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**THE LEGAL STANDING AND THE PROFESSIONAL
LIABILITY OF THE PROJECT MANAGER IN THE
CONTEXT OF HIS CONTEMPORARY
RESPONSIBILITIES**

الوضع القانوني والمسؤولية المهنية لمدير المشروع ضمن سياق مسؤولياته
المعاصرة

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Abstract

This dissertation reviews the legal standing and the professional liability of the contemporary project management practice where construction specialists and professionals such as cost managers, building surveyors, commercial managers, architects and engineers have merged into the realm of project management area of expertise. As a result, the project management consultancies have expanded their services beyond their well know classical role where it is of norm nowadays to see the project manager performing the role of the contract administrator, acting as an employer's agent from one side, and as a certifier from the other side.

Consequently, the role of the engineer under FIDIC forms of contracts – the most used in the Middle East and the Gulf Countries - and particularly under FIDIC Red Book 1999, has been affected where his role has been practically restricted to the design & technical supervision role only, shifting the responsibility of administering the main works contract and certifying the works to the project manager.

Having in mind this exponential increase in the project manager's responsibilities, it is imperative to understand what his legal position is under the UAE law in view of his duties and responsibilities where this dissertation endeavored to present a simple legal analysis, highlighting the project manager's professional liabilities, and documenting a list of recommendations which helps in defining the project manager within a recognized legal and administrative framework.

الملخص:

تناقش هذه الأطروحة الوضع القانوني والمسؤولية المهنية لمدير المشروع بالمفهوم الحديث لمسؤولياته، حيث بات الكثير من شركات ادارة المشاريع تضم ضمن كوادرها الاختصاصيين والمهنيين في مجالات البناء والعمران كمديري التكاليف، مساحي البناء، المعماريين والمهندسين وغيرهم من أصحاب الخبرات مما ساعدها في أن تتجاوز الدور التقليدي التي اعتادت تقديمه في الماضي والذي كان محصورا بإدارتها لأركان ما يعرف بالمثلث الذهبي المتمثل بالوقت والتكلفة والجودة، وصار طبيعيا هذه الأيام أن تجد مدير المشروع ينوء بمسؤولية ادارة العقد بين المالك و مقاول البناء الرئيس، وتحضير و اصدار شهادات الدفعات المالية، و اصدار شهادات اتمام البناء وغيرها من المهام التي لم تكن سابقا جزءا من مسؤوليات مدير المشروع .

وبالنتيجة على سبيل المثال، فان دور المهندس التقليدي كما هو متعارف عليه في العقود التابعة لنموذج " الفيديك" المستخدم بشكل شائع في منطقة الشرق الأوسط و دول الخليج العربي، صار محصورا بأعمال التصميم الخاصة بالمشروع والاشراف التقني على التنفيذ فقط نتيجة ما طرأ من تغيير على دور مدير المشروع .

وبالأخذ بعين الاعتبار هذا التغيير الجذري على مهام ومسؤوليات مدير المشروع، فانه من الضروري تعريفها من الناحية القانونية في ضوء واجباته و مسؤولياته الحديثة كما تناولتها هذه الأطروحة، والتي حاولت أن تقدم تحليلا قانونيا مبسطا لوضع مدير المشروع ، و مناقشة مسؤولياته المهنية، والتوصل الى قائمة من التوصيات والتي من شأنها النهوض بدور مدير المشروع ووضعه في أطر قانونية و تنظيمية واضحة .

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Keywords - Modern Project Management - Project Management – Project Manager – Legal - Liability - - Duty of Care – Insurance - Breach of Contract - Duty of Purpose – Indemnity – Remedies – Quantity Surveyor – Lead Consultant – Design & Supervision Consultant – Engineer – Contract Administration - Contract Administrator – Cost Consultant – Employer – Limitation of Liability – Risk Management – Losses and damages - Muqawala – Agent – Certifier – Engineer - Negligence

Table of Abbreviations and Definitions

Abbreviation	Definition
PM	Project Manager
D & SC	Design & Supervision Consultant
CA	Contract Administrator
EA	Employer’s Agent
QS	Quantity Surveyor
CM	Cost Manager
PMI	Project Management Institute
IPMA	International Project Management Association
APM	Association for Project Management
RICS	Royal Institute of Chartered Surveyors
RIBA	Royal Institute of British Architects
FIDIC	International Federation of Consulting Engineers

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Pozzolanic Lytag Ltd v. Bryan Hobson Associates [1999] Lloyd's Rep PN 125

Chesham Properties Ltd v. Bucknall Austin Project Management Services [1996] 82 BLR 92

Valerie Pratt v. George J. Hill Associated (1987) CA 38 BLR 25

Wilks vs. Thingoe Rural District Council [1984] 164 EG 86

R. vs. Metron Construction Corporate [2013] ONCA 541

R. vs. Vadim Kazenelson [2015] ONSC 3639

Costain Ltd v. Bechtel Ltd [2005] TCLR 6 and [2005] BLM Vol.22

Murphy vs. Brentwood DC [19991] 1 A.C 398

Hedly Byrne vs. Heller [1964] A. C 465

Pacific Associates vs. Baxter [1990] 1 Q. B 993

Hickman & Co. vs. Roberts [1913] AC 229

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Day vs. Ost [1973] 2 NZLR 385

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1.0 CHAPTER ONE – INTRODUCTION

1.1 Background

The evolution of the contemporary project management is a direct repercussion of the necessity for professional managers to deliberate and improve their original discipline, together with the requirement to make operative use of the data produced by the schedulers and planners in an endeavor to ascertain, manage, and regulate their precarious paths. These necessities and desires had led unswervingly to the creation of the primary associations that grown into today's project management bodies.

Project management has progressed and evolved in its area of expertise from the orthodox school of management where the emphasis was on the “scope, time, and cost” to the soft skills which are interfaced with the human resources and relations with more attention to the shareholders, communications, control, and guidance. This incessant evolvement accelerated the headway of the project management as a profession. Therefore, the more the organizations develop, the higher the challenges face the project managers to acquire certain set of skills and knowhow.

Nowadays, the facilities and the services presented by the project management vary significantly in areas such as experiences and knowledge of the professionals placing themselves available for this role.

The Chartered Institute of Builders (CIOB) has defined the project management in the 3rd edition of the Code of Practice for Project Management for the year 2002 as *“Project management is the professional discipline which separates the management function of a project from the design and execution functions”*.¹

However, it is very crucial to gauge the scope of the project management as defined in the third edition dated 2002 with the scope of the project management defined in the fourth edition of the Code of Practice dated 2010. The fourth edition stated

¹ CIOB, *Code of Practice for Project Management for Construction and Development* (3rd edn, Blackwell publishing 2002).

that “...an established discipline which executively manages the full development process, from the client’s idea to funding, co-ordination and acquirement of planning and statutory controls, approvals, sustainability, design delivery, through to the selection of procurement of the project team, construction, commissioning, handover review, to facilities management coordination”.²

It is very obvious that the role and the scope of the modern project management has categorically developed into a more composite and extended professional role where the project manager now is undertaking a number of responsibilities which did not used to be under the umbrella of his remits and obligations known traditionally. The project manager now is performing the role of the project quantity surveyor known as the cost consultant, the contract administrator, acting as an agent for the employer in performing certain responsibilities from one hand, and as a certifier in performing other responsibilities.

The project management companies and in order to maintain their business existence and competency in the construction industry started to introduce new members to their portfolios who are qualified people equipped with the necessary academic, practical experiences, certificates and are professionals such as engineers, architects, chartered quantity surveyors etc. Therefore, the project management companies had become more confident in its capabilities to undertake new responsibilities used to be performed by other consultants and specialised organizations such as lead architects and cost consultants.

In most of Gulf Countries and the wider Middle East region, the legal position of the project manager under the governing laws and the definition of the project manager and its responsibilities under statutory authorities had not been identified clearly and no direct reference to the project manager despite the fundamental role being performed by him in the construction industry at large.

² CIOB, *Code of Practice for Project Management for Construction and Development* (4th edn, Blackwell publishing 2010).

1.2 Research Problem

This dissertation intends to identify the modern project management scope of services in which the project manager assumes responsibilities used to be carried out by other consultants such as the contract administration and the quantity surveying which are of the core responsibilities of the engineer under the FIDIC forms of contract for example.

In projects where the project manager is the contract administrator and sometimes is the quantity surveyors as well, the engineer role as defined by FIDIC Red Book 1999 will be limited to the design and technical related issues in addition to the supervision role at site, whereas the responsibility of administering the main works contract, certifying the works, issuing the payment certificates, and the building completion certificates has been shifted the project manager.

Someone could ask the question; why the reference is being made to FIDIC forms of contract and the engineer's role in it in scrutinizing the project manager's role?

The simple answer is that the Middle East and since the 1970s has been widely using the FIDIC forms of contract despite the fact that this form of contract had been recruited based on the common law doctrines. The source of Gulf countries generally is based on a combination of civil and shari'a law for instance the United Arab Emirates, however, both private and public sectors are generally using FIDIC forms of contracts to a large extent.

Moreover, Despite the fundamental role of the modern project manager in the construction industry, its legal position had not been recognised clearly in many legal systems and governing laws in the gulf countries and the wider Middle East region, nor been controlled directly by statutory authorities or classified such as other professions like the architects and the engineers.

1.3 Research Questions

The main questions and interrogations which this dissertation is aiming to provide an answers to could be summarized as follow:-

- i) What does the modern project management mean, and what is the role and responsibility of the project manager when performing the contract administrator's role and/or undertaking the quantity surveyor/cost consultant's role
- ii) Identify the matches between the project manager's responsibilities as found under the question probed previously and the engineer's responsibilities in the context of FIDIC Red Book 1999 standard form of contract.
- iii) What amendments are recommended to the FIDIC Red Book 1999 Clauses and Sub-Clauses to encompass the project manager within the traditionally recognized parties of construction projects.
- iv) What is the dual role that the project manager is performing and what is his legal standing under the UAE law.
- v) What is the project manager professional liability and when he will be liable for negligence in performing his duties.

1.4 Aims and objectives

This dissertation aims to highlight the existence of the modern project management profession in which the responsibilities of the project manager are no more restricted to the traditional old style one but extended to include the contract administration responsibility and indeed expanded more to perform the cost consultancy services as well. As such, the objectives which this dissertation endeavors to address are:

- i) To identify the matches between the project manager's scope of services when performing the role of the contract administrator and/or the cost consultant, and the role of the engineer as documented in the FIDIC Red Book 1999 form of contract.
- ii) To suggest some amendments to FIDIC Red Book 1999 Clauses and Sub – Clauses that could be adopted in order to introduce the project manager

profession formally to one of the most common used form of contract(i.e. FIDIC form of contract).

- iii) To provide an analysis of the project manager's legal position and professional liability having in mind such important role being performed by him in the construction industry either as an employer's agent or as an independent certifier.

1.5 Significance of Research

The project manager's role particularly in the Gulf Region and the Wider Middle East area has evolved and expanded over the past few years substantially. Therefore, it is believed that it is the time for the whole construction industry to provide the utmost attention to the rise of the project manager which as a result will necessitate an overall review of the current legislation system pertaining to the construction laws and to the statutory authorities regulations which govern the engineering aspects of the construction industry in order to capture the project manager in its legal and legislation framework and to publish a code of conduct which governs the practices of the project manager generally.

1.6 Research Methodology

The dissertation will be adopting the doctrinal methodology which numerous attorneys consider best demonstrates a noticeably legal method to research.

This methodology will focus on argument cases, discussing scholars writing, examining and scrutinizing the information congregated from various main and subordinate legal sources such as literature material, legal commentaries, journal articles, books, applicable Acts, civil and case law, in addition to the industry best practices.

1.7 Dissertation Structure

This dissertation will be tackling the subject matter being scrutinized throughout a structure comprises of six chapters which are in summary:-

- i) Chapter one which provides a general outline about the dissertation by introducing an overall background, highlighting the research problem,

identifying the research questions, stipulating the research aims and objectives, emphasizing on the importance and the significance of the research before it describes the research methodology which will be adopted.

- ii) Chapter two which provides an overall highlights on the definition of project management and project manager, source and formation of this “profession”, and provides a general knowledge about the project management associations and institutes which had been involved in the creation of the project management as a profession by setting out its panels and scope, improvement of its standards, providing accreditation, research and education, and by publishing its code of practices and others.
- iii) Chapter three which demonstrates and establishes the target of this dissertation which is to identify the common grounds and the overlaps between the scope of the project manager and other consultants involved in the delivery process of the project particularly the engineer in the context of FIDIC Red Book 1999. Project management companies have during the few past years strengthen their resources quality and experience capabilities, and started offering the developer a different services which include the contract administration and the quantity surveying or what is called cost consultancy services.

As a result, the project manager has started undertaking certain responsibilities considered to be of the core responsibilities of the engineer in the context of FIDIC contracts such as issuance of instructions and payment certificates, this chapter identifies the matches between the scope of the project manager in the context of the modern project management and the engineer’s scope of work as described in FIDIC Red Book 1999.

- iv) Chapter four which identifies and recommends suggested amendments to the Clauses and Sub – Clauses of the most common used form of contract in the Gulf Region and the wider Middle East which is the FIDIC Red Book 1999 in order to recognize and introduce the project

manager and the project management profession contractually in the delivery process of the project.

- v) Chapter five which provides an insight on the project manager's legal status and professional liability, discussing the legal background of the project management contract with the employer and the law recognition of this profession, identifying the requirements for establishing the liability, and providing the areas of negligence considered to have the potential to hold the project manager liable for not providing the required level of care or for being negligent whilst performing his role and responsibilities.
- vi) Chapter six which is the conclusion and recommendation where the finding of this research and the current industry practices are concluded and summarized along with a set of recommendations.

2.0 CHAPTER TWO – OVERVIEW OF PROJECT MANAGEMENT AND PROJECT MANAGER

2.1 Background

All through the history and before establishing any organization for project management, or modernized knowledge books and frameworks for managing projects, the time past offers numerous examples of gigantic projects efficaciously completed. From the Great Wall of China to the Pyramids of Egypt and the Coliseum, all are virtuous illustrations of such projects. To build an atmosphere where individuals can work collectively to attain a reciprocated objective of delivering the project on time and to the budget is the core drive of the project management.

All over the history of humanity, people have been working on cultivating rehearses of the project management. The aim of this chapter is to provide an overall idea about project management and project manager, source and formation of this “profession”, and the associations and institutes which had been involved in its creation.³

2.2 What is project and what is project management.

A project as defined by the Project Management Institute⁴ is an “impermanent endeavor commenced to produce a distinctive and unique product, service, or outcome”, which means that each project has a certain commencement and absolute end which is normally reached when the project goals have been realized, or when it turns out obvious that the projects aims will not or cannot be achieved, or the necessity for the project does not exist any longer and the project is dismissed.

Impermanent does not essentially mean short time interval; various projects last for numerous years. In each case, though, the project’s duration is predetermined. Projects are not unending efforts. Most projects are carried out to generate a long-

³ T Seymour and S Hussein, ‘The History of Project Management’ International Journal of Management and Information System- 3rd Quarter (2014), Volume 18, Number 4.

⁴ D Bolles and S Fahrenkrog, *A guide to the Project Management Body of Knowledge* (3rd edition, Project Management Institute 2004) 5

lasting outcome. Nevertheless, environmental, social and economic circumstances may impact that far outlive the projects themselves.

Additionally, uniqueness and individuality are significant physiognomies of project deliverables. For instance, several thousands of residential buildings have been established, however, each individual project is distinctive – different titleholder, diverse design, different builders and suppliers, and so on. The existence of repetitive components does not change the eventual uniqueness of the job work.

Project management is the implementation of knowhow, expertise, aptitudes, tools and methods to project events to achieve project targets. It is the professional approach that splits the management from the design. However, combining both under one umbrella is still possible for minor projects and normally undertaken by the head of the design team which is known as the lead consultant in most cases. For more complicated and larger projects, the necessity for discrete management has instigated the development of project management.⁵

Why Projects Fail



Source: KPMG

Illustration No.1_ Why Projects Fail⁶

⁵ CIOB, *Code of Practice for Project Management for Construction and Development* (3rd edn, Blackwell publishing 2002).

⁶ KPMG stands for its founders (Klynveld Main Goerdeler, Marwick Mitchell & Co., Klynveld Kraayenhof & Co., William Barclay Peat & Co.) KPMG is a professional service company, being one of the Big Four auditors, along with Deloitte, EY and PwC. Seated in Amsterdam, the Netherlands, KPMG employs 174,000 people and has three lines of services: audit, tax, and

2.3 The source of contemporary project management

Projects in a way or another had been carried out for millennia of time; the Pyramids had been built by the primordial Egyptians since 4500 years ago and several pancontinental railways had been built throughout the 19th century. Nevertheless, people had begun the dialogue about “Project Management” just before 1950s when the Manhattan project to construct the nuclear missile during the 1940s is mostly considered to be the first “programme”.

Modern project management is an expression used to define the management of projects just as had been described by establishments such as “Association for Project Management” in UK and the “Project Management Institute” in the USA.⁷

There are various characteristics normally considered to be essential for a discipline or an “area of specialty” to be known as profession such as certain recognized educational and prerequisite entry requirements must be met by the practitioners, the self-sufficiency over the terms and conditions of the practice, an obligation to service principles, a domination over a distinct body of knowledge and associated abilities, and certainly a code of ethics to commit to. Project management is currently being understood to be an “evolving profession” despite of existing well recognized body of knowledge, various associations all over the world have slightly differing opinions on their content.

However, some bodies necessitate the requirement of recognized informative and entry requests such as the AIPM⁸, others provide official certifications but do not considered to be prerequisites to practice such as the PMI⁹. Whilst the majority of establishments and project management associations are committed to provide their

advisory. (Available at https://www.google.ae/search?q=why+projects+fail&biw=1280&bih=608&source=lnms&tbm=isch&sa=X&sqi=2&ved=0ahUKEwjjuuT7r8DNAhXkKsAKHRoEDrUQ_AUIBigB#imgrc=vFxSqZhy33Ko9M%3A, accessed 24 June 2016.

⁷ P Weaver, ‘THE ORIGINS OF MODERN PROJECT MANAGEMENT’ (15 – 18 April 2007), available at http://www.mosaicprojects.com.au/PDF_Papers/P050_Origins_of_Modern_PM.pdf /accessed 17 June 2016.

⁸ Australian Institute of Project Management

⁹ Project Management Institute, USA.

services using a standard and principled approach, the number of practitioners who are belonging to an association is relatively small.

More than 50% of the individuals who had participated in setting up the panels of PMI in USA, IPMA in Europe, and the APM in the UK were planning specialists, schedulers, and most of the remainders were cost specialists. Therefore, their emphasis was virtually on project controls and specifically on “Critical Path Scheduling” which ultimately along with the cost control considered to be the birth of the modern project management.

The PM associations such as PMI¹⁰, IPMA¹¹, APM¹², AIPM¹³, ENAA¹⁴ and others such as the Royal Institute of Chartered Surveyors RICS, have established a mostly dependable and stable view of the procedures affianced in project management, converted these opinions into “Bodies of Knowledge”, and now providing the necessary certification to the eligible experienced and proficient project managers. Additionally, the PM associations are heavily involved in conducting dedicated seminars and conferences all over the world for academic and practitioners, subsidizing all researches related to different traits of project management, and working effectively in building up a universal community of ‘project managers’.

¹⁰ Project Management Institute, USA.

¹¹ International Project Management Association

¹² Association for Project Management , UK

¹³ Australian Institute of Project Management

¹⁴ Engineering Advancement Association of Japan

3.0 CHAPTER THREE – PROJECT MANAGERS’ RESPONSIBILITIES; ARE THEY CONSISTENT WITH THE ENGINEER’S RESPONSIBILITIES UNDER FIDIC 1999

3.1 Introduction

The project manager has started undertaking certain responsibilities considered to be one of the core responsibilities of the engineer in the context of FIDIC contracts. The project manager is found now to be the contract administrator and/or the quantity surveyor where the issuance of instructions and the payment certificates are included in his scope of works.

This chapter identifies the matches between the scope of the project manager in the context of the modern project management and as documented in the guidelines of the Royal Institute of Chartered Surveyors (RICS) and the engineer’s scope of work as described in FIDIC Red Book 1999.

3.2 Project manager’s responsibilities: contemporary development

3.2.1 General Scope of Services

The project manager¹⁵ who is undertaking the responsibilities of administering the contract¹⁶ and the cost consultancy¹⁷ under the umbrella of his duties and responsibilities will include the following services:

- a) *Manage, administer, co-ordinate, programme and monitor the project delivery process and various activities starting from the inception stage, engineering stage, construction and commissioning through out to hand over.*

¹⁵ RICS, ‘Project Manager Services’, available at <http://www.rics.org/Global/rics-projectmanagerservice.pdf>, accessed on 16 June 2016.

¹⁶RICS, ‘Contract administration’, available at http://www.rics.org/Global/Downloads/Contract_administration_1st_edition_PGguidance_2011.pdf, accessed 16 June 2016

¹⁷ RICS, ‘Quantity Surveyor Services’, available at http://www.rics.org/Global/Downloads/quantity_surveyor_services_dwl.pdf, accessed on 24 June 2016.

- b) *Advise the employer on the most suitable work breakdown arrangement and project procurement tactic, considering the goals and desires of the employer, the competences of the employer's organization, physiognomies of the project, market circumstances, and the risk allocation.*
- c) *Report the project status habitually to the employer during the various stages of the project delivery, advise the employer on decisions to be made and recommend resolutions.*
- d) *Promptly inform the employer in writing about anything which could have an impact on the project such as:*
 - *Matters have the potential in changing the project nature and brief.*
 - *Matters have the potential in increasing the project cost or affect negatively the works quality.*
 - *Matters have the potential in extending the time documented in the main works contract to complete the project.*
- e) *Monitoring committed and projected costs against the approved budget and report accordingly to the employer along with suggested recommendations.*
- f) *Establishing the cost centers and cost codes for the project within the framework of the overall coding structure established by the project manager for the project.*
- g) *Preparation and submission of project cash flow forecasts and updates thereof during post-contract phase covering consultancy agreements and construction contracts.*
- h) *Preparation and compiling of main contractor tender and contract documents in addition to the provisional sum packages.*
- i) *Preparation of addenda to the tender documents for use in the provisional sum packages including incorporating technical information and documentation provided by others.*
- j) *Evaluation of the commercial aspects for provisional sum packages and operator supplies & equipment (OSE) package of tenders received, including*

*but not limited to rate analysis, and reporting to the employer thereon together with recommendations.*¹⁸

3.2.2 Programming

- a) *Prepare, obtain the approval of the employer to, and monitor all activities against a project master programme identifying all parts of the project, detailing key design and construction milestones and summarizing all activities*
- b) *Update the project master programme at regular intervals and as necessary to reflect the current Project status.*
- c) *Identify any potential or actual delays to the approved project master programme or other programmes and take the necessary actions in close coordination with the employer.*
- d) *Oversee the construction procurement process. Advise the employer of circumstances that may or will affect delivery and / or cost and take remedial actions in close coordination with the employer.*¹⁹

Under FIDIC Red Book 1999 Sub Clause 8.3 [Programme], the contractor is to communicate with the engineer in regard to the original work programme's submission and the subsequent revisions where the engineer will be reviewing it and issuing the necessary notices to the contractor highlighting the extent to which his programme doesn't comply with the contract provisions. Whereas when the project manager is the contract administrator, the ownership of reviewing and monitoring the contractor's programme and issuing the necessary instructions and notices is the project manager's ownership and responsibility.²⁰

3.2.3 Design Management

- a) *Oversee and observe the design progression and ensure that it is being developed in line with the employer's brief, requirements, and authorities having jurisdiction's guidelines.*

¹⁸ Refer to footnotes No. 15, 16, and 17.

¹⁹ Refer to footnotes No. 15, 16, and 17.

²⁰ Conditions of Contract for Construction Red Book (1st edition, FIDIC 1999)

- b) *Monitor the performance of the supervision consultant and other consultants in respect of the deliverables associated with the agreed design programme and provide immediate advice to the employer if necessary.*²¹

The design is the engineer's responsibility under FIDIC Red Book 1999 which has been published for building and engineering works designed by the employer through his assigned engineer. In projects involving project managers, their liability pertaining to the design is to ensure that it is fulfilling the employer's requirements and addressing the statutory authorities' requirements and their design guidelines.²²

3.2.4 Inspection, testing and commissioning, and project taking over.

- a) *Manage and co-ordinate the commissioning programme and advise the project team on their actions to address.*
- b) *Manage all testing and commissioning activities, ensure that the employer and his team are notified in advance for witnessing the commissioning activities and a programme is in place for authorities personnel to inspect and witness.*
- c) *Ensure that all warranties are submitted by the contractor to the employer as provided for under the construction contracts. Advise the employer of his rights under such warranties and guarantees including limitation periods.*
- d) *Establish in consultation with the supervision consultant guidelines for the taking over or occupancy of the whole or parts of the project.* ²³

Under FIDIC Red Book 1999, Sub – Clause 7.3 [inspection], the contractor's requests for inspection will be addressed to the engineer to carry out the necessary witnessing and inspection for all works presumed completed. However, by having the project manager involved in the project delivery, he will ensure that the proper method statements have been submitted and approved, the works have been completed using the specified material, the installations and commissioning activities are being carried out following the agreed programme and sequence of works. Additionally, the project manager being the contract administrator will be

²¹ Refer to footnotes No. 15, 16, and 17.

²² Conditions of Contract for Construction Red Book (1st edition, FIDIC 1999)

²³ Refer to footnotes No. 15, 16, and 17.

issuing any necessary instruction to perform any required tests and will be determining the associated costs, time involved, and all other administrative issues described under Sub- Clause 7.4 [Testing] apart from the technical issues and approvals which will normally left for the design & supervision consultant to review and determine.

Additionally, Under FIDIC Red Book 1999, sub – clauses 10.1 and 10.2 pertaining to taking over of the works either the complete works or part of it, it is the engineer's responsibility to address the contractor's request and to work out his eligibility for such certificate following the process and the procedures described under these two Sub – Clauses. However, in projects having project manager involved, the contractor would normally addresses the request for taking over certificate to the project manager who should be determining the contractor's eligibility in close coordination with the design & supervision consultant and project cost consultant.²⁴

3.2.5 Health and Safety

- a) *Advise the employer through the project team regarding his published statutory and regulatory responsibilities in regards to health and safety.*
- b) *Ensure that the contractor has established and published a safety plan and that all involved parties in delivering the project are fully aware of their responsibilities in regards to health and safety.*²⁵

Under Sub Clause 6.7 of FIDIC Red Book 1999, the contractor is responsible for maintaining the health and safety of the employer and its personnel. This process is monitored and verified by the engineer who shall ensure that the contractor is undertaking all precautions necessary to retain this vital aspect. However, when project managers are involved in projects, the monitoring and the administering responsibilities are automatically transferred to the project manager.

3.2.6 Insurance and Bonds

- a) *Reviewing insurances, tender and performance's bonds, retention and advance payment's bonds, etc are obtained from the contractor(s), and ensure that the*

²⁴ Conditions of Contract for Construction Red Book (1st edition, FIDIC 1999)

²⁵ Refer to footnotes No. 15, 16, and 17.

*employer is fully aware of these insurances and bonds 'compliance with the tender documents.*²⁶

This responsibility is one of the core responsibilities of the engineer in the context of FIDIC Red Book 1999 where the engineer shall be receiving a copy of all insurances and bonds been submitted to the employer. The engineer will not be in a position to issue any payment certificate against the advance payment for instance if the contractor's bank guarantee has not been submitted to the employer and the engineer has received a copy of the same and is satisfied with its content. Clause number 18 of FIDIC Red Book 1999 is dealing with insurances in which the engineer is presumed to be fully aware of its conformity with the contract requirements. This responsibility has been shifted to the project manager and/or the cost consultant when they are involved in the project delivery.

3.2.7 Variations and Value engineering

- a) *Assess the value of the change or the variation order and seek for the employer's approval before agreeing the same with the contractor(s).*
- b) *Manage value engineering exercises on behalf of the employer, in conjunction with the design & supervision consultant and the cost consultant, and recommend preferred options with a view to time, cost, maintenance and operational benefits.*²⁷

Under FIDIC Red Book 1999, Sub – Clause 13.1 [Right to Vary], Sub – Clause 13.3 [Variation Procedure], and Sub – Clause 13.8 [Adjustment for Changes in Cost], the engineer has the right to initiate variations if approved by the employer and /or to review variations proposals received from the contractor and issue the necessary instructions after obtaining the employer approval.²⁸In projects having project managers involved working as contract administrators and quantity surveyors, instructing variations is the project manager sole responsibility and if the design and supervision consultant wants to vary any works he shall be following a change management process where the project manager will be issuing the

²⁶ Refer to footnotes No. 15, 16, and 17.

²⁷ Refer to footnotes No. 15, 16, and 17.

²⁸ Conditions of Contract for Construction Red Book (1st edition, FIDIC 1999)

instruction after assessing the time and cost impacts and obtain the employer approval as a prerequisite to issue such variation.

The value engineering exercise is undertaken during the pre - contract stage whilst the design is being progressed and developed and during the post – contract stage whilst the project is being built by the contractor. However, FIDIC Red Book 1999 Sub – Clause 13.2 has not discussed the value engineering during the former stage but stipulated the procedures to be followed during the latter stage where the value engineering proposals are initiated by the contractor and made available for the engineer’s approval and determination for necessary adjustments for change in cost followed by the necessary engineer’s instructions for the contractor to proceed.²⁹

On the other hand, project managers when introduced to projects will have their own influence in such exercise, as they will be initiating this activity through a structured meetings with other parties involved in the project right from the design inception stage by issuing the necessary instructions to the designer to implement the agreed value engineering after being approved by the employer and the cost and /or time saving are determined.

The value engineering meetings during the construction stage will continue where the contractor’s ideas will be received and implemented after being endorsed by the employer based on the cost and/or the time saving identified and the necessary instructions issued by the project manager in full coordination with the design & supervision consultant and the cost consultant involved.³⁰

²⁹ Conditions of Contract for Construction Red Book (1st edition, FIDIC 1999)

³⁰ Conditions of Contract for Construction Red Book (1st edition, FIDIC 1999)

Change Management Procedure

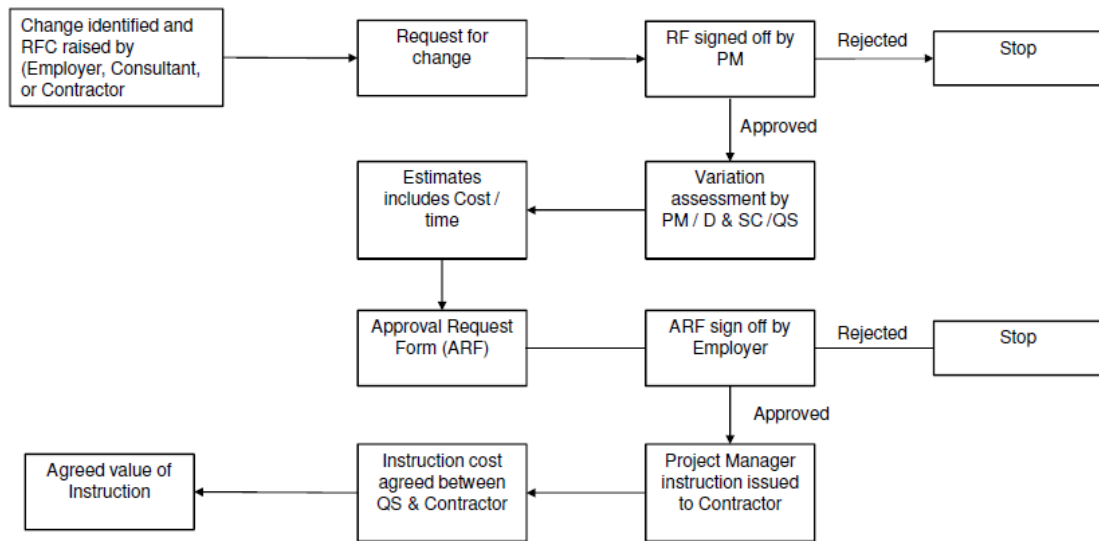


Illustration No.2_ Change Management Procedure_ Flow Chart

3.2.8 Advance, interim, and final accounts

a) *Checking the advance, interim, statement of completion, final statement and final accounts provided by the contractor(s), modify/amend as required and submit to the employer for approval along with recommendations if necessary according to the conditions of the contract.*³¹

Under FIDIC Red Book 1999, Sub – Clause 14.10 [Statement at Completion] stating that it is the engineer’s responsibility to receive and review the contractor’s statement at completion with the supporting documents which will be submitted in accordance with Sub – Clause 14.3 [Application for Interim Payment Certificate] , following this submission the engineer will review and certify accordingly following Sub - Clause 14.6.³²

Having now the project manager involved who is administering the contract and undertaking the responsibilities of the quantity surveyor, the contractor’s application for the final account and the statement at completion will be submitted to him who will be reviewing, assessing, and issuing the necessary payment certification with recommendation for the employer to pay. However, the project

³¹ Refer to footnotes No. 15, 16, and 17.

³² Conditions of Contract for Construction Red Book (1st edition, FIDIC 1999)

manager evaluation and determination shall be in close coordination and consultation with the design and supervision consultant to ensure the works included in the payment application is technically competent.

4.0 CHAPTER FOUR – RECOMMENDED AMENDMENTS TO FIDIC RED BOOK 1999 CLAUSES TO INTRODUCE THE PROJECT MANAGER

4.1 Background

The projects nowadays require multiple contractors, sub-contractors, consultants and sub consultants to undertake its design and construction efficiently and that in its own requires a distinctive knowledge and expertise to carry out administrative and coordination tasks of the project various execution phases. Therefore, the engineer's role as described under FIDIC Red Book 1999 has been practically undertaken and performed by two consultants namely the project manager and the supervision/technical consultant.

Therefore, and in view of the above, there are certain alteration recommended to a number of the clauses and sub clauses of FIDIC Red Book 1999 to adopt and describe the role of the project manager and the design & technical supervision consultant (D&SC) as a replacement to the classical role of the engineer.

4.2 Recommended Amendments to FIDIC 1999 Clauses

These alterations are to be introduced to the engineer's role as described by FIDIC on the following matters and areas of involvement

4.2.1 The definition of the engineer and the employer representative under general provisions

The engineer and the employer's representative has been defined under Sub Clause 1.1.2.4 and 1.1.2.5 respectively.³³ As the engineer's role has been replaced by the project manager and the supervision consultant therefore these two new roles should be defined in a very similar way to the engineer's definition as suggested herein;

³³ Conditions of Contract for Construction Red Book (1st edition, FIDIC 1999)

- *““ **Project Manager (PM)**” means the person appointed by the Employer to act as the PM for the purposes of the Contract and named in the Appendix to Tender, or other person appointed from time to time by the Employer and notified to the Contractor under Sub- Clause 3.4 [Replacement of the PM or the D&SC].”*
- *““**Design & Supervision Consultant or D&SC**” means the person appointed by the Employer to act as the D&SC for the purposes of the Contract and named in the Appendix to Tender, or other person appointed from time to time by the Employer and notified to the Contractor under Sub-Clause 3.4[Replacement of the PM or the D&SC].”*
- *““**Employer's Personnel**”means the PM, D&SC, the assistants referred to in Sub-Clause 3.2 [Delegation by the PM and the D&SC] and all other staff, labour and other employees of the PM, D&SC and of the Employer; and any other personnel notified to the Contractor, by the Employer or the PM, as Employer's Personnel.”*

4.2.2 Interpretation and elucidation Matters

As described under Sub Clause 1.5 [Priority of Documents], the engineer is the only entity who is sanctioned and authorized to issue the essential explanations or instructions to clarify any uncertainty or inconsistency might be found in the contract document.³⁴ However, this task could be performed by the project manager being performing part of the engineer's role described under FIDIC Red Book 1999 and that the project manager could be authorised to undertake any interpretation necessary to clear any ambiguities and/or issue any instruction to do so. Therefore, Sub Clause 1.5 could be amended to read as

- *“... If an ambiguity or discrepancy is found in the documents, the Project Manager shall issue any necessary clarification or instruction. However, if the ambiguity or the discrepancy is of technical nature, the Project Manager shall consult with the Design & Supervision Consultant before issuing any clarification and/or instruction.”*

³⁴ Conditions of Contract for Construction Red Book (1st edition, FIDIC 1999)

4.2.3 Communications Matters

Under FIDIC Red Book 1999, the majority of the contractual communications and correspondences are taking place between the engineer and the contractor.³⁵ However, there are certain communications pertaining to insurances, banks' bonds and guarantees, termination and disputes which are normally being communicated directly between the employer and the contractor. Having the project manager and the design and supervision consultant replacing the engineer's role, the following amendments are suggested to Sub Clause 1.3 [Communications] to read as:-

“...Approvals, certificates, consents and determinations shall not be unreasonably withheld or delayed. When a certificate is issued to a Party, the certifier shall send a copy to the other Party. When a notice is issued to a Party, by the other Party or the *Project Manager*, a copy shall be sent to the *Project Manager* or the other Party, as the case may be. *All types of contractual communications between the Contractor and the Design and Supervision Consultant shall be performed through the Project Manager.*”

4.2.4 Instructions and Determination Matters

With the communication protocols as described earlier kept in mind, the project manager is the only entity authorized to issue instructions. However, if the design and supervision consultant requested for an instruction to be issued to the contractor relating to certain technical changes or change on design aspects, then he shall be submitting a request for change to the project manager highlighting the motives behind this change and the project manager will be issuing the necessary instruction to the contractor once the cost and /or time impact have been assessed by the project manager and approved by the employer. The following amendments to certain FIDIC Red Book 1999 Sub Clauses are suggested to reflect the role of the project manager and the design and supervision consultant:-

³⁵ Conditions of Contract for Construction Red Book (1st edition, FIDIC 1999)

i) **Sub-Clauses 1.9 [Delayed Drawings or Instructions]**³⁶

“The Contractor shall give notice to the *Project Manager* whenever the Works are likely to be delayed or disrupted if any necessary drawing or instruction is not issued to the Contractor within a particular time... of the delay or disruption likely to be suffered if it is late.

The Design and Supervision Consultant shall deliver to the Project Manager such required technical and/or design information as necessary along with the request for change and the Project Manger shall issue the same after assessing the cost and/or time impact which shall be approved by the Employer before the issuance of such information/instruction to the Contractor.

If the Contractor suffers delay and/or incurs Cost as a result of a failure of the *Project Manager and/or the Design and Supervision Consultant* to issue the notified drawing or instruction within a time which is reasonable and is specified in the notice with supporting details, the Contractor shall give a further notice to the *Project Manager* and shall be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to:

- a) An extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- b) Payment of any such Cost plus reasonable profit, which shall be included in the Contract Price.

After receiving this further notice, the *Project Manager in Consultation with the Design and Supervision Consultant* shall proceed in accordance with Sub-Clause 3.5[Determination] to agree or determine these matters.

However, if and to the extent that *Project Manager and/or the Design and Supervision Consultant's* failure was caused by any error or delay by the Contractor... such extension of time, Cost or profit.”

³⁶ Conditions of Contract for Construction Red Book (1st edition, FIDIC 1999)

ii) **Sub - Clause 3.2 [Delegation by the Engineer]** ³⁷

This Sub-Clause is suggested to be renamed to [*Delegation by the Project Manager and the Design and Supervision Consultant*] and to read as:-

“The Project Manager and the Design and Supervision Consultant may from time to time assign duties and delegate authority to assistants, and may also revoke such assignment or delegation. These assistants may include a resident Project Manager or a resident Supervision Engineer, and/or independent inspectors appointed ... However, unless otherwise agreed by both Parties, the Project Manager shall not delegate the authority to determine any matter in accordance with Sub-Clause 3.5 [Determinations]... Any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by an assistant, in accordance with the delegation, shall have the same effect as though the act had been an act of the Project Manager and/or the Design and Supervision Consultant as the case may be. However:

- a) any failure to disapprove ... of the *Project Manager and/or the Design and Supervision Consultant* to reject the work, Plant or Materials;
- b) if the Contractor questions any determination or instruction of an assistant, the Contractor may refer the matter to *the Project Manager, who shall promptly confirm, reverse or vary the determination or instruction after conducting the necessary consultation with the Design and Supervision Consultant taking into consideration his opinion on matters related to technical issues.*”

³⁷ Conditions of Contract for Construction Red Book (1st edition, FIDIC 1999)

iii) Sub- Clause 3.3 [Instructions of the Engineer] ³⁸

This Sub-Clause is suggested to be renamed to [*Instructions of the Project Manager and the Design and Supervision Consultant*] and to read as:-

“The Project Manager may issue to the Contractor ... from the Project Manager, or from an assistant to whom the appropriate authority has been delegated under this Clause. If the Design and Supervision Consultant requested that a certain instruction is necessary to be issued to the Contractor and mainly if it comprises a design related issues or technical information necessary for the Contractor to perform the Works, then he shall be submitting a request for change to the Project Manager identifying the reason for this instruction to be issued and enclosing all necessary information to be issued along with the instruction. The project Manager shall evaluate the time and cost impact if any and seeks for the Employer approval before issuing such instructions. If an instruction constitutes a Variation, Clause 13 [Variations and Adjustments] shall apply.

The Contractor shall comply with the instructions given by the Project Manager or delegated assistant, on any matter related to the Contract. Whenever practicable, their instructions shall be given in writing. If the Project Manager or a delegated assistant... instruction of the Project Manager or delegated assistants (as the case may be).”

iv) Sub- Clause 3.5 [Determinations]³⁹ which is suggested to read as: -

“Whenever these Conditions provide that the Project Manager shall proceed in accordance with this Sub-Clause 3.5 to agree or determine any matter, the Project Manager shall consult with each Party in an endeavour to reach agreement. If agreement is not achieved, the Project Manager shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances. However, the Project Manager shall

³⁸ Conditions of Contract for Construction Red Book (1st edition, FIDIC 1999)

³⁹ Conditions of Contract for Construction Red Book (1st edition, FIDIC 1999)

be all the time in full and close coordination and consultation with the Design and Supervision Consultant before issuing any determination especially if it is of technical background.

The Project Manager shall give notice to both Parties and shall provide the Design & Supervision Consultant with a copy, of each agreement or determination, with supporting particulars. Each Party shall give effect to each agreement or determination unless and until revised under Clause 20 [Claims, Disputes and Arbitration].”

v) Sub – Clause 7.6 [Remedial Works]⁴⁰ which is to read as:-

“Notwithstanding any previous test or certification, *the Project Manager and/or the Design and Supervision Consultant through the Project manager* may instruct the Contractor to ...the Contractor shall subject to Sub-Clause 2.5 [Employer's Claims] pay to the Employer all costs arising from this failure.”

vi) Sub – Clause 20.4 [Obtaining Dispute Adjudication Board's Decision] which is to read as:-

“If a dispute (of any kind whatsoever) arises ... opinion or valuation of *the Project Manager after a consultation with the Design & Supervision Consultant* ,either Party may refer the dispute in writing to the DAB for its decision, with copies to the other Party, the Project Manager, and the Design and Supervision Consultant.

Such reference shall state that it is given under this Sub-Clause. For a DAB of three ... Binding upon both Parties.”

vii) Sub – Clause 20.6 [Arbitration]⁴¹ which is to read as

“Unless settled amicably, any dispute in respect of which ...The arbitrator(s) shall have full power to open up, review and revise any

⁴⁰ Conditions of Contract for Construction Red Book (1st edition, FIDIC 1999)

⁴¹ Conditions of Contract for Construction Red Book (1st edition, FIDIC 1999)

certificate, determination, instruction, opinion or valuation of *the Project Manager reached to in association with the Design and Supervision Consultant*, and any decision of the DAB, relevant to the dispute. Nothing shall disqualify *the Project Manager* from being called as a witness and giving evidence before the arbitrator(s) on any matter whatsoever relevant to the dispute.

Neither Party shall be limited in ... be admissible in evidence in the arbitration.

Arbitration may be commenced prior to or after completion of the Works. The obligations of the Parties, *the Project Manager along with the Design and Supervision Consultant*, and the DAB shall not be altered by reason of any arbitration being conducted during the progress of the Works.”

4.2.5 Quality Assurance and Quality Control Matters

Under FIDIC Red Book 1999, it is the engineer’s responsibility to ensure that the contractor(s) has in place a quality assurance systems which are reliable and being implemented all way through the various stages of the project delivery processes, such as responsibilities of auditing quality assurance, control system and policies, reviewing and consenting to samples submitted, site installations inspections and approvals and other responsibilities which are now and in our case being performed by the design and supervision consultant and endorsed by the project manager

i) Sub- Clause 4.9 [Quality Assurance] ⁴²which is to read as

“The Contractor shall institute a quality assurance system to demonstrate compliance with the requirements of the Contract. The system shall be in accordance with the details stated in the Contract. *The Design and Supervision Consultant* shall be entitled to audit any aspect of the system *who in his turn shall be advising the Project Manager on his finding. The Project Manager shall be notifying the Contractor accordingly with the necessary instruction as appropriate.*

⁴² Conditions of Contract for Construction Red Book (1st edition, FIDIC 1999)

Details of all procedures and compliance documents shall be submitted to *the Project Manager with a copy to the Design and Supervision Consultant* for *approval* before each design and execution stage is commenced. When any document of a technical nature is issued to *the Project Manager*, evidence of the prior approval by the *quality assurance manager* of the Contractor ...obligations or responsibilities under the Contract.”

ii) Sub- Clause 7.2 [Samples] which is to read as :

“The Contractor shall submit the following samples of Materials, and relevant information, *to the Project Manager for his information and requesting for the Design and Supervision Consultant’s* consent prior to using the Materials in or for the Works:

- a) manufacturer's standard samples of Materials and samples specified in the Contract, all at the Contractor's cost, and
- b) additional samples instructed by *the Project Manager after obtaining the necessary Employer’s approvals* , *these instructed samples shall be considered as a variation if not specified in the contract.*

Each sample shall be labelled as to origin and intended use in the Works.”

4.2.6 Quantum of Works and measurement matters

Carrying out the work’s measurement is the engineer’s responsibility under Sub-Clause 12.1 of FIDIC Red Book 1999 Conditions of Contract. If the Project Manager and the Design and Supervision Consultants are to undertake and perform the role of the engineer, then the following amendments are suggested to the following Sub – Clause:

i) Sub-Clause 12.1[Works to be measured]

“The Works shall be measured, and valued for payment, in accordance with this Clause. Whenever *the Project Manager and/or the Quantity Surveyor and/or the Design and Supervision Consultant* require any part of the Works to be measured, reasonable notice shall be given to the Contractor's Representative *by the Project Manager*, who shall:

- a) promptly either attend or send another qualified representative to assist the Design and *Supervision Consultant and the Quantity Surveyor* in making the measurement, and
- b) supply any particulars requested by *the Project Manager, the Quantity Surveyor, or the Design and Supervision Consultant*.

If the Contractor fails to attend or send a representative, the measurement made by (or on behalf of) *the Design and Supervision Consultant and the Quantity Surveyor* shall be accepted as accurate.

Except as otherwise stated in the Contract, wherever any Permanent Works are to be measured from records, these shall be prepared by *the Contractor and approved by the Design and Supervision Consultant*. The Contractor shall, as and when requested, attend to examine and agree the records with *the Quantity Surveyor and the Design and Supervision Consultant*, and shall sign the same when agreed. If the Contractor does not attend, the records shall be accepted as accurate.

If the Contractor examines and disagrees the records, and/or does not sign them as agreed, then the Contractor shall give notice to *the Project Manager* of the respects in which the records are asserted to be inaccurate. After receiving this notice, *the Quantity Surveyor and the Design and Supervision Consultant* shall review the records and either confirm or vary them. If the Contractor does not so give notice to *the Project Manager* within 14 days after being requested to examine the records, they shall be accepted as accurate.”

4.2.7 Certification and Endorsement of Payments Matters

This exercise is normally undertaken by the project team where each party has its role as follows: The Contractor will be issuing his payment application to the project manager who is the only entity authorised to issue payment certificates

The project manager will be requesting the quantity surveyor to review the contractor’s payment application and to evaluate the quantities included in the

payment application and ensure that these included in the payment applications are in reality installed in the project and accepted by the design and supervision consultant.

Simultaneously, the project manager will be requesting the design and supervision consultant to review the payment application and to advise on the technical compliance of the material/systems installed with the project contract and specifications. Additionally, the design and supervision consultant will be providing the necessary support or explanation the quantity surveyor may need to perform his task properly.

Based on the feedback and recommendation from the quantity surveyor and the design and supervision consultant, the project manager will adjust the payment application as appropriate if need be, and issue it to the employer with a recommendation to make the necessary payment to the contractor.

Therefore, the following amendments are suggested to the following Sub-Clauses:

i) Sub – Clause14.6 [Issue of Interim Payment Certificates]

“No amount will be certified or paid until the Employer has received and approved the Performance Security. Thereafter, *the Project Manager, in association with the Design and Supervision Consultant who shall verify the technical compliance of the quantities claimed in the payment application, and the Quantity Surveyor who shall evaluate the quantities claimed in the payment application and ensure that they are actually installed at site*, shall, within 28 days after receiving a Statement and supporting documents, issue to the Employer an Interim Payment Certificate which shall state the amount which the *Project Manager* fairly determines to be due, with supporting particulars.

However, prior to issuing the Taking-Over Certificate for the Works, *the Project Manager* shall not be bound to ... In this event, *the Project Manager* shall give notice to the Contractor accordingly.

An Interim Payment Certificate ... *The Project Manager* may in any Payment Certificate make any correction or modification that should properly be made to any previous Payment Certificate. A Payment Certificate shall not be deemed to indicate *the Project Manager, or the Design and Supervision Consultant, or the Quantity Surveyor's* acceptance, approval, consent or satisfaction.”

ii) **Sub- Clause 14.13[Issue of Final Payment Certificate]**

- “Within 28 days after receiving the Final Statement and written discharge in accordance with Sub-Clause 14.11 [Application for Final Payment Certificate] and Sub-Clause 14.12 [Discharge], *the Project Manager, in association with the Design and Supervision Consultant who shall verify the technical compliance of the quantities claimed in the payment application, and the Quantity Surveyor who shall evaluate the quantities claimed in the payment application and ensure that they are actually installed at site* shall issue, to the Employer, the Final Payment Certificate which shall state ... Sub-Clause 14.12 [Discharge], *the Project Manager* shall request the Contractor to do so. If the Contractor fails to submit an application within a period of 28 days, *the Project Manager* shall issue the Final Payment Certificate for such amount as he fairly determines to be due *after having the quantities claimed verified in number and technical competency.*”

5.0 CHAPTER FIVE– PROJECT MANAGER’S LEGAL STATUS AND PROFESSIONAL LIABILITY: LEGAL ANALYSIS

5.1 Background

The presence of contract administrator is communal in all types of building contracts. The project manager when acting as a contract administrator has two discrete but sensitive dual roles in regards to the project as it should be stipulated clearly in the terms of the particular contract between the employer and the project management consultancy. Generally, the project manager performing the contract administrator role will be acting as the employer’s agent where he shall act to the employer’s best interest and as an “independent” certifier undertaking a decision – making role

i) Performing an agency function in a capacity of an agent to the employer

The purpose is to achieve the completion of the project, in a cost-effective and well-timed manner. The employer performs all obligations and responsibilities on behalf of the employer such as providing certain information and issuing instructions, if the employer desires to maintain direct contribution in the delivery process of the project such as insurances and negotiations, it is crucial that this involvement is documented in the project management consultancy contract.

It is important to highlight that the employer could be held liable for the contract administrator failure in fulfilling the employer’s obligations stipulated in the contract with the main contractor, this failure could possibly leads to loss of contractual privileges or reparation entitlements by the contractor.

ii) Performing a decision – making occupation in a capacity of independent certifier

Under this role, the project manager’s actions to be performed must consider the interests of both the contractor and the employer when providing professional opinions which shall be theoretically “impartial” decisions/opinions. Such acts include the issuance of the interim and final payment certificates after assessing the

works performed by the contractor, extension of time determination and awarding, consenting to the work programme submitted by the contractor, issuance of variations, and others.

It is significant to indicate here that the contract administrator when he is acting as a certifier is under certain obligations to act ‘fairly and impartially’, however, when the contract administrator is exercising the agency function, he is not obliged to.

5.2 The law recognition of the “Project manager/Contract Administrator”

Any organization or individual participates in the delivery of any construction process irrespective to his profession, area of specialty or designations will be subjected to the civil liability for the role and the scope of works and services performed by him. The laws concerning the practice of the project manager/contract administrators are the civil law which is a private law governing the rights and obligations of organizations and individuals when they are trading off with each other, such as law of contract and law of tort, and the administrative law which includes the codes, regulations, and the legislation of the state aiming generally to improve the building codes.

5.2.1 The project management consultancy service contract

This title will go through the characteristics of the project management contract compared to the UAE contract law, starting with the description of the relationship between the project manager and the employer where the contract will demarcate clearly the contractual obligations of both parties. Normally the contract will be tailored to achieve the employer’s expectations and requirements.

The mutual consent between both parties forms the base of the contract when the exchanging of the offer and acceptance are in place and the legal effect is created and accepted by both.⁴³ Therefore, the contract between the project manager and the employer is a professional contract in which one party undertakes to use his

⁴³ Article 129 (a) of UAE CTC states that: “that the two parties to the contract should agree upon the essential elements”.

professional expertise and skills in fulfilling the other's party needs who seeks the advice, the UAE civil law is applicable to this professional contract.⁴⁴

The project manager in fulfilling his contractual obligations shall be independent in exercising the sensible expertise, carefulness, and diligence of his self-control to ensure that the employer's requirements are achieved, the project manager shall be fully committed to the profession morality in a goodwill and true devotion. On the other hand, the employer is also independent in selecting the project manager and has the discretion to accept the project manager advice or not. As such, it is a binding contract in which the project manager is under obligation to perform his scope of services and provide the required level of skills and care as stipulated in the contract and the law applicable, and the employer is indebted to pay the consultancy fee and remuneration.

The project management consultancy has a jurisdictional character under the UAE law⁴⁵; as such, if the project management company assigned somebody else to execute the contract, this may be considered a breach in the contract which could turn the contract to be null and void, unless agreed otherwise in the contract terms and conditions.⁴⁶ As a result, and in case of the death or bankruptcy of the licensee of the project management company, the contract might be cancelled by law.⁴⁷

5.2.2 The legal nature of the project management service contract

It is imperative to ensure that the essential components of the project management consultancy service contract are considered in the formation of the contract and are

⁴⁴ Article 125 of UAE CTC states that: "A contract is the coming together of an offer made by one of the contracting parties with the acceptance of the other, together with the agreement of them both in such manner as to determine the effect thereof on the subject matter of the contract, and from which results an obligation upon each of them with regard to that which each is bound to do for the other. There may be a coincidence of more than two wills over the creation of the legal effect".

⁴⁵ Article 92 of the UAE CTC States that: "Juridical persons shall consist of the following: (e) Civil and trading companies, save as excluded by a special provision".

⁴⁶ Article 381 of UAE CTC states that: "(1) if the subject matter of the right is an act which, by its nature or by virtue of a contractual provision, the obligor must perform personally, the obligee may reject performance thereof by another person. (2) If the obligor does not perform the act, the obligee may seek the leave of the judge to perform it (himself), and he may also perform it (himself) without leave under compelling necessity, and in both cases the performance shall be at the expense of the obligee".

⁴⁷ Article 282 of the UAE CTC states that: "A promise binds the maker unless he die or bankrupt".

consistent with the applicable laws and the international standards in order to secure an efficient and practicable contract. Therefore, elements such as the official proposal and approval, consent of both parties, lawful purpose, capacity and contract form must be considered.⁴⁸ If one of these elements is absent, the consultancy service could be considered void, the following paragraphs will provide further details about each element.

i) Official proposal and approval

A proposal or an offer is a manifestation of readiness to enter into an obligatory contract and the acceptance or the approval shall echo the offer. Normally, the acceptance of an offer must be communicated to ensure the demonstration of the mutual consent which in its turn leads to the materialization of the contract.⁴⁹

ii) Legal Purpose

If the drive of creating the consultancy service contract is conflicting with laws, public order, domestic rules, and/or morals, the contract may be considered to be null and void such as contracts containing crimes or deception.⁵⁰ Not knowing the legal consequences of the outcomes of any contract will not discharge the contracting parties from responsibilities for damages or harms caused for others.⁵¹

⁴⁸ Article 129 of the UAE CTC states that: “The necessary elements for the making of a contract are:-

(a) that the two parties to the contract should agree upon the essential elements;
(b) the subject matter of the contract must be something which is possible and defined or capable of being defined and permissible to be dealt in; and
(c) there must be a lawful purpose for the obligations arising out of the contract.

⁴⁹ Article 125 of the UAE law CTC states that: “A contract is the coming together of an offer made by one of the contracting parties with the acceptance of the other, together with the agreement of them both in such a manner as to determine the effect thereof on the subject matter of the contract, and from which results an obligation upon each of them with regard to that which each is bound to do for the other. There may be a coincidence of more than two wills over the creation of the legal effect”.

⁵⁰ Article 129 of the UAE law CTC states that: “(c) there must be a lawful purpose for the obligations arising out of the contract”.

⁵¹ Article 296 of the UAE CTC states that: “Any condition purporting to provide exemption from liability for a harmful act shall be void”.

iii) Agreement

The presence of the communal understanding of the terms and conditions of the contract is compulsory for the contract to materialize.⁵² Contracts formed by duress or upon deceit are of course void and are not enforceable by law.⁵³ And⁵⁴.

iv) Capacity⁵⁵

The individuals are required to have the necessary capacity for contract formation where the individual age shall be more than 18 years and is mentally fit.⁵⁶ The capacity of the establishment starts once it has been created and its capacity is restricted to the listed activities in the commercial license.⁵⁷

5.2.3 The contractual correlation

It is important to elucidate the contractual obligations of both the project manager and the employer and that is achievable by understanding the legal relationship between both as documented in the service contract, the following paragraphs highlight various legal natures of the contract: -

i) Agency contract

The agency contract is a fiduciary relationship created by an agency agreement in which the first party (the principal) has no objection that the actions of the second party (the agent) bind him to agreements concluded by the agent as if it (the agreements) had been performed by himself (the principal) in the first place.

⁵² Article 129 (a) of the UAE CTC states that: “The necessary elements for the making of a contract are:-

(a) that the two parties to the contract should agree upon the essential elements”.

⁵³ Article 182 of the UAE CTC states that: “A person who exercises either kind of duress to conclude a contract may not enforce his contract, but the contract will be valid if the victim or his heirs so permit after the threat has ceased, either expressly or by their acts.

⁵⁴ Article 187 of the UAE CTC states that: “If one of the contracting parties makes a misrepresentation to the other and it transpires that the contract was concluded by a gross cheat, the person so misled may cancel the contract”.

⁵⁵ Article 157 of the UAE CTC states that: “Every person shall have capacity to contract unless that capacity is taken from him or restricted by operation of law”.

⁵⁶ Article 168 (1) of the UAE CTC states that: “Minors, insane persons and imbeciles shall be ipso facto under a restriction”.

⁵⁷ Article 93 (2) of the UAE CTC states that: “b - legal capacity within the limits laid down by the document establishing it, or as laid down by law”.

Therefore, the agency is considered to be a resilient invention of a contractual agreement between two parties.

Article 924 of the UAE CTC (Contract of agency) describes the agency to be⁵⁸. Article 925 listed the conditions to be met for the agency contract to be valid.⁵⁹

In construction industry and as explained earlier, the project manager performing the role of the contract administrator as an agent is contractually authorized to create a legal relationship on behalf of the employer with the contractor. However, when the project manager's contract with the employer empowers him as a contract administrator to undertake particular actions, this essentially involves authority to work out such influence and power. Additionally, there will be an implied authority for the project manager to perform other activities sensibly essential and supplementary to the matters for which a definite authority has been granted in the contract.⁶⁰ In FIDIC Red Book 1999, Clause 3 is emphasizing on the fact that the engineer is considered to act for the employer whilst performing duties or implementing certain authorities whether expressed or implied in the contract.⁶¹ Therefore, when the project manager is the contract administrator rather than the engineer, the same rule applies to the project manager.

Consequently, and to avoid the employer being bound, it is imperative to inform the contractor about any limitations of the project manager's authority. Practically, there are restrictions to the project manager's authority in performing functions which are essential for the efficient operation of the employer's contract with the contractor such as approving the extension of time, needless to say that these

⁵⁸ Article 924 of the UAE CTC states that: "Agency is a contract whereby the principal puts another person in the place of himself in an ascertained, permitted dealing".

⁵⁹ Article 925 of the UAE CTC states that: "(1) The following conditions must be satisfied for an agency to be valid:-(a) the principal has the right to deal himself in the matter which he delegates; (b) the agent is not prohibited in dealing in the matter delegated to him; and (c) the subject matter of the agency must be ascertained, and must be such as is capable of being performed by proxy".

⁶⁰ Article 931 of the UAE CTC states that: "By virtue of the contract of agency the agent shall have the power to conduct dealings within the scope of the agency and may not go beyond those limits save as may result in a greater benefit to the principal".

⁶¹ FIDIC Red Book 1999 Clause 3 stated that: "... (a) whenever carrying out duties or exercising authority, specified or implied by the contract, the engineer shall deemed to act for the employer".

limitation in the project manager's power must be documented plainly in the project management service contract with the employer.

ii) Contract of Sale

The contract of sale is one type of contracts in which the possession of belongings or the monetary rights are transferred for money. Usually and as long as the subject matter is legal and conforms with public order and morality, the law does not deny such transfer. Article 489 of the UAE CTC defined the sale contract as.⁶²

There are certain resemblances between the project management consultancy service contract and the contract of sale where the intellectual work/service provided by the project manager has a monetary value. Nevertheless, the contract between the project manager and the employer is for services to be provided and not to sell it unless the employer requested for these services to be shifted to his possession and documented in the contract.

iii) Contract of Muqawala

Contract of Muqawala has been defined under Article 872 of the UAE CTC as⁶³, it is clear from this definition(... *to make a thing or to perform work...*) that the project management service contract is a Muqawala contract since the intellectual services are considered to be the objective of the Muqawala contract. However, the project management contract has certain characteristics which differ from other Muqawala contracts.

Therefore, the Muqawala contract has the ability to be implemented on various types of contracts where each type has its own characteristics but the main outlines of Muqawala contracts remain. Additionally, there are certain matches between Muqawala contract and project management service contract where both are consensual and commutative contracts.

⁶² Article 489 of the UAE CTC stated that: "A sale is the exchange of non-money property for money".

⁶³ Article 872 of the UAE CTC stated that: "A muqawala is a contract whereby one of the parties thereto undertakes to make a thing or to perform work in consideration which the other party undertakes to provide".

5.2.4 Example from the region; the project manager's legal situation under Qatari law

The project manager profession under Qatari law is controlled by law No.19 of 2005 amended by law No. 2 of 2014 (Engineering Law) which is the same law that legalises the practise of the engineering profession. Article 1 provides that.⁶⁴

The project management has been confirmed to be one of the regulated engineering profession under Article 8 of the Executive Regulations of the Engineering Law and also regulated by the Admission Committee of Engineers Counselling Office at the Ministry of Municipality and Urban Planning.

Under Article 14 of the Engineering Law, the project manager will be requested to assume an oath before the Engineering Committee⁶⁵. Under Article 17 of the same law the project managers are forbidden from carrying out activities that contradict with their line of work.⁶⁶

What about the duty of care?

The contracting parties are free to decide the necessary standard of care that should be incorporated in the service contract. However, if an explicit standard of care is absent from the contract, the substantive law of the contract will be determining the situation. Under Article 253 of the civil code, law No. 22 of 2004 stipulated that.⁶⁷

⁶⁴ Article 1 of Qatari law No.19 of 2005 (Engineering Law) provides that: "Engineering Consultancies means the works of preparing architectural and constructional drawings, diagrams, designs, surveying and diagramming; supervision of performance; giving advice; conducting feasibility studies; estimating costs and computing quantities; and managing projects in the various engineering professions."

⁶⁵ Article 14 under the Engineering Law states that: "The engineer whose name has been enrolled in the Register of Engineers may not practice the profession except after taking an oath before the Committee in the following form:

"I swear by Allah Almighty to perform my work with honour and honesty and to maintain the secrecy of the profession and to respect its morals and traditions. The taking of the oath shall be recorded in the minutes of the Committee's meeting."

⁶⁶ Article 17 under the Engineering Law states that: "The owners of the Engineering Consultancy Offices, the partners thereof and the engineers working therein, shall be prohibited from carrying out contracting works, from trading in building materials or other materials related to the execution of projects of any size or kind or in any other profession conflicting with their profession, or from seeking to obtain any work of their profession in a manner inconsistent with their profession's ethics or traditions."

⁶⁷ Article 253 of law No. 22 of 2004 (Qatari Civil Code) stated that: "1 - Where the obligor is required to maintain or manage a thing or to act carefully in the performance of his obligation, he shall have performed his obligation if he uses reasonable care, even where the intended purpose is

Additionally, the project manager practising his profession in Qatar shall be giving the necessary consideration and care to law No 11 of 2004 (Penal Code) in respect of health and safety law. The project manager could be held liable under the civil code or Labour law No. 14 of 2004.⁶⁸ Based on this law, if the project management company breached the labour law which results in affecting negatively the health and safety of its employee, the project management company will be held liable and accountable for such breach.

5.3 The professional liability of the project manager

The project manager has to fulfill his contractual obligations as stipulated in his contract with the employer, otherwise he will be held accountable for the negligent exercise of such obligations under his dual role as an agent or as independent certifier. The contract administrator will not be granted any immunity from being held liable for acts involving certifications, however, in particular cases and contracts some of his acts could be considered having a judicial nature. Additionally, if the project manager/contract administrator does not have the authority to perform certain acts, he will be held accountable for breach of authority where by virtue of the main contract the employer will be held liable.

There are two areas of liability of particular concern which are liability for breach of contract which falls under the contract law and liability for negligence which falls under law of tort.

5.3.1 Duties of Care

i) Duties of care in execution the contractual obligations/duties to the employer

The project manager is required to adhere to certain sensible level of care, diligence, and skills in conducting his contractual services and that there is no higher obligation other than this duty. Under the UAE CTC, Article 283 stated that⁶⁹ and

not achieved, unless the law or agreement provides otherwise. 2 - At all times, the obligor shall be liable for any fraud or gross negligence committed by him.”

⁶⁸ Qatari Labor Law No. 14 for the year 2004.

⁶⁹ Article 283 of the UAE CTC stated that: “(1) Harm may be direct or consequential. (2) If the harm is direct, it must unconditionally be made good, and if it is consequential there must be a wrongful or deliberate element and the act must have led to the damage”.

Article 284 stated that⁷⁰. Naturally, the reimbursement of the damages occurred shall be calculated based on the extent of the harm happened to the victim and that any direct loss of earnings resulted as a natural consequence of the damaging act shall be included in the calculations.⁷¹ Refer to Article 106 and Article 282 of the same UAE law.⁷²

ii) Duty of care in the wrongdoing of negligence under the law of Tort either to the employer or to a third party

In cases where there is existing contractual relationship with the employer, the project manager owes his employer a concurrent duty of care in tort as a general rule and not as a matter of standard for the fact that the tortious obligation does not purely result from the contractual connection between the contracting parties but also from the industry practices.

Moreover, under law of tort, professionals in general and project managers/ contract administrators in particular may suffer liability to third parties⁷³ and under certain circumstances could be held liable for negligent misstatement.⁷⁴ In *Pacific Associates vs. Baxter*⁷⁵ the contractor wanted compensation from the defendant contract administrator who had disapproved the contractor's statement. However, in a following arbitration event the contractor managed to get a portion of his claim ratified and wanted to get the balance from the contract administrator depending on the contract administrator negligent in managing the contract as alleged.

5.4 The project manager's liability for negligence

Construction business is an efficient supporter to the economic improvement of any country. It entails numerous parties involved which have diverse contextual and

⁷⁰ Article 284 of the UAE CTC stated that: "If the harm is both direct and consequential, the rules relating to direct harm shall apply".

⁷¹ Article 292 of the UAE CTC stated that: "In all cases the compensation shall be assessed on the basis the amount of harm suffered by the victim, together with loss of profit, provided that that is a natural result of the harmful act".

⁷² Article 106 (1) of the UAE CTC stated that: "(1) A person shall be held liable for an unlawful exercise of his rights". And Article 282 stated that: "Any harm done to another shall render the actor, even though not a person of discretion, liable to make good the harm".

⁷³ *Murphy vs. Brentwood DC* [19991] 1 A.C 398

⁷⁴ *Hedly Byrne vs. Heller* [1964] A. C 465

⁷⁵ *Pacific Associates vs. Baxter* [1990] 1 Q. B 993

proficiency in projects. Project manager as a front-runner of the project plays significant role in its delivery. Though, people cannot escape making errors or negligence in carrying out certain duty or an assignment. Negligence and Inattention of project manager will be deliberated in providing the superlative achievement of project manager through learning the earlier faults and mistakes.

5.4.1 Negligence Definition

Negligence of the project manager occurs when and where the project manager does not discharge duty of care to other entities and consequently, those entities agonize losses, harms and other possible damages as a result of that negligence. Negligence as well could be found as a delinquency or a misconduct of professionals who were unsuccessful in undertaking their tasks competently. In *Bolam v. Friern Hospital Management Committee*⁷⁶, negligence had been defined as a failure to perform an act that a sensible man under similar situation would do, or the undertaking of an act which a sensible man under similar conditions would refrain from doing it; and if the failure or the performing of that act ends up with injury or damage, then a reason of action has materialized.

Malpractice has been defined as a presentation of negligence wherein liability is ordinarily enacted when professionals did not succeed in exercising the “reasonable care” and the “due diligence” in their practices, and not when they fail in attaining certain outcomes. HM & W. Azlan (1998) indicated that the term negligence is found in three primary senses;

- 1- It may identify the quality of an individual’s behavior when he is negligent whilst performing an action such as crossing a street, driving his car, or when he fails to undertake an action that would protect his child from being injured when leaving him in a playground for instance. The expression negligence in this sense specifies the class and the standard of the behavior.
- 2- Negligence could refer to an individual’s mental component and to the potential effects of his negligent conduct.

⁷⁶ *Bolam v Friern Hospital Management Committee* [1957] 1 WLR 582

- 3- Negligence under the umbrella of tort law enforces a definite standard of care to be provided under certain conditions; which means that it is not permitted to conduct lower than the standard, otherwise reparation the person who has faced losses as a result of the careless action would form a liability. *Donoghue v Stevenson*⁷⁷ is the case that inaugurated the negligence modern law and the test known as the “neighbour test”.

5.4.2 Components of Liability

The project manager in performing his responsibilities to deliver the project successfully and efficiently using tools such as planning, organizing, leading and coordinating cannot be simply being judge to be negligent. There are certain requirements for the plaintiff to prove in order to hold the project manager negligent or in breach of contract. The plaintiff must fulfil the following requirements to create a claim in negligence: ⁷⁸

- 1- The duty of care is owed by the respondent to him under specific circumstances
- 2- The breach of that duty has been materialized.
- 3- The existence of the casual link between the respondent’s conduct and the damage.
- 4- That the damage instigated falls under the scope of the duty.

5.4.3 Areas of Negligence

There are two types of negligence of professionals as stated in Hussein A. (2006) which are the negligence in the execution of the duties and the negligence in providing a statement which is misleading and erroneous statement provided by the

⁷⁷ *Donoghue v Stevenson* [1932] AC 562 in which Lord Atkins stated that: "The rule that you are to love your neighbour becomes in law you must not injure your neighbour; and the lawyer's question "Who is my neighbour?" receives a restricted reply. You must take reasonable care to avoid acts or omissions which you can reasonably foresee would be likely to injure your neighbour. Who then in law is my neighbour? The answer seems to be persons who are so closely and directly affected by my act that I ought reasonably to have them in contemplation as being so affected when I am directing my mind to the acts or omissions which are called in question."

⁷⁸ Sweet J. 2000

project manager to one of the parties involved in the project delivery construction process.

Negligence of the project manager while performing his duties and responsibilities could be described to include what has been included under his scope of work in the contract between him and the project owner/client which could include works such as quality checks on site, design compliance with the brief, delivery of efficient cost plans, preparation of bills of quantities, procurement of contractors and subcontractors, contract administration, providing proper instructions as required, payment certifications and recommendations, and other types of duties could be covered under his scope of works. Project manager is considered negligent when he does not fulfill his contractual obligations in undertaking the tasks assigned to him by contract efficiently and diligently.

There are various examples of project manager's negligence which are examined and discussed in the following sections:

i) Negligence in certifying the works completed or in granting the extension of time

The contract administrator shall be impartial when implementing his professional skills during the issuance of payment certificates or determining the eligibility of the contractor for extension of time. If the employer put any pressure on the contract administrator and influenced his judgment, the contract administrator decision may be held unenforceable.

In *Hickman & Co. vs. Roberts*⁷⁹ the contract between the contractor and the employer stated that the payments to the contractor shall be final and based on the payment certificates issued by the contract administrator, the contractor claimed that the contract administrator had failed in issuing the payment certificates, the contract administrator stated that no payment certificates to be issued without the permission of the employer regardless of his opinion. The House of Lords apprehended that the contract administrator had inadequately allowed the employer

⁷⁹ *Hickman & Co. vs. Roberts* [1913] AC 229

to influence his decision and that the employer cannot depend on the nonexistence of the payment certificate as an excuse not to pay for the contractor.

Will the contract administrator be liable to the contractor for wrong certification?

The contractor may suffer losses if the contract administrator certified less than what he is entitled for or determined wrongly the extension of time that the contractor is eligible for. As such, the contractor may seek to recover his losses from the contract administrator, can he do that? In *Pacific Associates vs. Baxter*⁸⁰ the court confirmed that there is no duty of care between the contract administrator and the contractor and there will be no breach of such duty if the contract administrator failed in certifying the amount which the contractor is entitled for. The court concluded the same decision in *Pacific Associates vs. Baxter* in *Leon Engineering vs. Ka Duk Investment*.⁸¹ However, the contractor administrator was held liable to the contractor in *Day vs. Ost*⁸² for negligent misstatement where a subcontractor had not been paid by the main contractor and the contract administrator have requested the subcontractor to recommence the works assuring him that he will be paid by the main contractor. The subcontractor re –started the works and the main contractor failed to pay him and as a result the contract administrator were held liable for such misstatement.

Will the employer be liable to the contractor for wrong certification by the contract administrator?

Generally, the employer will not be held liable due to the contract administrator mistake in certifying payments to the contractor less than his true entitlement as long as the contract administrator is performing his role independently and impartially unless the employer is fully aware of the contract administrator fault and does not rectify the error. In *BR and EB Cantrell vs. Wright and Fuller*⁸³, the Technology and Construction Court held that the contract administrator has an

⁸⁰ *Pacific Associates vs. Baxter* [1990] 1 QB 993

⁸¹ *Pacific Associates vs. Baxter in Leon Engineering vs. Ka Duk Investment* [1989] 47 BLR 139

⁸² *Day vs. Ost* [1973] 2 NZLR 385

⁸³ *BR and EB Cantrell vs. Wright and Fuller* [2003] BLR 412

obligation to act independently and impartially in line with the power provided to him and if failed to provide the correct certification, the employer has an implied duty to instruct the contract administrator to perform his duties as long as these duties are within the administrator's authority. The Court added that the employer will be in breach of contract with the contractor if he does not intervene to correct the wrong action taken by the contract administrator.

Will the contract administrator be liable to the employer for over certification?

This issue had been a point of discussion and debate until 1974 when the case of *Sutcliffe vs. Thackrah*⁸⁴ sorted out the argument. Before 1974, it was not possible for the employer to sue the contract administrator due to wrong certification as it was believed by the courts that the certifier is performing an arbitral role where a quasi-judicial immunity shall be available to protect him. In 1974 and following *Sutcliffe vs. Thackrah*, the House of Lord took precedence on the previous decision and confirmed that the certifier owes a duty of care for his employer and might be held liable for negligence in undertaking such duty since no immunity will apply.

ii) Negligence in giving advice

The project manager is considered to be negligent in achieving the tasks assigned to him when for instance fails to provide the appropriate and adequate advice to his client on certain issues and matters related to the project and the project delivery processes. For example, the project manager has an obligation to advise his owner about the proper construction material to be used and to warn him about any inappropriate material.

In *Pride Valley Foods v. Hall and Partners*⁸⁵, Pride valley planned to expand their business by building a factory in Durham the country in England. Pride valley had approached Halls and Partners and assigned them as project managers for the factory construction activities and are well recognized as quantity surveyors in the town.

⁸⁴ *Sutcliffe vs. Thackrah* [1974] AC 727

⁸⁵ *Pride Valley Foods v. Hall and Partners* [2001]6 CLR 1, EWCA Civ. 1001

The concern was that Pride valley aimed to maintain the construction cost down and therefore, Hall and Partners had recommended the partitioning works to be constructed of polystyrene panels. However, Halls and Partners had brought-verbally and not in writing- to the client's knowledge the risk associated in using such material in terms of fire rating characteristics and other poor performance criteria.

The polystyrene material had been used to build the factory partitions and unluckily the factory had been on fire which spread to the partitions panels that accelerated the spread of the fire throughout the whole factory to the extent that it was impossible for the firefighters to get inside the factory and set the fire out. As a result, the owner decided to sue the project manager Halls and Partners due to his failure in demonstrating the appropriate level of duty of care and to warn the client when and where required. The project manager stated that they had advised the owner verbally however, the court held that the project manager had not provided his advice in a proper manner and that the advice should be documented in writing.

Nevertheless, the court rejected the owner's claim since he did not consider the project's manager advice albeit had been given orally and alternately preferred to proceed with the inexpensive material by using the polystyrene panel sheets.

What if in the previous case the project manager failed to provide any advice to the owner regarding the flammable material intended to be used? If that was the case then what is so called the project managers 'contributory negligence to the project will be considered and in one similar cases the court held that fifty percent of the losses occurred to the owner must be compensated by the project manager who failed to take the necessary preventive measures taking into consideration the fundamental role that the project manager play in coordinating and supervising the project delivery processes.

iii) Negligence in carrying out his duty of care

In certain cases the project manager does not appreciate and realize clearly that there are definite issues which shall remain under his remit such as the ones discussed in the following two cases;

Case A: *Pozzolanic Lytag Ltd v. Bryan Hobson Associates (BHA)* [1998]⁸⁶

The owner is Pozzolanic Lytag who assigned BHAs as a project manager in addition to their role as the project engineer responsible for the project design and the construction supervision. Not long after the project had been constructed and completed, the portion of the works which was designed by the contractor collapsed, this incident gave immediate rise to the project insurances availability and unfortunately found that there were no insurances in place to protect the project either during its construction stage or when it has been completed.

Therefore, the owner Pozzolanic Lytag accused the project manager BHAs for not having the right insurances secured and for an appropriate period of time. However, the project managers stated that they were not aware that securing the project insurance is falling under their responsibilities and that their experience in insurances is quite limited. BHAs being the project manager should have been more cautious about the owner's interest and should have presented higher level of commitment in practicing his duty of care towards the owner's interest although the project managers were not experts in insurances generally. This is one of the challenges that the project managers occasionally found themselves in front of. The court in this case held that the project managers are liable for not fulfilling their obligations in providing their duty of care despite lacking the expertise of insurance business.

Case (B): *Chesham Properties Ltd v. Bucknall Austin Project Management Services* [1996]⁸⁷

The project manager Bucknall Austin had been appointed by the owner Chesham Property to manage the delivery of a project known as the Royal Court House in London. In this case, the contractor had been granted an extension of time despite being allegedly not eligible for such extension but to cover up the project managers and the professional team's failure. Additionally, the owner found that the project had run out of budget and time and that the project manager had breached the

⁸⁶ *Pozzolanic Lytag Ltd v. Bryan Hobson Associates* [1999] Lloyd's Rep PN 125

⁸⁷ *Chesham Properties Ltd v. Bucknall Austin Project Management Services* [1996] 82 BLR 92

contract and found to be negligent in carrying out his duties and responsibilities and that the project manager was under a duty to warn the owner about the performance deficits and insufficiencies of other parties involved in the project.

Consequently, the owner sued the project manager and the entire professional team where the court held that the project manager was negligent since he failed in reporting the deficiencies of the professional team to the owner keeping in mind the duty of care he owes the owner

iv) Negligence in supervision or inspection

Project managers who are architects, engineers, or quantity surveyors in profession, have a duty to warn and to highlight out any possibilities for problems or shortfalls that may result due to the non-compliance of the contractor's works with the technical specification and best engineering practices. Of course, protecting the employer's interest and completing the project successfully are the motives behind this duty to warn.

The professional project manager who is an architect, engineer, or quantity surveyor should be having generally the technical capability, the practical experience, and the required competency to undertake work inspections and ensure compliance with project specification. The professional project managers could be held liable for damages and harms suffered by the employer.

v) Negligence in selecting contractor

Selecting and recommending contractors to the employer for potential consideration and involvement in the project is one of the key responsibilities of the project manager which should be performed and carried out professionally with due diligences exercises in place. Negligence in achieving the goal of this task- which is the selection of the capable contractors to undertake certain works – means the contractor's failure to implement reasonable and sensible methodology in shortlisting the right candidates and contractors.

For the project manager to complete this task successfully, a long list of potential contractors proposed by the project manager should be discussed and agreed with

the employer. Once agreed, the project manager will be issuing a prequalification questionnaires to the proposed contractors, the questionnaires will be requesting the contractors to respond to a wide variety of questions which cover various numbers of topics.

The responses to these questionnaires will be providing the project manager with an overall feel of the capabilities and the strength of each company. The questionnaires will be covering areas such as the financial capabilities of the proposed companies, the human resources capabilities, the design and engineering capabilities, the overall experience, similar projects completed, in addition to other relevant questions. Once the responses to the questionnaires received, the project manager will be scoring against each contractor's responses and will position them in ranking order for further discussion with the employer in order to agree a shortlist out of the long one for the upcoming tendering process.

PREQUALIFICATION

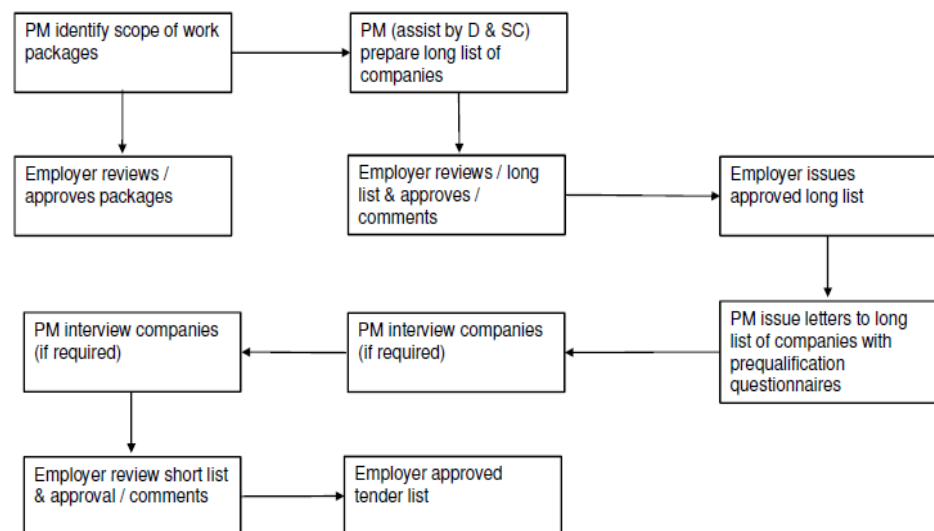


Illustration No.3_ Prequalification Process_ Flow Chart

In *Valerie Pratt v. George J. Hill Associated*⁸⁸, the claimant involved the respondent project manager in one of his project. Depending on the project manager advice as to his dependability and fidelity, the claimant employer appointed a contractor who

⁸⁸ *Valerie Pratt v. George J. Hill Associated* (1987) CA 38 BLR 25

later became bankrupt and insolvent. The employer demanded compensations for misrepresentation together with totalities remunerated under certificates for faulty works and expenditures incurred in an adjudication process against the contractor. The court held that the project manager had not fulfilled his duty of care since he had not undertaken the contractor's prequalification diligently by advising the employer to engage a contractor who was potentially exposed to insolvency.⁸⁹

vi) Negligence in recommending the appropriate main works contract, the procurement strategy, and the provisional sums procurement.

One of the project manager duties is to advise the employer on the most appropriate contract and procurement strategy. The objective of the procurement strategy is to deliver the development in an optimized period, without attracting unnecessary cost or risk. The project manager should provide proposals which show the optimum balance between programme and cost, whilst addressing logistical and market constraints.⁹⁰

The project manager in implementing the duty of care and utilizing his best professional skills in advising the employer will be required to advise the employer to adopt a certain form of contract or to refrain from using others since it will not be in favor of the employer's interest. The project manager will not be advising on the form of contract to be used but will also providing his advice on amendments required to certain terms and conditions of the contract. Additionally, the project manager should not be recommending the assignment of any nominated subcontractor unless all required guarantees and warranties have been submitted to the employer to accomplish his scope of works to the time and the quality specified.

⁸⁹ http://158.132.107.165/lawbook/html/t3_D_6.html

⁹⁰ T Elliot, 'Contract Administrators: The Obligation of Impartiality and Liability for Incorrect Certification' Keating Chambers 20 October 2006.

Procurement of Provisional Sums

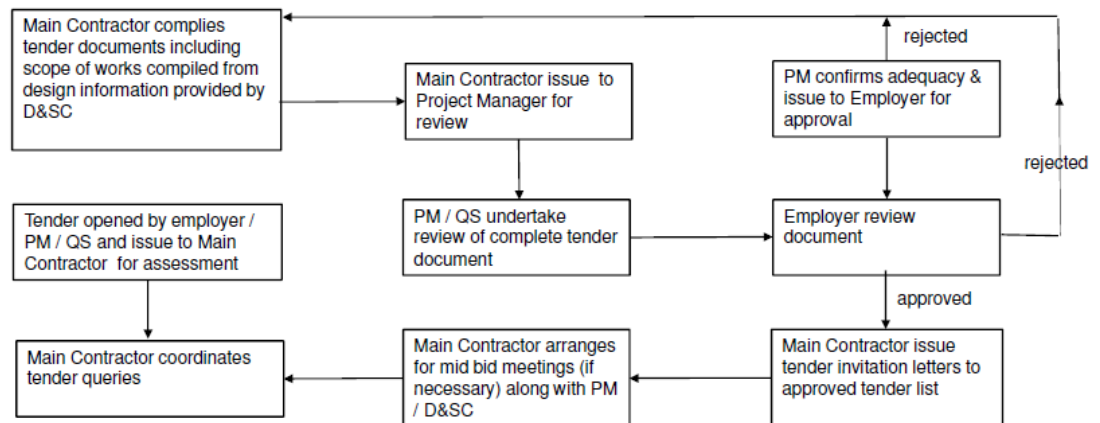


Illustration No. 4_ Procurement of Provisional Sums_ Flow Chart

vii) Negligence in administering and managing building contract

In *Wilks vs. Thingoe Rural District Council*⁹¹, the project manager had been held liable and negligent since he had approved certain expenditure without obtaining the preapproval of the employer. The court held that even if the project manager had been assigned by the employer that does not mean the project manager will be authorized to exercise his unrestricted supremacy and power without reverting back to the employer beforehand.

5.4.4 Results of project manager's negligence

The project manager role as we examined so far is a very crucial role due to its contractual and administrative characteristics involved. Therefore, the project manager negligence in performing his duties will be resulting in a significant negative impacts either to the project itself or to the wide range of stakeholders involved, and ultimately to the overall construction industry. However, the impact's magnitude varies from low to high depending on the extent of the negligent act itself.

The following impacts are potential straightforward fallouts from the project manager's negligence:-

⁹¹ *Wilks vs. Thingoe Rural District Council* [1984] 164 EG 86

i) Damages

As a result of the project manager's breach of his duty, there will be damages and losses which are quantifiable in its nature. For instance, when the project manager is providing his employer with a wrong declaration or when he is found to be negligent whilst furnishing an advice, an immediate knock on effect on the project budget may occur which will donate to damages and losses of various types.

There are two types of losses; distinct and general, while the former signifies the ones which are measurable such as property damages, the latter are the ones which are non-measurable such as the pain and the discomfort suffered by the losing party.

Similar to all other professionals such as the architects and the quantity surveyors, the remedy for the project manager's breach of duties is an award of compensations and damages. Under definite conditions, the employer may deny the payment of the project manager's consultancy fees where his negligence could be considered to be equivalent to a non-performance situation.

ii) Injury

There are several cases on which the project manager had been held liable for his negligence in ensuring that the workplace is safe for the workforce to perform their tasks without being injured.

In one of the tragedy cases happened in Toronto on the 24th of December 2009, the platform which were holding five workers pouring concrete at the balcony located at level thirteen of a high rise tower had collapsed resulting in the death of four workers and serious injuries to the fifth worker. The court held in *R. vs. Metron Construction Corporate*⁹² that employer liable and ordered for an amount of \$ 750,000 to be paid by the employer who found to be guilty for a negligence triggering death. As a consequence, the project manager of the employer at the

⁹² *R. vs. Metron Construction Corporate* [2013] ONCA 541

project in *R. vs. Vadim Kazenelson*⁹³ were sentenced for criminal negligence caused death for four workers and serious injury to the fifth worker.

However, for the project manager to be convicted, the court should be proving that:-

- a) The project manager had the authority to direct the workers on how the works should be performed.
- b) The project manager failed to take the necessary preventive measures.
- c) And that the harm or the death caused by the act or the omission of the project manager.

iii) Claims

Claims against the project managers are not necessarily materialize and held them liable as we have found in *Pride Valley Foods v. Hall and Partners* discussed earlier under [5.4.3 (ii) - Negligence in giving advice].

⁹³ *R. vs. Vadim Kazenelson* [2015] ONSC 3639

6.0 CHAPTER SIX – CONCLUSION AND RECOMMENDATIONS

6.1 CONCLUSION

- Project Management and its rehearsal have come to be crucial since it form the source of what has been accomplished during the course of a project. Therefore, the success of any project is a true reflect to the level of the competency of the project managers involved.
- Having in mind the fundamental role of the project manager in the delivery process of the project and the sensitive responsibilities of the project manager which have been increased exponentially. Therefore, the project manager's professional duties are certainly onerous and burdensome in nature which must be borne by the project manager to understand the importance of his role in the project.
- The responsibilities of the project manager necessitate him to be technically capable in his area of expertise since this will definitely minimize the possibility of being professionally liable for one of the contracting parties.
- Licensed project manager or chartered project manager is considered to be a valuable track for the profession of project management to trail, supposing that the licensing authority(s) is agreed upon and standards are in place.
- The project manager's scope of works depends on the particular conditions of their contract with the employer. Nowadays, it is common to find the project manager performing the role of the contract administrator and in many cases the project quantity surveyor. Therefore, the project manager is performing dual roles, the first is his role as an agent of the employer when undertaking certain works such as issuing the instructions to the contractor or ordering variation works, and the second one is his role as a decision maker when certifying the works completed, issuing the payment certificates, and determining whether the contractor is eligible to time extension or not.
- When the project manager is performing the role of the certifier as one of his functions being the contract administrator, he must be impartial and

independent. However, the project manager is not required to implement the rules of natural justice.

- If the project manager negligently issued an over certified payment certification to the contractor he might be held accountable to the employer who appoint him. However, the project manager will not be held liable to the contractor in case he under certified the works completed unless he provided misleading statement to the contractor.
- The engineer's role as documented in the FIDIC Red Book 1999 is no more applicable when the project manager is undertaking the role of the contract administrator acting as an employer's agent and a certifier. Therefore, it is necessary to amend some Clauses and Sub – Clauses to introduce the project manager to the contract and to alter the engineer's role to be solely involved in pure technical issues and supervision works.

6.2 RECOMMENDATIONS

- A specific statutory procedures and guidelines for the project management services required to be established and developed since the current legal provisions do not cover the private features of the project manager duties as discussed in this dissertation.
- The UAE Society of Engineers and the authorities having jurisdiction requested to launch and introduce a code of conduct for project managers to adhere to. As a result, authorities will be having an overall control on the individuals and organisations practising this profession.
- Ensure minimum level of capability based on knowledge and practical experience, backed up with the necessary and proper education.
- By having the project manager profession regulated by governmental entities, this will form the starting point for the law system to incorporate this new profession explicitly in its articles and regulate its rights and obligations.
- Project managers are recommended to take certain steps and mitigation to reduce the risk's magnitude of getting a claim such as the followings:-

- Project managers should not rely completely on their own information and experience in certain specialised area and should be seeking and recommending specialist examination if necessary.
- Make sure that senior management constantly review and check reports and all other important deliverables before being issued formally to others involved in the project.
- If a claim has taken place, project managers should refer it instantaneously to their insurer and should not try to resolve it themselves as the consequence could be worse.
- Project managers are advised to maintain a record and journal system which recording all events and dates could potentially lead to liability.
- Keep tracking the changes in legislation and market practices and notify the employers accordingly.
- Maintain the records of the impartial information used when practising any professional judgment.
- Project manager should ensure that the official contract with the employer is completed at the earliest possible opportunity and their scope of works and liabilities are well attended.
- Maintain an updated version of the projects manager's code of practices and previous lessons learnt.
- The project management profession is recommended to be given the attention necessary due to the sensitive role played by the project managers in delivering the projects. Projects manager must be trained and made aware of their legal standing and professional liability

7.0 BIBLIOGRAPHY

Books

- 1- The Hon Sir Vivian Ramsey; S. Furst, QC, *Keating on Construction Contracts* (10th edn. Sweet& Maxwell, 2016).
- 2- D Bolles and S Fahrenkrog, *A guide to the Project Management Body of Knowledge* (3rd edition, Project Management Institute 2004)
- 3- J Uff, *Construction Law* (11th Edition, Sweet& Maxwell, London, 2013)
- 4- J. Adriaanse, *Construction Contract Law* (3rd edn. Palgrave Macmillan 2010)
- 5- S Deakin, A Johnston and B Markesinis, *Tort law* (7th Edition, Oxford 2012)
- 6- A Mullis & K Oliphant, *Torts* (third Edition, Palgrave Macmillan, 2003)
- 7- O Elton, *The Emirates Law In Practice* (1st Dubai, UAE, 2009)
- 8- R Morledge, A Smith and D Kashiwag, *Building Procurement* (RICS and Blackwell, US & UK 2008)
- 9- E Peel, *The law of contract* (12th Edition, Thomson Reuters London 2007)
- 10- D Chappell, *Construction Contracts* (Spon Press, London and New York 2011)
- 11- CIOB, *Code of Practice for Project Management for Construction and Development* (3rd edn, Blackwell publishing 2002).
- 12- CIOB, *Code of Practice for Project Management for Construction and Development* (4th edn, Blackwell publishing 2010).
- 13- Conditions of Contract for Construction Red Book (1st edition, FIDIC 1999)

Journal, Command Papers, and Law Reports

- 1- T Seymour and S Hussein, 'The History of Project Management' International Journal of Management and Information System- 3rd Quarter (2014), Volume 18, Number 4.

- 2- C Anyanwu, 'The Role of Building Construction Project Team Members in Building Projects Delivery' Volume 14, Issue 1 (Sep. – Oct.2013), PP 30 – 34
- 3- T Elliot, 'Contract Administrators: The Obligation of Impartiality and Liability for Incorrect Certification' Keating Chambers 20 October 2006
- 4- Keating Chambers, 'Project Managers Duties and Fee Disputes'

Electronic Sources

- 1- Clerk and Lindsell on Tort. 'Professional Liability' 21st Edition, chapter 10, Available at Westlaw UK,
<http://login.westlaw.co.uk/maf/wluk/app/document?src=doc&linktype=ref&context=34&crum-action...> Accessed on 13 April 2016.
- 2- P Weaver, 'THE ORIGINS OF MODERN PROJECT MANAGEMENT' (15 – 18 April 2007), available at
http://www.mosaicprojects.com.au/PDF_Papers/P050_Origins_of_Modern_PM.pdf /accessed 17 June 2016.
- 3- RICS, 'Project Manager Services', available at
http://www.rics.org/Global/rics_projectmanagerservice.pdf, accessed on 16 June 2016.
- 4- RICS, 'Contract administration ', available at
http://www.rics.org/Global/Downloads/Contract_administration_1st_edition_PGguidance_2011.pdf, accessed 16 June 2016.
- 5- RICS, 'Quantity Surveyor Services', available at
http://www.rics.org/Global/Downloads/quantity_surveyor_services_dwl.pdf, accessed on 24 June 2016
- 6- Association of Professional Engineers, Scientists and Managers, Australia APESMA, 'Guide to Professional Liability', available at
http://www.professionalsaustralia.org.au/contractors-consultants/wp-content/uploads/sites/42/2014/07/12-0727_APESMA_Prof_Indemnity_Guide_finalallow-res.pdf, accessed on 13 April 2016

- 7- QBE European Operations, 'Project Specific Professional Liability', available at <http://www.qbeurope.com/documents/uae/qbe%20me%20project%20specific%20wording.pdf>. Accessed on 18 March 2016.
- 8- P Aeberli, 'Tort in Construction', available at <http://www.aeberli.com/uploads/articles/KINGS%20-%20TORT%20IN%20CONSTRUCTION%202011.pdf>, accessed on 12 February 2016.
- 9- E Monastiriotis and A Bodnar, 'Construction Professional Negligence Update' Society of Construction Law, Paper presented on May 2013.
- 10- V Russell, 'Duties and Liabilities of Construction Professionals' Fenwick Elliot, November 2006.
- 11- A Morgan and S Gbedemah, 'How Poor Project Governance Causes Delays' Society of Construction Law, Paper presented on October 2010.
- 12- F O'Farrell QC, 'Professional Negligence in the Construction Field' Society of Construction Law, Paper presented on 29 June 2009.
- 13- N Gould, 'Identifying and managing your legal expectations to avoid pitfalls in an increasingly demanding project role' Fenwick Elliott, July 2011.
- 14- N Gould, 'Project Management: The Liability and Standards Expected of a Project Manager' Fenwick Elliot, July 2011.
- 15- W Gloyn, 'Negligence in the Construction Industry – Is Insurance the Answer?' Society of Construction Law, 4 February 1992.
- 16- G Hamilton, G Byatt, and J Hodgkinson, 'Should Project Managers Be Professionally Licensed or Chartered?' International Project Management Association, June 2012.
- 17- J Lyden, 'Professional Negligence: The Irish and UK Case Law' Society of Construction Law, April 2002.
- 18- J Sher, 'Are You a Professional? Identifying and Managing Risk in Construction Projects' Holman Fenwick Willan, January 2014.

8.0 WORD COUNT

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