A PROJECT MANAGEMENT APPROACH TO A HIGHWAY CONSTRUCTION IN MONTENEGRO

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Abstract: The management of design and build contract for Bar-Boljare highway construction section Smokovac-Uvač-Mateševo is based on FIDIC conditions of the Contracting and introduces new standards in the system of managing and implementation of large infrastructure projects. So far, the realization of most infrastructure projects in Montenegro has been based on the FIDIC Red book. For this project the FIDIC Yellow Book has used, and adapted to the needs of the highway project in Montenegro for the Design and Build Contract. The construction of the highway would improve the investment environment in Montenegro, improved connections between the southern and northern parts of the country, which would lead to greater stimulation of economic development, and thus intensification of the work of other infrastructure projects and realization of large scale projects in tourism and energy. The aim of this paper provide details of this Contract and to present the main adjustments to the FIDIC Yellow Book in terms of contractual and financial aspects, with focus on advance, taxes, subcontractors, interim payment schedule.

Key words: Project Management, FIDIC Conditions of Contract, Contract implementation, Montenegro, Sub Contractors

1. BACKGROUND OF THE PROJECT

One of the main focuses of Montenegro is to become a part of EU- to achieve Member state status. In this process of EU integration many economic, political and social reforms are currently underway in Montenegro. The economy started recovering in 2010 from the effects of the crisis what, was driven by increasing net exports, private consumption and infrastructure development. Nevertheless, the unemployment rate in November 2017 remained high at 22%, and it continued increasing. The entire northern region and certain areas in the central region lag significantly behind the coastal region in terms of the extent of economic development, what directly has consequences on poverty and poverty risk. With recently privatized state-owned industrial enterprises in the north region either not operational or operating well below previous levels, the main economic sectors in these less developed areas are tourism and agriculture. The tourism and agriculture sectors in particular have been identified by the Government of Montenegro as the main pillars of country's future economic development, which cannot be developed without good traffic connections. Furthermore, specifically tourism development in Montenegro has been traditionally focused on coastal areas, hardly reaching the development potentials in the less developed regions, because of the lack of good traffic connection.

Main roads are roads connecting bigger cities or economic regions of Montenegro and the reasonably well developed along the coast and from the coast to the capital Podgorica. Typically, these are paved roads of single carriageway type, featuring one lane per direction, with frequent addition of a third overtaking lane on sections with steep gradients. Curve radii usually allow speeds of up to 80 km/h, and width of a single traffic lane is usually at least 3m. In the north, the road from Podgorica to Kolašin through the Morača canyon and continuing onto Serbia is considered the bottleneck of Montenegrin road network, as it is a curvy mountainous road, often unsafe during the winter.

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The construction of the section Smokovac - Uvač - Mateševo of the Bar - Boljare highway represents the beginning of the realization of the largest infrastructure project in the history of Montenegro. Bearing in mind the fact that Montenegro is the only country in the Balkans without a highway, its construction will significantly bring North Montenegro closer to the central and southern part of the country, connect with the region, which will result in a more equitable development of Montenegro. This will enable greater and safer mobility of people, goods and services. The port of Bar will be fully connected with the rest of Europe's corridors, linking the harbour on the Adriatic with the Danube ports (Corridor VII and Corridor X) and further with the entire network of Pan-European corridors. It will also be the shortest link between Hungary and Romania via Serbia (IvaniševićN. et al., 2014) and Montenegro with southern Italy and Albania.

The Government of Montenegro on 26 February 2014 signed the contract with the Chinese company China Communications Construction Company Ltd, (CCCC), and China Road and Bridge Corporation, (CRBC) for the construction of the first section of the Bar – Boljare highway, Smokovac - Uvač - Mateševo. The total value of the contract is 809 million Euros, of which 15% of the funds will be financed from Government Montenegro funds- via the state budget, while 85% of the funds will be secured with a loan from Exim's Bank (Roumboutsos, A. et al., 2017). The contract is made based of the FIDIC Yellow book.

The Commencement date of the Design and Build Contract is 11 May 2015 and with acontract duration of 48 months, i.e. a completion date of 11 May 2019. After the completion of the construction there is a Defects Notification Period of 2 years during which time the Contractor is responsible for the remedial works due to identified defects.

2. TECHNICAL ASPECTS OF THE PROJECT

The route Belgrade - South Adriatic forms part of the Trans-European Motorway (TEM) which in the territory of Montenegro connects the main route of TEM (Gdansk – Athens - Istanbul) to the Adriatic Coast. The Bar - Boljare Highway is part of the TEM through Montenegro and at the same time part of longitudinal and transverse routes of the European transport network.

The section Smokovac – Uvač - Mateševo of the Bar - Boljare Highway is highlighted in solid red in the figure below. It is the most complex section of this 2x2 lanes motorway which is designed for a vehicle speed of 100 km/h.

The geomorphologic features of the terrain along the route are very complex. The altitude varies from approximately 50 m to a maximum of 1,174 m. The first third of the route is in the high-altitude zone of 50-500 m, the second third of 500-1000m, and the last third of 1000 to 1174 m. Terrain configuration is such that hills and valleys, depressions, ravines and gullies alternate at a very short distance. As a result, the 41km of highway of this project include a large number of bridges and tunnels.

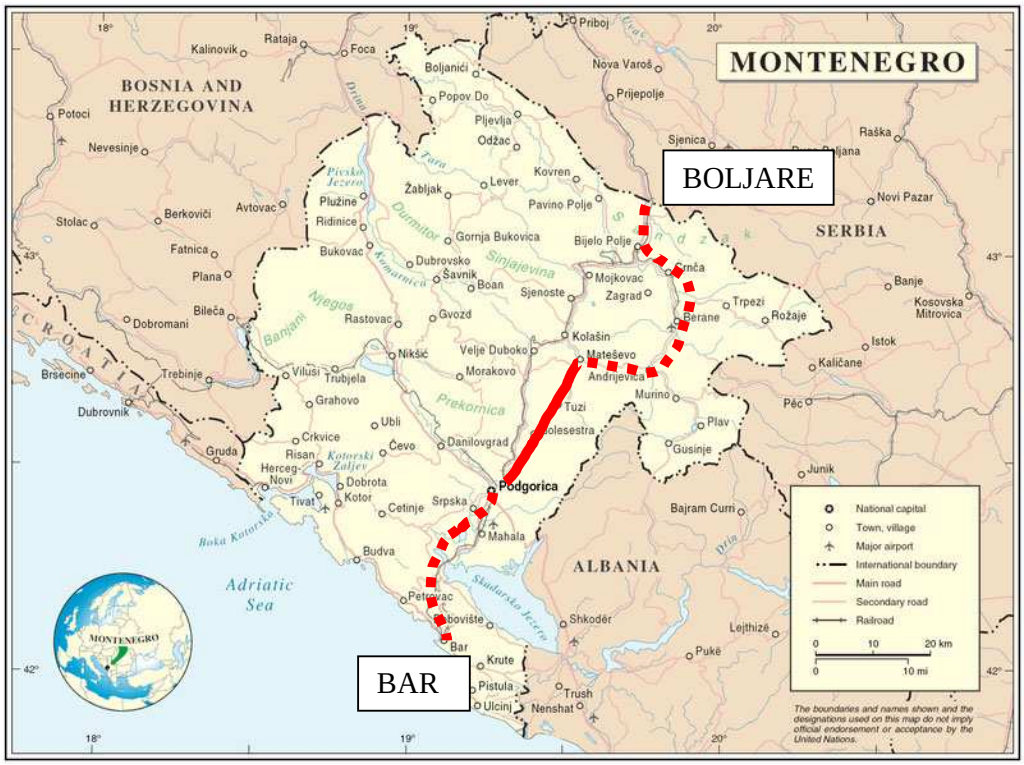

Figure 1: Location of the Project

The total length of the route from Smokovac to Mateševo is 40,871 km divided betweenopen route, tunnels and bridges

- Open route makes up 41% of the alignment. The carriageway width in one direction is 2x3.50 = 7.00 m. The total width of the highway including safety lanes, marking lanes, safety barriers and double carriageway is 27.10 m. The slopes of embankments will be built with the slope inclination of 1:1.5. However, due to the height of embankments which ranges from 10 to 35 m, protection against erosion is provided.
- Tunnels take up 44% of the alignment and are in 16 locations, each location having separate tunnels for each direction and totalling approximately 18,000 metres in each direction. The longest tunnel at Vjeternik just over 3000 metres.Tunnels will in general be constructed in two groups of different geological conditions: limestone, (found along the first 23 km of the alignment) and the flysch sediments for the remaining alignment. The clearance gauge of tunnels for road with two lanes of 3.50 m and benches for signalization and pedestrian walkways is 7.7 m width and 4.7 m height. In parts of the route with three-lane road total width between pedestrian ways is 11.2 metres
- Bridges take up 15% of the alignment and are in 17 locations, many of these location have separate bridges for each direction and totalling approximately 6000 metres in each direction. All bridges will be designed with the same structural system, except for the Moračica Bridge at km 6 +465 with hyper high piers, which will be designed as a special structure. The Moračica Bridge will become the key structure of the Motorway spanning the MoračaRiver, almost 1 km long over six spans with piers up to 165 metres high. Total width of the bridges for each direction of travel is 9.62 m. In parts of the highway where the longitudinal slope is greater than 4 %, a third lane will be added, and the overall width of the bridges for each direction of travel will be 13.12m.

3. ORGANISATIONAL STRUCTURE OF THE PROJECT

The management of the project is divided into several segments. Due to the size and complexity of the project, the Government of Montenegro has appointed several units in charge of implementing the project, split between two ministries- Ministry of Transport and Maritime Affairs and the Ministry of Finance (Figure 2).

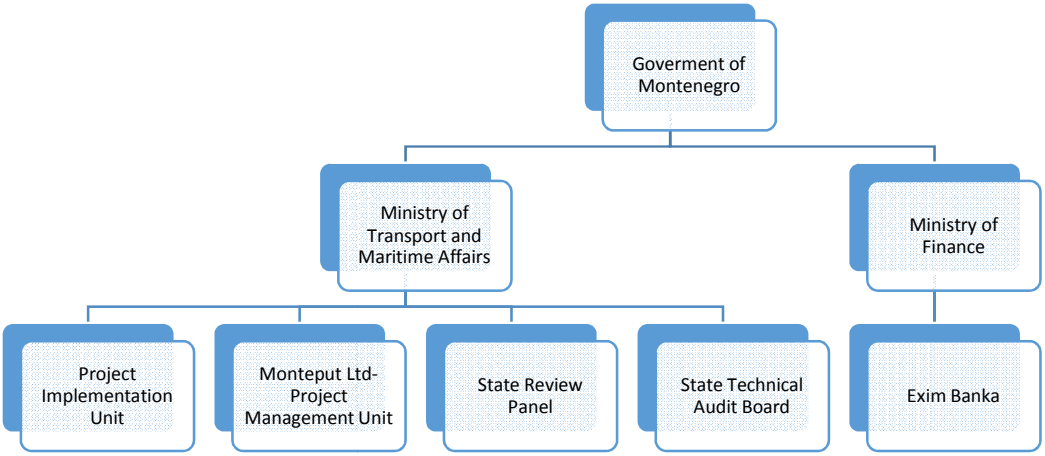

Figure 2: An overview of the designated units in charge of implementing the Project

The Ministry of Transport and Maritime Affairs as the Employer, (on behalf of the Government of Montenegro), has under its jurisdiction set up the following units:

a. Project Implementation Unit (PIU), as a unit of the Ministry, is responsible for overall management of the project;
b. Project Management Unit (PMU) , as a part of company Monteput Ltd, Podgorica, Montenegro, is responsible for control of the implementation of the design and build Contract in accordance with the Sub clause FIDIC contractual terms (general and special conditions of the contract - hereinafter, Contract). In more specific term, the main responsibilities are to:
    - coordinate the work and give relevant cooperation with all participants of the Contract,
    - perform the control off the execution of the Contract on the provision of consulting services for the supervision of the preparation of project documentation and the execution of works on the construction of the highway,
    - with the Contractor and the Engineer, participates in the drafting and harmonization of contractual documents that are an integral part of the Special Conditions in accordance with its assessment or at the request of the Employer,
    - periodically monitor the implementation of environmental mitigation measures, and Health and Safety,
    - according to its estimation or at the request of the Employer, PMU will periodically control the documentation, reports and records of safety, occupational safety, health protection and all contractual forms of insurance of workers.
    - according to its assessment and work plan, they will visit the Construction site, attends meetings of the Contractor and the Engineer where the analysis of the technology of performance and the quality of works and the progress of the works is carried out, and in this connection, receives and gives opinions, remarks and suggestions.

Also, the PMU is obliged to submit regular monthly information to the Employer on the progress and realization of the project. In this regard, the report contains the following: general information about the Project, design, progress of works, resources, contractual issues, financial status, land expropriation, quality, health and safety, environmental protection, insurance and project reporting status - by Contractor and Engineer.

c. State Review Panel (SRP), is responsible for the review and approval of the Main Design
d. State Technical Audit Board (STAB), is responsible for the technical acceptance of the works on behalf of the Employer

The Ministry of Finance is responsible for the payments to the Contractor and the loan arrangements with the Exim Bank.

For the day to day supervision of the construction and assistance to the Employer the Government has hired a French-Italian consortium, to take the role of the Engineer. China Road and Bridge Corporation (CRBC) on behalf of CCCC is considered as the Contractor within the terms of this Design and Build Contract.

Bearing in mind that the project involves organisations from different countries, organizational cultures and the different concepts on how project is managed, it is clear thatproject management approach has to be flexible, regardless of the fact that the project is managed according to the already established FIDIC contract.

4. FIDIC DEFINITION

As many people are aware FIDIC has produced series of standard formats/books of Contract Conditions for construction activities, each format has a different coloured cover. The FIDIC RED Book is for contracts where the design is provided to the Contractor who then builds, the FIDIC Yellow Book where the contractor is implementing both the design and construction and the FIDIC Silver Book where the contractor is responsible for the designing, building and operating.

Thisproject in Montenegro has been awarded where the Contractor is required to Design and Build the highway and as such we use the FIDIC Yellow Book. The main difference where the Yellow Book differs from the Red Book is in Clause 5 which in the Yellow Book deals with the design aspects implemented by the contractor, which is of course not needed in the Red Book.

We can consider the FIDIC books are providing the basic clauses, (the skeleton), to a contract and it is for the Client/Investor to add more specific clauses, such as special conditions or particular clauses(the muscles) to the FIDIC Book. In the following sections of this paper we will highlight some of the contractual and financial aspects added to the FIDIC Yellow Book to make it more relevant to the highway project here in Montenegro.

5. ADJUSTMENTS TO THE FIDIC YELLOW BOOK

In preparing the Contract documents prior to the proposal from the Contractor the Employer has adjusted, revised or added to the FIDIC format to meet the project requirements and the fact that the project is in Montenegro.

a. Language of the Contract

Whilst the language of the contract is English there is a requirement that where possible all documentation is prepared in English and Montenegrin**,** (Sub Clause 1.4).

b. Advance

The FIDIC Yellow Book has a clause related to contract advances, (Sub Clause 14.2) and under the Contract Data the details of the % and repayment is indicated. Under this contact the advance has been indicated in 2 stages, 10% on signing of the contract and an additional 10% one year after signing. The purpose of the advances are to allow the Contractor to carry out the mobilisation activities such as construction of their camps, the purchase of equipment, preparatory worksand to pre finance elements of the construction until they are able to begin to invoice.

Obviously the contractor has to pay back the advance and this is done once the value of the approved constructed works has reached 20% of the Approved Contract Value. Then there will be deductions off the value of each Contractors Interim Payment by a fixed 20% of the value of the Interim Payment until all the advance payment is repaid.The advance has to be repaid before the Take Over of the works by the Employer.

c. Tax exemptions

As is usual on a project of this size and nature the Contractor is allowed various tax exemption (Sub-Clause 1.15). The Montenegrin Parliament has passed a Law on Highway for this project and a series of tax exemptions have been allowed covering such items as:

- Value added TAX
- Customs Duties on imported equipment and materials
- Expatriate Income tax and social contributions
- Corporate tax of the Contractor's company having its registered seat in Montenegro
- Excise tax on motor fuel

The Contractor is required to submit on a regular basis documentation showing the expenditure on these items which is monitored initially by the PMU and also by the relevant government agencies such as Customs and Exercise.

d. Duties of the Engineer

One of the important items related to supervising is the role of Engineer in the process of project management and their implementation. Namely the FIDIC Yellow Book sets out the role of the Engineer. The relevant clause (Clause 3) has been expanded, so that there is no misunderstandings on what the Engineer can or cannot approve without the prior approval of the Employer

These expansions are such that the Engineer is to obtain the Employers approval for actions which would revise the overall Contract. This would cover items such:

- Variations to the Construction works which would increase the value of the Contract
- Additional works or extension of time of the overall contract duration
- Engineers review of any Claims from the Contractor

e. Sub-Contractors

It is normal in a project of this size that the Main Contractor is allowed to sub contract a certain percentage of the works, obviously they are not allowed to contract out all the works. The fact that they sub contract does not take away their responsibility for the works carried out by their sub-contractors.

Whilst the Contract has been awarded to an international contractor it is in the interest of the Montenegrin Government to have the involvement of Montenegrin companies in the project. Amongst other reasons is the fact that Montenegrin firms and personnel will gain experience in working on a project of this nature which will be of benefit to them in the future development of the country.

The sub clause 4.4 has been expanded to state that a minimum of 30% of the Approved Contract Value has to be awarded to Montenegrin Companies. This applies to both the Design and Construction elements of the Contract.

A process has been implemented in which the Main Contractor has to request prior consent from the Employer for any company that they propose to use as a sub-contractor. The technical review from the Engineer and Employer takes into account that:

- the Company has the relevant licenses to cover the work that they are proposed for as a sub-contractor
- That the company has personnel who also have the relevant licenses
- The Company has experience and equipment to carry out the works for which they are being proposed as a sub-contractor.

In addition to these main technical points if the sub-contractor is Montenegrin and they were registered as a company prior to 1st

January 2012 then the value of their sub contact will be considered as being part of the 30% element outlined in Sub Clause 4.4.

In addition if the Contractor wishes to sub contract to a Montenegrin company who is registered after 1st January 2012, or is an international company the Contractor can have the approval from the Employer, but their contract value for these sub- contractors will not be taken into account under the 30% element.

It is the responsibly of the Main Contractor to make sure that their sub-contractors implement their works as per the Main Contract in terms of quality of works, also taking into account aspects such as Environmental and Health and Safety.

To make sure that the Sub Contractors are paid there is an additional condition under the payment sub clause of the Contract, (sub Clause 14.2), that the Main Contractor has to pay their sub-contractors within a fixed time period following any payment made by the Employer to the Main Contractor.

One of the roles of the Engineer and Employer is to monitor and evaluate the value of the sub contracted works and payments made by the Main Contractor to their sub-contractors.

To date,75 prior consents have been issued, out of that over 100 companies have been verified. Most of the companies are hired through consortiums (up until now 40 consortiums have been approved),as well as individual entities. In addition to companies from Montenegro, there are also companies from Serbia, Croatia, Bosnia and Herzegovina, Albania and Italy.

f. Design

As previously outlined under the FIDIC Yellow Book the Contractor is responsible for preparing the Main Design (Clause 5). To assist them in preparing the Main Design the contractor has been given by the Employer a Preliminary Design.

This Main Design has to meet various technical requirements which are set out in the Terms of Reference and Employers Requirements plus relevant Montenegrin laws and Regulations. Within certain limits the Contractor is allowed to propose options for the Main Design that vary from the PreliminaryDesign. These options should not mean an increase in the Contract Price.

Usually under FIDIC Yellow Book it is the role of the Engineer to review and approve the Contractors Main Design. However in Montenegro and as per law there exists a State Review Panel whose role is to review designs. For this project the Employer has set up a State Review Panel containing national experts in a range of specialisations and operates as an independent body.

The Contractor Main Design is reviewed by the State Review Panel and once they have given their approval then the Contractor can be formally informed by the Employer. There are various contractions between the Terms of Reference and the role of the State Review Panel and the Main Contract and these are being dealt with on a case by case basis.The approval of the Main Design also starts the process of obtaining a Building Permit so that construction work can formally begin. Due to the size and complexity of the project the project and the design has been divided into a series of 19 sub sections. This allows the Contractor to prioritise the sections for design and construction, obviously the sub sections on the critical path, such as the Moračica Bridge and the long tunnels are priority.

g. Programme

One of the basic items when contracting a construction project is the creation of the Programme provided by the Contractor. It is normal that the Main Contractor has to provide a Programme. Without this it would not be possible to monitor and evaluate the progress of the actual works and take remedial action if required.

As usual in the FIDIC Yellow Book there is a sub clause dealing with this, Sub Clause 8.3. To make sure that there is no confusion of what should be included in the Programme this Sub Clause has been expanded to list the various components of this Implementation Programme.

The Engineer and Employer have a stated time period in which they have to review and send their comments on whether the Implementation Programme meets the contractual requirements. It is important to note that under FIDIC the Implementation Programme is not approved as such, since this is unfair to both parties under the contract. The Engineer is required to determine if the Programme meets the Contract requirements.

h. Adjustment for Changes in Cost

The FIDIC Yellow book has a sub clause allowing for adjustments in changes of costs. This sub clause is usually used to deal with matters such as inflation, increase or decrease in unit costs such as labour, fuel, materials.In the case of this particular project, clause in not applicable.

i. Sub Clause 13.9

A new sub clause has been added to the contact to allow for Unforeseeable, Unforeseen and Subsequent Works. The value of unforeseeable and subsequent works is not included in the Maximum Guaranteed Price, and these works are not included in the Main Design prepared by the Contractor and approved by the Employer in accordance with Terms of Reference and the Employer's Requirements.

The value of Provisional Sums for the unforeseeable and subsequent works shall not exceed 10% of the Maximum Guaranteed Price referred to in paragraph 1 of Article 4 of the Framework Agreement.

6. FURTHER DETAILS OF SOME PROJECT ASPECTS

The previous section has outlined some of the areas where the FIDIC Yellow Book has been modified to take into account the requirements of the Employer and Montenegro.

a. Payment Schedule

Under a FIDIC Red Book approach, where the design is provided to the Contractor, the quantities are basically known and as the contractor has given a unit price for each work element calculating the amount of money to be paid to the contractor is relatively easy. The Engineer measures the quantity of work done and by multiplying with the unit rate determines the amount to be paid to the Contractor. If the final quantities are different from the provided design the amount paid to the contractor will be increased or decreased.

This project differs from many others that have been implemented to date in Montenegro. Based on a preliminary design provided by the Employer the Contractor has given an overall price to carry out all the works, before they have prepared the Main Design. This means that quantities to be built are unknown at the time they provided their Overall Price.

Also as a part of the sub-clause 14.4 it is added that within 14 days following the approval of the Implementation Programme, the Parties (the Employer and the Contractor) and the Engineer shall define and agree jointly on the Schedule of Payment. The Contractor shall be paid in accordance with the agreed Schedule of Payment.

As the Main Design has not been completed or maybe not even started, it means that the actual quantities are not known. This means that the quantities and prices for items of work, (such as excavation of bridge foundations, tunnel construction), are based on the quantities in the preliminary design for which the Contractor has given rates/price and that the total value of these items matches the Approved Contract Price. Following discussions between all parties the elements of work have been broken down into smaller measureable components, i.e. length of tunnel excavation, height of bridge pier, length of road foundation. Agreements has been made that payments will be made for the items of work when they are 100% complete; such as payment for a bridge foundation will be made when the foundation is 100% complete.

Also, this Schedule of Payment is not permanent, and it is going to be adjusted according the Project implementation, to take into account such aspects as the final design and the actual method of construction. Any changes to the schedule are agreed jointly by all parties involved in the Project.

6.2 Interim Payment Certificates

According to the FIDIC Yellow Book Interim payment certificate (IPC), sub clause 14.6, is going to be submitted to the Employer in six copies after agreed payment period, and this is one of the difference in comparison with FIDIC Red Book, where payment is made on monthly bases. The Engineer shall review and if necessary revise then IPC's, and then submittheapproved IPCs to the Employer for payment. Specific for this Contract is that the percentage of retention is 5% of the amount of each Payment Certificate, and limit of retention money shall not be more than 5 % of the accepted Contract amount. Under the sub-clause 14.6 it is a condition that minimum amount of Interim Payment Certificates shall be 1.000.000 Euro.

There is a fixed time period for the IPC to be reviewed and payment made to the Contractor. Payments made outside this fixed period, could lead to a charge from the Contractor for delayed payment. The rates for this set out in Sub Clause 14.8 and are linked to EURIBOR and LIBOR rates. As the payment is partly made directly by the Government of Montenegro and partly made via a loan it is important that all parties work promptly and with no misunderstandings.

6.3 Insurance

Insurance is prepared based on the FIDIC Yellow Book, and it means that the Contractor is the insuring Party. Insurance shall be effected with insurers and in terms approved by the Employer, with conditions agreed by both Parties before the date of the Letter of Acceptance. This insurance applies to the three major groups: (1) the Insurance for Works and Contractor's Equipment, (2) Insurance against Injury to Persons and (3) Damage to Property and Insurance for Contractor's Personnel.

(1) Insurance for Works and Contractor's Equipment refers to the insurance of Works, Plant, Materials and Contractor's Documents for not less than the full reinstatement cost including the costs of demolition, removal of debris and professional fees and profit, valid until the date of issue of the Performance Certificate. The Contractor's Equipment is going to be insured for not less than the full replacement value, including delivery to Site. It means that the insurance shall be effective while the Contractor's Equipment is being transported to the Site and until it is no longer required as Contractor's Equipment.

(2) According to the Contract data, it is the Contractor's responsibility to provide insurance against each Party's liability for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment]) or to any person (except persons insured under Sub-Clause 18.4 [Insurance for Contractor's Personnel]), which may arise out of the Contractor's performance of the Contract and occurring before the issue of the Performance Certificate. The exception for this Contract is that minimum amount of Third Party Insurance per accident shall not be less than 500.000 Euro per occurrence, with no limit on the number of occurrences.

3) This sub clause 18.4 has not been changed and it was fully in line with basic FIDIC Yellow book rules. Damage to Property and Insurance for Contractor's Personnel includes insurance of the Contractor's personnel, as well as insurance of the Employers and Engineers. Also, for Subcontractor's employees the insurance may be effected by the Subcontractor, but the Contractor shall be responsible for compliance with this Clause.

7. CONCLUSION

For an international project it is normal to use a standard contract that is easily understandable so that international contractors will be interested to Tender and also understand their risks in taking up the project. For that reason the use of FIDIC Yellow Book is a norm for a project of this nature. However the Government of Montenegro also wishes to maximise the participation of Montenegrin firms and personnel hence the need to follow various Montenegrin rules and regulation, but also add a percentage of work which must be subcontracted to Montenegrin Companies.

Having in mind that this is the first project in Montenegro of this size, in terms of finance

and construction complexity, this had led to the Government setting up a new form of organisational structure and new units for the project implementation and project management (Brookes, N. et al., 2015). Experience to date shows that this organisation structure, hastechnical and professional knowledge, which can deal with large complex projects (Locatelli, G. et al. 2017).

It is hoped that under this project the local firms and Montenegrin nationals will acquire new skills and knowledge so that they can participate on other international large scale projects in the future.

The introduction and use of the FIDIC has highlighted some contradictions with the Montenegrin rules and regulations. These contradictions are being addressed on a one by one basis. As part of lessons learnt it is suggested that in any future project in Montenegro using FIDIC that experiences from this project are considered in the early preparation stages before going out to Tender.

REFERENCES

Jovanović P.: Upravljanje projektom, VŠPM, Beograd, 2015.

FIDIC, Conditions of Contract for Plant and Design-Build, First Edition (1999)

Law on Highway, Official Gazete number 52/2014, as of 16 December 2014

Design and Build Contract for Bar –Boljare Highway Section Smokovac-Mateševo Official Gazete number 54/2014, 23 December 2014

Preferential Buyer Credit Loan Agreement on Bar – Boljare Highway Section Smokovac-Mateševo Construction Project , Official Gazete number 54/2014, 23 December 2014

Ivanišević, N., Arizanović, D., Petronijević, P., Mikić M. (2014) " Current Strategy for Highway Construction in the Republic of Serbia". Association of Structural Engineers of Serbia (ISBN 978-86-85073-19-9, COBISS.SR-ID 209958412, pages 109-120)

"Funding and Financing Transport Infrastructure – Business Models to Enhance and Enable Financing of Infrastructure in Transport" edited by Roumboutsos, A., Voordijk, H., Pantelias, A. Mikić, M., Cirilovic, J., Vajdić, N., Ivanisevic, N., Mladenović, G., authors of "5.3 Motorway Horgos – Novi Sad (second phase) Serbia", pages 142-150.Routledge (Taylor and Francis Group, London and New York, ISBN 978-1-138-29389-2 (hbk) ISBN: 978-1-315-23182-2 (ebk),

Brookes, N., Ivanišević, N., Lukasiewicz, A., Sainati,T., lo Storto ,C. (2015) "Special Purpose Entities in Megaprojects" University of Leeds, ISBN 978-0-9576805-3-1

Locatelli, G., Mikić, M., Kovačević, M., Brookes, N., Ivanišević, N., (2017) "The Successful Delivery of Megaprojects: A Novel Research -Method)" . Project Management Journal. Vol.48, No.5, Pages 78-94, , Publisher Project Management Institute, 14 Campus Blvd., Newtown Square, PA 19073-3299, USA

Vukmir B. "Kratki komentari FIDIC-ovih općih uvjeta građenja", Zagreb, 2013