



International Journal of Multidisciplinary Research and Growth Evaluation



International Journal of Multidisciplinary Research and Growth Evaluation

ISSN: 2582-7138

Received: 05-02-2021; Accepted 07-03-2021

www.allmultidisciplinaryjournal.com

Volume 2; Issue 2; March-April; 2021; Page No. 70-76

Lesson -Learned from COVID-19 outbreak of Soreang District (Indonesia) hospital construction project: Regulation and contract review

Krishna Mochtar *

¹ Institute Teknologi Indonesia

Corresponding Author: **Krishna Mochtar**

Abstract

The construction project is conducted in accordance with the laws and regulations in a country, including in Indonesia. The construction project also overcomes various conditions, not only in normal condition but also in special condition such as pandemic disease. The purpose of this paper is to conduct the regulation and contract review of what actually has been done in dealing with a force majeure in the Soreang District Hospital Construction Project. The methodology to be used is collecting data on the project, reviewing the literatures, conducting Gap Analysis, and finally conducting Lesson Learned Analysis. It can be concluded that there is

no gap between what should be done in accordance with the laws and its real implementation in the project. It is recommended for all construction projects that the negotiation of contract terms as a risk management tool for the parties to be contracted should be conducted better by anticipating all the parties' risks that may occur. It is also recommended that additional health and safety protocols for COVID-19 continue to be implemented, as a "new normal" health and safety program in post COVID-19 all construction projects.

Keywords: Force Majeure, Outbreak, Productivity, Safety

Introduction

The construction project is conducted in accordance with the laws and regulations in a country, including in Indonesia. The construction project also overcomes various conditions, not only in normal condition but also in special condition such as war, riots, labour strikes, natural disasters (floods, tornadoes, fires, earthquakes, etc.), and endemic or pandemic disease (bird flu, SARS, dengue fever, cholera, malaria, etc.) (Clough et al., 2015) [2].

Since December 2019, there has been a discovery and spread of diseases caused by new viruses, namely Corona Virus Disease 19 (COVID-19). The virus was found and began to spread from an area in the city of Wuhan, China. The virus is so easily transmitted among humans, that in just a few months, it has spread and killed humans in more than 200 countries around the world, including in Indonesia (Table 1). Human life has become very affected, because they have to do social distancing and even quarantine in the area or lockdown. This causes activities in the construction industry are significantly affected. For example the building material industry (sand and gravel, cement, concrete, reinforcing steel, structural steel, furniture, ceramics, natural stone, aluminum, and MEP equipment), construction equipment rental industry, construction human resources (construction laborers a variety of skills) are affected, so that supply becomes declining and scarce. The transportation of goods to construction projects also becomes difficult due to the closure of access roads and the stopping of freight transportation services due to area quarantine/lockdown. This is felt by the construction project in the form of the difficulty of obtaining various project resources, so that the progress of work is below that planned, including in the Soreang District Hospital Construction Project which is worth around Rp. 300 Billion, where the progress has reached around 38.2305% on April 5, 2020 (structural work is completed, architectural and MEP work are being done). From the monitoring of the CM Consultant that as a result of the COVID-19 force majeure, the negative deviation in the progress of work continues to grow from negative 0,3861 to negative 2,2090 from week 43 to week 46 (Table 2).

Because the project is a Bandung Regency government project, what must be done about the force majeure must be in accordance with the existing local laws and construction contracts, unless it will certainly be a problem in future audits that will be carried out by various government agencies.

The purpose of this paper is to conduct the regulation and contract review of what actually has been done by the CM Consultant in dealing with a force majeure in a construction project, in this case the Soreang District Hospital Construction Project.

Methodology

The methodology to be used is first collecting data on Soreang District Hospital Construction Project including contracts, work plans and requirements, weekly reports, correspondents, and master schedules. Second, literature review, including: the development of COVID-19 outbreak, regulation and construction contracts relating to force majeure: to find out what should be done. Third, Conducting Gap Analysis: comparing what has happened and what should have happened, so that the gap can be known, and to be reviewed and concluded. Finally, conducting Lesson Learned Analysis, to take lessons on positive and negative things to be able to become improvements for the future.

Literature review

Hierarchy of Regulations in Indonesia

The hierarchy or sequence of laws and regulations in Indonesia refer to Law Number 15 of the Year 2019 which reads.

The types of hierarchy rules and regulations in Indonesia consist of.

1. The 1945 Constitution of the Republic of Indonesia
2. Decree of the People's Consultative Assembly (MPR)
3. Law (UU)
4. Government Regulations (PP)
5. Presidential Regulation (Perpres)
6. Provincial Regulations (Perda), and
7. District/City Regulations

The legal force of the above laws and regulations is in accordance with the hierarchy and the lower laws and regulations must not conflict with higher regulations. Meanwhile, the position of the construction contract certainly occupies the hierarchy under the legislation mentioned above.

Regulation related to COVID-19 on the Indonesian Construction Project

As mentioned earlier, that since December 2019, there has been a discovery and spread of diseases all over the world caused by a new virus, namely COVID-19. The construction project in Indonesia is no exception affected by the pandemic. Government policy and individual factor have a positive and significant influence on contractor's risk attitudes (Taofeeq *et. al.*, 2019) ^[13]. Therefore, the various laws and regulations related to COVID-19 and Indonesian construction projects will be described as follows (sorted according to the hierarchy of laws).

▪ Law/PP Number 6 Year 2018 concerning Health Quarantine

Issued on August 7, 2018, this Act essentially regulates health quarantine regarding the responsibilities of the central and regional governments. For the articles of regulation relating to the activities of carrying out construction services have not been specifically regulated in this Law. However the impact of this health quarantine on the implementation of construction projects, such as the problem of mobilization of human resources (experts, managers, superintendents, foremen, workers), construction materials and equipment due to

the limitation of activities or quarantine in the project area and from the origin of the resources; although the implementation of construction services can still run, the productivity may decline, so that the time and cost may increase. Especially if in the construction project itself there are human resources that need to be quarantined health, then the construction project activities can be stopped temporarily, or even postponed until the health condition is back to normal. The impact can be in the form of additional time and costs of construction projects.

▪ Law Number 1 Year 2020 concerning State Financial Policy and Financial System Stability for Handling Corona Virus Disease 2019 (COVID-19) and/or in the framework of Facing Threats that Harm National Economy and/or Financial System Stability.

Issued on March 31, 2020, this Law regulates the scope of the budget to deal with COVID-19, which includes financial policies, revenue policies, taxation policies, and expenditure policies both in state and districts. Articles related to the implementation of construction services (Perppu 1/2020) ^[9], are.

- There is a policy of prioritizing the use of budget allocations for certain activities (refocusing), adjusting the allocation, and/or cutting/delaying the transfer of the budget transfer, with certain criteria. The impact is the possibility of the construction project budget being postponed, rescheduled (for example by extending part of the payment term to next year; in Ministry of PUPR it is called a relaxation program).
- The existence of a tax relief policy for business entities (including construction services), thereby avoiding and reducing the risk of financial difficulties that can be experienced by construction consultants, contractors, subcontractors, and suppliers of service, material, and construction equipment.

▪ Government Regulation/PP Number 21 Year 2020 concerning Large-Scale Social Restrictions in the framework of Accelerating Handling of Corona Virus Disease 2019 (COVID-19).

Issued on March 31, 2020 (in conjunction with above Law 1/2020), this PP sets the COVID-19 pandemic status option as Large-Scale Social Restrictions (PSBB), one of the choices for the status according to the Law Health number 6 of 2018 above. PSBB is a limitation of activities certain residents in an area suspected of being infected with COVID-19 in such a way as to prevent the possibility of spreading COVID-19 so that with the approval of the minister who organizes governmental affairs in the health sector, the Regional Government may carry out PSBB or restrictions on the movement of people and goods for a particular province or district/city, which must be based on epidemiological considerations, the magnitude of threats, effectiveness, resource support, operational technical, political, economic, social, cultural, defense and security

considerations. PSBB must meet the criteria for the number of cases and/or number of deaths due to disease increased and spread significantly and quickly to several regions; and there are epidemiological links with similar events in other regions or countries (PP 21/2020).

The impact on the implementation of a construction project in a PSBB situation in an area is the problem of mobilization of human resources (experts, managers, superintendents, foremen, and labour), construction materials and equipment due to limited activities or quarantine in the project area and the origin of the resources; productivity may decline, so that the time and cost of implementing the contractor may increase. If there are human resources that need to be quarantined health, then the construction project activities may be stopped temporarily, or even postponed until the health condition is back to normal. The impact can be in the form of additional time and costs.

- **Presidential Regulation/Keppres No. 11 of 2020 concerning Determination of Corona Virus Disease 2019 (COVID-19) Public Health Emergency.**

Issued on March 31, 2020 (together with Law 1/2020 and PP 21/2020 above), this Presidential Regulation stipulates that COVID-19 as a type of disease that causes a Public Health Emergency in Indonesia which must carry out mitigation efforts in accordance with statutory provisions (Keppres 11/2020). The impact on the implementation of construction services is that special health protocols need to be established to prevent and treat COVID-19 disease in construction projects. Furthermore, if necessary, as for one reason or another COVID-19 outbreaks occur in a construction project, the project can be stopped.

- **PUPR Minister Instruction/Inmen Number 2/IN/M/2020 concerning the Prevention of COVID-19 Prevention Protocol in the Implementation of Construction Services.**

Released on March 27, 2020, this Inmen regulates officials within the Ministry of PUPR who conduct construction services and carry out procurement of construction services to implement the COVID-19 Prevention Protocol as contained in the attachment of the Inmen. This is because the activities of construction services are categorized as an exception so that the project can be continued as long as it does not endanger workers against COVID-19.

Specifically for the implementation of construction projects, the COVID-19 Prevention Protocol regulates the formation of the COVID-19 Prevention Task Force by Owner's Project Manager consists of at least 5 people (1 chairman and member, and 4 members representing owners, consultants, and contractor). The ten tasks, responsibilities and authorities of the Task Force, include socialization, education, health inspection and monitoring, provision of nutrition to increase immunity, health facilities, and most importantly, report to Owner Project Manager if a construction worker is found as a COVID-19 Patient Under Supervision (PDP) and recommends temporary suspension/stoppage of project activities.

- **West Java Governor Regulation No. 30 of 2020 concerning Large-Scale Social Limitation Guidelines in the City of Bandung, the City of Cimahi, the Regency of Bandung, the District of West Bandung, and the District of Sumedang Regency.**

Issued on April 18, 2020, this regulation stipulates the status of PSBB in the Greater Bandung area, which includes several cities and regencies in West Java, including Bandung Regency (with the capital city of Soreang) until May 29, 2020, and extended until June 12, 2020. For the implementation of construction project activities together with 10 other sectors, in Article 8, it is excluded from the temporary suspension of work activities in the workplace/office (Kepgub Jawa Barat 443/2020). Consequently, the construction project can continue as far as possible, in accordance with the Protocols contained in PUPR Inmen Number 2 of 2020 above.

- **Work Contract Agreement Letter Contract Unit Price for Construction Works Package: Construction of Soreang Regional General Hospital Bandung Regency Number 645.3/002/2019 (between the owner of Soreang District Hospital and the contractor).**

Dated May 22, 2019, this agreement regulates the rights and obligations between owner and contractor (Surat Perjanjian Kontrak 645.3/002/2019, 22 May 2019). In accordance with PUPR Inmen 2/2020 above, if the construction project is decided upon the COVID-19 Task Force is suspended temporarily, then it can be finished with the Force Majeure Article. In the General Conditions of Contract (GCC) section in the contract, including the article governing the force majeure.

From the articles above, it can be concluded that the contractor has the right to extend the time and increase the cost and to adjust the quality/specification of the construction project, if COVID-19 is decided as a forceful situation by the Task Force Team in accordance with PUPR Inmen 2/2020.

Project Description of Soreang Regional Hospital Construction Project

The construction of the Soreang District Hospital is located at Soreang, Bandung Regency, West Java Province. The owner was the Bandung District Government. Source of funds is purely from Bandung Regency budget of Rp. 318 496 086 890, 47 including VAT, consisting of structural work (30%), architecture (25%), and MEP (45%). There is an advance of 8%. The contract type is Unit Price, with a monthly payment system. The implementation time is 79 weeks, namely from 23 May 2019 to 22 November 2020. The maintenance period is 6 months. Figure 1 gives an isometric picture of Soreang District Hospital.

The design firm is PT Pandu Persada, The CM consultant is PT Virama Karya (Persero), and as the Main Contractor is PT Pembangunan Perumahan (Persero).

Soreang District Hospital is 5 story with a land area of 63 000 m² and the total floor area of the building is 33 918, 21 m², which consists of Building A with 7 282.6 m² (55 bed), BTC Building with 19 184, 54 m² (116 bed), and Building D with 7 451, 07 (143 beds), so the total capacity is 314 beds.



Fig 1: Soreang District Hospital Project on 20 July 2020

Project Chronological Events in COVID-19

The first COVID-19 case that occurred in Indonesia announced by the Indonesian President directly at the Presidential Palace, on Monday 2 March 2020 (Kompas.com, 2020). Since then the COVID-19 case has continued to develop, and various laws and regulations relating to the COVID-19 were issued by the state and provincial and district governments as described earlier. The outbreak of the COVID-19 has impacted the Soreang District Hospital Construction Project, with indicators of deviation negative enlarged work progress during March 2020 of negative 2.2090% (Table 1). With these developments, on March 24, 2020 the contractor wrote a letter regarding the status of the COVID-19 emergency condition towards the productivity of site work and asked for guidance and considerations regarding this matter. The letter was based on the central government regulations and the West Java Governor Regulation, and also suppliers' notices about reducing the number of workers and work activities in the field, then conveyed the potential for delays in the implementation of work due to: labour mobilization difficulties because of instructions forbidden from traveling, delays in the arrival of imported materials due to restrictions on access to domestic, and delays in local materials due to the closure of the relevant supplier offices.

In addition, the COVID-19 protocol (hand washing, disinfecting, social distancing) was implemented in addition to the standard protocol before the COVID-19 outbreak. Following up on the letter, the CM consultant sent two letters on March 31, 2020. First is a letter to the contractor regarding information on the implementation of field work related to COVID-19 emergencies, CM consultant asked the contractor to propose their plan of action to be taken in relation to COVID-19 supported by data, policies and rules that strengthen the action plan. In addition, the CM consultant asked the contractor to submit constraints on procurement and/or mobilization of imported/local materials and/or equipment and/or spare parts accompanied by evidence, and so that the main contractor immediately proposed a letter regarding the action plan to be taken related to COVID-19 supported by data, policies and rules that strengthen the action plan which will then be discussed with the owner and CM consultant.

Second, a letter to owner's PM regarding information on the implementation of field work related to COVID-19 emergencies, which in essence recommends all directives of the Minister of PUPR in accordance with PUPR Inmen

2/2020, namely to immediately form COVID-19 Prevention Task Force by owner Project Manager (PM) and the main contractor continue to carry out the work as usual with due regard to the COVID-19 protocol and all facilities and supporting activities in accordance with the PUPR Inmen 2/2020.

On 1 April 2020 the owner PM reply the CM consultant's letter, which essentially instructs the main contractor and CM consultant proposed the action plan to be taken in relation to COVID-19 supported by data, policies and regulations that strengthen the action plan as a basis for determining the next policy relating to the Soreang District Hospital Construction Project. In the meantime, the COVID-19 Task Force was formed in accordance with the PUPR Inmen 2/2020 on April 10, 2020 by the owner PM.

During April and May 2020, efforts were made as much as possible to keep field productivity as planned before COVID-19 outbreak, while continuing to monitor the development of negative deviations of project weekly progress. This effort is to keep the work completed in accordance with the initial contract, which is November 22, 2020. However, the real condition showed indeed a very significant problem in mobilizing human resources, materials and equipment in the project, so that the negative deviation is increasing as can be seen in Figure 2.

Consequently, as a follow up to the above April 1 owner PM letter, the contractor sent a letter to the CM consultant on June 10, 2020 regarding the request for a contract addendum, which in essence, proposing an extension of time due to the COVID-19 outbreak because there are difficulties in mobilizing human resources, materials and equipment (both to be installed in the building or as equipment for carrying out construction work), resulting in decreased work productivity. The other reason is the delayed material and equipment arrival in the project due to delays in the production process at the material and equipment plant. As the result, the contractor requires more time than the initial contract period of November 22, 2020 to complete the work, and proposes an extension of time for 53 calendar days, or until January 15, 2020.

As a follow-up, the CM consultant conducted a study of the proposal. The consultant basically agrees the extension of time proposal based on his study on the contract particularly GCC Contract Clause, B.5. Article 40 of "Force Majeure", and GCC Contract Clause, B.4. "Addendum" Article 38 of "Changes in Work Implementation Schedule", and the fact of negative deviation of the progress of work during April and

May which has reached more than 6%, provided that the extension of time does not incur additional work implementation costs. The CM Consultant sent the results of the study through a letter regarding the introduction of the proposed Addendum contract/additional time dated June 5, 2020 to owner PM. Owner PM then proposed an examination/study by the Contract Implementation Research Committee (PPPK), based on procedure in regulation (Perpres 16/2018) in the event that needs to change the contract (contract addendum).

Owner PM then invited the CM consultant, contractor, Bandung District Public Works Department, and PPPK, on June 5, 2020 to meetings for in depth study on June 8, 2020, and on 16 June 2020, and finally on June 18, 2020. The in-depth study examined in detail the contractor proposal and the results of the CM consultant study, and finally concluded that it could be approved to increase work time for 22 days until by December 15, 2020, shorter than the contractor's proposal of 53 days. The rationale is:

- Implementation of permanent work must end in 2020
- Consider the deadline for submission of terms, which is December 15, 2020.

Subsequently on June 19 2020, the amendment to the extended time contract was signed for the implementation of Soreang District Hospital construction project for 22 days, from the initial contract deadline on November 22, 2020 to December 15, 2020 due to the COVID-19 outbreak. On June 19, 2020 the owner PM letter to the contactor regarding the implementation order of the contract amendment for the extension of the work time for the COVID-19 outbreak was issued, so that a new master schedule adjusting to work productivity due to COVID-19 was also formalized, and becomes a reference in weekly and monthly reports starting June 19, 2020 (Week 57). In Table 4.3 below, the progress of work and deviations for the master schedule before and after June 19, 2020 (Week 57) is presented. The deviation, which was originally negative, can be seen to be positive due to the adjustment of the progress plan which is adjusted to the decreasing work productivity due to the COVID-19 epidemic.

epidemic. The PUPR Inmen and the West Java Governor's Decree basically encouraged the ongoing construction project in the midst of the COVID-19 outbreak by continuing to run the COVID-19 protocol for preventing outbreaks in the construction project monitored by the COVID-19 Task Force Team in accordance with the principles of construction project management (Ervianto, 2005). In the Soreang District Hospital Construction Project this was consistently carried out to the fullest, although in the end it turned out that productivity was declining due to several obstacles due to the COVID-19 epidemic such as more difficulty in mobilizing human resources, material, and project equipment so that the negative deviation of the progress of work between planned and real progress continues to increase from week to week in April and May 2020, so that finally the addendum of contract for extension of time is processed by the contractor, CM consultant, and the owner.

Furthermore, with the amendment to the change in project time duration by extending for 22 calendar days with no additional costs and no specification changes, this is also in line with Inmen 2/2020 PUPR. The PUPR Inmen give directives that if there is an impact of the COVID-19 outbreak on projects such as declining productivity, difficulties in achieving specifications according to the initial contract, and additional implementation costs, an increase in implementation time can be made, changes in specifications can be made, and agreed upon an increase in implementation costs as long as there are technical and indeed verification if required and claimed by the contractor. In the Soreang District Hospital construction project, the only time needed was to increase the execution of work because there was an indication that contractor productivity was declining due to difficulties in mobilizing human resources, materials and equipment during the COVID-19 outbreak; according to Clough *et. al.* (2015) ^[2], construction project work costs are bound in a construction contract, which is in the form of an offer price and the price negotiation results. In a "Lump Sum Fixed Price" contract, the final amount of the contract is fixed (as long as there is no change in the specifications and scope of the contract), so that the risk of lack of construction funds becomes the risk of the contractor. While in the "Unit Price" contract, the unit price of each work item is fixed (as long as there is no change in contract specifications), so the risk of too low unit price becomes the risk of the contractor. In a state of force majeure (war, riots, and pandemics) or in particular the COVID-19 outbreak, price spikes can occur (Clough et al., 2015) ^[2]. This can be caused by the scarcity of resources (human resources, materials, equipment), high inflation, soaring currency exchange rates, many costly health procedures (costs of mouth masks, hand sanitizers, soaps, additional hand sinks in the project environment, periodic disinfectant spraying, COVID-19 tests, and adjustment of workers' barracks to meet physical distancing). As a result, cost performance has declined, and the need for negotiations with the owner to provide solutions, such as the escalation of costs and the additional costs for additional health procedures (Inmen PUPR 20/2020)

As for the quality specifications, in Soreang District Hospital construction project, it turns out that no adjustments are needed because it can be endeavoured according to initial specifications; there are delays in the arrival of human resources, materials, and equipment according to the initial specifications, which have an impact on the increase in the time of work only. This is not a problem, because according to Inmen PUPR 2/2020 the principle of quality adjustment might be claimed, and it is not mandatory for the claim by the contractor as long as it can still be tried as best as possible to

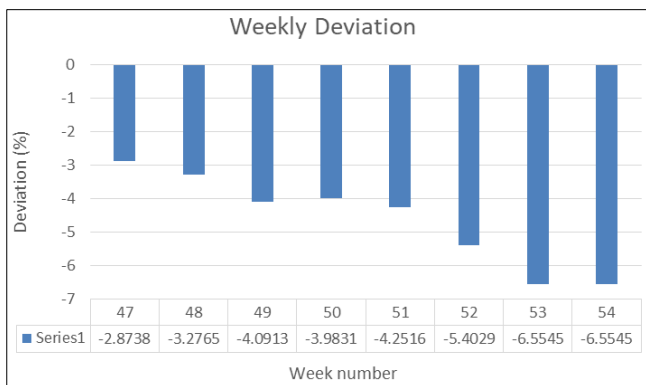


Fig 2: Trend of Negative deviations (Source: MK Consultant Weekly Report, 2020)

Gap analysis and discussion

With the ongoing efforts of the Soreang District Hospital Construction Project to run amidst the COVID-19 pandemic outbreak and with the issuance of the owner PM Decree forming the COVID-19 Task Force team in April 2020, this is in accordance with the directives of the PUPR Inmen 2/2020 and the West Java Governor Decree regarding PSBB in Bandung Regency that the construction sector activity is a sector that can continue in the midst of the COVID-19

achieve quality according to the initial specifications of the project. According to Clough *et. al.* (2015) [2], construction project work quality performance is bound in a construction contract in the form of drawings and project specifications. Specifications can be either closed specifications (only brands of materials and equipment can be proposed) or open (various brands of materials and equipment can be proposed). Specifications can also be in the form of specifications for the final result (the final result is determined) or a design specification (the process is determined) (Clough *et al.*, 2015) [2]. Therefore, contractor should run good quality management, for example by running Total Quality Management (TQM), obtaining and running ISO 9001 or Quality Management System (SMM) according to Public Work Minister Regulation (Permen PU) no 4/2009, and others. In the case of force majeure, especially the COVID-19 pandemic, achieving the predetermined quality can be impossible. Therefore it can be proposed to adjust the quality with the correct technical justification and be approved by planning consultants, supervisory consultants / MK, and

service users with price adjustments (Inmen PUPR 2/2020) Likewise, in accordance with the health and safety cost and management performance, in terms of costs, there are indications of additional costs due to the force majeure (in this case the outbreak of COVID-19) (Clough *et. al.*, 2015 and Hinze, 1997) [2, 5] such as health and safety additional costs (mouth masks, soap, hand sanitizers, washbasins, disinfectants, COVID-19 tests, and physical distancing effects) are still within the contractor health and safety cost tolerance, so there is no claim for these additional costs. This is not a problem, because according to Inmen PUPR 2/2020, the principle of additional costs may be claimed, so it is not required to be claimed by the contractor as long as it is within the contractor's initial health and safety cost tolerance. Overall, it can be said that the Soreang District Hospital Project during the COVID-19 epidemic has been carried out in accordance with all of the COVID-19 outbreak regulations and laws that apply both at the country, provincial and district levels where this project is located.

Table 1: COVID-19 Distribution of Several Countries in the World as of 30 March 2020

Country	Rank in World	COVID-19 Cases	Recovered	Deaths
US	1	142.356	4.767	2.493
Italia	2	97.689	13.030	10.779
China	3	82.149	75.903	3.308
Spain	4	80.110	14.709	6.803
Indonesia	38	1414	75	122

Source: <https://www.liputan6.com/global/read/4214499/update-corona-covid-19-30-maret-722289-orang-in-dunia-terinfeksi-151901-patients-heal>, browsed April 10 2020

Tabel 2: Percentage of Deviation of Progress of Progress in the Soreang District Hospital Project (

Week	43 (09-15 Maret 2020)	44 (16-22 Maret 2020)	45 (23-29 Maret 2020)	46 (30 Maret-5 April 2020)
Plan	3,65,344	3,71,658	3,78,802	3,82,305
Realization	3,69,205	3,81,071	3,92,881	4,04,396
Deviation	(0,3861)	(0,9413)	-14,079	-22,090

Source: CM Consultant Weekly Report, 2020)

Table 3: Percentage of Deviation of Progress of Progress in the Final Soreang Hospital Project at the Writing of LPKT on July 10, 2020

Week:	Minggu:	56 (08-14 Juni 2020)	57 (15-21 Juni 2020)	58 (22-28 Juni 2020)	59 (29 Juni - 5 Juli 2020)
Plan	Rencana	4,91,000	5,04,020	4,42,223	4,49,813
Realization	Realisasi	4,34,570	4,41,412	4,53,533	4,62,097
Deviation	Deviasi	-56,430	-62,608	11,310	12,285

Source: CM Consultant Weekly Report, 2020

Conclusion

The lesson learned that can be taken is that the construction project design and contract of the Soreang District Hospital construction project is not detailed enough as to regulate in the event of a disease outbreak, so that it should be better prepared in anticipation of all risks faced by all parties bound in the contract, including the risk of force majeure in this case the risk of disease outbreaks at the project site (Bong *et al.*, 2015). The article regarding force majeure should be tailored to anticipate all possibilities that occur during the project, such as by conducting a "what-if analysis" analysis. So all the force majeure that can occur needs to be clarified in the article by discussing "what if it happens, then (what will be done)". In the case of the Soreang Regional Hospital construction project because it is a district government project, the status of the COVID-19 force majeure was decided by a government decision. Luckily because the COVID-19 outbreak hit the whole world (pandemic), the Indonesian government attention to this outbreak became quite clear and fast, namely by issuing decisions starting from the President

(Keppres), the Minister (Minister of Health and PUPR), the Governor (West Java)), especially in the case of construction projects is the presence of PUPR Minister Inmen 2/2020. In the PUPR Inmen it is clearly directed that the construction project be continued to run with the COVID-19 protocol and be temporarily stopped only if the urgency at the project site COVID-19 is endemic with the permission of the Minister of PUPR on the proposal of the COVID-19 Task Force Team. In the Soreang District Hospital construction project the formation of the COVID-19 Task Force Team and the implementation of the COVID-19 health and safety protocol were specifically carried out, so that the health and safety condition at the project site went well and the COVID-19 outbreak did not occur. However, in April and May 2020 during the COVID-19 epidemic, there were still obstacles in the mobilization of human resources, materials, and project equipment, especially in reducing work productivity and delay in the arrival of materials and equipment. Consequently, an additional 22 calendar days were needed, but no additional costs and no quality adjustments were not

necessary to the project. This is also thanks to all the directives of the laws and regulations relating to COVID-19 which has been well and consistently implemented in the project, so that according to the gap analysis results it can be concluded that there is no gap between what should be done in accordance with the laws and its real implementation in the Soreang District Hospital construction project.

From lesson learned above, it is recommended for all construction projects that the negotiation of contract terms as a risk management tool for the parties to be contracted should be conducted better by anticipating all the parties' risks that may occur, especially the force majeure articles, so that the project may be better managed in such condition. It is also recommended that additional health and safety protocols for COVID-19 continue to be implemented, such as wearing mouth and nose masks, frequent hand sanitizing and/or hand washing, routine construction site disinfectant spraying, and conducting health tests as a "new normal" health and safety program in post COVID-19 all construction projects for in enhancing project performance, a robust health and safety system which is homogenous is one of the prerequisites as stressed by Umeokafora *et. al.* (2020) ^[14]

Strategies for improving complex construction health and safety regulatory environments Nnedinma Umeokafora, Konstantinos Evangelinosb and Abimbola Windapoc.

References

1. Bong S, Rameezdeena R, Zuob J, Man Lic RY, Yea G. The designer's role in workplace health and safety in the construction Industry: Postharmonized regulations in South Australia. *International Journal of Construction Management*. 2015; 15(4):276-287.
2. Clough RH, Sears GA, Sears KS, Segner RO. *Construction contracting*. 8th Edition, John Wiley & Sons, New York, 2015. <https://www.liputan6.com/global/read/4214499/update-corona-covid-19-30-maret-722289-orang-di-dunia-terinfeksi-151901-pasien-sembuh>, browsed 10 April 2020.
3. CM Consultant weekly report, proyek RSUD Soreang, week 43-46 and 56-59, 2020.
4. Ervianto WI. *Manajemen proyek konstruksi*. Edisi Revisi, Penerbit Andi, Yogyakarta, 2005.
5. Hinze JW. *Construction safety*. Prentice Hall, New Jersey, 1997.
6. Inmen PUPR Nomor 2/IN/M/2020 tentang Protokol Pencegahan Penyebaran Corona Disease (COVID-19) dalam Penyelenggaraan Jasa Konstruksi, 2019-2020.
7. Keppres Nomor 11 Tahun tentang Penetapan Kedaruratan Kesehatan Masyarakat Corona Virue Disease (COVID-19), 2019-2020.
8. Keputusan gubernur jawa barat nomor 443/Kep.287Hukham/2020 tentang perpanjangan pembatasan sosial berskala besar tingkat daerah provinsi jawa barat dalam rangka Percepatan Penanggulangan Corona Virus Disease (COVID-2019), 2019-2020.
9. Perppu nomor 1 tahun 2020 tentang Kebijakan Keuangan Negara dan Stabilitas Sistem Keuangan untuk Penanganan Pandemi Corona Virus Disease 2019 (COVID-19) dan/atau dalam rangka Menghadapi Ancaman yang Membahayakan Perekonomian Nasional dan/atau Stabilitas Sistem Keuangan, 2020.
10. Peraturan Presiden no 16 tahun 2018 tentang Pengadaan Barang/Jasa Pemerintah, 2018.
11. PP Nomor 21 Tahun tentang Pembatasan Sosial Berskala Besar dalam rangka Percepatan Penanganan Corona Virus Disease (COVID-19), 2019-2020.
12. Surat Perjanjian Kontrak Kerja Kontrak Harga Satuan
13. Paket Pekerjaan Konstruksi: Pembangunan Rumah Sakit Umum Daerah Soreang Kabupaten Bandung Nomor 645, 2019.
14. Taofeeq DM, Adeleke AQ, Lee CK. Individual Factors Influencing Contractors' Risk attitudes among malaysian construction Industries: The moderating role of government policy. *International Journal of Construction Management*, 2019, 1-20.
15. Umeokafora N, Evangelinosb K, Windapoc A. Strategies for improving complex construction health and safety regulatory environments. *International Journal of Construction Management*, 2020, 1-12.