signal tests were negatively affected due to the deficiencies resulting from the software

and in this case, the SMB1 and SMB2 certification process was negatively affected, which also affected the commercial operation date of the Project.

In this period of time, the coronavirus (COVID-19), which broke out in Wuhan in the People's Republic of China, spread to many countries around the world including Turkey. The Company received notifications from its suppliers and partners regarding the impact of the restrictions imposed by local and / or central governments to prevent the spread of the COVID-19 outbreak (Supply chain interruptions, closure of offices / schools or other public institutions and travel or access restrictions to regions, etc.) on their capability to fulfill their contractual obligations.

The Subcontractor of the Signaling System also sent its first notification under the Force Majeure clause in its contract through an official letter dated 03.03.2020 that the COVID-19 Pandemic could be recognized as a force majeure event within the scope of the applicable contract between the parties and that this event could affect the services and/or products to be provided by the Subcontractor.

It was notified that this situation could affect the valid delivery date according to the actual project plan or schedule, and its full impact on the Project was being assessed at that time; however, such assessment was subject to rapidly-changing measures implemented and the sanctions imposed by many authorities.

Subsequently, entries and exits into and from Spain were immediately closed and restrictions were imposed on the movement of citizens within the entire territory of the country based on a decree approved by the government on 14 March 2020. Due to the existing conditions in Europe and the decision taken by government authorities; entry permits into Turkey were temporarily cancelled and as the foreign experts in Turkey returned to their own countries, their works in the site were suspended, and as a result, certain critical activities could not be carried out in the construction site.

In such an extraordinary period of time, we conclude that the compensation for the delay experienced in the recent work schedule submitted by the Administration and agreed upon between the parties was not a realistic and achievable target, the Company and other suppliers experienced significant delays, and it was unrealistic to achieve these deadlines, which required a time extension claim.

4.6. Assessment of the Claim from the Company's Perspective

- The deficiencies identified in the ATS software were not completed,
- The site integration test plan was actually submitted late due to the deficiencies existing in the software, and the tests did not progress at the expected speed,
- The trainings required to be provided prior to the commercial operation were not planned,
- Although there were delays caused by the COVID-19, the software-related delays and the delays in the submission of the documents could not be directly associated with the Covid-19,
- Although a time extension was granted due to the force majeure event, the Subcontractor did not compensate for the delay that was much long than this,
- Due to the international travel measures taken, the number of the local teams could be increased and the execution of the works could be maintained within the scope of the Project,
- The execution of the Project could be maintained by integrating technological means,
- The expected works in the software and documentation processes were not directly related to the Covid-19, there were many delays caused by the Subcontractor independent of the pandemic, and these delays would not constitute a reason for time extension due to the force majeure.

4.7. The Claim from the Subcontractor's Perspective

- A total of 37 days of delay analysis was conducted due to the reasons not attributable to the Subcontractor (flooding in the tunnel due to heavy rain, power outages, delays caused by other contractors and pending due to the insufficient site safety measures),
- Even if the software was delivered early, the site was not ready and the other subcontractors that would perform the subsequent works were delayed,
- Considering the fact that the total duration of the last compressed work schedule that was agreed upon between the parties was slightly less than 4 months, the delay caused by the above-mentioned external factors in terms of the Subcontractor corresponds to approximately 35 to 40% of the total duration,
- The pre-conditions for the commencement of the signaling works and the testing and commissioning phase were indicated in the work schedule enclosed to the contract, and these pre-conditions were not fulfilled by the Main Contractor,
- The delay experienced within the scope of the Project was not only due to the COVID-19, but also the delays caused by other subcontractors and started in the pre-pandemic period increased even more during this period of time,
- The experts that would perform the integration tests could not come to Turkey due to the international

travel bans, and it was possible to conduct the critical integration tests only by foreign specialized personnel.

4.8. Dispute Occurrence

When the situation is assessed in terms of the Main Contractor and the Subcontractor, the main reason for the dispute is that the both parties failed to accurately analyze the delays experienced until that day when an agreement was reached for the commercial operation date. The short-term delays which were seemed to be insignificant at the beginning reached a level that cannot be compensated in the post-pandemic period.

The first link in the chain of errors was the failure to reach an agreement regarding the deficiencies existing in the software and to identify the software errors or the expected developments in the software from the very beginning. The important detail at this point is that while software studies, which are electronic computer engineering services, are the studies conducted in an office environment, the hardware on which the software is installed constitutes an engineering service that requires in-site installation and testing of compatible operating conditions with the software.

To eliminate its own delay caused by the software, the Subcontractor sent a written notification for each of the events that could affect the works within its own scope of works during the in-site installation and integration process, and prior to the pandemic process, it executed a correct contract management structure for the completion of the works on time by conducting a delay analysis for these issues.

Following the software and in-site integration tests, which are the most critical processes of the Project in order to commission the metro system smoothly; the security certification process to be provided for the safe operation of the system was managed only by the foreign specialized teams of the Company. For this reason, due to the COVID-19 pandemic and the relevant restrictions imposed by the official authorities and institutional procedures, it became mandatory to suspend the signaling tests for a while due to the impossibility of the travel of the foreign specialists of the Subcontractor to Turkey (to the Project Site). As mentioned above, the approaches to be used to compensate for the minor time losses at the beginning of the work within the working schedule were disrupted due to the PANDEMIC effects, and the delay of the works became inevitable.

Particularly, the fact that the foreign specialists could not come to Turkey due to the travel restrictions and the Subcontractor was located in Spain as one of the countries that suffered the biggest damage due to the Coronavirus caused disruptions in the execution of certain signaling works within the scope of force majeure. In this process, technological means were integrated, coordination was ensured with the local teams through remote access method and digital communication tools, and the necessary studies were continued by eliminating the software errors, making additional developments, providing the testing plan procedures, training plans and even provision of the trainings by using online digital communication tools.

With the start of the normalization processes in Europe and in Turkey and the opening of border gates, the foreign specialists came to Istanbul on 08.07.2020. However, it was allowed to work at the offices of the Subcontractor with maximum 50% personnel capacity. The employees were also scheduled to work in rotation in line with this schedule. The restrictions were still valid in terms of the cross-border travel. Mask-wearing and social distancing obligations were still strictly enforced in Spain and in other European countries. These extraordinary circumstances prevented the frequent travels of specialists. With the normalization process, work performance was started to be carried out at 50% capacity. Accordingly, the work schedule was revised and an agreement was reached on the table below.

Table 3. Work Schedule After the COVID-19 Pandemic

SAT		08.02.2020	19.05.2020
Return of the foreign specialists to their country due to the COVID-19 Interaction	42 Days + Pandemic	***3.03.2020***	***8.07.2020***
SAT		9.07.2020	5.09.2020

1.1. Contractual Entitlement to the Claim

2.1.2 The Work Schedule is a dynamic (variable) schedule due to reason that, inter alia, some part of the tunneling works will not be performed by the Company under the Main Agreement. Therefore, the Work Schedule may change, some part maybe suspended or the activities may be shifted or priority may change. In consideration of the foregoing, the schedule of the Works i.e. Detailed Work Schedule, may be subject to rescheduling accordingly. The Subcontractor, as being an experienced company, shall consider such possible rescheduling possibility and perform the Works without delays in opening dates and milestones and at no additional cost to Company.

At the time of concluding the contract, the Company prepared the foregoing clause to prevent the subcontractors from expecting additional costs in the future in case of a possible delay in these activities by foreseeing the general situation of the Project and to get the metro system activities carried out by a different joint venture.

According to the interpretation of this clause in the contract, the Subcontractor refers to this clause and indicates that the work schedule in which the commercial operation date of the Project was determined is a dynamic and variable schedule, and that the period of time allocated for the signaling system works cannot be shortened due to the delays caused by other subcontractors. To put it more

clearly, even if the Subcontractor delivered the software on time 1, the site conditions must be suitable for the installation of the hardware and other subsystems must be ready for software integration tests. The signaling system is the last activity in the work schedule of the metro project, and it is impossible to carry out the installation and site tests before the preliminary activities are completed. For this reason, it was stated that the work schedule is dynamic and that the time agreed for the completion of the signaling works cannot be shortened. According to the interpretation of this clause in the contract, the work schedule is dynamic due to the delay in tunneling activities, and the commercial operation date may be changed during the continuation of the construction activities.

According to the defense of the Company, the common intention of the Parties at the time of preparing such an article was to touch upon the dynamic aspects of the work schedule by giving the example of tunneling works. The total time allocated for the signaling works was delayed due to the deficiencies arising from the software and the integration tests not progressing at the desired speed. All these issues should have been taken into consideration by the Subcontractor at the time of preparing the revised work schedule. It was expected that the Subcontractor would accelerate its works and achieve compliance with the revised work schedule.

1.4.1 The Subcontractor is solely responsible, for performance and execution of all works and actions related to and/or in connection with ***the Works, which are not expressly stated under this Agreement*** *but required for proper* ***and timely performance*** *of the Works as per provisions of this Agreement.*

The main reason for preparing this clause was to define the characteristic requirements of the complex and high-technology system. As the Main Contractor in the capacity of purchaser of the system does not know all the details of the system, it might need other system-related works or subsystem requirements for the operation of the signaling system as a whole. All these needs and requirements should not prevent the timely completion of the works.

The Subcontractor refers to this clause and states that the definition of the works specified in this clause is limited to the signaling system under the Agreement, and other works beyond the scope are required to be excluded.

It indicates that the Subcontractor is not responsible for proper or timely performance of the other activities beyond the scope. For this reason, it is emphasized that the delay experienced is caused by the other subcontractors that will perform the preliminary activities.

The Company emphasizes that this clause cannot be interpreted with this approach, and states that it has never requested the performance of works beyond the scope, and many delays occurred due to the software deficiencies determined in the factory acceptance test including training planning, test program, presentation and approval of the test documentation. It argues that any action plan (accelerating the works, increasing the workforce with additional resource, etc.) was not presented regarding the delay experienced.

13.4 Either Party effected by Force Majeure shall notify the other Party of the Force Majeure and its nature without delay and not later than 7 (seven) days from the occurrence of Force Majeure. Failure to notify the other Party within the said 7 (seven) days shall constitute waiver of the rights under this Article. Occurrence of Force Majeure shall be certified by the Chamber of Commerce or relevant official authorities where Force Majeure has taken place.

13.7 If any Force Majeure event lasts for more than 2 (two) months, the Parties to the Agreement shall negotiate with the aim of obtaining a mutually agreed settlement. If the Parties cannot mutually agree on a settlement, then the Company shall have the right at its own discretion (i) to terminate this Agreement without any compensation under any name to the Subcontractor or (ii) to postpone and extend completion dates of the Works under the conditions stipulated in the Agreement.

The Subcontractor sent the following notification to reserve its rights arising from the pandemic: “As it is widely reported, a virus outbreak arising from China and currently identified as the COVID-2019 by the World Health Organization is spreading through various countries. To prevent the spread, various national, federal and local governments have started to impose a wide range of restrictions such as supply chain disruptions, closures of offices/schools or other public institutions and restrictions on travel or access to regions. The Subcontractor is continuously receiving notifications from its own suppliers and partners regarding the impact that these measures have on their capability to fulfill their obligations towards the Subcontractor.

Therefore, this letter should be recognized as a notification that the above-mentioned situation can be accepted as a force majeure event within the scope of the contract in force between the Subcontractor and your company and this may affect the services and/or products to be provided by the Subcontractor.”

The Company stated that the delay arising from the software cannot be linked with the COVID-19, the relevant deficiencies were notified before the outbreak and there should not be any delays in the development of the software arising from the measures taken due to the outbreak. The obligations such as provision of software, documentation and training can be fulfilled by integrating technology into business processes. In fact, the hardware installation process and integration tests could not be started because the software was not delivered on time, and the COVID-19 pandemic occurred in this period of time. The failure to deliver the software on time is a breach of the contract and a penalty arises due to this delay.

5. Conclusion and Assessment

When we look at the sociological, economic and even security effects of the COVID-19 Pandemic that affected the entire world, it is an undeniable fact that it truly caused different effects than previous pandemics experienced in the world. The health administration of all countries, particularly the World Health Organization (WHO), had to take extraordinary radical measures both to protect the people within the country and to prevent dangers from abroad. These measures dragged the business world into irreparable conditions in terms of both employees and industrial production. It caused the cessation of the works by commercial enterprises that continue their business relationships under a specified work commitment, affecting both the contract completion times and causing an increase in committed costs. Due to these effects caused by the COVID-19 Pandemic, the ongoing work flow was unexpectedly restricted very quickly and even came to a standstill. To partly relieve the disrupted balance in global relationships in economic, sociological, security and psychological aspects and to support global stability, it was necessary to take extraordinary measures and as a result, it caused the economy administrations of countries to implement practices such as granting financial supports, workforce supports, tax exemption supports etc.

When we look at the negative effects of the COVID-19 pandemic on both the creditor and obligor sides regarding the works assumed under contracts, we see the provisions "Hardship" and "Force Majeure". It is clear that due to the pandemic, the fulfillment of the contractual obligation became impossible in certain business lines, and the fulfillment of the obligation became very difficult and turned into a much heavier financial burden than the obligation that would have been realized as a condition of the contract in certain business lines. As a result of this effect, the balance in the contract will have consequences to the detriment of the both parties. An extraordinary and unforeseeable event emerged beyond the control of both the obligor and the creditor. While the creditor was affected by the extension of the delivery period of the work under the contract and the operating losses, the obligor encountered an additional cost burden due to the difficulty and prevention of the fulfillment of the obligation. Therefore, it would be contrary to the equality and honesty rules of the contract for the parties to unilaterally demand from each other the fulfillment of their tasks and obligations arising from the contract.

As it was tried to be explained in the case studies, the delay experienced within the scope of the Project is not only due to the COVID-19, but the delays that started in the pre-pandemic period were also increasing even more in this period of time. The Parties executed their 'Claim' management in accordance with the provisions of the contract, and when the case study is examined, the following picture emerges:

By putting forward the delay experienced in the signaling-software works, which are electronic computer engineering services, the Main Contractor disregarded the effect of the PANDEMIC on the delays experienced in the hardware installation, testing and commissioning processes and demonstrated an approach such as "if there had been no delay in the software works, the hardware works would not be subject to the PANDEMIC process".

The Subcontractor claimed that it prepared a program that could compensate for the delay encountered in the software process for the works that it would carry out in terms of the hardware installation and tests, but it failed to use this program due to the PANDEMIC effect.

A debtor has fallen into default due to their own fault, and subsequently, the COVID-19 pandemic has made the performance of the contract excessively difficult. The debtor must bear the consequences of this situation because if the debtor had performed their obligation on time, the pandemic would not have affected the contract.

To eliminate such disputes arising from the contract, the most accurate approach for the Parties would be to use the win-win principle in their actions towards each other.

The binding principles of the provisions of the contract between contractors should be able to be managed according to this special situation when force majeure events or globally or locally unforeseen effects occur. For example, the contractor should make a claim for the delay suffered by the subcontractor in the software works, but it should waive the claim arising from the time losses experienced in the hardware process. Likewise, the subcontractor should accept the negative impacts of the delays attributable to itself on the works related to the successive (start to start or finish to start) relationship, and should cover the additional work costs arising from the prolonged work processes.

Another key point in the case study is that technological means were used more in order to mitigate the effects of the delay caused by the restrictions taken at local and global levels. We can say that the integration of technology into business processes significantly improved the delay analysis and overall project management processes during the pandemic period.

We can see in the case study that the digital communication tools that were used to ensure efficient communication between the project stakeholders accelerated the flow of information and in this way, the causes of delays and solution suggestions could be shared quickly.

During the pandemic, remote working and virtual training opportunities allowed the workforce to continue to develop their skills. These technological developments have supported overcoming the challenges of the pandemic by enabling projects to be managed more flexibly and efficiently.

When considering another impact of the pandemic on contracts, it is crucial to take sustainability principles into account. In addressing the economic and social challenges

faced by the parties to the contract, it is not only short-term solutions that are necessary but also long-term actions that align with environmental, social, and economic sustainability principles. In the uncertain environment created by COVID-19, paying attention to sustainability goals such as social responsibility for employees and the protection of natural resources in the face of disruptions in the supply chain not only safeguards the interests of the contracting parties but also ensures the long-term support of society and the environment. From this perspective, the application of force majeure and hardship provisions can lead to the creation of a more just, resilient, and sustainable contractual structure, where the interests of the parties are equally protected.

The pandemic has had a profound impact on the construction industry, and these effects, when combined with sustainability goals, have created new opportunities, as demonstrated in the case study. When examining the impact of the pandemic on the construction sector from a sustainability perspective, the following points stand out:

Environmental Impacts and Sustainable Practices: During the pandemic, the suspension or slowdown of many construction projects led to a reduction in environmental impacts. Air pollution and carbon emissions decreased, which in turn highlighted the importance of environmentally friendly, low-carbon, and energy-efficient practices within the construction industry.

Social Sustainability and Health and Safety: The pandemic has brought to the forefront the importance of health and safety measures in the construction sector. The health and safety of workers on construction sites became a top priority. From a social sustainability perspective, issues such as workers' rights, safe working conditions, and social distancing measures were emphasized. Along with the pandemic, the health status of workers was closely monitored, and additional hygiene and sanitation measures were implemented in the workplace. Moreover, social challenges such as workforce loss and unemployment necessitated the development of sustainable labor force strategies.

Economic Sustainability and Resource Management: The pandemic has brought about economic challenges and financial pressures for many construction companies. From a sustainability standpoint, efficient resource use, budget management, and cost control were key factors in maintaining economic sustainability during this period.

Digitalization and Technology Use: The pandemic accelerated digitalization in the construction industry and ensured that technology played a critical role in achieving sustainability goals. Remote monitoring of construction projects, digital planning, and management software have accelerated the process of building energy-efficient structures.

As a result, each case should be examined separately by considering whether the difficulty encountered due to the COVID-19 constitutes a force majeure event, how it has prevented the contractor from fulfilling its obligations, and what consequences it will bring. Cost benefits and even productivity increases have been achieved in business lines, where technological innovations could be integrated more, while negative impacts emerged against the Administration or the Contractor in the projects with manufacturing and site conditions depending upon labor. For this reason, I believe that each project should be examined based on its own conditions, technological innovations and contract provisions.

Annexes

Annex-1 Pre-Conditions for compliance with the Work Schedule

Annex-2 Work Schedule

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SIGNALLING TESTS COMMENCEMENT CERTIFICATE 3

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- Civil Works, Track Works, Catenary, Power Supply, PSD Doors (fully functional), Tetra System, UPS, and auxiliary systems in SER (S11, S12, S14, S15, S16, S18, S19) have been duly installed, completed and verified by the Company.
- Safety measures on the Track Section have been provided by the Company in full accordance with the applicable **ESSKMM14907D104** – "*Test Plan*" documentation and shall be maintained for the full duration of the Signaling Tests as deemed necessary.
- Permanent Health, Safety and Environment (HSE) Responsible for the Track Section have been assigned by the Company to coordinate all subcontractors joint work in a harmony and ensure good level of communication between all parties. Permanent HSE Responsible shall be maintained by the Company for the full duration of the Signaling Tests as deemed necessary in order to avoid any incidents or accidents that may happen due to miscommunication.
- Environmental conditions for the Track Section have been checked and verified to be within the acceptable range by the Company which shall continue to be monitored and controlled for the full duration of the Signaling Tests as deemed necessary.
- The Company shall pursue their rights stipulated in their main contract with IMM and ensure that the Drivers who successfully passed the Driver Trainings of the Vehicle Supplier have been arranged by Vehicle **Company** to attend each shift of Signaling Tests to be executed as deemed necessary.
- The Company shall pursue their rights stipulated in their main contract with IMM and ensure that the Vehicle needs for the Signaling Tests shall be provided by **Vehicle Company** in a timely manner as deemed necessary.

Company hereby declares and certifies that the Track Section together with all the preconditions as listed above have been fulfilled and ready for the Signaling Subcontractor to commence performing all necessary testing and commissioning activities included under the Signaling scope as of the execution date of this Certificate.

In Witness Whereof, this Certificate which has been signed and executed by the duly authorized officers of the Company hereto on 20 / 2 / 20 in 2 (two) original copy.

KMM - ACTUAL SUMMARY SCHEDULE FOR STAGE 1			
ACTIVITY	**DURATION**	**START**	**FINISH**
AL dependencies			
PSD System fully completed S09-S19			15.01.2020
Line available exclusive for signalling tests only S09 - S19			22.01.2020
OCCS ready			02.03.2020
Rolling Stock dependencies			
Train No.3-14 handing-over to AL/BT (in equal gradual steps)		03.12.2019	11.03.2020
Section S05-S09			
SMA 2 for start Wayside SAT S05 - S09	26 days	15.01.2020	**31.01.2020**
SAT Test (Integration test) S05 - S09	42 days	28.12.2019	07.02.2020
Section S09-S19			
DTS & Network test (805, 1282) S09 - S19	3 days	12.01.2020	14.01.2020
System initialization and I/O test (2001, 3950, 3951) S09 - S19	7 days	15.01.2020	21.01.2020
Map verification & Radio test (907, 811, 812)S09 - S19	10 days	22.01.2020	31.01.2020
SMA 2 for start Wayside SAT S09 - S19	5 days	03.02.2020	**07.02.2020**
Section S05-S19			
SAT Test (Integration test) S05 - S19	42 days	08.02.2020	20.03.2020
On board dynamic testing trains 3 to 14 (Test No. 904, either on temporary test track or a main line section) (in equal gradual steps)	90 days	18.12.2019	16.03.2020
SMA 3 for start wayside SIT Stage 1 (S05-S19)	12 days	21.03.2020	01.04. 2020
SIT Test (Performance & Demonstration test) (with 7 trains)	7 days	02.04.2020	08.04.2020
SMB1 (ISAR) for Stage 1 (S05-S19) (Signalling System Safety Certificate)	12 days	09.04.2020	20.04.2019