RISK MANAGEMENT FOR DISPUTE AVOIDANCE IN DIFFERENT PROCUREMENT SYSTEMS USED IN HIGH RISE BUILDINGS IN SRI LANKA

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(149130G)

Degree of Master of Science in Construction Law and Dispute Resolution

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DECLARATION

I declare that this is my own work and this thesis does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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The above candidate has carried out research for the M.Sc. Dissertation under my supervision.

……....……..…….. ……

Ch.QS. Prof. (Mrs.) B.A.K.S. Perera Date

Dissertation Supervisor

Risk management for dispute avoidance in different procurement systems used in high rise buildings in Sri Lanka

ABSTRACT

Disputes drive endemic problem in construction industry particularly in high rise buildings as most important part of the construction in Sri Lanka where it is required to avoid disputes for successful project completion. Consequently, risks, as a root causes of the disputes, should be managed systematically. Even though there are several researches on risk management on individual procurement systems, systematic risk management process is not applied in either. Hence, this research is aimed to develop systematic risk management frameworks for different procurement systems commonly used in high rise building in Sri Lanka which will be ultimately help to avoid disputes. The collected data from preliminary survey and two phase of questionnaire surveys were analyzed using content analysis, severity index, average method and relative importance index.

There are three procurement methods named separated with measure & pay, separated with lump sum & design & build with sump sum are used in high rise buildings in Sri Lanka. 128 risk factors are identified as applicable to the high rise building in Sri Lanka and all risk factors lead to disputes. There are 22 significant risk factors to the high rise buildings in Sri Lanka. Among them 16, 15 and 18 risk factors are significant to Separated with LumpSum (LS) systems, Separated with Measure and Pay(M&P) systems and Design and Build (D&B) with LS systems respectively. "Lack of skilled labours" and "unable to finish work on time" are the most significant risk factors for all procurement systems". Third highest risk factor is "need innovative construction methods" which is significant to only D&B with lump sum system.Risk shall be allocated to the best party who can tolerate and manage the risk. 15 Risk response methods appropriate in high rise building projects in Sri Lanka were identified. Risk Response methods are common to all procurement systems. Education and training has been highly recommended as the best response method for most of the risk factors. It is recommended to use standard conditions of contract for subcontracts and consultant contracts. Finally systematic risk management frameworks for each procurement methods were developed which can be used as a tool for procurement selection and as a guidance for risk management where ultimately help to avoid disputes of the high rise projects in Sri Lanka.

Keywords*:* *Risk management frameworks; Severe risk factors for dispute avoidance; Procurement systems; High rise buildings*

DEDICATION

To my beloved parents, husband and sons,

With special thanks to support and love,

Any credit of accuracy belongs to you,

Any blames for mistakes is mine.

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