



**Substantial Completion/ Practical
Completion in Construction
Contracts**

الإنجاز الإجمالي/ الإنجاز العملي في عقود الإنشاء

By

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Key Words

Adjudication - ADR – AIA – Domestic sub-contractor Beneficial Occupancy – Case Law Dispute Resolution Board – FIDIC – JCT- Latent Defects – minor de minimis work-NEC – Obiter Dictum – Patent Defects – Partial Possession – Project Cycle – RIBA – RICS – Sectional Completion – Time is of Essence – trivial nature

Acronyms

ADR –Alternative Dispute Resolution

AIA – American Institute of Architecture

FIDIC – Federation Internationale des Ingenieurs-Conseils

JCT – Joint Construction Tribunal

LADs-Liquidated Damages

NEC- New Engineering Contracts

PC – Practical Completion

RIBA- Royal Institute of British Architects

RICS – Royal Institute of Chartered Surveyors

SC – Substantial Completion

SFCC-Standard Forms of Construction Contracts

UAE- United Arab Emirates

Abstract

This dissertation examines the issue of Substantial Completion/Practical Completion (SC/PC) which is considered to be one of the most important Project Milestone provisions that is contained in most Forms of Construction Contracts invoking tangible benefits to both contracting parties notwithstanding the ambiguous nature of the term that often give rise to disputes.

The purpose of this dissertation is to bring about an awareness of the significance and important nature of SC/PC as contained in Standard forms of construction contract and due to its importance, how such a provision is misinterpreted by the contracting parties and the party on which decision making powers are conferred. The source of misinterpretation stems from lack of clearly defined terms. This has led to judicial processes at all levels, and numerous discussions amongst Industry Professionals. The matter has long been debated in the Construction Industry and the Law in certain jurisdictions has attempted to define the terms but with a mixed approach as will be seen later on in this Paper.

Decisions of the Courts, in some circumstances, have been such that have given rise to discussions and mixed arguments amongst many commentators. The evidence indicate that there is widespread perception amongst Industry Professionals of injustice arising out of ambiguities that exist in Construction contracts concerning SC/PC and the need for clearly defining its meaning becomes more and more pronounced.

This research paper therefore encompasses reasoned arguments regarding the need for contracting parties to be aware of the risks involved with unclear defined terms. It also highlights the texts within the contract that is prone to misinterpretation and provides an insight for further research for enhancement of Standard Forms of Contract commonly in use within the industry.

It is hoped that this dissertation will provide Industry Professionals a deeper awareness towards the importance of SC/PC as applied in Construction Contracts and perhaps provoke a need for further dialogue and research with the aim of eliminating

ambiguities by providing clarity of the term when entering into contracts which otherwise has proved to have an adversarial effect amongst the contracting parties both in contract and the Law.

الخلاصة

تبحث هذه الرسالة في الإشكاليات المتعلقة بمصطلح الإنجاز الإجمالي/ الإنجاز العملي (إ.ج/ إ.ع) و الذي يعتبر النقطة الأكثر أهمية في تحديد متطلبات المشروع المذكورة في نماذج عقود الإنشاءات و ما ينتج من فوائد جمة على طرفي العقد تخدم مصالح كل منهما على الرغم من طبيعة المصطلح الغامضة و التي تؤدي غالباً إلى نشوء النزاعات.

إن الهدف من هذه الرسالة لجلب مزيد من الوعي حول معنى و أهمية مصطلح إ.ج/ إ.ع كما هو مطبق في النماذج القياسية لعقود الإنشاءات، و نظراً لأهمية المصطلح فقد يسيء طرفا العقد تفسير هذا المصطلح أضف إلى ذلك سوء التفسير من قبل الطرف المخول باتخاذ القرار. ينبع مصدر التفسير الخاطئ من قلة وضوح المصطلحات ما قد أدى إلى إجراءات تقاضي على جميع المستويات و المناقشات العديدة ضمن اختصاصي المهنة.

وقد كانت قرارات المحاكم بعض الأحيان مصدراً للنقاشات و السجلات المختلفة تعقياً على تلك القرارات. يوضح هذا بالدليل الرأس المنتشر بين الخبراء حول نقص العدالة الناجم عن الغموض في عقود الإنشاءات فيما يتعلق بمصطلح إ.ج/ إ.ع والحاجة إلى التعريف بشكل واضح لمعنى المصطلح ليصبح بعدها الأكثر انتشاراً.

تبحث هذه الرسالة في تغطية النقاشات المدعمة بالحجج فيما يتعلق حاجة أطراف العقد ليكونوا أكثر إدراكاً بالمخاطر المتعلقة بالمصطلحات الغير معرفة جيداً. كما تهدف الرسالة إلى كشف بعض النصوص المستخدمة في العقود و التي تكون عرضة لسوء الفهم كما تمهد الطريق لعمل أبحاث إضافية لتحسين نماذج العقود القياسية المستخدمة في الإنشاءات.

إنه من المرجو أن تقدم رسالة البحث هذه لخبراء صناعة الإنشاءات فهماً أعمق لأهمية مصطلحي إ.ج/ إ.ع كما هو مطبق في عقود الإنشاءات و ربما تظهر الحاجة لمزيد من الحوارات و الأبحاث بهدف الحد من الغموض و إظهار مزيد من الوضوح عند إبرام العقود و التي إن لم تكن موجودة سيكون لها تأثير سلبي على أطراف العقد تعاقدياً و قانونياً.

Dedication

I would like to dedicate this dissertation to my daughter Sheliza

Acknowledgement

I would like to express my utmost gratitude and appreciation to Professor Aymen Masadeh, my Course Professor and Dr. Abba Kolo, my Dissertation supervisor for their encouragement and guidance given towards my accomplishment of this dissertation and for the Registrar and the MC for their understanding and patience exhibited over the period of my study.

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In addition my appreciation and thanks go to those who participated in the Survey that enabled me to develop a correlation between the Literature review and their opinion/perception on the matter of Substantial Completion/Practical Completion either based upon their own experiences of having actually encountered related disputes or having knowledge of disputes that have arisen due to unclear definition of SC/PC provisions within Construction Contracts.

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Chapter One

1.0 Introduction

1.1 General Background

Construction Contracts are known to have their fair share of complexities and even when the parties entering into the contract exercise prudence; it is not guaranteed that all factors that emanate from them are free from being contended during its execution.

As Construction Projects are terminal and not indefinite, they have a definitive Project cycle governed by a commencement date and a Substantial Completion/Practical Completion date (SC/PC). Almost all Construction Projects have the element of such time of completion which is dependent on the Employer's Business Strategy and therefore Construction Contracts makes this requirement as one of the most important obligation of the contractor. Failing to fulfil this obligation, the consequences faced by the contractor can be quite severe as often this is tied with the Losses the Employer incurs, in addition to the contractor's continued cost expenditure for care of the works, non-receipt of final payments and imposed penalties for non-timely completion. The underlying issue of whether a construction project has achieved SC/PC completion has long been the source of many disputes within the construction industry.

Therefore, the need for clearer definitions with respect to what constitutes SC/PC cannot be overemphasised. Disputes arising from unclear definitions have found themselves entering into the Courts for judicial decisions based upon the Courts interpretation of the definitions. The underlying issue of lack of clear definition of SC/PC in Construction Contracts is a major concern and has been a subject of continuous debate amongst Industry Professionals and cannot be ignored. Powell-Smith 1989, the R.I.C.S. 1990, Cobb 2000 and Chappel 2002, John Adriaanse 2010 , Keating 2012 all agree that there exists a lack of clear definition.

The meaning of SC/PC in Construction context can perhaps be seen to be realized with Construction Project being incomparable to manufactured product where the latter is a definitive product that if not completed to its extremity of 100%, is not useable or

functional for its intended purpose whilst the former can be useable and functional for all practical purpose as intended even when not 100% completed which in essence is termed as SC/PC as opposed to Completion. Such meaning can be seen to be touched upon by Judge Newey in *Emson Eaterrn v EME Development Ltd (1999)* as will be seen stated in Section 4.2 of this paper.

The fact that achieving SC/PC provides tangible benefits to both contracting parties, as will be seen from Section 2.1 of this paper, it is highly unlikely that either of the contracting parties would argue against reforms for clearer definitions to alleviate disputes that would otherwise arise. The understanding that practical completion has been achieved when the Employer is able to take over the completed works and use them for their intended purpose. These inherently lead to two issues 1) What is the definition of Completed works and 2) What constitutes intended purpose. This therefore has been a subject of many debates and dissenting arguments too in Courts and has been discussed in this paper.

1.2 Aims and Objectives

The aim of this paper is to provide a sense of dire need for circumventing adverse circumstances on the issues related to SC/PC provision, as contained in Construction Contracts, for Contracting parties and Industry Professionals to be emphatically aware of the importance of the doctrine of SC/PC and its implications well in advance of executing a contract. Often, such provision, as existing within standard forms of Contracts, is taken for granted without realisation of its implications in depth when entering into contracts and its importance is only realised when issues arise at the stage of Completion of the project. Such situations become a subject of hindsight when unexpected losses become apparent.

1.3 Significance and Importance of SC/PC in Construction Contract

1.3.1 Introduction

SC/PC is a milestone contained in Construction Contracts which signifies a state of completion of the Works which precedes final/ultimate completion. It bestows, upon the contracting parties, respective tangible benefits and establishes the end and beginning of

certain obligations and liabilities that are significant in nature to the parties. It is therefore considered an important milestone within the Project Cycle.¹ It is conceivable that every possible effort is made by the contracting parties to reach this point in the Project Cycle. Some of the key benefits conferred on the contracting parties on achieving this very important milestone in the Project Cycle are seen to be as follows:

1.3.2 For the Employer

- a) Provides beneficial use of the constructed Works for purpose of carrying out own fit out works, starting operations and earning revenue income.
- b) In addition to the period of attendance to defects prior to Substantial Completion, it triggers off a further period of normally 12 months or as agreed by the parties, known as Defects Liability/rectification Period for the employer to have patent and Latent defects and any minor outstanding works attended by the contractor whilst not depriving the Employer from operations as intended and revenue earning powers.² Extent and type of defects and outstanding works also play a great part in the definition of the term SC/PC as discussed in the latter part of this paper.
- c) It establishes the point beyond which the Employer's rights to employ another contractor and implement recovery of third party contractor costs from the contractor in case of Contractor's refusal to complete the notified outstanding works and patent defects so prescribed in the Taking over certificate and Latent defects which become apparent during the Defects Liability/ Rectification Period.

1.3.3 For the Contractor

- a) The cessation of the Employer's rights to levy LADs on the Contractor.
- b) Receipt of payment that amounts to the full contracted amount save as to last portion of the retention monies and any set offs for outstanding works and defects, if any, notified at SC/PC.

¹ <http://www.aisolutions.co.uk/community/knowledge/topic/741/2001/Practical> Completion (accessed June 6, 2016)

² [http:// www.gnproperty.com/a/property-legislature/building-good-image](http://www.gnproperty.com/a/property-legislature/building-good-image) (accessed June 8, 2016)- "Defects notwithstanding the taking over of the works, it is almost inevitable that the defects will subsequently emerge. Defects must be promptly remedied by the contractor when directed by the employer. Bearing in mind the need to minimise disruption to the employer's business."

- c) To be able to demobilise from Site save as to a smaller team to complete the outstanding works and notified defects within a reasonable time after SC/PC and remedy defects that become apparent during the Defects Liability/notification period which follow SC/PC.
- d) The transfer of care of the Works to the Employer whereby the Contractors All Risk insurance policy ceases to be in effect and the Employer's Property Insurance is invoked.

1.3.4 For Both

It establishes the point beyond which the Employer is generally restricted to instruct any additional or varied works³ and if so instructed, it may entitle the Contractor to carry out such works under separate express agreement.⁴ For both parties

- a) It establishes the beginning of the Defects Liability/Notification period where the employer has an opportunity to have defects rectified within usually a 12 month period after SC/PC and the contractor has the opportunity to attend to defects instead of the employer procuring another contractor to remedy the defects and accordingly imposing monetary deductions as mentioned in which often can be much more than the cost of remedial by the same contractor.
- b) It establishes the beginning of the Decennial Liability for defects threatening the stability of the Structure or partial/full Collapse of the structure (as applied in Civil Law jurisdictions such as UAE).
- c) It is the point beyond which the parties' respective rights and obligations as stipulated in the contract relevant to Defects liability/Rectification Period are invoked. That means the contractor's obligation to rectify all patent defects within a specified time and Latent defects and the Employer's obligations for payments due to the contractor.

³ FIDIC 1999 YELLOW BOOK SUB CLAUSE 13.1-Right to Vary "Variations may be initiated by the Engineer at any time prior to issuing the Taking over certificate for the Works....."

⁴ Roger Knowles -200 Contractual Problems and ther Solutions (3rd edn., 2012 Wiley-Blackwell) – Hudson's Building and Engineering Contracts 11th edition, at paragraph 4.182 states the following as regards to SJ &MM Price Ltd. v Milner (1968) that "...Variations as well as original contract work cannot be instructed after practical completion of the remainder of the work in the absence of express provision, unless ofcourse the contractor is willing to carry them out..."

- d) It establishes the point beyond which the termination recourse is available to all parties should the other party be insolvent which is also applicable when the works are being carried out before SC/PC.

With above noted benefits, it is quite understandable that the Contracting parties strive to fulfil their respective obligations towards the achievement of SC/PC and will go to all ends to protect against losing the resulting benefits. However, to full fill their obligations, the parties must familiarise themselves of their obligations and the clear meaning of obligatory terms incorporated in the Contract to achieve SC/PC.

With such identified significance and importance, it then becomes equally important to fully understand the doctrine of SC/PC. As stated in the following section, the list of key questions are considered as being most appropriate and important for the contracting parties to address prior to entering into a construction contracts. Accordingly, this dissertation will focus on these key questions and address them in appropriate Chapters and sections as explained below:1.3.5

1.4 Research Questions

In order to address the aforementioned issues, this dissertation seeks to answer the following research questions.

- Q1) What provisions are made in the Standard Forms of Contract with respect to SC/PC and whether such contracts define SC/PC adequately? Chapter 2 of this paper can be seen to be of relevance for this Question.
- Q2) Who, contractually, is entrusted to define and determine that SC/PC is achieved and whether or not such determinations are made impartially? Chapter 3 of this paper can be seen to be of relevance for this Question.
- Q3) How are disputes related to SC/PC been dealt with by the Courts? Chapter 4 of this paper can be seen to be of relevance for this Question.
- Q4) What is the general opinion of Industry Professionals with respect to the issue of SC/PC through research survey? In addition to published literature by commentators and industry professionals, Chapter 5 of this paper can be seen to be of relevance for this Question.

1.5 Research Methodology

The research methodology that will be adopted in this paper will be a combination of doctrinal and quantitative methods. In respect of doctrinal methodology, the examination of the legal principles applicable to the issue of SC/PC will be undertaken with an intent to provide an analysis of the relationship between the legal Authority by way of case law and doctrine based upon contractual circumstances encountered by the contracting parties in construction on the issue of SC/PC⁵. The quantitative methodology will involve gathering responses and opinions to a set of relevant interview questionnaires, developed from Literature review and my experience, as a contract manager, from various Industry professionals, in order to formulate a statistical base on the general sense of perception from such professionals on the issues related to SC/PC⁶.

Accordingly, the research will initially be conducted through Literature review (Books, Internet, Law journals, Law Reports etc.) with an intention to bring about an awareness and understanding of the issues related to SC/PC and how it is perceived in the Construction Industry with regards to its significance or importance, its application in Construction Contracts and the disputes that have arisen between the contracting parties with reference to case law and articulation of my own experience as a Contracts Manager within the Employer's organization.

Additionally, the research will include interviews with several individuals associated with Law and Construction who are practicing Construction lawyers, arbitrators, Claims Experts, and professionals working with Developers/Employers, Engineering Consultants and Construction Contractors through survey Questionnaires in order to formulate a general sense of perception from such relevant professionals on the issues related to SC/PC.

⁵ T. Hutchinson & N. Duncan, Defining and Describing what we do: Doctrinal Legal Research, Citation:17 Deakin Law Review. 83 2012 <https://ojs.deakin.edu.au/index.php/dlr/article/view/70/75> (accessed April 10, 2016)

⁶ Adar Ben-Ellyahu, PHD. [October 13, 2014] <http://www.chronicle.umbmentoring.org/on-methods-whats-the-difference-between-qualitative-and-quantitative-approaches/> - (accessed June 11, 2016)

The format of the Questionnaire shall adopt the form that will enable the respondents to spend as little as possible time to answer due to their understandably busy nature of works.

Responses sought from respondents will be in the form shown below which includes a given opportunity for additional comments if they so wish to make:

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Other Comments if any:

The full list of Questions together with statistical presentation of the responses is appended to this dissertation as Appendix A.

1.6 Dissertation Structure

The dissertation is divided into Six Chapters and sub-sections and the following provides a brief synopsis of each of the Six Chapters.

1. Chapter one provides an overview of the research by providing a general background on the issue of SC/PC, its significance and importance as applied in Construction Contracts, the research questions and methodology adopted in this research paper.
2. Chapter two discusses the adoption of the term SC/PC in various Standard Forms of Construction Contracts (e.g. FIDIC'87, FIDIC'99, NEC, AIA) with relevant clauses and highlights the ambiguities that still exist within them in respect of the definition of SC/PC.
3. Chapter three examines the dilemma that is faced by decisions made by the party to whom such powers are conferred especially with ambiguous terms that exist in respect of SC/PC.
4. Chapter four notes the limitations of published case law in the UAE and therefore discusses more on the Case Law, under the common Law, where the courts have attempted to define SC/PC, with mixed approach, whilst adjudicating disputes arising out of Standard Forms of Contract. This chapter

also includes discussion on partial possession of the works by the Employer which have also been subjected to many court adjudications.

5. Chapter five provides the analysis of survey research implemented through distribution of questionnaires to Engineering, Construction and legal Professionals with regards to SC/PC. The survey is intended to acquire their opinion on the issue of SC/PC in order to validate some of the discussions presented in this paper and to obtain a sense of whether or not there lay a need for further research considering the issues that have emanated from current definition of SC/PC in SFCC.
6. Chapter six presents the Conclusion of the paper and elicits the need for further research and study with respect to SC/PC provisions contained in Construction Contracts with the aim of avoiding or minimising disputes and legal battles that have occurred and continue to occur between the contracting parties.

Chapter Two - SC/PC Provisions under various Standard Forms of Construction Contracts. (SFCC)

2.0 Introduction

There are various types of SFCCs' developed by different bodies in different parts of the World and the most popular amongst them are the ICE, FIDIC, JCT, NEC AIA amongst others which are adopted in various parts of the World and in bespoke form which are generally rooted from some of the aforementioned SFCCs'.

Whilst FIDIC form of Contracts are generally the most popular used internationally including the United Arab Emirates, ICE, JCT and NEC forms of Contract as originating from the UK are significantly used in the UK and most Commonwealth Countries and NEC forms are now also seen to be entering into Construction Contracts internationally. Throughout the Middle East, FIDIC 1987 form of contract remained predominantly the choice of Contract, however the trend, particularly in the UAE is seen to be moving gradually towards the adoption of FIDIC 1999 form of Contract in addition to the FIDIC 1987.⁷

The inference that Construction Works are considered substantially completed or practically completed within the context of having achieved SC/PC can be seen in the language adopted in most Standard Forms of Construction contracts and some of the arguable issues that are prevalent in such Forms of Contract are discussed below.

Accordingly, in the next five sub sections, we highlight how SC/PC is addressed in some main standard forms of contracts.

2.1 FIDIC 1987 Suite of Standard Form of Contract

In FIDIC 1987 4th Edition Contract Form, sub-clause 48.1 refers to substantial completion, and not entire completion as in case of manufactured products. The Sub-clause states:

⁷ <http://www.emirates247.com/eb247/companies-markets/construction/slow-transition-to-fidic-99-contract-forms-in-the-uae-2010-01-28-1.5756> (accessed July 2, 2016)

“.....When the whole of the Works have been substantially completed and have satisfactorily passed any Tests on Completion prescribed by the Contract, the Contractor may give a notice to that effect to the Engineer, with a copy to the Employer, accompanied by a written undertaking to finish with due expedition any outstanding work during the Defects Liability Period. Such notice and undertaking shall be deemed to be a request by the Contractor for the Engineer to issue a Taking-Over Certificate in respect of the Work. The Engineer shall, within 21 days of the date of delivery of such notice and after consultation with the Employer, either issue to the Contractor, with a copy to the Employer, a Taking-Over Certificate, stating the date on which, in his opinion, the Works were substantially completed in accordance with the Contract, or give instructions in writing to the Contractor specifying all the work which, in the Engineer's opinion, is required to be done by the Contractor before the issue of such Certificate. The Engineer shall also notify the Contractor of any defects in the Works affecting substantial completion that may appear after such instructions and before completion of the Works specified therein. The Contractor shall be entitled to receive such Taking-Over Certificate within 21 days of completion, to the satisfaction of the Engineer, of the Works so specified and remedying any defects so notified

Its meaning is relied on its indication to be the stage in the works where the works are substantially completed and have satisfactorily passed any Tests on Completion prescribed by the Contract, save as to any outstanding works and patent defects which in the Engineer's opinion would be required to be completed during a pre-agreed reasonable time frame within the Defects Liability Period in order for the Taking over certificate to be issued. However, the Employer's Contract administrator, known as the Engineer, upon application by the Contractor for issuance of the Taking over certificate, after consultation with the Employer has either an option to issue the Taking over certificate, which essentially reflects that Substantial Completion has been achieved or to issue instructions in writing specifying all the works yet to be completed and associated tests to have passed before the taking over certificate can be issued. As the Engineer's determination for acceptance or denial or deferment of the Taking over

certificate is based on his opinion, it is here that the matter is often challenged by the contractor, obviously because the Tangible benefits conferred to the contractor, upon the issuance of the Taking over certificate, as highlighted in section n 1.3 of Chapter 1 above, is essentially denied. It can therefore be seen that the contention often arises as a result of the Engineer's interpretation of what constitutes SC/PC and whether the contractor has achieved SC/PC or not. This then strengthens the argument of the necessity of establishing a clear definition of the term Substantial completion and its incorporation within the Contract with reference to what extent of outstanding works and defects for the Taking over certificate to be issued is permissible. Such issue was the subject of many case laws which will be seen referenced in Chapters 4 and 4 of this paper.

2.2 FIDIC 1999 Suite of Standard Forms of Contract

In FIDIC 1999 Suite of Contracts, the wording substantial completion or works to have been substantially completed is not specifically defined , but its reference is implied as the stage at which issuance of a Taking Over Certificate is made pursuant to Sub-Clause 10. FIDIC 1999 Forms despite seen to be an improvement by incorporation of the phrase *“minor outstanding work and defects which will not substantially affect the use of the Works or Section for their intended purpose (either until or whilst this work is completed and these defects are remedied)”* by replacing the more broader term ‘outstanding works’ in FIDIC ’87, it can still be seen to pose a concern and likely lead to dispute between the parties on the question as to what constitutes ‘minor outstanding works and defects which will not substantially affect the use of the Works’. The likelihood of the interpretation of this phrase to be same or similar amongst the Contracting parties is significantly low. Therefore, the need for clearly defined terms with respect to SC/PC, within the FIDIC 1999 Form of Standard contracts, cannot be overemphasised. Project specific definition of such term within the particular conditions of the contract or special specifications can be seen to be an answer to reduce disputes between the parties to the Contract.

Additionally, whilst the last paragraph of sub-clause 10.1 ,

“If the Engineer fails either to issue the Taking-Over Certificate or to reject the Contractor’s application within the period of 28 days, and if the Works or Section (as the case may be) are substantially in accordance with the Contract, the Taking-Over Certificate shall be deemed to have been issued on the last day of that period”,

provides the contractor a taking over certificate as a result of the Engineer’s non-reaction within a specified time line, it can also cause a problem as in all probability such a situation can essentially be taken up and challenged by the Employer by questioning as to who then decides “..if the Works or Section (as the case may be) are substantially completed in accordance with the Contract...” if the Engineer did not decide within the allowed time frame. This provision in the contract may not be seen by the Employer as a fair decision without the opportunity being given to the Engineer for stipulating justifiable reasons for not reacting with a decision within the specified time. This can put the Employer in a disadvantaged situation by the Contractor’s cessation of some of his obligations without a proper assessment of the Works. The shortcoming as can be seen from this provision in the sub-clause can perhaps be mitigated by engaging a third party to decide, however, without clear definition, this process can likely lead to a dispute between the contracting parties.

2.3 NEC Standard Form of Contract

Under the NEC form of contract, completion⁸ is defined as when all the work required by the ‘works information’ is completed by the specified completion date, and all notified defects that would prevent the Employer from using the works are corrected. The first issue that can be seen to be at hand here is as to what are the works defined in the works information that must be completed? Is there any part of the works contained in the works information permissible to be considered outstanding for the purpose of completion within the context of this Form of Contract or it must be all the works as stated in the works information. However the last sentence of Clause 11.2(2) addresses

⁸ Clause 11.2(2) *“Completion is when the Contractor has done all the work which the Works Information states he is to do by the Completion Date and corrected notified Defects which would have prevented the Employer from using the works and others from doing their work. If the work which the Contractor is to do by the Completion Date is not stated in the Works Information, Completion is when the Contractor has done all the work necessary for the Employer to use the works and for Others to do their work”*

the issue of works not stated in the Works information where, completion is then considered as works done that is necessary for the Employer to use the Works. The issue than arising here is as to what constitutes the extent of works that will enable the Employer to use the Works.

The second issue relates to Architects or Employer's identification of patent defects that fall under the heading of "notified defects" which would prevent the Employer from using the works may arguably be challenged by the contractor if the contractor feels it is a biased determination by the Architect or Employer. This therefore places a greater emphasis on Architects identification of 1) defects that will prevent the Employer from using the works carefully and reasonably and 2) defects that will be permissible for the Completion to be certified. In case of former category of defects, it would be considered mandatory for the Contractor to remedy prior to Completion Certification. Whilst it is considered fair to prevent the Employer from being disrupted by the Contractor when attending to defects once the Employer has taken over the Constructed Works, the issue of Architects or Employer's identification of which category the patent defects fall under could well result in contentious arguments at the very time the decision of Completion is required to be made and inevitably result either in delayed certification or rejection for which the Contractor may seek ADR methods to resolve the disputable rejection. In *Big Island Contracting (HK) Ltd v Skink Ltd*⁹, the contractor had contended that since the employer had entered and occupied the works, the works were practically completed. The Court of Appeal of Hong Kong held that the contractor did not achieve practical completion despite the Employer having entered and occupied the works as there were defects amounting to a substantial value including the failure of the contractor to modify the firefighting sprinkler system which brought about the question of safety and thus had not substantially performed the contract. The decision of the court meant that 'practical completion' cannot be distinguished from 'substantial performance'. Therefore as mentioned above, the extent of defects, unless they are of trifling nature, plays an important part in defining practical completion and if the parameters for patent defects are not set out at the outset by the contracting parties, such

⁹ [1990] HKCA 318 [8]

contentions are likely to lead to judicial process at an expense which the parties would not anticipate.

It is also worth noting that ECC NEC¹⁰ guidelines state “Works information must state clearly and unambiguously what work is to be done” which is seen to be an attempt to circumvent the disputes that can arise from the last paragraph of Clause 11.2(2). However, how clearly such works information is defined becomes more relevant.

2.4 JCT Standard Form of Contract

Under the JCT Form of Contracts, completion of the works is generally referred to as ‘Practical Completion’. Its definition has been known to be somewhat unclear. However, the term ‘practically completed’ as included in the earlier versions of the Contract Forms, played a pivotal role towards attempting to define Practical Completion due to its readily identified meaning within the English Language.

Having said that the term ‘Practically Completed’ as contained in earlier version of JCT Forms provided a better sense of the extent of works completion, however, it has indeed been seen to be approached differently amongst the Judges as will be seen from case laws referred to in Chapter 5 of this paper. Since the term ‘Practically Completed’ has been dropped from the 1998 version of the JCT Form of Contract, as highlighted by LJ Newey in *Emson Eastern v EME Developments Ltd (1992)*, the approach to defining ‘Practical Completion’ became somewhat difficult and thus led to be a source of debate amongst Industry Professionals and contracting parties due to the mixed opinions of the Courts in attempting to define the correct meaning of the term ‘Practical Completion’.

Keating¹¹, bearing reference to JCT Form of Contract, whilst he suggests that ‘Practical’ Completion is perhaps easier to recognize than to define, he submits that the following represents the correct analysis:

1. “The Works can be Practically Complete notwithstanding that there are Latent Defects;

¹⁰ Engineering and Construction Contract Works Information Guidance, January 2012

¹¹ Steven Furst, Vivian Ramsey, -Keating on Construction Contracts (9th edn, Sweet & Maxwell, London, 2012,)page 894

2. A certificate of Practical Completion may not be issued if there are patent defects. Defects Liability Period is provided in order to enable defects not apparent at the date of Practical Completion to be remedied;
3. Practical Completion means the completion of all the construction work that has to be done;
4. However, the Architect is given discretion under clause 17.1 to certify Practical Completion where there are very minor items of work left incomplete on de minimis principles.”

According to Hudson¹² meaning of Completion as stated below, although similar to Keating, it distinguishes itself on the matter of patent defects where trivial defects may be considered in certifying SC/PC.

“It is desirable to be clear as to the precise meaning of ‘Completion ‘in a time obligation. There is surprisingly little English authority on the point, but it is clear that the requirement will be less rigorous than in the contractual contexts. Usually it will mean bona fide completion free of known or patent defects so as to enable the owner to enter into occupation. The words ‘practical’ or ‘substantial in the English standard forms probably do no more than indicate that trivial defects not affecting beneficial occupancy will not prevent completion (the more so, of course, if the contract provides for a maintenance or defects liability period”.

So it will be seen with lack of no one common definition of SC/PC amongst Professionals and the mixed approach taken by the Courts, in defining SC/PC as will be seen from Chapter 4, the disputes that arise between the parties are quite inevitable.

2.5 A201 –American Institute of Architects Standard Form of Contract (AIA)

AIA conditions of contract define substantial completion under S A.9.8.1 as follows:

“Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract

¹² Ian Duncan Wallace- Hudson’s Building and Engineering Contracts (11th edn, Sweet & Maxwell, London,1994)

Documents so that the Owner can occupy or use the Work or a portion thereof for its intended use.”

Although, the Clause defines the term Substantial Completion as Work is sufficiently complete, the question arises as to what constitutes work to be “sufficiently completeso that the Owner can occupy or use the Work...”. Therefore, the need for clear meaning of the aforesaid phrase to be incorporated in the contract, in terms of what parts of the works which would prevent the owner to occupy and use the Work cannot be overemphasized where the contractor is made fully aware, at the outset, of the components of the works, if incomplete, will not enable the Owner to occupy or use the Work and correspondingly be denied the certification of Substantial completion. This clarity then invariably, provides the contractor to manage such risk appropriately by conducting proper planning of the works with due regards to being vigilant of the work components necessary for owner’s operations in respect of priorities from the outset to achieve sufficiently complete works. Failing that, disputes arising can be seen to be inevitable.¹³

¹³ <http://www.forconstructionpros.com/article/12213064/why-construction-contracts-need-to-define-substantial-completion> (accessed July 30 2016)

Chapter Three - Decision making party for SC/PC

3.0 Introduction

Most SFCC provide for discretionary powers of the Engineer, Architect or Contract Administrator's where they are entrusted with the decision/opinion, as to whether or not SC/PC has been achieved by the Contractor. This too has had its shortcoming when the SC/PC is not well defined in contract and opinionated decision of the Engineer, Architect or Contract Administrators in terms of what constitutes SC/PC are disputed. Even Keating¹⁴ confirms "Practical Completion is perhaps easier to recognize than to define" No clear answer emerges from Authorities as to the meaning of the term"

This can inherently put the party, to whom the decision making powers are conferred unto, into a difficult situation as it will be the party under scrutiny and perhaps be seen by the contractor and even for that matter, by the Employer, to be interpreting the definition of SC/PC with unreasonableness or biased intent especially in the wake of credit crunch which is to be contended by the employer.[reference] Such given decision making powers can be seen from some example clauses from FIDIC and JCT Form of Contract as stated below with my emphasis marked:

3.1 Reference to sub-clause 48.1 of FIDIC 1987 4th edn.

The sub-clause states: "...*The Engineer shall, within 21 days of the date of delivery of such notice and after consultation with the Employer, either issue to the Contractor, with a copy to the Employer, a Taking-Over Certificate, stating the date on which, in his opinion, the Works were substantially completed in accordance with the Contract, or give instructions in writing to the Contractor specifying all the work which, in the Engineer's opinion, is required to be done by the Contractor before the issue of such Certificate.*

¹⁴Steven Furst & Vivian Ramsey, Keating on Construction Contracts (8th edn, Sweet & Maxwell, London, 2006) at para 19-113

3.2 Reference to sub-clause Clause 17.1 of JCT'63 Form of Contract

The sub-clause states: *“When in the opinion of the Architect Practical Completion of the Works is achieved,..... he shall forthwith issue a Certificate to that effect and Practical Completion of the Works shall be deemed for the purposes of the Contract to have taken place on the day named in such Certificate’.*

3.3 Reference to sub-clause 2.30 of JCT 2005

The sub-clause pretty much follows its predecessor where sub-clause 2.30 states:

“When in the opinion of the Architect/Contract Administrator practical completion of the Works or a section is achieved and the contractor has complied sufficiently with Clause 2.40 and 3.25.4 then:

- 1. In the case of the Works, the Architect/Contract Administrator shall forthwith issue a certificate to that effect ‘(the Practical Completion Certificate)’;*
- 2. In the case of a Section, he shall forthwith issue a certificate of practical completion of that Section ‘(a section completion certificate)’*

And the practical completion of the Works or the Section shall be deemed for all the purposes of this Contract to have taken place on the date stated in that Certificate.”

The issue than arising is whether the Contractor or the employer is able to be satisfied with the opinion of the Engineer/Architect/Contract Administrator. In absence of clear definition as to what constitutes SC/PC, the contractor or the employer is likely to challenge the opinion of the Engineer/Architect/Contract administrator.¹⁵ Such circumstances have been evidenced from the various case laws under common law arising out of JCT Form of Contract provision of Practical Completion as will be seen in Chapter 4 below.

In retrospect, it is not uncommon for Employer's to defer taking possession of completed works due to financial reasons and given the ambiguity in the definition of

¹⁵ <https://simplymalaysia.wordpress.com/articles/certificates-payment/practical-completion-explained-but-not-defined/> (para. 7) (accessed July 30, 2016)

SC/PC and with such deferral, as seen to be an advantage for the Employer often result in a dispute which lead to adjudication by the Courts. Again, to reiterate, the need of clear definition of SC/PC cannot be overemphasized.

Equally important is the issue of whether the Engineer/Architect/Contract administrator, in deciding whether works is completed or not bears much reliance on the question of impartiality. For instance, whilst the FIDIC 1987 4edn, SFCC, explicitly requires the Engineer/Architect/Contract administrator to act impartially in accordance with Sub Clause 2.6 which states

‘wherever, under the Contract, the Engineer is required to exercise his discretion by:

- a) giving his decision, opinion or consent,*
- b) expressing his satisfaction or approval,*
- c) determining value, or*
- d) otherwise taking action which may affect the rights and obligations of the Employer or the Contractor he shall exercise such discretion impartially within the terms of the Contract and having regard to all the circumstances. Any such decision, opinion, consent, expression of satisfaction, or approval, determination of value or action may be opened up, reviewed or revised as provided in Clause 67.*

However, in public sector contracts, there is a tendency for Employers in the UAE to modify the first sentence of this sub clause to read ‘wherever, under the Contract, but subject to the provisions of Sub-Clause 2.1, the Engineer is required to exercise his discretion by.....’ meaning that under Sub clause 2.1 (ii) The Engineer/Architect/Contract administrator shall be required to seek the approval of the Employer prior to issuing any Taking-Over Certificate under Clause 48, of the Conditions of Contract. This then is seen to be defeating the object of impartiality and is often looked upon by Contractors negatively with such contracts of adhesion, as generally adopted in Government contracts and such dilemma is realized at the time when the Contractor seeks for the completion certificate and observes that such decision is not to be the sole decision of the Engineer/Architect/Contract administrator, but a joint or coerced/collaborated decision.

This area of Engineer/Architect/Contract administrator role as an impartial party was seen to be addressed by the Courts in *Sutcliffe v Thackrah*¹⁶ where the role and duties of an architect was discussed. Lord Reid said *'It has often been said; I think rightly, that the architect has two different types of function to perform. In many matters he is bound to act on his client's instructions, whether he agrees with them or not; but in many other matters requiring professional skill he must form and act on his own opinion. Many matters may arise in the course of the execution of a building contract where a decision has to be made which will affect the amount of money which the contractor gets. Under the RIBA contract many such decisions have to be made by the architect and the parties agree to accept his decisions. For example, he decides whether the contractor should be reimbursed for loss under clause 11 (variation), clause 24 (disturbance) or clause 34 (antiquities), whether he should be allowed extra time (clause 23); or when work ought reasonably to have been completed (clause 22). And, perhaps most important, he has to decide whether work is defective. These decisions will be reflected in the amounts contained in certificates issued by the architect. The building owner and the contractor make their contract on the understanding that in all such matters the architect will act in a fair and unbiased manner and it must therefore be implicit in the owner's contract with the architect that he shall not only exercise due care and skill but also reach such decisions fairly, holding the balance between his client and the contractor.'*

The legal Authority based on *Sutcliffe v Thackrah* was seen to be touching upon the Architect's duties and responsibilities as two fold. One, being that he would act to serve the interest of the employer such as when issuing variation orders to the contractor or reporting to the employer on the progress and quality of the works and second when dealing with issues of valuations or certifying the date of practical completion. As can be seen in the case of certifying practical completion, the Architect is required to use his professional skill to form his own opinion, which has been known to be contended by the Contractor where such opinions are often formed under unclear and undefined terms and possibly under the Employer's influence leading to disputes that can become technically complex.

¹⁶ [1974] AC 727 at 737

The case of Sutcliffe was also referred in *Costain v Bechtel* (2005), where the question of impartiality of the project manager (Bechtel), under an amended form of the NEC form of contract, was one of issues put forward to the Courts. In this case, Costain, the Claimant put forward the claim of Project Manager's (the defendant's) biased determination in assessing the payments due to the contractor which raised the question of whether the duty of the Project Manager was (a) to act impartially as between employer and contractor or (b) to act in the interest of the employer.

Mr Justice Jackson, whilst agreeing to the defendant's argument that the contract as based upon the NEC to have been more specific and definitive in terms of objectiveness, leaving very little room for discretionary determination, he however stated that *"....there are still many instances where the project manager has to exercise his own independent judgement , in order to determine whether the criteria are met and what precisely should be paid to the contractor or deducted from payments made to the contractor."*¹⁷. These instances were referred to as "residual areas of discretion" and Justice Jackson went on to state *"When the project manager comes to exercise his discretion in those residual areas, I do not understand how it can be said that the principles stated in Sutcliffe do not apply. It would be a most unusual basis for any building contract to postulate that every doubt shall be resolved in favour of the employer and every discretion shall be exercised against the contractor"*.¹⁸

This then draws on the principle cited in Sutcliffe *"In many matters he is bound to act on his client's instructions, whether he agrees with them or not; but in many other matters requiring professional skill he must form and act on his own opinion."*

What can be inferred is that whilst the certifiers such as Project Managers, Architects, contract administrators are employed by the employer, it's a natural tendency that they would act on behalf of the employer in certain aspects, and not in others where the contractor has based his reliance on the neutrality of certifiers, but the question lies as to where one draws the line. Hence if contracts lacking definitive objectives with respect to rights and obligations of each of the parties', we could see more disputes entering the judicial system.

¹⁷ [2005] EWHC 1018 TCC [43]

¹⁸ [2005] EWHC 1018 TCC [44]

In the fairly recent case of *Laing'O Rourke Construction Ltd v Healthcare Support (Newcastle) Ltd & Others* [2014] EWHC 2595 TCC, the decision making party known as the Independent Tester, as could be similarly classified as Project Managers, Architects, contract administrators for the purpose of issuing certificate of completion of the works, declined to issue the said certificate as he with complaints from the Employer, identified five areas of works which were categorised as not to confirm with the contract and that prevented him to issue the certificate of completion. The Courts definition of Practical completion in this case considered as to whether or not the non-conformity of the works would have a materially adverse effect on the ability of the employer to use the works for the purpose intended. If not, then Practical completion of the works would be issued by the Independent Tester. This does bring us back to the predicament of the Independent tester's decision as to whether the state of the works at the time applied for the certificate of completion would effect the ability of the employer to use the works for the purpose intended or not. As suggested in this paper, disputes arising from a certifier's opinion and/or decision can be avoided if it is set out at the outset the works that will materially adverse effect on the ability of the employer to use the works for the purpose intended. One would state that the difficulties in setting this completion criteria at the outset is cumbersome, but if weighed against the consequences if not considered would tend to make such an exercise worthwhile where both parties to the Construction Contract and the Project Managers, Architects, contract administrators, Independent Testers are all of the same mind with respect to well defined meaning of Practical Completion.

Chapter Four –Legal Principles on the issue of SC/PC

4.0 Introduction

This chapter is of much relevance to the fact as to how the law in various jurisdictions has considered the disputes that arise from unclearly defined terms in SFCCs on the matter of SC/PC.

More so, the cases discussed in this Chapter of the paper, are related to JCT Forms of Contract under the common law jurisprudence, and not under Civil Law due to limitations of publications of cases under the UAE Law. The Common law cases reveal the presence of unclear definition of the term ‘Practical Completion’ (PC), and in the most part, within the JCT Form of Contract.¹⁹ It will be seen that the approach taken by the Courts in attempting to define the true definition of the term “Practical Completion” has been seen to be somewhat mixed and seen by various commentators in the Construction Industry to be an aspect that invariably need much more discussion and further research to establish workable clear definitions that would appropriately remove ambiguities and thus alleviate disputes.^{20, 21, 22}

4.1 Case Laws on SC/PC for the Works under UAE Civil Law

Unfortunately, I was not able to find any reported case laws in the UAE with respect to disputes on SC/PC arising from the generally adopted FIDIC Forms of Contract in the UAE nor any cases were mentioned by any of the respondents of the Survey Questionnaire who were asked about it. However through knowledge and experience of the Construction Industry in the UAE, the issue of Contractor pursuing SC/PC vigorously with presentation of arguments to the Engineer and the Employer is not

¹⁹ John Adriaanse – Construction Contract Law (3rd edn, Palgrave macmillan, 2010) comment on p144

²⁰ http://www.longworthconsulting.co.uk/construction_contracts/practical_completion.htm (accessed July 30, 2016)

²¹ <http://www.wrighthassall.co.uk/knowledge/legal-articles/2015/04/28/what-practical-completion-and-partial-possession/> Article by construction Lawyer Adam Hiscox, first sentence. (accessed July 30, 2016)

²² <http://www.minterellison.com/Publications/Can-practical-completion-ever-be-practically-defined/> .(accessed July 30, 2016)

uncommon and this often has not gone unnoticed based on my experience. Nonetheless, it is believed that such matters are not generally progressed to ADR process for sake of parties wanting to maintain relationship for future mutual endeavors. This is very much so with the Contractor wishing for future work from the employer and the employer wanting not to be ill reputed. Employers also may not want to be recognized as employers in the Region where contractors may be reluctant to bid for any Works Tendered by such employers. Having said that, there is of course the possibility of SC/PC disputes having undergone Arbitration, but these were not found as not generally made public.

It is worthwhile mentioning here that the UAE Civil Code imposes an obligation on the employer to take over the works, when it is deemed completed as per Article 884 and further provides that if there is no valid reason for the employer not to take delivery of the completed works, the risk or care of the completed works shall be deemed transferred to the employer. This can inevitably be relied upon by contractors as grounds for transferring the risk and care of the completed works when employers refuse to take delivery of the completed works or prevent Architect/Engineer or Contract Administrator from issuing taking over certificate due to financial difficulties or when demand for Tenant occupancy drops.

However, for the Article 884 to be invoked effectively, there still lay the need of clearly defined terms for SC/PC. It would prove to be beneficial if the meaning of completed works were well defined in SFCCs used in the UAE which the law would take into consideration for Article 884 to be applied effectively. The argument of inadequate definitions of SC/PC in the FIDIC Forms of Contract can be seen in Sections 2.1 and 2.2 of this paper.

4.2 Case Laws on SC/PC for the Works under common law

The following cases, arising out of JCT Form of Contract can perhaps be seen to confirm unclear definition of the term PC with the JCT Form of Contract. The approach taken by the Common law Courts in attempting to define the true definition of the term PC can be said to be quite controversial .

One of the leading cases can be said to be *Westminster Corporation v J. Jarvis and Sons* (1970) 1 WLR. 637, in which dispute arose out of JCT 63 Form of Construction contract, where the courts were required to decide whether or not the follow on main contractor to the nominated piling subcontractor was entitled to an extension of time as a result of remedial works carried out by the nominated piling sub-contractor after he had achieved PC.

In this case, Lord Salmon LJ stated that:

*“The obligation on the contractors under clause 21 to complete the works by the date fixed for completion must, in my view, be an obligation to complete the works in the sense in which the words ‘practically completed’ are used in clause 15 and clause 16 of the contract. I take these words to mean completion for practical purposes, i.e. for the purpose of allowing the council to take possession of the works and use them as intended. If completion in clause 21 meant down to the last detail, however trivial and unimportant, the clause 22 would be a penalty clause and unenforceable”*²³

However, in the same case a further definition was given by Lord Dilhorne who confirmed that the Contract did not define the meaning of Practical completion and appeared to view practical completion differently to Lord Salmon’s views, where he stated:

*“The contract does not define what is meant by Practical Completion. One would normally say that a task was practically completed when it was almost but not entirely finished, but practical completion suggests that this was not the intended meaning and what is meant is the completion of all the construction that has to be done...”*²⁴

What is understood from Lord Salmon’s statement is that Practical completion of the Works is achieved when the Works are capable of being used by the Employer as intended, notwithstanding the outstanding works that are trivial or unimportant.

²³ [1969] ALL ER 1025 at 1031 AC

²⁴ [1970] ALL ER 943 at 948 HL

What is understood from Lord Dilhorne's statement is that Practical completion of the Works is achieved when all the Works specified are completed with no works to be outstanding.

The approach taken by the courts in defining Practical Completion in *H.W. Nevill (Sunblest) Ltd v William Press & Son Ltd. (1981)* can be seen to follow the approach taken by Lord Salmon in *Westminster Corporation v J. Jarvis and Sons*, however, in HW Nevill case, the issue of patent defects was considered in defining Practical Completion where Judge Newey stated:

"...I think the word 'practically' in clause 15(1) gave the architect a discretion to certify that William Press had fulfilled its obligation under clause 21(1), where very minor de minimis work had not been carried out, but that if there were any patent defects in what William Press had done, the architect could not have given a certificate of practical completion".²⁵

Lord Salmon's approach to defining Practical completion can be seen with emphasis put on completion for practical purposes, to be such that the Employer is able to use the works for its intended purpose. It is somehow unclear on the issue of patent defects and debateable as to whether completion for practical purpose should take the harsher approach of Lord Dilhorne in Westminster or for that matter Judge Newey's approach in HW Nevill for patent defects to disqualify Practical completion.

Although Lord Dilhorne's attempted definition of Practical Completion in Jarvis was seen to be somewhat harsher than Lord Salmon's definition on the matter of Practical completion meaning 'the completion of all the construction that has to be done' the decision of the courts as to whether or not the follow on main contractor was entitled an Extension of time for disruption caused as a result of the remedial works by the enabling works contractor relied eventually on the issue of Latent defects, being defects that were not apparent when the PC was achieved and that the enabling contractor is required to fulfil his obligations to remedy Latent defects during the Defects Liability period provided in the contract. Lord Dilhorne's emphasised this by stating:

²⁵ [1983] 20 BLR 78 at 87 QBD

“....secondly that the defects liability period is provided in order to enable defects not apparent at that date of practical completion to be remedied. If they had been apparent no such certificate would have been issued....”

Consequently, the grant of Extension of Time for the follow on main contractor was denied.

Such circumstances can thus be seen to pose a problem to the follow on main contractor, however, the Courts would not rule out that a prudent contractor would have allowed for such risk in his Tender where the procurement of enabling works contractor is independently procured or nominated by the Employer. In case of such procurement, most contracts provide for main contractor to enter into agreement with nominated contractor where such risks are apportioned between the parties. For the Employer to avoid such risks leading to disputes and costly judicial processes, procurement of the enabling works contractor should be left to the main contractor, thus establishing one liable party when delays occur in the progress of works as a result of enabling works contractor employed as a Domestic subcontractor and the apportionment of risks between the Contractors addressed clearly in the Sub-Contract Agreement.

A similar approach to Lord Dilhorne with regards to patent defects not apparent at SC/PC was taken by Lord Diplock adjudicating *P&M Kaye v Hosier & Dickson* (1972) involving the construction of warehouse and offices where he stated:

*“The first period, which I will call “the construction period,” starts when he is given possession of the site under condition 21 (1). It continues until he has completed the works to the satisfaction of the architect so far as the absence of any patent defects in materials or workmanship are concerned. It ends with the issue by the architect of a certificate of practical completion under condition 15 (1)....”*²⁶

“In the course of the progress of the works during the construction period until practical completion the architect signifies his satisfaction by the issue of interim certificates. By issuing his certificate of practical completion he signifies his

²⁶ [1972] 1 WLR 146 at 165

*satisfaction with the works at the end of the construction period; but this is subject to any latent defects which become apparent to him during the defects liability period.”*²⁷

By this statement his inference was made on the basis of the employer having taken the possession of the warehouse with contractor's consent before the whole of the contract works were complete under the Clause 16 of RIBA 63 form of Contract whereby PC of the warehouse was deemed to have been achieved on the date of taking possession. A couple of weeks following this date, warehouse floor were observed to be defective and this prompted the issuance of Architect's instruction for removal and relaying. Lord Pearson added that the re-laying of the floor in this circumstance fell under the ambit of defects that were required to be remedied during the defects liability period.

However, in the case of *Emson Eastern Ltd v EME Developments Ltd (1991)*, arising out of JCT 80 Form of Contract, Judge Newey took the approach to somewhat consider patent defects by contrasting Construction Contracts with manufacture of goods in a factory where he stated “...*I think the most important background fact which I should keep in mind is that building construction is not like the manufacture of goods in a factory. The size of the project, site conditions, and the use of many materials and the employment of various kinds of operatives make it virtually impossible to achieve the same degree of perfection that a manufacturer can. It must be a rare new building in which every screw and every brush of paint is absolutely correct.....if....completion is something which occurs after all defects, shrinkages and other faults have been remedied ... it would make the Liquidated Damages provision ... unworkable.*”²⁸

The inference from Judge Newey's statement in *Emson* can be seen as imperfections in the Construction works do occur, meaning that the presence of patent defects on construction works do occur in contrast to the approach in *Nevill H. W. (Sunblest) v William Press and Sons (1981)*, where the existence of patent defects, was not considered permissible for Practical completion to be certified.

It can therefore be seen that Legal authority on practical completion with respect to JCT form of Construction Contracts has somewhat been unclear and the need for reform

²⁷ [1972] 1 WLR 146 at 168

²⁸ [1992] 55 BLR 114 at 121 QBD

towards a well-defined term cannot be overemphasised especially when the term “practically completed” has since been dropped in the latter editions of the JCT Form of Contract and attempts on defining what is ‘Practical Completion’ may continue to be subjected to mixed understanding and opinions.

4.3 Case Laws on SC/PC with respect to Agreement of Lease and Purchase

Clear definition of the term SC/PC in construction contracts is also of much importance to the owner/developer on back to back agreements that involve purchasers or Tenants as subsequent beneficiaries of the Development whereby purchasers or Tenants will have competing commercial interests including defects free construction and often result in stringent conditions embedded within the Purchase or Lease Agreements. These conditions often place due regard to the defined terms for completed facility and these have been seen to play a pivotal role in Closure of the lease Agreements and have also been a subject of disputes that have led to the Courts. One such case of Closure of the Agreement arose in *Elmbid v Burgess*(2013) where Burgess, the purchaser of a converted Barn to residential premises had agreed to complete the purchase after Elmbid, the property developer achieves practical completion. However, the meaning of practical completion was the issue where Burgess considered it to mean works completed without any defects whilst the judgement was made in favour of the Builder, Elmbid, in reliance of the meaning of practical completion to be “*complete for all practical purpose*”²⁹ as also cited in *Menolly Investments 3Sarl v Cerep Sarl* (2009)³⁰ and not completion to the last detail. This decision can be seen to be based on the Courts establishment that the works were completed to a state where the employer/end user is able to use the works for their intended purpose adopting the test of reasonableness known as the ‘deminimis principle’ where the law does not generally intervene when the certificate of completion is not refused if there are very minor works outstanding and/or defects that are trifling in nature at the time as opposed to fully completed defect free works.

²⁹ [2013] ALL ER 1489 [247] [248] EWHC

³⁰ [2009] ALL ER 516 [68-71] EWHC CH

The meaning of SC/PC was also a subject of contention in the sale and purchase Agreement in the Hong Kong case of *Mariner Int. Hotels v Atlas Ltd*³¹

The Developer Atlas Ltd entered into an agreement for the sale and purchase of a hotel with Mariner Int. Hotels. Completion of the sale and purchase agreement was conditional on various events, one of which was practical completion and the clause read: “Completion of this agreement is conditional onthe vendor having procured the practical completion of the hotel with furniture, fixtures, fittings and decoration ... and having obtained (i) the occupation permit ... and (ii).. [the hotel licence] in order for the hotel to commence business on or immediately after completion.”

Accordingly, Atlas achieved Practical Completion under the Building and Fit out Agreement.

Since the meaning of ‘practical completion’ under the sale and purchase agreement was not defined, the court of first instance held that practical completion under the building and fit out contracts for the Hotel satisfied the requirement of practical completion under the Sale and purchase Agreement.

The court of appeal took a contrasting view and ruled that practical completion under the Sale and Purchase agreement and that under building and fit out contracts were separate issues. The Court of Appeal defined practical completion under the Sale and Purchase Agreement to mean that the Hotel is ready for all practical purposes so that it could be operational as a hotel immediately upon completion of the Agreement. By this they adopted the view that patent defects did not prevent practical completion so long as such defects did not interfere with the beneficial usage by the Hotelier.

The court of final appeal took a different approach by taking into consideration the type and extent of patent defects. The Court of Final appeal were persuaded by Mariner’s Counsel on accepting the English court authority that ‘*practical completion*’ is a legal term of art in England as understood to mean a state of affairs in which the works have been completed free from patent defects other than ones to be ignored as trifling under

³¹ [2007] 1 HKLRD 413

*the maxim deminimis*³². In this regard, the final court of appeal took into consideration the admission of Atlas that was previously made to state that the Hotel was not free from non-trifling patent defects. This admission contravened the meaning of Practical Completion as adopted by the Final Court of Appeal held that Practical Completion was not achieved. The Final Court of Appeal Judgement is now considered as the Law in defining Practical Completion in Hong Kong if ‘practical completion’ is not expressly defined in the contract.³³

From above it can be seen that the meaning of ‘practical completion’ as adopted by the Final court of Appeal is harsher than the meaning adopted by the Court of appeal.

The decision in *Mariner* can be seen to be overturning the earlier decision of the Court of Appeal in *Big Island Contracting (HK) Ltd v Skink Ltd (1990)* in which the court could not distinguish between practical completion and substantial performance and therefore held that practical completion had not been achieved where there was still minor outstanding works and defects where safety was also considered a risk.

The English High Court decision in the case of *Laing O’Rourke v Healthcare Support (Newcastle) Ltd & Ors* as discussed in last part of Section 3.3 of Chapter 3 referred to ‘practical completion’ as the stage of there being ‘*no materially adverse effect on the enjoyment and use of the building*’³⁴ seems to be more in line with the Court of appeal meaning of practical completion in *Mariner v Atlas*.

In another Hong Kong Case, *Vigour Limited v Hyundai Engineering and Construction Company Ltd (2008)*³⁵ which involved the construction of the Hotel by Hyundai exemplifies the situation that although ‘practical completion’ was defined as to when the works were ‘fully available for possession and use, subject only to minor works’ where minor works were to exclude works which would otherwise ‘inconvenience or unreasonably disturb occupants’, the issue before the High court of Hong Kong was the definition of the term ‘occupants’ as not defined in the contract. In this regard two very

³² [2007] 1 HKLRD 413 at 418 [13]

³³ <http://www.pinsentmasons.com/mediafiles/1776364896.pdf> (accessed June 7, 2016)

³⁴ [2014] 1 BLR 2595 [44] EWHC TCC QBD

³⁵ [2008] HKEC 1425

much contrasting meanings were presented in court. Vigour Ltd. presented that Occupants were hotel guests and staff who had lower level of tolerance for the uncompleted minor works and therefore the works were at a stage that would unreasonably disturb such occupants. The courts disagreed by citing that ‘occupants’ were those with higher level of tolerance and this meant that the court ruled that practical completion was achieved despite the fact that some outstanding works could disturb hotel guests and staff. This is a typical example of judgemental decisions on the behavioural patterns of hotel guests and staff that is left for judicial proceedings. Therefore, once again, contracts should not contain undefined terms that are then brought to the decision of the courts which can be prone to debate amongst legal experts and Professionals alike.

With all the above interpretation and decisions of the courts on the meaning of practical completion, it is not an understatement to say that contracts need to be well defined as the ‘non-trifling’ or ‘trifling’ patent defects as considered in Mariner or the tolerance levels of hotel guests and staff as considered in Vigour in order to avoid dissenting arguments in future cases.

Given the intricacies and debateable circumstances that can arise as seen from the mixed approach taken by the courts on cases so exemplified above in attempting to define the meaning of SC/PC, and with drafters of the Standard Forms of Contract finding it difficult to pin down a comprehensive definition, the concept of the ‘elephant test’³⁶ in line with Keating’s summation that SC/PC is easier to recognize than to define, whilst has been suggested to perhaps be an appropriate approach to the question of whether or not SC/PC is achieved, it could carry with it the uncertainty of whose opinion will count in respect of recognizing completion when it is seen. Whether it will be the Contract Administrator’s observation with his/her threshold set for what is SC/PC or is to be the contractor’s observation or for that matter the employer’s observation. This then brings back to the argument for the need of defining SC/PC to certain degree of detail within the contract in order for all parties to the contract to be well aware of the extent of works completion they need to achieve in order to secure all the important and significant entitlements SC/PC carries as mentioned in sub section 1.3

³⁶ www.heinonline.org/hol/cgi-bin/grt-pdf.cgi?handle=hein.journals---33 (accessed May 17, 2016)

above. In the latter part of this paper, I have suggested in my conclusive section of the paper the need to approach defining SC/PC holistically.

4.4 Case Laws on SC/PC for Partial Possession of the Works by Employer

Most Construction Contracts in addition to the provision of overall completion of the works termed as SC/PC do provide for circumstances that are pre-determined by the Employer for works to be completed in sections and taken over by the Employer in sections based upon established priorities and set prior to execution of the Contract. Such Sectional Completion requirements essentially follow the same principles as SC/PC for the whole Works and contentions that arise are similar. To note that for Sectional Completion of the works, contracts often stipulate completion times of respective sections and corresponding values of Liquidated Damage proportions.

However, the concept of Employers taking over the Works when partially completed and not as pre-determined sectional completion taking over, as also provided in most construction contracts has been known to have its own share of problems where disputes have been notable. This aspect of the taking over needs careful consideration, whereby quite often; Employers have tended to misconceive the matter of partial taking over with early access. Both these have a different meaning, but the contracting parties have tended to use either of these aspects in arguing the basis of their rights.³⁷

Partial possession as referred to in JCT Form of Contract provides the Employer to take possession of part of the Works before practical completion provided the Employer obtains the Contractor's consent which should not be unreasonably withheld. Generally the contractors are willing to grant consent in most instances as such partial possession of part of the Works by the Employer means to the contractor that partial completion is deemed to have occurred for that part and the Liquidated damages for the whole Works is reduced proportionately with apportionment of the part of the Works possessed by the Employer, who then becomes responsible for that part of the works. However, in some cases this is not granted easily without having to go through a judicial process where parties have contended on the matter of whether or not partial completion, given the

³⁷ John Murdoch & Will Hughes- Construction Contracts Law and Management (4th edn Taylor & Francis, 2008) last para. Section 14.3.4 p.194

specific circumstances, is deemed to have occurred or not. This can be seen from some exemplary case laws described below.

The Legal principle on the subject of Partial Possession of the Works by the Employer can be seen to be quite mixed as will be seen from some of the leading cases discussed here with each one interestingly having a common base of possession of the works by the employer/tenant but distinguishing itself from each in respect of the decision of the Courts.

In the case of *Skanska Corporation v Anglo-Amsterdam Corporation (2002)* which arose out of JCT 81 Form of Contract, Skanska Corporation, the Contractor, was employed by the Employer Anglo Amsterdam Corporation to construct the office facility which upon completion was to be leased to ICL who were very much anxious to gain access for commencement of their fit-out works. ICL gained access by moving into the office facility on 12 February 1996 for the execution of their fit-out works despite the non-completion of the Air-conditioning system and the pending submission of O&M manuals by the contractor Skanska. The remaining Works were completed by 25th April 2015 and Anglo Amsterdam Corporation levied Liquidated Damages up to 25th April 1996. Consequently, Skanska contended that since ICL had moved into the office facility on 12th February 1996, the Liquidated Damage so imposed for period 12th February 1996 to 25th April 1996 was unenforceable and as result, a dispute was registered and the matter was advanced to Arbitration. The Arbitrator relied on Clause 16 of the contract which dealt with the matter of PC whereby the Engineer/Contract Administrator is required to provide a formal statement in writing that PC is achieved when works are substantially completed save as to outstanding works that are minimal and of a minor nature. Since the Air-conditioning System had not been completed and O&M manuals had not been handed over, the Arbitrator considered this to lie outside the realm of outstanding works that are minimal and of a minor nature and therefore the works were not completed to the extent required by clause 16 and the contractor was obliged to pay liquidated damages for the period between 12th February 1996 and 25th February 1996. The Arbitrator took the stand that as clause 17 only dealt with partial possession and therefore it could not be applied as ICL had full possession of whole works before practical completion was achieved. Skanska's appeal was heard in the

TCC where Judge Thornton QC presided over the case. Judge Thornton approached the matter considering clause 17 which essentially states that “if at any times before practical completion of the works the Employer wishes to take possession of any part or any parts of the works and the consent of the contractor (which consent shall not be unreasonably withheld) has been obtained, then notwithstanding anything expressed or implied elsewhere in the contract, the Employer may take possession thereof...”

His emphasis was that since the contract provided for employer to take possession of any part or parts of the works, this should apply where the employer takes possession of the whole works before practical completion and therefore the principle as set out in Clause 17 should apply. Here it can be seen that he defined the clause 17 to not only take effect for when the employer took possession of the part of the works, but also where the employer takes possession of the whole of the works and asked to hand over the keys whilst the works were incomplete which in essence gave up possession of the works to the employer and only given access by grant of the employer to enter and complete the works. Therefore, in this case the court held that the contractor is deemed to have achieved partial completion of the whole part of the works and that the employer was not entitled to levy Liquidated damages for period 12th February 1996 to 25th April 1996 when the works were finally completed.³⁸

If this legal principle, is allowed to be propagated into rewording of Clause 17 in the SFCC to state that if the employer, at any time before practical completion of the works occurs, takes possession of part(s) of or the whole of the works then practical completion of the part(s) or whole of the works taken into possession is deemed to have taken place could very well lead to employers instituting changes in the contract for reasons outlined in the next paragraph.

The words ‘practical completion..... is deemed to have taken place’ when employers take possession of whole of the works whilst the works are incomplete can place the employers in a very delicate position whereby they have to contend with incomplete works of the contractor and burdened with responsibility of care of the works through insuring the works, reduction of Liquidated damages and release of retention monies

³⁸ <http://casetrack.com/ct/casetrack.nsf/index?openframeset> (accessed Aug 13, 2016)- [2002] EWHC Judgement para 7.3 [58] TCC QBD

and the defects Liability periods taking effect despite the works are not yet complete. Thus this can restrict employers in taking possession of the works before practical completion. Once again, such attempts of defining SC/PC by the Courts is very likely to be a subject of discussion amongst Construction Professionals and the Institutions developing SFCCs as a necessity to have clear definitions incorporated in the SFCCs and perhaps avoid for the Courts in attempting to define SC/PC.

It is very important to distinguish the definition of SC/PC decided by the Courts in the above cases with that in *Impresa Castelli Spa v Cola Holdings Ltd*(2002) which can be seen from the following.

In *Impresa Castelli* , the Courts were to decide on the situation where the employer had taken possession of the works when works were not completed. The circumstances of the case arose out of the JCT '81 Form of contract executed between Cola Holdings Ltd, the employer and *Impresa Castelli*, the contractor, whereas the employer contracted the contractor for the construction of Kingsley Hall hotel in Great Queen Street, London. Construction was running late which prompted the parties to enter into a supplemental agreement that the contractor would within a period of 11 further days complete the outstanding works that were listed in the agreement and allow the employer access to all the areas so as the hotel to fully operate therefrom. When the employer was granted access in accordance with the agreement and the works listed were still not completed, the employer levied Liquidated Damages. The contractor contended that the employer had taken partial possession of the whole of the works under clause 17.1 and therefore did not have any entitlement to deduct Liquidated Damages. In his judgement³⁹, Judge Thornton, put his argument against the contractor, basing his argument on the facts put forward to him which included the terms set in the supplemental agreement that the parties had entered into, and granted that the employer's occupation could not be construed as taking partial possession of the whole of the works as envisaged under clause 17.1, but had merely gained access to the site under clause 23.3.2. Clause 23.3.2 of the contract which gave the employer an entitlement to gain access to part or all of the works with exclusive possession of the

³⁹ <http://casetrack.com/ct/casetrack.nsf/index?openframeset> (accessed Aug 13, 2016)- [2002] EWHC Judgement para 3.4 [46-50] TCC QBD

site remaining with the contractor to complete the outstanding works and therefore Liquidated damages were payable by the contractor and the care of works responsibility lay with the contractor up to the point the contractor eventually completed the works.

The above two cases brings about a very fine line between them: 1) employers taking possession of the part or whole of the works where practical completion of the part or the whole of the works taken into possession is deemed to have taken place so the contractor no longer has the possession of the site and insurance or site safety obligations for that part are taken over by the employer⁴⁰ and 2) employers gaining access where practical completion is not deemed to have occurred where the contractor is considered to retain the possession of the site and is responsible for site safety, care of the works and insurance for the works.⁴¹

Therefore it is worthwhile to look at these two aspects which give effect to different consequences and if not explicitly provided or defined in contracts, can often lead to disputes.

Whilst the first scenario mentioned above is provided for in FIDIC SFCC (refer Sub Clause 48.2 (c) of FIDIC 1987 4th edn and sub-clause 10.2 of FIDIC 1999 SFCC), the second scenario is not covered in FIDIC SFCC. However, it is not uncommon under FIDIC SFCC for Employers to request early access for purpose of having fit-outs commenced by themselves or their Tenants. Therefore it would be prudent of the employer to have early access provision placed within the FIDIC based Contract with clearly defined terms. As far as JCT Form of contract is concerned, provision for employer to gain early access whilst the works are uncompleted has been seen from the Courts decision in *Impresa Castelli v Cola Holdings Ltd* where Clause 23.3.2 with possession of the site still with the contractor prevailed over clause 17.1 for possession of the site handed over to the employer.

⁴⁰ Issaka E Ndekugri & Michael E Rycroft –The JCT 05 Standard Contract Law and Administration (2nd edn. Butterworth-Heineman, 2009)- Section 3.10, p 138

⁴¹ Issaka E Ndekugri & Michael E Rycroft –The JCT 05 Standard Contract Law and Administration(2nd edn. Butterworth-Heineman, 2009)- Section 3.11, p 139

Early possession /early access is somewhat a dreaded concept to the contractors where the contractor is essentially in possession of the site, accordingly responsible for Health and safety and Works Insurance, whilst the Employer has gained access for his fit out works, which the contractor can be disrupted from completing the works on time and then be levied liquidated damages. However, in fairness clauses for possession by employer of uncompleted works have been seen to be adopted by certain developer in the UAE whereby some relief is provided to contractors as can be seen from the following included under particular conditions.

Insert new Sub-Clause:

48.5

***Possession of
Uncompleted
Works***

The Employer shall be at liberty at any time before the completion of the whole of the Works to take possession of and use any part or parts of the Site or uncompleted Works, and in such case the Contractor shall completely finish the said uncompleted part or parts of the Works as and when the Engineer shall direct, whether before or after the respective prescribed time or times (if any) for the completion of the Works and, if required by the Engineer, while the Employer is in possession of the said part or parts of the Site or Works.

If, in the opinion of the Engineer, such possession or use by the Employer interferes with the completion of the said part or parts of the Works or the Works generally, due allowance shall be made by the Engineer or approval by the Employer of an extension of time under the provisions of Clause 44 hereof and he may exclude such part or parts of the Works from the provisions as to the Time for Completion and fix such reasonable time for the completion of said part or parts. Should the Contractor incur extra expense due to the operation of this Sub-Clause, reasonable substantiated and unavoidable costs will be certified by the Engineer for payment to the Contractor?

The above Sub Clause provides for the Engineer to decide when the contractor should complete the works due to Employer's possession of the uncompleted works. The second paragraph goes further to provide the contractor an extension of time for the part possessed by the employer, which in the Engineer's opinion, interfered with the original time of completion requirement and associated costs for such extension. With such provision in contracts it is very unlikely that Contractors would raise any objection for early possession of the works by the employer. It is worthwhile to note

that without the aforementioned provision as Sub-clause 48.5, the likelihood of disputes on the matter as to whether such possession of uncompleted works fall under the doctrine of SC/PC to have been achieved or employer is deemed to have gained early access only is high which can be seen from the examples of case laws presented in this Chapter.

Chapter Five – Survey Analysis and Discussion

5.0 Introduction

34 Survey Questions were developed with due regard to its relevance to achieve the objective of this Paper. These were circulated to 44 individuals. Out Of 44 invitations for participation, 24 individuals from various walks of life within the Construction Industry provided their responses to the Survey.

Generally most of the respondents showed great interest in the subject matter and considered the subject to be of relevance and of high importance and responded to the survey questionnaire with honesty and true to their belief. The record of their responses is contained in the Appendix of this Paper.

The representative sample of participants were considered to be of quite relevance as they in one way or the other have either experienced or had knowledge of the circumstances relating to SC/PC and contentions that arise or can arise between the contracting parties with respect to SC/PC.

5.1 Discussion on Responses to Survey Questions 1 to 34

Survey Question 1- What type of Organization do you work with?

A fair representation of the Industry professionals participated in the survey with 37.5% of the respondents belonged to Contracting establishments, 25% belonged to Architect/Engineering Consultancy organization, 16.67% belonged to Employers' organization, 12.5% belonged to Legal entities, 4.17% belonged to Firms providing Project Management Services and 4.17% belonged to Academic Institutions.

Survey Question 2 –Which of the following describes your position?

From the 24 participants, it was observed that the representative participants comprised of 55% individuals holding the position of Project Director/Manager, 20% holding the position of Construction Manager/Director, 5% holding the position of Architect/Engineer and 20% held the position of Contracts Manager/Quantity Surveyor.

Survey Question 3 – How many years of experience do you have in the construction industry?

The fact that about 69% of the participants had construction Industry experience of more than 15 years and 27% with experience of between 5 and 15 years can perhaps be taken as quite a relevant representation with respect to their responses in promulgating their opinions based on this Paper's topic. Those with experience of less than 5 years totaling to approximately 4% also articulated their opinion on the issues that relate to SC/PC which perhaps strengthen the argument of more and more awareness was brought about amongst all categories of Professionals with respect to provisions made within SFCC for SC/PC and its effect on the contracting parties.

Survey Question 4 Do you agree or not that the terms SC and PC as adopted within different Standard Forms of Construction Contracts serve the same purpose

50% of the respondents agreed whilst 40% of the respondents disagreed and 10% opted to be neutral.

The near equal split of the opinion of the respondents, though in principle SC/PC as applied in different SFCC is deemed to serve the same purpose when considering the tangible benefits to the contracting parties to be similar, the split responses could perhaps be related to the fact that the participants may have had significant working knowledge of one particular form of contract stipulating SC and not the other stipulating PC as completion of the works.

Survey Question 5 -SC/PC, as referred to Works completion, in Construction Contracts, is of extreme significance and importance to contracting parties and do have contractual and legal implications.

95% of the respondents agreed to the aforementioned statement whilst 5% of the respondents opted to be neutral. This overwhelming response of SC/PC to be of extreme significance and importance resonates with the objective of this paper with emphasis on provision of clear definitions of SC/PC within Construction contracts in order to curtail ambiguities.

Survey Question 6 - SC/PC milestone Set with reference to the Employer's Plan to take possession of the Constructed Works and use it for the intended purpose and therefore setting the time frame for Contractor to complete the Construction Works thereby Instituting Time to be of essence.

80% of the respondents agreed to the aforementioned statement whilst 10% of the respondents disagreed and 10% expressed their neutrality.

The unanimity of the respondents in agreement to the aforementioned statement shows that contracts should always be formulated with a set milestone for all parties to the contract including Project stake holders to know in advance, therefore instituting proper planning and timely delivery of a Project.

It is worthwhile to note here that on the question of Employer being able or not being able to use the works for their intended purpose, can result in contentions where the employer may refuse to take over the works. It would therefore be a recommendable solution to have a clear understanding of the employer's operations at the outset where the definition of the term "use the works for their intended purpose", is set from the outset providing the parties the extent of the works to be completed in addition to the concept of completion certificate being issued on 'deminimis principle' when there are very minor works outstanding and/or defects that are trifling in the nature. This could deter the employer to argue that though there are minor works outstanding and/or defects that are trifling in nature, it is not possible for him to use the works as was intended. This would also provide the Architect to fulfil his obligations for determining practical completion more precisely and avoid the issues of challenge from the contracting parties as discussed in Chapter 4 of this paper.

Survey Question 7 - Achieving SC/PC milestone enables the Contractor to receive payment for the whole Works save as to the portion of the retention monies and determined set offs.

80% of the respondents agreed whilst 10% of the respondents disagreed and 10% opted to be neutral. The general consensus of 80% of the participants agreeing on the payment regime for due payment on completion of the works can be seen to be complying with provisions within the SFCC which also have retention and setoff clauses against works not satisfactorily carried. This provision rightly serve to protect Employers against non-attendance or non-completion of defective works and a deterrence for contractors to abscond from their obligations under the contract in addition to the protection offered to the employer by way of Performance Security that is generally valid until the expiry of the Defects Liability/notification periods.

Survey Question 8 Employer's rights to impose Liquidated damages against the contract ceases when SC/PC is achieved.

70% of the respondents agreed to the aforesaid statement whilst 20% of the respondents disagreed and 10% opted to be neutral.

Cessation of employer's rights to Liquidated damages upon achieving SC/PC in contracts was overwhelming agreed by the respondents. The perception of those who disagreed to the aforementioned statement may have relied on the fact that employers may tend to react negatively if any works certified as substantially completed or practically completed was later found to be incomplete. In such situation, it is extremely important to note that the party certifying SC/PC need to be weary of employer's action against them in respect of wrongly or incorrectly certifying SC/PC as the Contract does not provide such recourse of penalizing the contractor after the certificate of SC/PC has been issued.

Survey Question 9 - Parties' rights to terminate the Contract ceases when SC/PC is achieved.

35% of the respondents agreed to the aforesaid statement, however 55% disagreed with remaining 10% being neutral. The high percentage of disagreement can perhaps be

examined with reference to Termination Clauses and disputes that have arisen on Termination and the Legal Authority on Termination. For instance considering Clause

Generally it is considered that the obligations and the rights of each of the Contracting parties do not cease until the contract is performed fully since the performance Bond is for the purpose of contractor's performance which is valid beyond the point of achieving SC/PC and until the end of Defects Liability/Defects Notification period, generally 12 months from SC/PC. The Performance Bond could very well provide a remedy to the employer should the contractor lack performance beyond SC/PC.

Additionally, considering the example of FIDIC 1987, 4th Edition, the employer, under Sub-Clause 63.1 is provided with recourse of Terminating the Employment of the Contract for certain causes as listed therein, however the meaning of the last paragraph as quoted here can be construed as such termination to be carried out prior to achievement of SC/PC where the employer has not gained possession of the site. The last paragraph of the aforesaid clause reads "then the Employer may, after giving 14 days' notice to the Contractor, enter upon the Site and the Works and terminate the employment of the Contractor without thereby releasing the Contractor from any of his obligations or liabilities under the Contract, or affecting the rights and authorities conferred on the Employer or the Engineer by the Contract, and may himself complete the Works or may employ any other contractor to complete the Works." The fact that the employer is entitled to enter the site means that the contractor still has the exclusive possession of the site until he achieves SC/PC hence termination rights cease at SC/PC. However Termination due to insolvency of either parties during the Defects liability period can be invoked as highlighted in subsection 1.3.4 d) of this paper.

Furthermore, since the employer has gained possession of the site after the contractor achieves SC/PC, any shortcoming or default of the contractor despite the instruction of the Engineer to rectify the defects can invoke sub clause 39.2 which essentially gives the employer an opportunity to employ other contractors to rectify the defects at the cost of the contractor with added security of retention monies held by the contractor up to the issuance of Defects Liability Certificate.

With the above remedies available to the employer, termination by employer seems highly unlikely after SC/PC is achieved. On the other hand, Termination by the Contractor could be provoked from non-payment to contractor of any certificate of the engineer within the time specified in the contract that is due to the contractor after SC/PC in which case the Contractor would endeavour to base his termination rights under the provision of Sub-clause 69.1.⁴² However such could be argued by the employer to apply to payment certificate issued by the Engineer for the works prior to SC/PC.

From the above discussion it could be inferred that the parties' rights to terminate the contract ceases after SC/PC is achieved.

Survey Question 10 - Employer's right to instruct Variations in accordance to the contract ceases when SC/PC is achieved.

Whilst 45% of the respondents agreed to the aforementioned statement in question, 35% disagreed and 20% remained neutral.

For those who agreed with the survey statement, this can be seen in the light of sub clause 13.1 of FIDIC 1999 Form of Contract which states: *"Variations may be initiated by the Engineer at any time prior to issuing the Taking-Over Certificate for the Works, either by an instruction or by a request for the Contractor to submit a proposal."*

The fact that 40% of the respondents disagreed to the aforementioned statement may have considered for variations requested rather than instructed. In the case of requested variations, the matter would be a subject of mutual agreement and terms agreed upon unless the contract has a provision for variations to be issued after SC/PC.

It is not uncommon for employers to have the contractor carry out extra works during its presence on site during the defects liability period whereby the onus would then be on the contractor to either accept, subject to an agreed price outside the contract or not at

⁴² Sub Clause - **69.1 Default of Employer**-*"In the event of the Employer failing to pay to the Contractor the amount due under any certificate of the Engineer within 60 days after the expiry of the time stated in Sub-Clause 60.10 within which payment is to be made, subject to any deduction that the Employer is entitled to make under the Contract, the Contractor shall be entitled to terminate his employment under the Contract by giving notice to the Employer, with a copy to the Engineer. Such termination shall take effect 60 days after the giving of the notice."*

all. As Hudson states⁴³, “The last of the above cases *SJ &MM Price Ltd v Milner (1968)* though somewhat inadequately reported supports the view that variations as well as original contract work cannot be instructed after practical completion of the remainder of the work in the absence of express provision, unless of course the contractor is willing to carry them out.”

In *Ata Ul Haq v City Council of Nairobi (1962)*, it was held that once the certificate of SC/PC was issued, the contractor’s obligations are terminated subject only to the maintenance period provisions meaning employer’s rights for Instructing Variations after SC/PC ceases. The 40% of the respondents may have postulated on the fact that there are Form of Contracts such as the 7th edition of ICE with express provision for variations that can be issued after SC/PC.

Survey Question 11- Care of works responsibility passes over from the Contractor to the Employer when SC/PC is achieved.

55% of the respondents agreed with the aforementioned statement, 25% disagreed and 20% opted to be neutral.

Considering FIDIC’87 4th edition, it can be stated that the 55% of the respondents’ agreeing with the Question statement could fall within Sub Clause 20.1 (a)⁴⁴ and the those who disagreed may have considered for the circumstances provided in Sub Clause 20.1 (b)⁴⁵ where the care of the works responsibility lie with the contractor for certain works

⁴³ Hudson’s Building and Engineering Contracts (11th edn., Sweet & Maxwell, London, 1995)

⁴⁴ Sub Clause **20.1 Care of Works**

The Contractor shall take full responsibility for the care of the Works and materials and Plant for incorporation therein from the Commencement Date until the date of issue of the Taking-Over Certificate for the whole of the Works, when the responsibility for the said care shall pass to the Employer. Provided that:

(a) if the Engineer issues a Taking-Over Certificate for any Section or part of the Permanent Works the Contractor shall cease to be liable for the care of that Section or part from the date of issue of the Taking-Over Certificate, when the responsibility for the care of that Section or part shall pass to the Employer and

⁴⁵ (b) the Contractor shall take full responsibility for the care of any outstanding Works and materials and Plant for incorporation therein which he undertakes to finish during the Defects Liability Period until such outstanding Works have been completed pursuant to Clause 49.

Survey Question 12- In Civil Law jurisdictions, SC/PC triggers the date at which decennial liability period begins to run for defects that threaten the stability of the Built Facility or partial/full collapse due to bad workmanship.

70% of the respondents agreed with the aforementioned statement, 10% disagreed and 30% opted to be neutral.

Article 880 (3) of the UAE Civil Code which states “The period of ten years shall commence as from time of delivery of Works” which can be seen to be true of the 70% of the respondents answers.

Survey Question 13 - SC/PC milestone marks the beginning of the Defects Liability /Defects Notification Period.

90% of the respondents agreed with the aforementioned statement, 5% disagreed and 5% opted to be neutral.

The overwhelming agreement with regards the aforesaid question statement commensurate with the stipulation in SFCC, one of which being sub clause 49.1 of the FIDIC’87 4th edn. SFCC which states as follows:

49.1 Defects Liability Period

In these Conditions the expression "Defects Liability Period" shall mean the defects liability period named in the Appendix to Tender, calculated from:

(a) the date of substantial completion of Works certified by the Engineer in accordance with Clause 48,

Survey Question 14 - Defects Liability/Defects Notification Period is for purpose of rectification of Latent Defects and not Patent Defects.

55% of the respondents agreed with the aforementioned statement, 30% disagreed and 15% opted to be neutral.

Whilst 55% agreed to the aforementioned Question statement, the response of 30% of the respondents could be seen to take into consideration sub clause 10.1 (a) of FIDIC’99

Yellow book⁴⁶ where the patent defects of the nature specified therein could be permissible for SC/PC to be achieved and the rectification of such be implemented within the defects notification Period. However, in contrast, sub clause 48.1 of FIDIC '87 4th edn. does not grant for such defects to be rectified during the defects liability period, it states "...to finish with due expedition any outstanding work during the Defects Liability Period." These contrasting provisions then can be seen to resemble the mixed approach taken by the courts in defining SC/PC in relation to patent defects as discussed in Chapter 5. For instance, Judge Newey in *H.W. Nevill (Sunblest) Ltd v William press & Son Ltd* touched upon patent defects by stating "...but that if there were any patent defects in what William Press had done, the architect could not have given a certificate of practical completion." This statement seemingly resembles the intention of sub clause 48.1 whilst Lord Salmon's approach in defining SC/PC in *Westminster v Jarvis* by stating "to mean completion for practical purpose, i.e. for the purpose of allowing the council to take possession of the works and use them as intended." can imply the presence of patent defects of minor nature whilst the council had taken possession and this can be seen to be analogous to Sub clause 10.1(a)

Similarly, Lord Dilhorne's approach in *Westminster v Jarvis* could be seen to be resonating sub clause 48.1 where he stated "...secondly that the defects liability period is provided in order to enable defects not apparent at that date of practical completion to be remedied. If they had been apparent no such certificate would have been issued...." implying if patent defects were found in the works no SC/PC would have been achieved and therefore no provision for patent defects to be rectified during defects liability period. However, the courts approach in *Emson Eastern v EME Developments* where Construction contracts were compared with manufacture of goods with construction contracts being prone to certain imperfections, this could be implied to resemble the intent of sub clause 10.1(a).

⁴⁶ "10.1 Taking Over of the Works and Sections

The Engineer shall, within 28 days after receiving the Contractor's application:

(a) issue the Taking-Over Certificate to the Contractor, stating the date on which the Works or Section were completed in accordance with the Contract, except for any minor outstanding work and defects which will not substantially affect the use of the Works or Section for their intended purpose (either until or whilst this work is completed and these defects are remedied); or..."

It is therefore conceivable that the near balanced split between the respondents to be understandable.

Survey Question 15 – with reference to the definition of PC by:

- 1) Lord Salmon's in *Westminster v Jarvis (1970)* as PC to mean completion for all practical purposes for the purpose of employer to take possession of the works and use them as intended**
- 2) Lord Dilhorne's in *Westminster v Jarvis (1970)* as PC to mean completion of all the construction has to be done**
- 3) Judge Newey in *HW Nevill v William Press (1981)* as PC to mean works completed save as to very minor de-minimis work had not been carried out**

PC is achievable notwithstanding outstanding works of trivial and unimportant nature as opposed to completion of all the construction that has to be done?

85% of the respondents agreed with the aforementioned statement, whilst 15% opted to be neutral.

The overwhelming agreement to the aforementioned question statement can be seen in the context of SFCCs where minor outstanding works are normally referred to be warranted for SC/PC to be certified.

Survey Question 16 – Clearer Definition of the term SC/PC would alleviate the need of Architect, Engineer or Contract Administrator to make discretionary interpretations/decisions based on opinion such as provided in SFCC's like FIDIC and JCT forms that are known to lead to disputes.

50% of the respondents agreed with the aforementioned statement, 15% disagreed and 35% opted to be neutral.

With the above majority of 50% of respondents amongst Industry Professionals agreeing to the statement in question goes to show that Architects, Engineer or Contract Administrator should have a role of decision making with a clear and concise definition for SC/PC which would alleviate disputes and not to be held for incorrect decisions by any of the parties.

Survey Question 17- reference to sub-clause 48.1 for notice given by the contractor to the Engineer for works to have been substantially completed together with an undertaking to finish with due expedition any outstanding work during the Defects Liability period conform with Lord Salmon's and Judge Newey's definition of PC in *Westminster V Jarvis (1970)* and *HW Nevill v William Press (1981)* respectively and not as defined by Lord Dilhorne in *Westminster v Jarvis (1970)*.

65% of the respondents agreed with the definition of Lord Salmon and Judge Newey, 5% disagreed and 30% opted to be neutral.

The overwhelming agreement towards the aforementioned question statement can be seen in the context of the following:

Lord Salmon having stated “.....*completion for practical purposes, i.e. for the purpose of allowing the council to take possession of the works and use them as intended.....*”

Judge Newey having stated “*that William Press had fulfilled its obligations under clause 21(1), where very minor de minimis work had not carried out,*”

Lord Dilhorne having stated “ ... *but practical completion suggests that this was not the intended meaning and what is meant is the completion of all the construction that has to be done...* ”

Therefore in construction today, whilst outstanding works is generally permitted in achieving SC/PC, there is still an issue of the type and extent of such outstanding works that is evidenced from the responses in the next question statement.

Survey Question 18- The term “Outstanding Works” as used in sub-clause 48.1 of Fidic'87 SFCC is very broad and is subjected to Engineer's opinion that can often lead to disputes.

75% of the respondents agreed with the aforementioned statement, 10% disagreed and 15% opted to be neutral.

The overwhelming agreement for the term ‘Outstanding Works’ as being broad does somewhat infer the need for more specific definition to alleviate disputes.

Survey Question 19/Question 20 – RE: sub-clause 10.1, the Engineer shall

(a) issue the Taking-Over Certificate to the Contractor, stating the date on which the Works or Section were completed in accordance with the Contract, except for any minor outstanding work and defects which will not substantially affect the use of the Works or Section for their intended purpose (either until or whilst this work is completed and these defects are remedied);

Do you agree or not that even the phrase “minor outstanding work” can still potentially lead to dispute as the parties’ could arguably differ as to what constitutes ‘minor outstanding work?’.

85% of the respondents agreed with the aforementioned statement, 10% disagreed and 5% opted to be neutral.

Although FIDIC 99 SFCC has improved from its predecessor by insertion of “minor outstanding work, it can still be seen from the overwhelming percentage of respondents for the need to define ‘minor outstanding work’ in order to alleviate speculation and eventually disputes. It is not surprising that high percentage of respondents also responded similarly to Question 18 for the need of clear definition for ‘Outstanding works’.

Survey Question 21- Do you agree or not that, that sub-clause 10.1 of FIDIC 99 allows for patent defects to be permissible in achieving SC is in fact different to:

1)“.....The Engineer shall also notify the Contractor of any defects in the Works affecting substantial completion that may appear after such instructions and before completion of the Works specified therein. The Contractor shall be entitled to receive such Taking-Over Certificate within 21 days of completion, to the satisfaction of the Engineer, of the Works so specified and remedying any defects so notified.”” as stated in Sub-Clause 48.1 of FIDIC 1987, 4th edn. and

2)“....that the defects liability period is provided in order to enable defects not apparent at that date of practical completion to be remedied. If they had been apparent no such certificate would have been issued..” stated by Lord Dilhorne in *Westminster Corporation v J. Jarvis and Sons (1970)*, and “but that if there were

any patent defects in what the contractor had done the architect could not have given a certificate of practical completion.” stated by Judge Newey QC in *HW Neville v William Press and Sons (1981)*.

75% of the respondents agreed with the aforementioned statement, and 25% opted to be neutral. It is not surprising to observe overwhelming agreement to the above question statement, confirming inconsistency between SFCC FIDIC’87 v FIDIC’99 and between FIDIC’99 and Judge Newey’s and Lord Dilhorne’s statements in courts during their attempt to define SC/PC.

Survey Question 22-Do you agree or not that SC/PC within SFCC, whilst being recognized, it lacks clear definition and its definition is somewhat debated profoundly at the stage of completion of the Project and has been known to be a source of disputes that have advanced to adjudication through ADR and legal process.

75% of the respondents agreed with the aforementioned statement, and 25% opted to be neutral.

The overwhelming agreement to the Question statement shows that there is much need for SFCC to have a more concise definition for SC/PC to avoid disputes that advance to adjudication through various ADR and legal process. The definition of SC/PC can be suggested to be to a level that it comprises various scenarios of completion in relation to various types of works and to also define the terms to a detailed level such as to what will and what will not substantially affect the use of the Works and how clearly defined is the phrase ‘intended purpose’ and what constitutes ‘outstanding works’, ‘minor outstanding works’ and what constitutes defects which are of trivial or trifling nature and whether or not what is the tolerance level of the employer for contractor to attend to defects whilst in occupation and operating his business.

The aim would be to leave very little room for interpretation.

Survey Question 23-Properly defining SC/PC from the stand point of meeting expectations and avoiding disputes is considered to be a necessity.

75% of the respondents agreed with the aforementioned statement, 10% disagreed and 15% opted to be neutral. The general consensus amongst respondents confirms the necessity of defining SC/PC clearly and concisely to avoid disputes and the complexities and cost expenditures that come with the disputes.

Survey Question 24- There is a distinction between Employer's possession of part of the works before SC/PC and Contractor consenting to the employer for early use of the works with the common issue of Contractor's consent (which shall not be unreasonably withheld).

95% of the respondents agreed with the aforementioned statement, and 5% opted to be neutral. It can be seen from the overwhelming majority of the respondents who agreed with the aforesaid question statement that possession of the uncompleted Works by employer to be distinct from the employer gaining early access.

Survey Question 25 -Often employers are known to take partial possession of the works and such actions have led to disputes with respect to whether SC/PC is certified or is deemed to have been achieved.

85% of the respondents agreed with the aforementioned statement, 5% disagreed and 10% opted to be neutral. The overwhelming agreement to the aforementioned Question statement is evident of some of the case laws presented in Section 5.4 of Chapter 5 of this paper.

Survey Question 26-There is a need for further discussion and research on the issue of SC/PC related to Projects where there is an enabling works contractor for example a piling contractor to have achieved SC/PC is considered not to be in breach for having to return to remedy defective piles during the defects liability period, which became apparent after SC/PC, even though this caused delays to the works of the follow on main contractor.

65% of the respondents agreed with the aforementioned statement, 10% disagreed and 25% opted to be neutral. The high percentage of respondents who agreed may well have had the knowledge or experienced issues with enabling works carried out by a separate

contract to that of the follow up works. Some may have well been aware of case laws in common law arising out of JCT forms of Contract, similar to *Westminster v Jarvis*.

Survey Question 27-There is a mixed perception amongst Industry Practioners on the meaning of SC/PC when considering the mixed approach of the courts and considered as Obiter Dictum when the approach in *Westminster v Jarvis* included that PC is achieved when all the construction work that has to be done is completed and the approach in *Neville v William Press* defined PC is achieved where there are very minor de-minimis items of work incomplete and the approach in *Mariner International Hotels v Atlas* defined PC is achieved when works have been completed free from patent defects other than ones which can be ignored as trifling.

75% of the respondents agreed with the aforementioned statement of existence of mixed perception amongst Industry Practioners, 10% disagreed and 15% opted to be neutral. It is not surprising that the overwhelming agreement of the respondents in respect of mixed perception amongst Industry practioners, based on the different understanding and dissenting arguments for the meaning of SC/PC by the courts.

Survey Question 28-The UAE Law does not provide or there is no legal authority as to what constitutes SC/PC, but only protects the contractor from the employer not taking delivery of the works under Article 884 of the UAE Civil Code when works are completed, therefore seen to prevent the Employer to unfairly impose damages for delays when in actual fact the works were completed.

50% of the respondents agreed with the aforementioned statement 15% disagreed and 35% opted to be neutral. It is not clear if the 35% of the respondents who opted to be neutral based on the extent of their knowledge of the UAE Civil code or assumed that there may be some indication of what constitutes SC/PC in relation to sale of goods and services where the question of specific performance could arise. This could very well be applicable to the 15% who disagreed with the Question Statement. However, half of the respondents who agreed may have had in the past searched for the legal authority on SC/PC and were not able to find.

Survey Question 29- In the UAE there is no reported legal cases on the matter of SC/PC and if there have been indications of such cases would be welcome if provided under the heading of other comments.

40% of the respondents agreed with the aforementioned statement and 60% opted to be neutral. Similar to the discussion on the Survey question 28, 60% of the respondents who opted to be neutral may not have had knowledge of any law under the UAE on the issue of SC/PC and for that matter any legal cases arising between the contracting parties and also no other comments were seen, as asked in the question, from any one respondent. However, existence of disputes relating to SC/PC occurring within the UAE cannot be ruled out entirely. Some may have advanced through the Arbitration process and not known publicly or some may have been settled amicably between the parties through ADR process like mediation and conciliation.

Survey Question 30-The powers conferred onto the Architect/Engineer/contract Administrator, in particular where definitions of the term SC/PC is vague can be subject of abuse for not exercising or not being able to act impartially for sake of employer's gains that are beyond his contractual rights.

65% of the respondents agreed with the aforementioned statement, 1% disagreed and 30% opted to be neutral.

The high percentage of respondents agreeing with the Question statement with a minute percentage of 1% disagreeing signifies the advantage an employer can take in interpreting the meaning of SC/PC in his favor, if the meaning is vague, with little or no challenge from the Architect/Engineer/contract Administrator, who is employed by the Employer.

Survey Question 31-The terms SC/PC should be defined with elaborations contained within the Particular conditions based on Project by Project basis, fitting the type of works ranging from Roads and infrastructure Works to various type of Building Works and further.

80% of the respondents agreed with the aforementioned statement, 10% disagreed and 10% opted to be neutral. The overwhelming response from the respondents in respect of

SC/PC to be defined in much detail and appropriate to the type of works signifies that SFCC should be modified within the particular/supplementary conditions to define Project Specific SC/PC prior to Contract. Some may argue that such mode of definition is much cumbersome, but when weighed against the avoidance of arguments and disputes that lead to judicial process, it is always seen as a positive measure.

Survey Question 32-The following proposed definitions for SC/PC could possibly aid towards reducing ambiguities: SC/PC as referred to in Clause ... means the stage when the Works or a section are completed in accordance with the Contract to the satisfaction of the Architect/Engineer except for minor outstanding work and/or minor defects of the type and nature prescribed in the particular conditions as not to prevent the works being used by the Employer for their intended purpose or occupied and which the Architect/engineer determines the contractor has grounds for not promptly rectifying and that there are no legal requirements, approvals, certification or other impediment to the Employer's use or the occupation of the Works or a Section for which, in the opinion of the Engineer, the Contractor responsible to provide by that time under the Contract or otherwise under the law.

65% of the respondents agreed with the aforementioned definition, 10% disagreed and 25% opted to be neutral. The definition seems quite elongated, nonetheless a high percentage of the respondents agreed for it in favor of it being a little more explicit to what is contained in SFCC. However, the recommendation under Question 31 for the definition to be more Project Specific in terms of the type of works, if combined with the definition proposed under this Question in a form of detailed inspection rules and check list could be considered to be an enhancement.

Survey Question 33-No question was specified in error.

Survey Question 34-mistakenly a repeat of question 7

Chapter Six – Conclusion

From this paper, it is thus seen that the terms SC/PC, is an important milestone contained in Construction Contracts and should not be ignored or taken lightly

especially when such milestone, when achieved, confers onto the contracting parties important tangible benefits as mentioned in Section 1.3 of Chapter 1.

As discussed in Chapter 2 of this paper, SC/PC clauses as currently contained in the SFCCs are prone to potentially high level of misinterpretation amongst the parties which inevitably lead to contentions and that it is hoped that the relevant Institutions will continue with their plight to develop SFCC that will limit ambiguities and disputes.

The decision making considerations of the party upon whom is conferred the obligation to certify SC/PC with an impartial influence is an important consideration which cannot be ignored. This was discussed in Chapter 3 of this paper, which is still an issue where the party can still be seen to have divided purpose.

The Common law cases referred to particularly in Section 4.2 of Chapter 4 can be seen to be an attempt by the courts to define the terms with mixed approach of the Judges. This has inevitably brought about reasoned arguments amongst legal experts and Industry Professionals pointing towards the necessity of reforms with respect to providing clear and concise meaning of such terms in contracts in order to alleviate disputes. In addition, this would essentially avoid the use of words such as ‘probably’ and ‘I think’ in court citations that could be considered obiter dictum.

Partial taking over of the uncompleted works is also implemented without setting at the outset clear intent and Scope which inevitably lead to disputes that often lead to expensive judicial processes as discussed in Section 4.4 of Chapter 4.

The General observation from the Research survey as discussed under Chapter 6, lends itself to the fact that SC/PC is not clearly defined which commensurate with the need for further research and development of SFCCs with respect to SC/PC.

It is perhaps a right approach to consider the definition of SC/PC in Contracts holistically and not be limited to the common meaning of the term, but go further to consider the type and specific elements of Work components related to the different type of Construction Projects viz Building Construction Works or Infra Structure Construction Works as each of these have differing components of work and accordingly have their own set of construction features check list that would prevent the

Employer to use the Works for its intended purpose. Such an initiative, should be clearly set out prior to execution of the contract, though cumbersome to implement due to Project by Project variables, its benefits much outweigh the situation of disputes that otherwise would arise leading to expensive adjudication processes. It also cannot be overemphasized that such an initiative has far wider benefits where relationships of the parties are maintained for future endeavors together with the fact that their reputation is not marred through public knowledge of them having been involved in Legal proceedings. However, in attempting to define comprehensively the terms SC/PC for incorporation into the Contract, care should be taken as not to define the term with impractical and onerous elements of outstanding works and defects which would inevitably expose the contractor to be liable for Liquidated Damages, resulting in high Bid values. The citation by Judge Newey in *Emson Eastern v EME Developments* that building construction is not like the manufacture of goods in a factory becomes more relevant. The type and extent of outstanding works or remedial works for the purpose of SC/PC should be defined within the contract and developed with careful analysis and consideration of fairness in defining essential components of the Works which will or which will not prevent the Employer from taking occupation and using the works for its intended purpose.

In achieving that, it is hoped that a holistic approach in coming up with a clearer and more concise definition of SC/PC can be made a subject for further research whereby the contracting parties would need to play a pivotal role into pre- agreeing on the specifics of what constitutes SC/PC on a project by project basis with reference to type of development and look further beyond the one common definition as put in the Standard Forms of Contract to fit all projects. By this, the clause within the contract for SC/PC under general conditions can perhaps be elaborated within the Special conditions in a similar manner as other general condition clauses that are made project specific by incorporation of Special condition clauses. Such a clause would be prescriptive in defining the extent of completed works with reference to the components of the development where categorical importance is emphasized which in essence would set out a comprehensive awareness to the contractor as to what constitutes beneficial occupancy in the eyes of the employer and/or for that matter the ability of the employer

to use the facility as intended avoiding the contention at the time of completion where the employer could very well reject taking over to state the facility is not completed for use as intended. In other words the contravening interpretations and arguments at the time of completion can be avoided where prescriptive nature of building completion is pre-defined at the outset. Although the exercise would seem at the first instance to be cumbersome but the advantages that emanate from it could seemingly be welcomed by the concerned parties to the contract and equally by the Contract administrator whereby the nature and extent of completion would have been clearly earmarked in the form of a pre-determined physical checklist of what parts would be or would not be considered towards project completion even if they were observed to be of minor nature, though critical to the operations of the employer.

It is therefore hoped that in any enhancement and updating of the Form of Contracts, not only clearly defined term for SC/PC is put in place but clear rules and procedures are put in place, such as adopted in China and also by some developers in the UAE where the part of the Building Authorities' inspection is considered an essential and precursory input for the facility to be considered operational and fit for occupancy in terms of safety, in addition to the works having been carried out in accordance with the design and specifications Including passing of all the tests that are required by the contract. Such Project Completion event shall not be treated simply as an ordinary event but treated as one that is of utmost importance, due to the tangible benefits it provides, to the parties in contract.

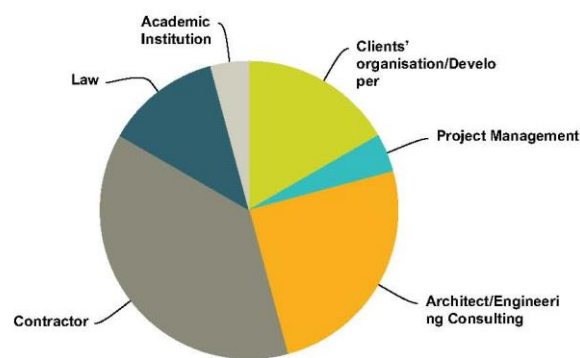
Similar to China, process for Authority inspections, on contracts in Dubai make reference to Government Building Regulation Authorities compliance (JAFZA/TRAKHEES, TECOM, Dubai Municipality, Environmental and Health and Safety Department, Dubai Civil Defence, DEWA) as a condition precedent to SC/PC certification which in effect confirms that all necessary statutory requirements have been met for the employer to take occupancy and use or conduct their operations as intended. However, such certification by Authorities precedes the Contractual Certification in respect of SC/PC where the contractor's obligations as set out in the contract need to be fulfilled. Care should be taken not to mix the two certifications as they serve different purposes.

Finally, it is the Author's hope that this paper has provided an insight into the importance of SC/PC in construction contracts and that it conveys a need for further research in developing clear definitions for SC/PC in the endeavour to alleviate disputes and undesirable consequences amongst the contracting parties.

APPENDIX

Q1 1.1 What type of organisation do you work with?

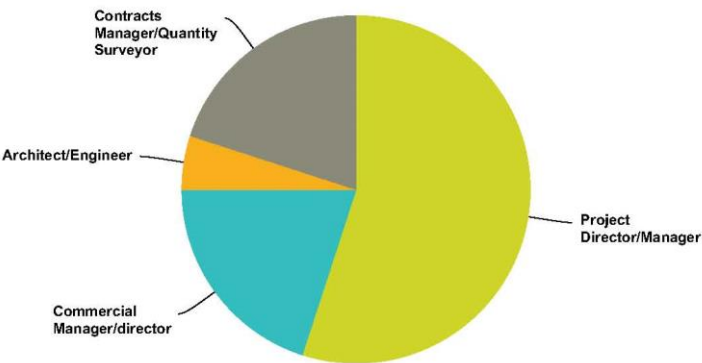
Answered: 24 Skipped: 2



Answer Choices	Responses	
Clients' organisation/Developer	16.67%	4
Project Management	4.17%	1
Architect/Engineering Consulting	25.00%	6
Contractor	37.50%	9
Law	12.50%	3
Academic Institution	4.17%	1
Total		24

Q2 Which of the following describes your position

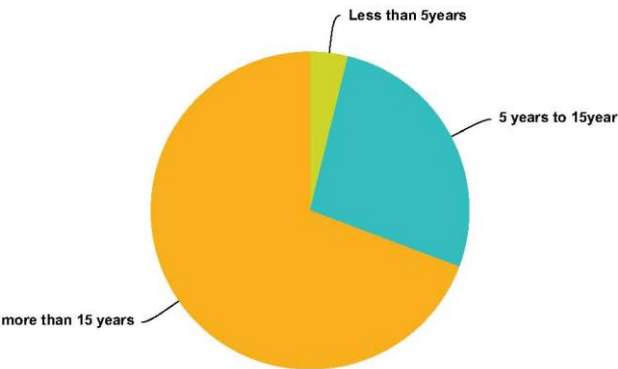
Answered: 20 Skipped: 6



Answer Choices	Responses	
Project Director/Manager	55.00%	11
Commercial Manager/director	20.00%	4
Architect/Engineer	5.00%	1
Contracts Manager/Quantity Surveyor	20.00%	4
Total		20

Q3 How many years of experience do you have in the construction industry?

Answered: 26 Skipped: 0



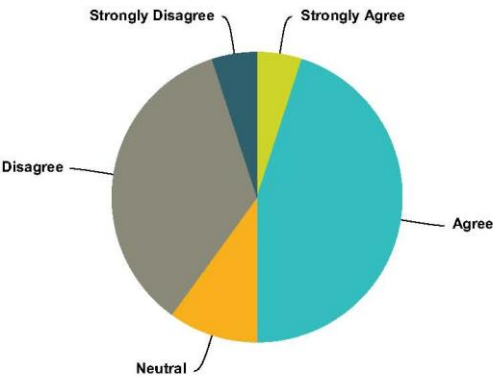
Answer Choices	Responses	
Less than 5years	3.85%	1
5 years to 15year	26.92%	7
more than 15 years	69.23%	18
Total		26

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

SurveyMonkey

Q4 Do you agree or not that the terms “Substantial Completion” (SC) and “Practical Completion” (PC) as adopted within different Standard Forms of Construction Contracts serve the same purpose?

Answered: 20 Skipped: 6



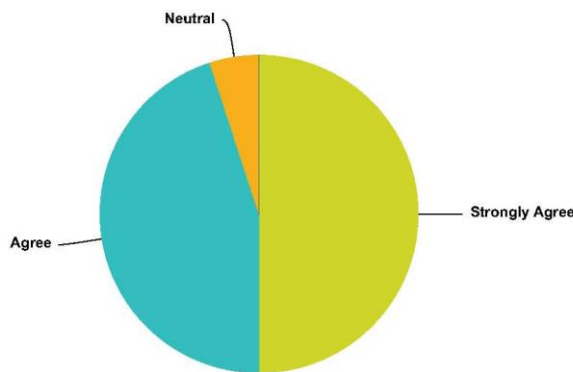
Answer Choices	Responses	
Strongly Agree	5.00%	1
Agree	45.00%	9
Neutral	10.00%	2
Disagree	35.00%	7
Strongly Disagree	5.00%	1
Total		20

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

SurveyMonkey

Q5 Do you agree or not that SC/PC, as referred to Works completion, in Construction Contracts, is of extreme significance and importance to contracting parties and do have contractual and legal implications?

Answered: 20 Skipped: 6



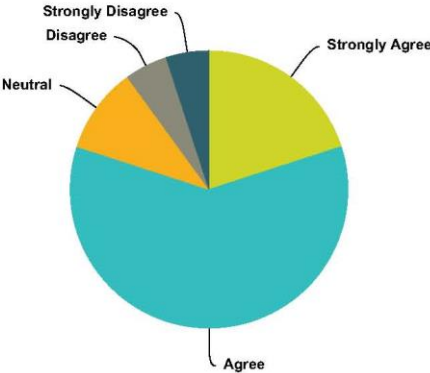
Answer Choices	Responses	
Strongly Agree	50.00%	10
Agree	45.00%	9
Neutral	5.00%	1
Disagree	0.00%	0
Strongly Disagree	0.00%	0
Total		20

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

SurveyMonkey

Q6 Do you agree or not that SC/PC milestone is set with reference to the Employer's Plan to take possession of the Constructed Works and use it for the intended purpose and therefore sets the time frame for Contractor to complete the Construction Works thereby instituting Time to be of essence?

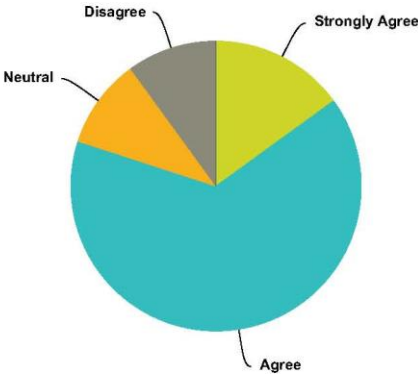
Answered: 20 Skipped: 6



Answer Choices	Responses	
Strongly Agree	20.00%	4
Agree	60.00%	12
Neutral	10.00%	2
Disagree	5.00%	1
Strongly Disagree	5.00%	1
Total		20

Q7 Do you agree or not that achieving SC/PC milestone enables the Contractor to receive payment for the whole Works save as to portion of the retention monies and determined set offs?

Answered: 20 Skipped: 6



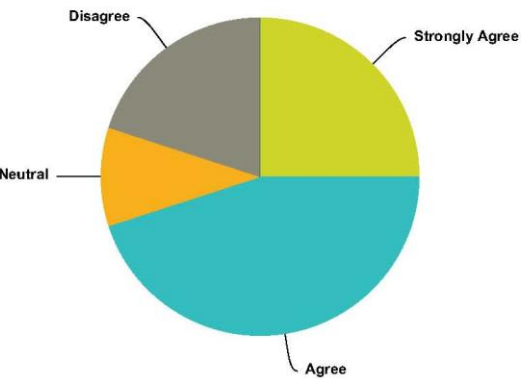
Answer Choices	Responses	
Strongly Agree	15.00%	3
Agree	65.00%	13
Neutral	10.00%	2
Disagree	10.00%	2
Strongly Disagree	0.00%	0
Total		20

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

SurveyMonkey

Q8 Do you agree or not that the Employer's rights to impose Liquidated damages against the contractor ceases when SC/PC is achieved?

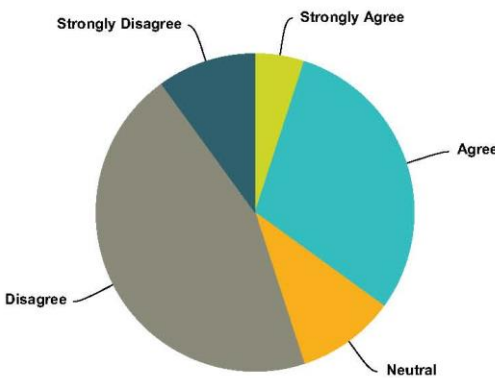
Answered: 20 Skipped: 6



Answer Choices	Responses	
Strongly Agree	25.00%	5
Agree	45.00%	9
Neutral	10.00%	2
Disagree	20.00%	4
Strongly Disagree	0.00%	0
Total		20

Q9 Do you agree or not that the parties' rights to terminate the Contract ceases when SC/PC is achieved?

Answered: 20 Skipped: 6



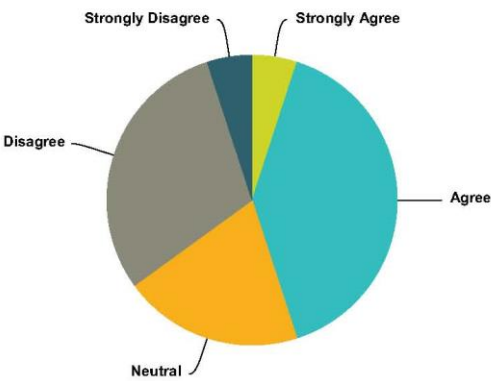
Answer Choices	Responses
Strongly Agree	5.00% 1
Agree	30.00% 6
Neutral	10.00% 2
Disagree	45.00% 9
Strongly Disagree	10.00% 2
Total	20

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

SurveyMonkey

Q10 Do you agree or not that the Employer's rights to instruct Variations in accordance to the contract ceases when SC/PC is achieved?

Answered: 20 Skipped: 6



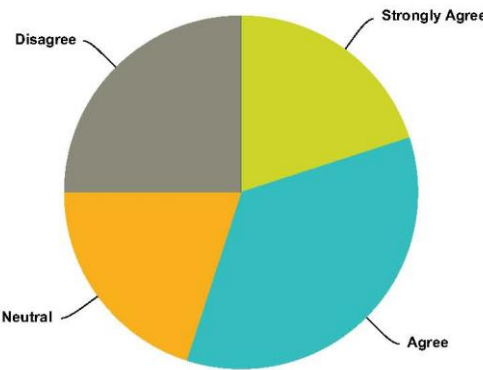
Answer Choices	Responses	
Strongly Agree	5.00%	1
Agree	40.00%	8
Neutral	20.00%	4
Disagree	30.00%	6
Strongly Disagree	5.00%	1
Total		20

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

SurveyMonkey

Q11 Do you agree or not that the care of works responsibility passes over from the Contractor to the Employer when SC/PC is achieved?

Answered: 20 Skipped: 6



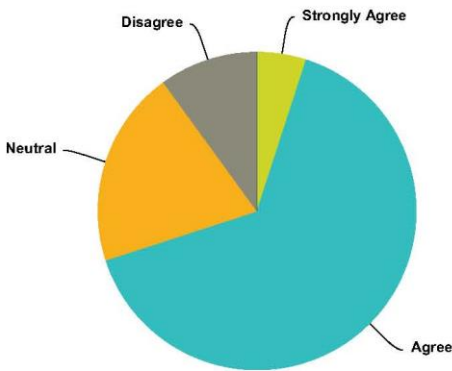
Answer Choices	Responses	
Strongly Agree	20.00%	4
Agree	35.00%	7
Neutral	20.00%	4
Disagree	25.00%	5
Strongly Disagree	0.00%	0
Total		20

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

SurveyMonkey

Q12 Do you agree or not that in Civil Law jurisdictions, SC/PC triggers the date at which decennial liability period begins to run for defects that threaten the stability of the Built facility or partial/full collapse due to bad workmanship?

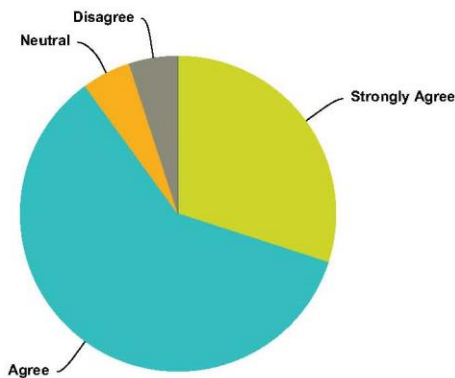
Answered: 20 Skipped: 6



Answer Choices	Responses	
Strongly Agree	5.00%	1
Agree	65.00%	13
Neutral	20.00%	4
Disagree	10.00%	2
Strongly Disagree	0.00%	0
Total		20

Q13 Do you agree or not that SC/PC milestone marks the beginning of the Defects Liability/Defects Notification period

Answered: 20 Skipped: 6



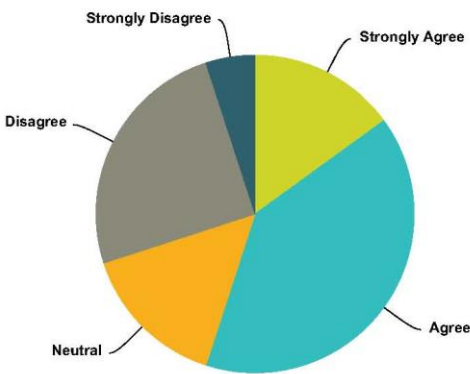
Answer Choices	Responses	
Strongly Agree	30.00%	6
Agree	60.00%	12
Neutral	5.00%	1
Disagree	5.00%	1
Strongly Disagree	0.00%	0
Total		20

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

SurveyMonkey

Q14 Do you agree or not that Defects Liability/Defects Notification Period is for the purpose of rectification of Latent Defects and not Patent Defects?

Answered: 20 Skipped: 6



Answer Choices	Responses	
Strongly Agree	15.00%	3
Agree	40.00%	8
Neutral	15.00%	3
Disagree	25.00%	5
Strongly Disagree	5.00%	1
Total		20

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

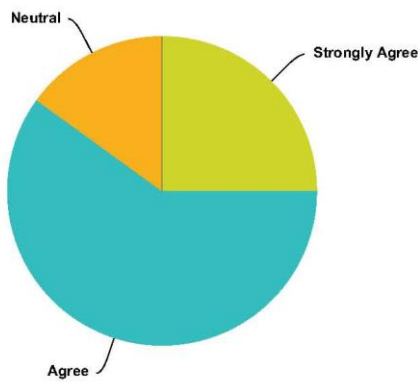
SurveyMonkey

Q15 With attempts by the Common Law Courts to define PC in Westminster Corporation v J. Jarvis and Sons (1970) arising out of RIBA 63 SFCC, whereby, Lord Salmon LJ stated: "I take these words 'practical completion' to mean completion for all practical purposes, that is to say for the purposes of allowing the employer to take possession of the works and use them as intended. If completion in clause 21 meant down to the last detail, however trivial and unimportant, the clause 22 would be a penalty clause and as such unenforceable." and In the same case, Lord Dilhorne stated: "The contract does not define what is meant by practical completion. One would normally say that a task was practically completed when it was almost but not entirely finished, but practical completion suggests that this is not the intended meaning and what is meant is the completion of all the construction that has to be done....." From the two definitions above, and with added Legal Authority from HW Neville v William Press and Sons (1981) where Judge Newey QC stated "... the word practically in clause 15(1) gave the architect a discretion to certify that the contractor had fulfilled his obligationwhere very minor de-minimis work had not been carried out,.....", Do you agree or not that PC should be achievable notwithstanding outstanding works of trivial and unimportant nature as opposed to completion of all the construction that has to be done?

Answered: 20 Skipped: 6

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

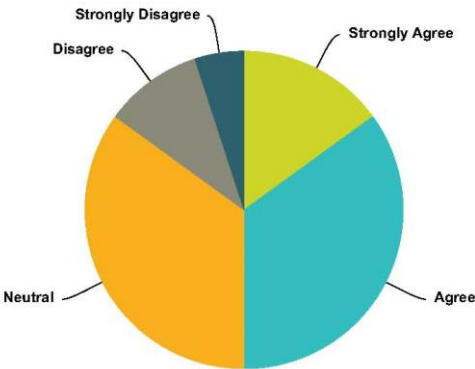
SurveyMonkey



Answer Choices	Responses	
Strongly Agree	25.00%	5
Agree	60.00%	12
Neutral	15.00%	3
Disagree	0.00%	0
Strongly Disagree	0.00%	0
Total		20

Q16 Do you agree or not that clearer definition of the term SC/PC would alleviate the need of Architect, Engineer or Contract Administrator to make discretionary interpretation/decisions based on opinion, such as provided in below clauses that have known to lead to disputes? Sub-clause 48.1 of FIDIC 1987 - “.....The Engineer shall, either issue to the Contractor a Taking-Over Certificate, stating the date on which, in his opinion, the Works were substantially completed or give instructions in writing to the Contractor specifying all the work which, in the Engineer's opinion, is required to be done by the Contractor before the issue of such Certificate.....” sub-clause 17.1 of JCT 98 SFCC - “When in the opinion of the Architect Practical Completion of the Works is achieved.....he shall forthwith issue a certificate to that effect and Practical Completion of the Works shall be deemed for all the purposes of this Contract to have taken place on the day named in such certificate.”

Answered: 20 Skipped: 6



Answer Choices	Responses
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Substantial Completion/Practical Completion (SC/PC) within Construction Contracts		SurveyMonkey
Strongly Agree	15.00%	3
Agree	35.00%	7
Neutral	35.00%	7
Disagree	10.00%	2
Strongly Disagree	5.00%	1
Total		20

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

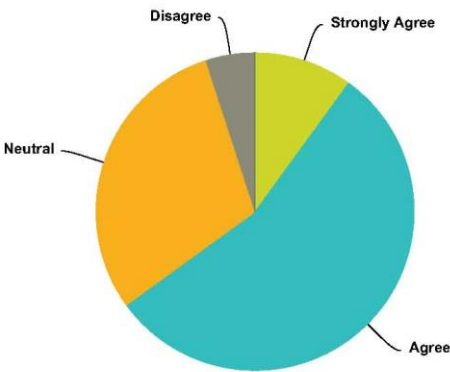
SurveyMonkey

Q17 Re: Sub-Clause 48.1 of FIDIC 1987 4th edn., SFCC which states “.....When the whole of the Works have been substantially completed and have satisfactorily passed any Tests on Completion prescribed by the Contract, the Contractor may give a notice to that effect to the Engineer, with a copy to the Employer, accompanied by a written undertaking to finish with due expedition any outstanding work during the Defects Liability Period. Such notice and undertaking shall be deemed to be a request by the Contractor for the Engineer to issue a Taking-Over Certificate in respect of the Works.....”The Engineer shall also notify the Contractor of any defects in the Works affecting substantial completion.....” Do you agree or not that the above clause permitting Works to be outstanding for PC to be certified conforms to Lord Salmon’s and Judge Newey’s definition of PC given in Westminster Corporation v J. Jarvis and Sons (1970) and HW Neville v William Press and Sons (1981) and not as given by Lord Dilhorne in Westminster Corporation v J. Jarvis and Sons (1970)?

Answered: 20 Skipped: 6

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

SurveyMonkey



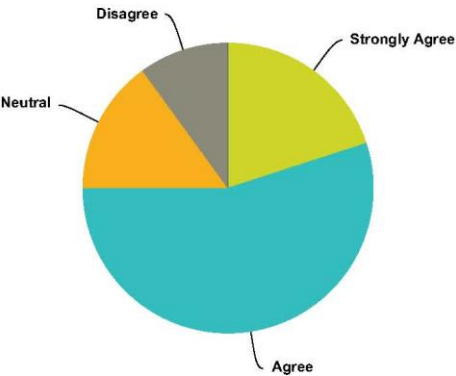
Answer Choices	Responses	
Strongly Agree	10.00%	2
Agree	55.00%	11
Neutral	30.00%	6
Disagree	5.00%	1
Strongly Disagree	0.00%	0
Total		20

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

SurveyMonkey

Q18 Do you agree or not that the Term “Outstanding Works” as used in sub-clause 48.1 of FIDIC 1987 SFCC is very broad and is only subjected to Engineer’s opinion that can often lead to disputes?

Answered: 20 Skipped: 6



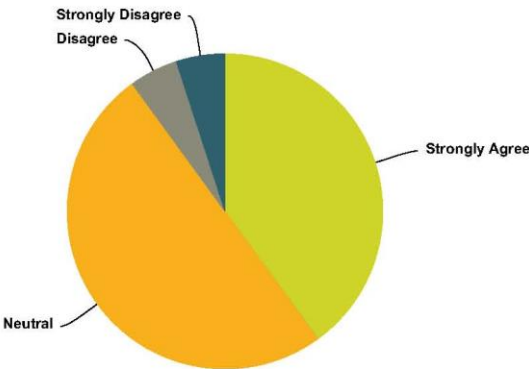
Answer Choices	Responses	
Strongly Agree	20.00%	4
Agree	55.00%	11
Neutral	15.00%	3
Disagree	10.00%	2
Strongly Disagree	0.00%	0
Total		20

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

SurveyMonkey

Q19 RE: sub-clause 10.1 of FIDIC 1999 SFCC- which states “.....The Engineer shall, (a) Issue the Taking-Over Certificate to the Contractor, stating the date on which the Works or Section were completed in accordance with the Contract, except for any minor outstanding work and defects which will not substantially affect the use of the Works or Section for their intended purpose (either until

Answered: 20 Skipped: 6



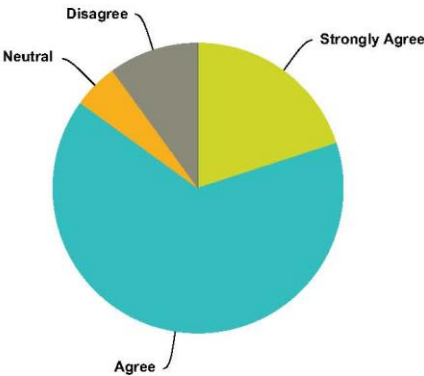
Answer Choices	Responses	
Strongly Agree	40.00%	8
Agree	0.00%	0
Neutral	50.00%	10
Disagree	5.00%	1
Strongly Disagree	5.00%	1
Total		20

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

SurveyMonkey

Q20 Do you agree or not that the even the phrase “minor outstanding work” can still potentially lead to dispute as the parties’ could arguably differ as to what constitutes ‘minor outstanding work’?

Answered: 20 Skipped: 6



Answer Choices	Responses	
Strongly Agree	20.00%	4
Agree	65.00%	13
Neutral	5.00%	1
Disagree	10.00%	2
Strongly Disagree	0.00%	0
Total		20

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

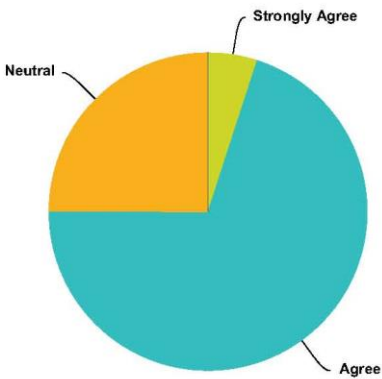
SurveyMonkey

Q21 Do you agree or not that, that sub-clause 10.1 of FIDIC 99 allows for patent defects to be permissible in achieving SC is in fact different to: “.....The Engineer shall also notify the Contractor of any defects in the Works affecting substantial completion that may appear after such instructions and before completion of the Works specified therein. The Contractor shall be entitled to receive such Taking-Over Certificate within 21 days of completion, to the satisfaction of the Engineer, of the Works so specified and remedying any defects so notified.”” as stated in Sub-Clause 48.1 of FIDIC 1987, 4th edn. and “....that the defects liability period is provided in order to enable defects not apparent at that date of practical completion to be remedied. If they had been apparent no such certificate would have been issued..” stated by Lord Dilhorne in Westminster Corporation v J. Jarvis and Sons (1970), and “but that if there were any patent defects in what the contractor had done the architect could not have given a certificate of practical completion.” stated by Judge Newey QC in HW Neville v William Press and Sons (1981).

Answered: 20 Skipped: 6

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

SurveyMonkey



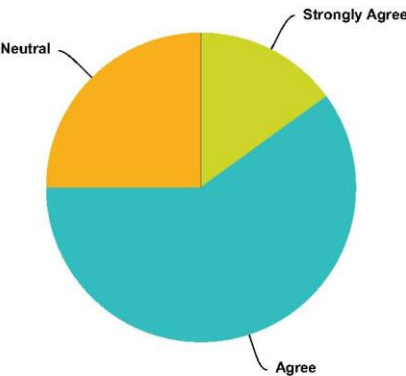
Answer Choices	Responses	
Strongly Agree	5.00%	1
Agree	70.00%	14
Neutral	25.00%	5
Disagree	0.00%	0
Strongly Disagree	0.00%	0
Total		20

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

SurveyMonkey

Q22 Do you agree or not that SC/PC, within Standard forms of Construction Contracts (SFCC), whilst being recognized, it lacks clear definition and its definition is somewhat debated profoundly at the stage of completion of the Project and has been known to be a source of disputes that have advanced to adjudication through Alternative Dispute Resolution and Legal Processp?

Answered: 20 Skipped: 6



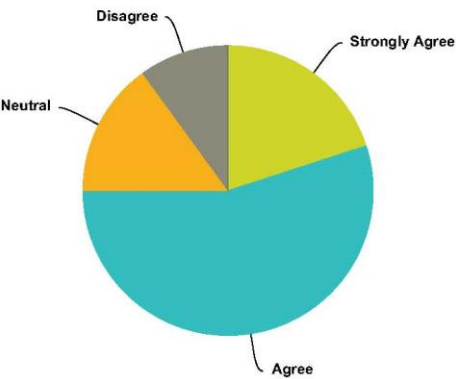
Answer Choices	Responses	
Strongly Agree	15.00%	3
Agree	60.00%	12
Neutral	25.00%	5
Disagree	0.00%	0
Strongly Disagree	0.00%	0
Total		20

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

SurveyMonkey

Q23 Do you then agree or not that properly defining SC/PC from the stand point of meeting expectations and avoiding disputes is considered to be a necessity?

Answered: 20 Skipped: 6



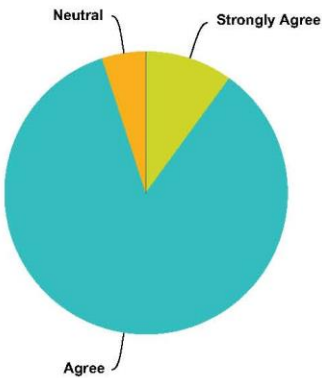
Answer Choices	Responses	
Strongly Agree	20.00%	4
Agree	55.00%	11
Neutral	15.00%	3
Disagree	10.00%	2
Strongly Disagree	0.00%	0
Total		20

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

SurveyMonkey

Q24 Do you agree or not that there is a distinction between Employer’s possession of part of the works before SC/PC and Contractor consenting to the Employer for early use of the works with the common issue of Contractor’s consent (which shall not be unreasonably withheld ?

Answered: 20 Skipped: 6



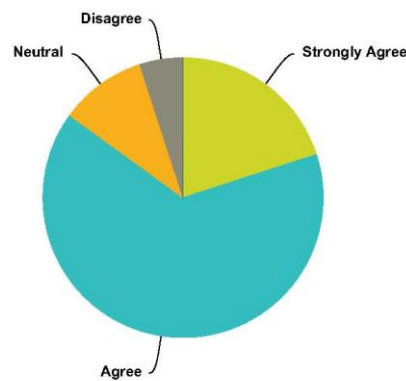
Answer Choices	Responses	
Strongly Agree	10.00%	2
Agree	85.00%	17
Neutral	5.00%	1
Disagree	0.00%	0
Strongly Disagree	0.00%	0
Total		20

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

SurveyMonkey

Q25 Do you agree or not that often Employers are known to take partial possession of the Works and such actions have led to disputes with respect to whether SC/PC is certified or is deemed to have been achieved?

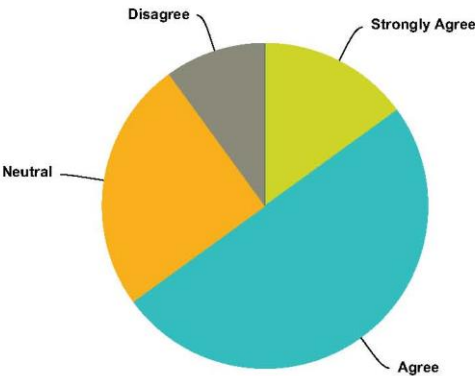
Answered: 20 Skipped: 6



Answer Choices	Responses	
Strongly Agree	20.00%	4
Agree	65.00%	13
Neutral	10.00%	2
Disagree	5.00%	1
Strongly Disagree	0.00%	0
Total		20

Q26 Do you agree or not that, there is a need for further discussion and research on the issue of SC/PC related to Projects where enabling works contractor. For example, Piling Contractor, to have achieved SC/PC is considered to not be in breach of contract, for having to return to remedy defective piles during the defects liability period, which become apparent after SC/PC, even though this caused delays to the works of the follow on main contractor?

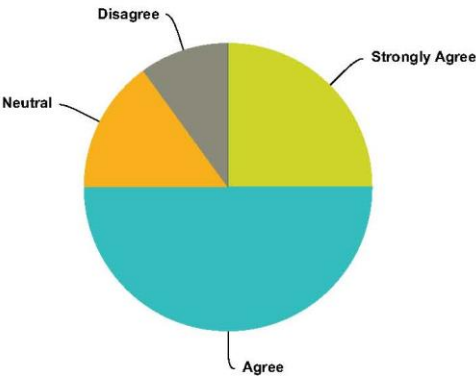
Answered: 20 Skipped: 6



Answer Choices	Responses
Strongly Agree	15.00% 3
Agree	50.00% 10
Neutral	25.00% 5
Disagree	10.00% 2
Strongly Disagree	0.00% 0
Total	20

Q27 Do you agree or not that there is a mixed perception amongst Industry Practioners on the meaning of SC/PC when considering the following definitions given by the Courts and considered as Obiter Dictum: (i)Practical Completion means completion of all the construction work that has to be done (Jarvis and Sons v William Press) (ii)Practical completion can be certified where there are very minor de minimis items of work incomplete (HW Nevill v William Press) (iii) Practical completion is a state of affairs in which the works have been completed free from patent defects other than ones which can be ignored as trifling (Mariner International Hotels v Atlas)

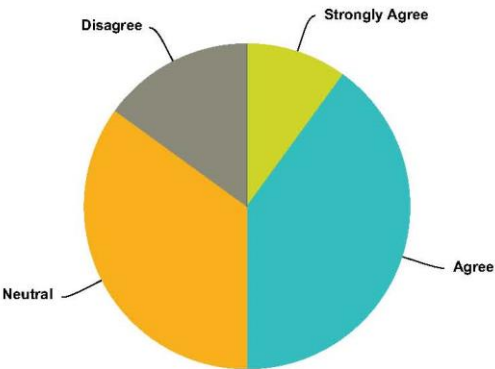
Answered: 20 Skipped: 6



Answer Choices	Responses	
Strongly Agree	25.00%	5
Agree	50.00%	10
Neutral	15.00%	3
Disagree	10.00%	2
Strongly Disagree	0.00%	0
Total		20

Q28 Do you agree or not that in the UAE, the law does not provide or there is no legal authority as to what constitutes SC/PC, but only protects the contractor from the Employer not taking delivery of the works, under Article 884 of the UAE Civil Code, when works are completed? can this be seen to prevent the Employer to unfairly impose damages for delays when in actual fact the Works were completed?

Answered: 20 Skipped: 6



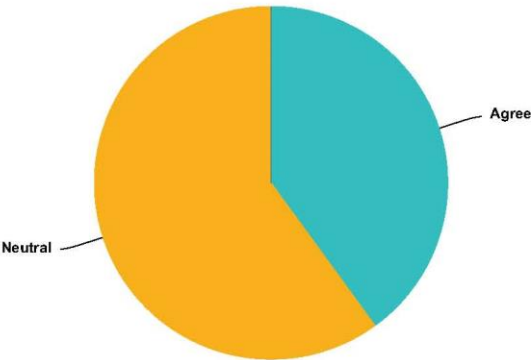
Answer Choices	Responses	
Strongly Agree	10.00%	2
Agree	40.00%	8
Neutral	35.00%	7
Disagree	15.00%	3
Strongly Disagree	0.00%	0
Total		20

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

SurveyMonkey

Q29 Do you agree or not that in the UAE, there is no reported legal cases on the matter of SC/PC and if there have been, indications under Other Comments would be helpful.

Answered: 20 Skipped: 6



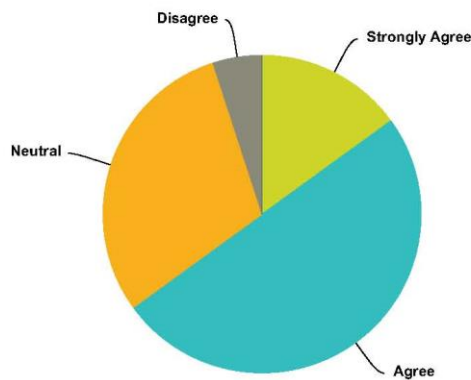
Answer Choices	Responses	
Strongly Agree	0.00%	0
Agree	40.00%	8
Neutral	60.00%	12
Disagree	0.00%	0
Strongly Disagree	0.00%	0
Total		20

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

SurveyMonkey

Q30 Do you agree or not that the powers conferred onto the Architect/Engineer/Contract Administrator, in particular where definitions of the Term SC/PC is vague, can be subject of abuse for not exercising or not being able to act impartially for sake of Employer's gains that are beyond his contractual rights?

Answered: 20 Skipped: 6



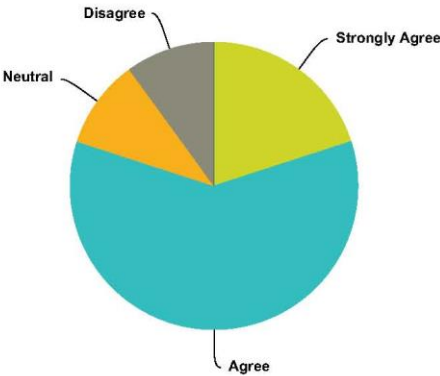
Answer Choices	Responses
Strongly Agree	15.00% 3
Agree	50.00% 10
Neutral	30.00% 6
Disagree	5.00% 1
Strongly Disagree	0.00% 0
Total	20

Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

SurveyMonkey

Q31 Do you agree or not that the terms SC/PC should be defined with elaborations contained within the Particular conditions based on Project by Project basis, fitting the type of works ranging from Roads and Infrastructure Works to Various type of Building Works and further?

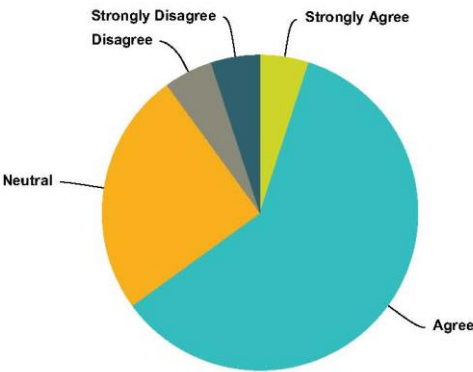
Answered: 20 Skipped: 6



Answer Choices	Responses	
Strongly Agree	20.00%	4
Agree	60.00%	12
Neutral	10.00%	2
Disagree	10.00%	2
Strongly Disagree	0.00%	0
Total		20

Q32 Do you agree or not that the following proposed definitions for SC/PC could possibly aid towards reducing ambiguities?
“Substantial Completion/Practical Completion” as referred to in Clause means the stage when The Works or a Section are completed in accordance with the Contract to the satisfaction of the Architect/Engineer except for minor outstanding work and/or minor defects of the type and nature prescribed in the particular conditions as to not prevent the works from being used by the Employer for their intended purpose or occupied and which the Architect/Engineer determines the Contractor has grounds for not promptly rectifying and that there are no legal requirements, approvals, certification or other impediment to the Employer’s use or the occupation of the Works or a Section for which, in the opinion of the Engineer, the Contractor is responsible to provide by that time under the Contract or otherwise under the law

Answered: 20 Skipped: 6

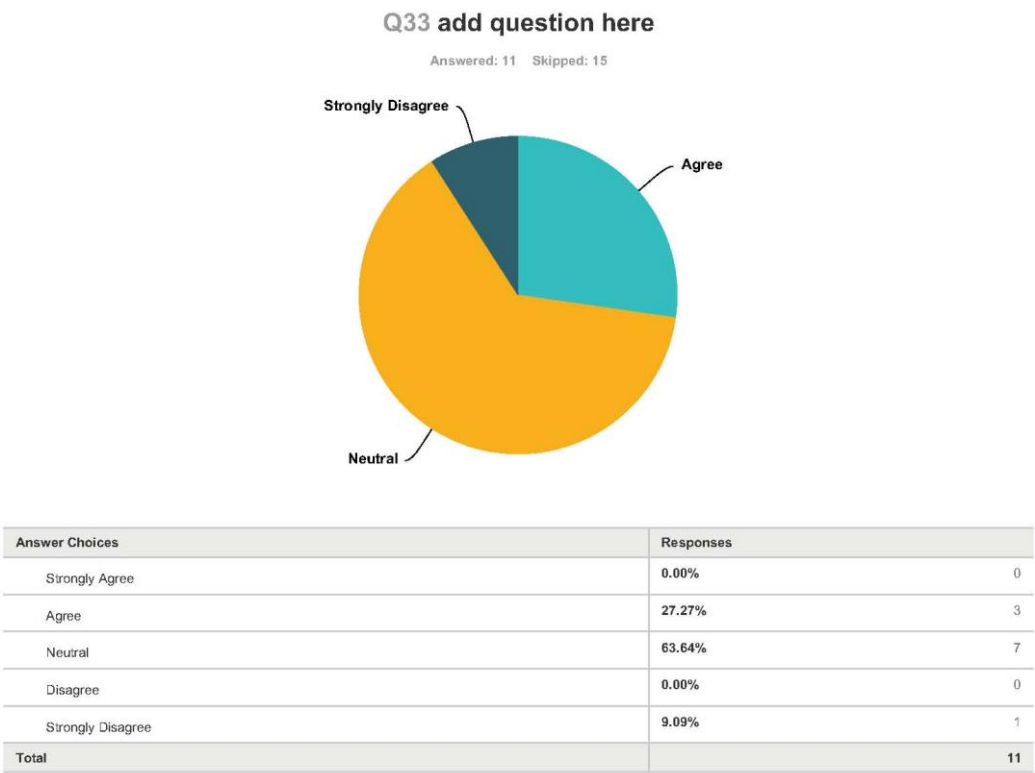


Answer Choices	Responses
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Substantial Completion/Practical Completion (SC/PC) within Construction Contracts		SurveyMonkey
Strongly Agree	5.00%	1
Agree	60.00%	12
Neutral	25.00%	5
Disagree	5.00%	1
Strongly Disagree	5.00%	1
Total		20

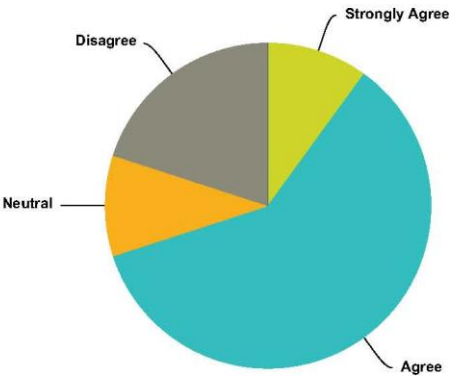
Substantial Completion/Practical Completion (SC/PC) within Construction Contracts

SurveyMonkey



Q34 Do you agree or not that achieving SC/PC milestone enables the Contractor to receive payment for the whole Works save as to portion of the retention monies and determined set offs?

Answered: 20 Skipped: 6



Answer Choices	Responses	
Strongly Agree	10.00%	2
Agree	60.00%	12
Neutral	10.00%	2
Disagree	20.00%	4
Strongly Disagree	0.00%	0
Total		20

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