

**APPORTIONING SUBCONTRACTORS' LIABILITY
FOR PROJECT DELAYS: A CONSENSUS APPROACH**

تقسيم المسؤوليات بين مقاولي الباطن عن تأخير المشروع: نهج التناسق

by

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**Dissertation submitted in fulfilment
of the requirements for the degree of
MSc CONSTRUCTION LAW AND DISPUTE RESOLUTION
at
The British University in Dubai**

May 2020

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Abstract

Most construction contracts make use of the “Liquidated Damages” clause for dealing with damages due to delay. As it is difficult and sometimes impractical to evaluate the exact losses accrued due to the late handover of the project, the employer and main contractor pre agree an estimated sum which will be due to the employer for each day of the delay. Although, this satisfactorily addresses the liability issues between the owner and main contractor, a large portion of the works are indeed executed by subcontractors and currently there is no single standard method in use to satisfactorily assess subcontractors’ liability for delay. Unlike in the case of the main contract between the owner and the main contractor, where Liquidated Damages (LD) or a pre estimate of the damages are pre agreed, the use of similar LDs or a component of the same in some form or the other has often led to disputes between the parties.

It is quite straight forward when it comes to allocating liability to subcontractors for defects in their work, owing to poor quality of materials and/or workmanship. However, when it comes to attributing contractual liability for delays there is no straight forward method for apportioning the liabilities to the subcontractors, without carrying the risk of either over burdening the subcontractor with unreasonable damages or causing under-recovery by the main contractor due to limits that are imposed on the LDs recoverable under the subcontracts. Main contracts mostly contain mechanisms for allocating the liability for delays, which commonly manifests in the form of “Liquidated Damages” (LD) provisions of the contract, normally a pre-estimate of the employer’s loss for each day of the delay. Although. Main contractors are keen on transferring this risk to their subcontractors for delay caused by the subcontractors, transferring this risk to the subcontractors is not always straight forward and is met with considerable resistance from the subcontractors. The extent to which such transfer is possible will depends upon the criticality of the subcontracted work and the bargaining power of the particular subcontractor. Main contractors sometimes run a significant risk of losing out on a major portion of their contract price to LDs for delays by subcontractors, due to the problem of not being able to recover entire LDs from their subcontractors. Various methods for allocating subcontractors’ liability for delays are in practice.

This study touches on the subject of delay claims in general and investigates the complexities of apportioning delay damages within subcontracts. It endeavors to find out the different

methods that are actually used in practice within subcontracts in the UAE, the frequency of use of each identified method and to what extent is their selection influenced by the attributes of the subcontractors and/or criticality of the subcontracted works. A survey was conducted to discover the methods that are actually used, their frequency, and whether it is possible to relate the different approaches to the attributes of subcontractors.

The most commonly used method was for the subcontractors' liability to be based on a certain proportion of the main contract LDs. Interestingly, this is neither the method stipulated in standard subcontracts, nor is it the one preferred by subcontractors. Moreover, this method puts the main contractors in considerable risks of under-recovery and liable for claims from other subcontractors. This method and indeed all other methods that were discovered, seems to be the result of a compromise between the parties, the selection of which may have a bearing on the parties relative bargaining power.

المخلص

تستخدم معظم عقود التشييد والبناء بند "التعويضات الاتفاقية" للتعويض عن الأضرار الناجمة عن التأخير. نظرًا لصعوبة تقييم الخسائر المتركمة بدقة بسبب التأخر في تسليم المشروع وفي بعض الأحيان يكون الأمر غير ممكن عمليًا، يوافق صاحب العمل والمقاول الرئيس مسبقًا على مبلغ تقديري يستحق إلى صاحب العمل عن كل يوم من أيام التأخير. وعلى الرغم من أن هذا يعالج بشكل مرضٍ قضايا المسؤولية بين صاحب العمل والمقاول الرئيس، فإن جزءًا كبيرًا من الأعمال ينفذه المقاولين من الباطن فعليًا ولا توجد حاليًا طريقة قياسية واحدة مستخدمة لتقييم مسؤوليتهم عن التأخير بشكل مرضٍ. فعلى النقيض من مسألة المقاول الرئيس بين صاحب العمل والمقاول الرئيس، حيث يتم الاتفاق مسبقًا على التعويضات الاتفاقية أو تم بالفعل التقدير المسبق للأضرار، فإن استخدام التعويضات الاتفاقية المشابهة أو أحد مكوناتها بشكل أو بآخر كثيرًا ما أدى إلى نشوب النزاعات بين الطرفين.

قد تكون هذه النزاعات مباشرة عندما يتعلق الأمر بإسناد المسؤولية إلى المقاولين من الباطن بسبب عيوب في أعمالهم سواء أكانت ناجمة عن سوء جودة المواد و/أو عيوب الصنعة. إلا أنه، عندما يتعلق الأمر بتحمل المسؤولية التعاقدية بسبب التأخير، فلا توجد حينها طريقة مباشرة لتوزيع المسؤولية على مقاولي الباطن بدون تحمل المقاول الرئيس لمخاطر تحميل أحد المقاولين بتعويضات غير معقولة أو التسبب في تحميل غيره من مقاولي الباطن مسؤولية أقل من المفترض عليه تحملها، وذلك بسبب الحدود المفروضة على التعويضات الاتفاقية القابلة للاسترداد بموجب عقود المقاول من الباطن. تحتوي العقود الرئيسية في الغالب على آليات لتخصيص المسؤولية عن التأخيرات التي تظهر بشكل عام في شكل أحكام "التعويضات الاتفاقية" للعقد، وعادة ما تكون تقديرًا مسبقًا لخسارة صاحب العمل عن كل يوم تأخير. ويحرص المقاولون الرئيسيون على نقل مخاطر التأخير إلى مقاولي الباطن، وعادة ما يكون نقل هذه المخاطر بشكل صريح وتتم مجابهة ذلك بقدر كبير من المقاومة من قبل المقاولين من الباطن. كما يعتمد مدى إمكانية نقل هذه المخاطر على مدى أهمية العمل الخاص بالمقاول من الباطن وقوة المساومة لهذا المقاول من الباطن. يواجه المقاولون الرئيسيون في بعض الأحيان خطرًا كبيرًا بخسارة جزء كبير من سعر العقد الخاص بهم بسبب التعويضات الاتفاقية بسبب التأخير الذي يسببه المقاولين من الباطن وذلك بسبب معضلة عدم قدرتهم على استرداد كامل مبلغ التعويضات الاتفاقية من المقاولين من الباطن. توجد طرق مختلفة مطبقة لتحديد مسؤولية المقاولين من الباطن فيما يتعلق بالتأخير.

تتناول هذه الدراسة موضوع مطالبات التأخير بشكل عام وتحقق في تعقيدات توزيع التعويضات الخاصة بالتأخير في عقود المقاوله من الباطن. تسعى هذه الدراسة إلى استكشاف الطرق المختلفة التي يتم استخدامها فعلياً في الممارسة العملية في عقود المقاوله من الباطن بالإمارات العربية المتحدة، وعدد مرات استخدام كل طريقة محددة وإلى أي مدى يتأثر اختيارهم بخصائص المقاولين من الباطن و/أو مدى أهمية الأعمال الخاصة بالمقاوله من الباطن. تم إجراء مسح لاكتشاف الطرق المستخدمة فعلياً، وعدد مرات تكرارها، وما إذا كان من الممكن ربط المفاهيم المختلفة بخصائص المقاولين من الباطن.

والطريقة الأكثر استخداماً على نطاق شائع تكمن في مسؤولية مقاولي الباطن اعتماداً على نسبة معينة من التعويضات الاتفاقية لعقد المقاولات الرئيسي. ومن المثير للاهتمام أن هذه ليست الطريقة المنصوص عليها في عقود المقاوله من الباطن القياسية، وليست هي أيضاً الطريقة التي يفضلها المقاولون من الباطن. بالإضافة إلى ذلك، تضع هذه الطريقة المقاولين الرئيسيين في مخاطر كبيرة تتعلق باسترداد مبلغ أقل من التعويضات الاتفاقية والمسؤولية عن المطالبات من المقاولين من الباطن الآخرين. فهذه الطريقة وبالتأكيد الطرق الأخرى التي تم اكتشافها، تبدو وكأنها نتجت عن مساومة بين الأطراف، ويتحدد اختيارها تبعاً لقوة مساومة الطرفين النسبية.

DEDICATION

I dedicate this dissertation to my darling wife and son, Betsy and Reyaan whose support, patience and understanding during the preparation of my dissertation has been truly astounding for which I will forever be indebted to them.

ACKNOWLEDGEMENTS

I would like to thank Professor Dr. Abba Kolo, my dissertation supervisor, for his support, direction and feedback during the course of my dissertation. I would also like to thank the library of the British University in Dubai for their persistence and professionalism in sourcing certain literature for my dissertation. Finally, I would like to thank all the participants in the survey which enabled me to conduct my research.

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1.0 Chapter 1 - Introduction

1.1 Background

A subcontractor is a construction company that contracts with a main contractor to perform a specific task on a project as part of an overall contract which may include supplying manpower, materials, equipment, tools and designs¹. Subcontractors can be categorized into three types based on the services and resources they provide, viz. 1) trade contractors specializing in specific trades like paintwork, brick work, etc.; 2) specialist subcontractors that carry out specialist services such as electrical, plumbing, insulation, etc.; and 3) the subcontractors that provide labor only services such as skilled craftsmen².

On construction projects, it is common for 80 to 90% of the work to be performed by subcontractors³. Subcontracts are found in most construction work as projects have become more complex to execute, it is not possible for an average main contractor to complete the project by himself⁴. There are other significant benefits of subcontracting including, the main contractor need not provide full-time employment of skilled craftsmen who are difficult to find and retain for the several specialized trades that are required to complete the project. Also, he is not required to own, operate and maintain specialized plants and equipment which may have limited use throughout the duration of the project and finally because specialized tasks are performed faster and more efficiently at a lower cost and better quality when carried out by specialized subcontractors who are highly skilled in their respective trades. Further, because subcontracting eases cash flow and financing problems for the main contractor, by

¹ Arditi, D.; Chotibhongs, R. 2005. Issues in subcontracting practice, *Journal of Construction Engineering and Management* 131(8): 866–876.

² Gul Polat Subcontractor selection using the integration of the AHP and Promethee methods *journal of Civil Engineering and Management* ISSN 1392-3730 / ESSN 1822-3605 2016 Volume 22(8): 1042–1054

³ Hinze, J., and Tracy, A. (1994) The contractor–subcontractor relationship: the subcontractors’ views, *Journal of Construction Engineering and Management* 120(2): 274–287.

⁴ John Uff (2017) *Construction Law- Law and Practice Relating to the Construction Industry* (12th edn) Sweet & Maxwell, London, pp 325

sharing risks on the project with the subcontractors the main contractor is in a better position to deal with the uncertainties of the construction industry⁵.

Although, there are immense benefits of subcontracting, it is rather a risky business for the main contractor, as being fully responsible to the owner for the performance of the subcontractors in terms of time, cost and quality, when projects do get delayed, which happens most often than not due to nonperformance by the subcontractors or mismanagement by the main contractor in failing to coordinate and control the quality and progress of the works of his subcontractors, resulting in project defaults by the main contractor ⁶.

1.2 Scope of the Study

The scope of this study is limited to liability for project delays caused due to non-performance by subcontractors and the apportioning of resulting damages between the main contractor and sub-contractors. The analyses concentrates on the different possible methods for apportioning of delay damages; further discovering the method that is most preferred by subcontractors'; and the one that is most frequently used in practice. It also analysis whether the selection of a particular method is dependent upon the attributes of the subcontractor, its bargaining power and/or criticality of the subcontracted works.

1.3 Objectives of the Study

- 1) to identify from literature and/or from empirical research, all the feasible methods for dealing with liability for delay within subcontracts;
- 2) to ascertain the preferences of subcontractors for each method;
- 3) to discover the frequency of use for each method;
- 4) to discover via empirical research the most used method for apportioning liability for subcontractors' delay within contemporary subcontracts and whether it is the one that is preferred by subcontractors;

⁵ Ibid supra note 2

⁶ Cooke, B.; Williams, P. 1998. Construction planning, programming and control. UK, Basingstoke: Macmillan Press Ltd. pp 504.

- 5) to find out whether it is possible to relate the method that is adopted to the subcontractor's bargaining power based on its attributes or to the criticality of the subcontracted work.

Apportionment of delay damages is essential to main contractors who have to distribute delay responsibility among their subcontractors and suppliers. This research firstly clarifies the problem area of apportioning subcontractors' liability for delay, it discusses the delay damages provisions in existing standard forms of subcontract and the ineffectiveness of the same. It discusses the difficulties in proving delay causation in situations of concurrent delays, due to the lack of definitive authority in dealing with the same, by highlighting some relevant legal cases. It also discusses the relevant provisions of the UAE law related to delay and liquidated damages. It then aims to discover through a survey, the different approaches that are used to apportion delay damages to the responsible subcontractors, within subcontracts in the UAE and to find out the most commonly used method, whether it is the one preferred by subcontractors and if the selection of any particular method is related to the subcontractors' attributes and relative bargaining power. The industry practitioners would benefit from understanding the different approaches that are presented in this dissertation and the analysis of the results of the survey will assist them in choosing an appropriate method for their subcontracts.

1.4 Methodology

This study is carried out mainly using empirical method. Opinions regarding subcontractor preferences, frequency of the use of different methods and subcontractors' organizational and work attributes were collected by conducting an on-line questionnaire survey. The survey questionnaire was developed using 'Google Forms' and the 'on-line' link for completing the survey was sent by email to the targeted participants, who are either sub-contractors or practicing professionals with industry knowledge and experience of dealing with subcontracts. It is appreciated that practicing professionals are able to provide the required feedback based on their working knowledge gained by dealing with subcontracts in the UAE.

2.0 Chapter 2 - Delay claims on construction projects and complexities of delay risk

2.1 Delay claims

There are a number of studies which show that construction projects have a tendency to be delayed. And, delays are not without losses for the parties involved. The owner is bound to suffer from potential loss of use, and the contractor and subcontractors due to prolongation of their services and extended stay on site. Therefore, construction contracts usually have mechanisms to allocate the liability for delays and to compensate the injured party for their losses, including liquidated damages, extensions of time, and prolongation costs⁷.

Delay claims are a common source of disputes in the construction industry, where the actual dispute may either be about the validity of the claim or the extent of time and/or cost that is claimed⁸. In order to effectively resolve delay claims before they turn into disputes, there is a requirement for adequate contractual mechanisms to be in place to correctly apportion liability, to properly quantify the delay and evaluate its causation and effect⁹. However, the existing contractual mechanisms are inadequate in dealing with the complexity that are encountered¹⁰.

Most forms of subcontracts contain provisions for extension of time to be made for the following reasons:¹¹

- 1) Delay for which the contractor is entitled to an extension of time under the main contract;

⁷ Scott, S, Harris R, and Greenwood, D J (2004) Assessing the New United Kingdom Protocol for Dealing with Delay and Disruption. ASCE Journal of Professional Issues in Engineering Education and Practice, 130 (1), pp 50-59.

⁸ Duncan Wallace, I N (1995) Hudson's Building and Engineering Contracts (11th edn.) Sweet & Maxwell, London.

⁹ Ibid supra note 7.

¹⁰ Yogeswaran, K., et al. (1998). "Claims for extensions of time in civil engineering projects." Constr. Manage. Econom., 16, pp 283-293.

¹¹ Reg Thomas, Construction Contract Claims (Second Ed. 2001), pp 200

- 2) Delay or default due to the contractor or other persons for whom the contractor is responsible, such as subcontractors.

And, all subcontracts need to be interpreted as running back-to-back with the main contracts. That is to say, all provisions in the main contract in connection with the subcontractor's obligations, rights and remedies are to work together as if the main contract provisions were set out within the subcontract.¹² For example, clause 4.1 of the FIDIC subcontract 1994 edition provides for an unpriced copy of the main contract to be made available for the subcontractor to inspect and the subcontractor is deemed to have full knowledge of it. Likewise, clause 12.1 states "The provisions of clause 54 of the Conditions of Main Contract in relation to Contractor's Equipment, Temporary Works, or materials brought on to Site by the Subcontractor are hereby incorporated by reference in to the Subcontract as completely as if they were set out in full herein"

The contractor and subcontractor should therefore recognize the merits of cooperating with each other and maintaining records and giving notices in time, and should work together in formulating the claim in order to maximize their chances of receiving reimbursement from the owner, provided that their claim has merit.

Subcontractors on the other hand may become liable for claims due to delays caused by them from three different aspects:¹³

- 1) Claims for the main contractor's own costs caused due to subcontractors delay;
- 2) Liquidated damages levied against the main contractor by the owner;
- 3) Claims by other subcontractors against the main contractor due to the subcontractor's default.

However, if the delay was due to the owner's fault, then provided that the subcontract is on a back-to-back basis with the main contract, the main contractor may be able to obtain a remedy under the terms of the main contract, subject to the subcontractor complying with the notice provisions of the sub contract. Sub clause 11.1 of the FIDIC subcontract 1994 edition states that: "... whenever the Contractor is required by the terms

¹² Ibid pp 200

¹³ Ibid pp 206

of the Main Contract to give notice or other information to the Engineer or to the Employer, or to keep contemporary records, the Subcontractor shall in relation to the Subcontract works give similar notice or such other information in writing to the Contractor and keep contemporary records as will enable the Contractor to comply with the terms of the Main Contract ...”¹⁴ Therefore, it is imperative that the main contractor and subcontractor maintain a good relationship and extend full cooperation to each other so as to benefit fully from the terms of the main contract. Main contractors who cultivate an adversarial approach towards subcontractors will most definitely fail to realize payments for subcontractor claims from owner if they don’t rely on being supported by the subcontractor’s timely inputs.

2.2 Subcontractors’ liability for project delays

The most common way in which a contract can encourage timely completion is to agree a completion date whereby creating a liability on the obligor (in the form of damages) for any culpable failure of his to meet the agreed completion date¹⁵.

The general principle of damages at Law is that they are there to compensate the injured party, and must follow the actual event of loss. However, in practice there are significant advantages in agreeing on the perceived damages in advance¹⁶. It is widely recognized that such Liquidated Damages clauses are the most convenient way for the parties to assess damages for delay within their contracts. Their use is recognized by courts in common law countries like the UK as well as in civil law countries like the UAE, which support such provisions as a genuine pre-estimate even though actual assessment is difficult or sometimes impossible¹⁷.

Nevertheless, the Liquidated Damages approach deals with delays from a main contract (i.e owner–main contractor) perspective but as discussed above up to 80-90% of the project work is executed by subcontractors and given the contractual basis that main

¹⁴ Ibid pp 206

¹⁵ David Greenwood, Keith Hogg And Stanley Kan (August 2005) Subcontractors’ liability for project delays Journal of Financial Management of Property and Construction Volume 10, Number 2, pp107 – 113.

¹⁶ Duncan Wallace, I N (1995) Hudson’s Building and Engineering Contracts (11th edn.) Sweet & Maxwell, London, pp 1143.

¹⁷ Ibid at pp 1144

contractors are liable for the works of the subcontractors, it is a reality that main contractors will be delayed due to the non-performance of the subcontractors and thereby be at risk of forfeiting the Liquidated Damages to the owner¹⁸

A study conducted by the National Economic Development Office in the UK has shown that 49% of all delays on projects in the UK are caused by non-performance of subcontractors¹⁹. However, there is a scarcity of published work on the subject of subcontractors' delays and the information on how subcontractors' liability for project delays is actually dealt with under the subcontracts is not readily available²⁰.

It is very often seen that subcontracts are awarded when the main contractor's current programme is out of date, sometimes even to the extent that it shows the subcontract works ought to have completed before the actual date of subcontract award. These problems are not imaginary, they occur regularly in real life and are a constant source of disputes.²¹ Moreover, there will be a problem in establishing the subcontractor's obligation regarding progress and completion when the subcontract is awarded based on terms that state that the subcontract works shall be carried out "in accordance with the main contractor's programme". Then, does the reference to the main contractor's programme mean the current programme, which is outdated or is it the next revision? What happens if there are no further revisions generated by the main contractor? In this case there could be two outcomes, both of which may be disastrous in terms of delay claims:²²

- 1) The period for completion of the subcontract works may be impossible to determine from the subcontract documents and the subcontractor may only have an obligation to complete within a reasonable time. This reasonable period may not allow the

¹⁸ Abdul-Malak, M U and Hassanein, Z (2001) Asphalt Works Subcontracting Disputes in Large Construction Programs. ASCE Journal of Performance of Constructed Facilities, 15 (2) pp 62-67

¹⁹ NEDC for Building (1983) Faster Building for Industry. National Economic Development Office. HMSO, London. As referred in David Greenwood, Keith Hogg And Stanley Kan (August 2005) Subcontractors' liability for project delays Journal of Financial Management of Property and Construction Volume 10, Number 2, pp107 – 113

²⁰ David Greenwood, Keith Hogg And Stanley Kan (August 2005) Subcontractors' liability for project delays Journal of Financial Management of Property and Construction Volume 10, Number 2, pp107 – 113

²¹ Reg Thomas, Construction Contract Claims (Second Ed. 2001), pp 187

²² Ibid , pp 187-188

subcontract works to be completed within the time for completion stated in the main contract.

- 2) The subcontractor may accept the obligation to execute the works in accordance with any programme of the main contractor. Or to proceed with the main contractor's reasonable requirements.

In the case of *Martin Grant & Co Ltd v. Sir Lindsay Parkinson & Co Ltd* (1984) 29 BLR 31, the subcontractor had to extend his stay on site for a considerably longer period as the works under the main contract were delayed. It was argued by the subcontractor that there was an implied term that the main contractor would make sufficient work available to enable the subcontractor to maintain reasonable and economic progress and that the main contractor would not prevent the subcontractor from executing the subcontract works. The subcontractor's claim failed and he was unable to recover the extra cost due to prolongation as he had agreed to abide by the main contractor's programme for completion. The subcontract terms under clause 2. contained the following wording "The subcontractor will provide all materials, labour, plantand do and perform all the obligations and agreements imposed upon or undertaken by the Contractor under the Principal Contractat such time or times and in such manner as the Contractor shall direct or require and observe and perform the terms and conditions of the Principal Contract so far as the same are applicable to the subject matter of this contract." ²³This case shows that subcontractors who are prepared to accept disproportionate risks by agreeing to back-to-back terms, either due to economic pressure of bagging new jobs or due to the criticality of their works, may stand to lose in either cases of default by the employer or by subcontractor's own default, whereby, requiring to bear losses/ damages in far excess of their actual risk bearing capacity.

2.3 Difficulty of apportioning delay damages in subcontracts

Main contractors are keen to ensure that the sub contracts are made on a "back-to-back" basis so that the subcontractor automatically becomes liable for any acts or omission which may cause a breach of the main contract or to require that the subcontractor

²³ Ibid

performs in manner so as not to cause any breach of the main contract terms, this is a mechanism that is often adopted by the standard forms of subcontracts. However, this mechanism is only effective with regard to the quality of work but it is much more difficult to assign obligations to ensure that a subcontractor performs to a program that is entirely in line with the needs of the main contract²⁴.

Normally, main contractors are keen on shifting the risk of Liquidated Damages to their subcontractors by 'flowing down' the conditions of the main contract in to the subcontracts. However, the following logical and practical difficulties arise when trying to allocate a proportional and feasible sum towards Liquidated Damages for each subcontractor and by which the main contractor can reasonably recover all his potential losses and Liquidated Damages that would otherwise accrue under the main contract in case of any delays by subcontractors:

- 1) Due to the fact that subcontractors are only responsible for their portion of the works, it is not logical to consider the full extent of Liquidated Damages payable under the main contract, which could potentially constitute a substantial portion of the subcontract value or sometimes even exceed it, causing disproportionate risk allocation within the subcontract. This may be unacceptable to the subcontractor, preventing it from successfully registering a bid.
- 2) The approach of fixing Liquidated Damages on a prorate basis of the respective subcontract values is also patently illogical, as it can quite easily be anticipated that all of the delay could be caused by a single subcontractor resulting in losses to the main contractor, including Liquidated Damages payable under the main contract, additional delay costs incurred by the main contractor in respect of his own works, and claims made by other sub-contractors for delay and disruption to their work.

Hence, in any circumstance there is a serious risk of under-recovery for the main contractor²⁵.

²⁴ John Uff (2017) Construction Law- Law and Practice Relating to the Construction Industry (12th edn) Sweet & Maxwell, London, pp 327

²⁵ Ibid

If more than one subcontractor is responsible for the delay and possibly even the main contractor also is at fault then the allocation of liability to each subcontractor may become even more difficult.²⁶ The contractor is required to allocate responsibility by linking the cause and effect and prove for what amount each subcontractor is liable including providing answers for the how's and why's.²⁷

2.4 Typical delay damages provisions under standard forms of subcontract

If a subcontractor causes delay which results in the main contractor being delayed and liable for liquidated damages, then the main contractor will recover the amount of liquidated damages from the subcontractor through an express provision in the subcontract, otherwise if there is no express terms for liquidated damages in the subcontract then the main contract has to rely on claiming general damages from the subcontractor.

Most subcontract forms with the exception of a few, like FIDIC subcontract, Part II (1994) for use with the Conditions of Contract 1987 fourth edition, do not contain an express provision for liquidated damages.²⁸ Sub-clause 7.4 (Liquidated Damages for Delay) of the FIDIC subcontract, Part II (1994), which is the most widely used form of subcontract in the UAE, states as follows “ If the Subcontractor fails to comply with the Subcontractor’s Time for Completion in accordance with Sub-Clause 7.1 or, if applicable, any Section within the relevant time prescribed by Sub Clause 7.1, then the Subcontractor shall pay to the Contractor the relevant sum stated in the Appendix to Subcontractor’s Offer as liquidated damages for such default and not as a penalty (which sum shall be the only monies due from the Subcontractor for such default) for every day or part of a day which shall elapse between the relevant Subcontractor’s Time for Completion and the date the Subcontractor Works or relevant Section is complete as evidenced (where applicable) by a Taking Over Certificate , subject to the applicable limit on liquidated damages stated in the Appendix to Subcontractor’s Offer” . The FIDIC form of subcontract therefore provides for liquidated damages to be recovered

²⁶ Reg Thomas, Construction Contract Claims (Second Ed. 2001), pp 208

²⁷ Mid Glamorgan County Council v. J. Devonald Williams & Partners [1992] 29 ConLR 129

²⁸ Ibid supra note 26 pp 207

by the main contractor from the defaulting subcontractors', however, the sum applicable (per day) is subject to agreement at the time of subcontract and so also is an upper limit that is set to 10% of the subcontract price in most cases, whereby, limiting the subcontractor's liability for delay. Problems may arise if the subcontract works are small in comparison to the main contract but are critical for the timely completion of the works. It may so happen that a few days of delay by a subcontractor could make the main contractor liable for liquidated damages under the main contract, that are far in excess of the value of the subcontract works or the limit of subcontractor's liability under the subcontract. Hence, it is always better for a subcontractor to agree on a limit of liability for liquidated damages before entering into a subcontract. It is also important to note that the FIDIC sub-clause example cited above states that the amount stipulated for liquidated damages is the only damages due from the subcontractor, then if this sub-clause was to be adopted, it is likely that the courts may construe this to include not only the main contractor's claim for delay but also that of other subcontractors.²⁹

The JCT DSC/Sub Standard Form of Subcontract (Joint Contract Tribunal, 2002), or the earlier DOM/1 Subcontract (Construction Confederation, 1998) which is widely used in UK contain no Liquidated Damages provision. As per DOM/1 clause 12.2 if the subcontractor is in delay then he must "pay or allow to the Contractor a sum equivalent to any direct loss and/or expense suffered or incurred by the Contractor". Arguably, this creates the most onerous condition for the subcontractor, where his liability for damages is virtually unlimited, including but not limited to (i) all of the Liquidated Damages under the main contract; ii) the relevant prolongation costs of the main contractor; (iii) associated claims for damages from other subcontractors for delay and disruption. Thus, the benefits of incorporating a known risk impact (Liquidated Damages) in the main contract are lost to the sub-contractor³⁰.

²⁹ Ibid and M.J. Gleeson Plc v. Taylor Woodrow Plc (1990) 49 BLR 95

³⁰ David Greenwood, Keith Hogg And Stanley Kan (August 2005) Subcontractors' liability for project delays Journal of Financial Management of Property and Construction Volume 10, Number 2, pp107 – 113

2.5 Causes of delay and delay types based on causation

Causes of delays are infinite and their combined effect on the project completion date can be complex to analyze, therefore delay claims are inevitable and difficult to prove³¹. Delays are classified as either excusable or non-excusable, depending on whether the contractor is entitled to an extension of time, and compensable or non-compensable, depending on whether the contractor is entitled to damages for the delay³². Compensable causes include discovery of differing site conditions at the time of execution than what was anticipated/ disclosed at the time of tender, incomplete or inferior drawings or specifications, owner's failure to provide access to the site, site preparation works not as per requirement, delay or failure in provision of owner-supplied materials by the owner, failure or delay in approving shop drawings by the architect, main contractor's failure to coordinate other subcontractors, problems of cash flow due to non-payment by owner or main contractor, delay in performing timely inspection of works by architect/ engineer, excessive change orders being issued, or non-acceptance of completed work by the engineer/ owner³³.

Whereas, the causes related to bad weather and/ or other acts of nature or due to public commotion, war and hostilities and general labor strikes are classified as non-compensable but excusable delays. However, delays resulting from causes that are under sub contractor's control like failure to provide sufficient labor or materials for the works are common examples cited for non-excusable and non-compensable delays³⁴

The subject matter of this dissertation is concerned with the later type, which is non-excusable and non-compensable delays specifically occurring due to non-performance by subcontractors.

³¹ Justin Sweet, Sweet on Construction Law (1997), pp 318 ("The many possible causes of delay can make delay claims complicated and difficult to sustain.").

³² Robert F. Cushman et al., Proving and Pricing Construction Claims Aspen Law & Bus. 3d ed. 2001, pp 33-36 as referred in Carl S. Beattie, Apportioning the Risk of Delay in Construction Projects: A Proposed Alternative to the Inadequate "No Damages for Delay" Clause, 46 Wm. & Mary L. Rev. 1857 (2005), <https://scholarship.law.wm.edu/wmlr/vol46/iss5/5>

³³ Ibid supra note 32, pp 317-318

³⁴ Ibid supra note 32, pp 317

2.6 Components of Delay Damages

Delay damages include both direct and indirect monetary components. Direct delay damages may include site and head office overheads, idle equipment and manpower costs, loss of productivity, cost related to extended storage of equipment and material, additional mobilization and demobilization cost, additional premiums for extending insurance and maintaining bonds, escalation in labor and material cost during delays. In addition to these direct cost components, there are also indirect costs due to consequential losses. Such indirect delay damages may include loss of profits, loss of contractor's financial capacity impacting its limit of providing bonds for other projects, interest and financing costs and legal fees³⁵.

2.7 Difficulties in assessing and proving delay claims

The single most significant factor which makes proof of delay causation difficult is the existence of concurrency in delays. There could be a number of causes that may delay a contractor, some could be compensable whilst others may not. As noted in Strogatz et al (Oct 1997) "delays by their very nature are ongoing, intertwined, intermittent, and very difficult to segregate between those caused by the defendant and those caused by the plaintiff"³⁶

A dedicated chapter within this dissertation addresses the subject of concurrent delay, in detail (see chapter 3.0).

The proof of causation can be further complicated by the natural duty of a contractor to mitigate delay damages. It is often asserted by owners that a contractor could have mitigated damages by implementing measures such as reallocating idle resources to other projects, etc. However, in practice, this is not as simple as is asserted, nor is it without incurring additional cost by the contractor³⁷.

³⁵ Carl S. Beattie, Apportioning the Risk of Delay in Construction Projects: A Proposed Alternative to the Inadequate "No Damages for Delay" Clause, 46 Wm. & Mary L. Rev. 1857 (2005), <https://scholarship.law.wm.edu/wmlr/vol46/iss5/5>

³⁶ Strogatz et al., Pricing the Delay: Whom Do I Sue and What Do I Get?, 17 CONSTRUCTION LAW. 4, 8-10 (Oct. 1997), pp 13 as referred in Ibid

³⁷ Michael K Love, Theoretical Delay and Overhead Damages, 30 PUB. CONT. L.J. 33,48 (2000) (presenting six broad considerations that affect any decision for potential mitigation plans) as referred in Ibid

Identifying and quantifying the costs incurred due to delay is not easy, and often involves the use of experts. During trials it is often seen that contractors find it difficult to substantiate their calculated figures for delay damages with corroborating evidence³⁸. The availability and quality of project documentation matters as these act as evidence to prove and quantify delay damages. If the contractor's project team fail to maintain relevant project documentation during the period of the delay or if such documents are not of sufficient quality or are of questionable authenticity, then it could affect the contractor's ability to prove their claim.

³⁸ Strogatz et al., Pricing the Delay: Whom Do I Sue and What Do I Get?, 17 CONSTRUCTION LAW. 4, 8-10 (Oct. 1997), pp 13-14 (discussing the use of summaries, the use of expert testimony, and hearsay complications) as referred in Ibid.

3.0 Chapter 3 - Concurrent delays

3.1 Relevance of concurrent delays for this dissertation

Concurrent delays are truly the most problematic of the issues concerning the proof of causation and assessment of delay damages related to construction delay claims. One of the definitions of concurrent delay, which is often used is: “A period of project overrun which is caused by two or more effective causes of delay which are of equal causative potency”³⁹

Concurrent delays can be either simultaneous or sequential. Sequential relates to events which do not start and finish at the same time but may overlap to some extent; whereas, simultaneous events are those which start and finish together and are referred to as “true concurrency”⁴⁰

Concurrent delays at the subcontract level is of particular importance for this dissertation. When the cause of a delay is attributed solely to the main contractor, liquidated damages as per the main contract are assessed and the responsibility to reimburse the owner solely lies with the main contractor’s. Whereas, if the delay is identified to have been caused by a subcontractor then the main contractor will transfer those liquidated damages to the responsible subcontractor, provided that the subcontract is on “back-to-back” terms. However, if concurrent delays were to result out of events caused by multiple subcontractors, or between the main contractor and the subcontractors, there is no uniform approach that is currently followed in practice or stipulated under the existing forms of subcontract; most existing forms of subcontract are silent when it comes to dealing with apportionment of liquidated damages in the case of concurrent delays⁴¹.

³⁹ John Marrin QC, Concurrent Delay, SCL Paper, February 2002. A referred in Dean O’Leary (April 2014) Dealing with Concurrency in Construction Delay Claims, web resource available at <https://www.tamimi.com/law-update-articles/dealing-with-concurrency-in-construction-delay-claims/>

⁴⁰ Dean O’Leary (April 2014) Dealing with Concurrency in Construction Delay Claims, web resource available at <https://www.tamimi.com/law-update-articles/dealing-with-concurrency-in-construction-delay-claims/>

⁴¹ Concurrent Delays and Apportionment of Damages William Ibbs, M.ASCE1; Long D. Nguyen; and Lonny Simonian DOI: 10.1061/(ASCE)CO.1943-7862.0000259 JOURNAL OF CONSTRUCTION ENGINEERING AND MANAGEMENT © ASCE / FEBRUARY 2011 / pp 119 - 126

3.2 The lack of definitive authority on concurrent delay in the context of common law

There is no single, definitive authority which deals with the different situations in which concurrencies can occur. Some of the more notable cases on the issue are referred to below, which makes it clear that there is no agreed direction on the meaning of concurrency or on how it should be interpreted and applied. It must however be acknowledged that the references made below to common law authorities are not binding in the UAE.

Whenever there is an Owner's risk event involved, the English courts have generally found that the Contractor is entitled to an extension of time regardless of whether he was already in delay when the Owner's risk event occurred and provided that the Owner's risk event is a critical delay causing one. In the context of subcontracts 'Owner' would mean the main contractor whereas 'Contractor' would mean the subcontractor.

In *Walter Lawrence & Son Ltd v. Commercial Union Properties (UK) Ltd*⁴² the contractor was already in delay for which he was responsible but was entitled to an extension of time for exceptionally adverse weather conditions, which is an owner's risk event. This was further upheld in *Trollope & Colls v North West*⁴³ where the judge held that the owner cannot insist upon strict adherence to the time for completion if it contributed to the cause of a delay. In *Percy Bilton v GLC*⁴⁴ it was also held that the owner cannot rely upon a liquidated damages clause in the contract if it has itself prevented the contractor from completing the works and subject to contract not providing otherwise; in such a case, the owner needs to claim general damages from the date at which the contractor should have completed the works, after taking into account a reasonable extension of time for the contractor to complete. However, the contractor will not be entitled to any extension of time if it fails to demonstrate a causal link between the owner's risk event and the delay to completion.

⁴² [1984] 4 Con LR 37

⁴³ [1973] 9 BLR 60

⁴⁴ [1982] 20 BLR 1 (HL)

Therefore, English courts have a tendency to award extension of time even if the contractor was himself in delay, provided that there was an owner's risk event involved causing critical delay.

Henry Boot Construction (UK) Ltd v. Malmaison Hotel (Manchester)⁴⁵ is considered to be the leading modern authority on concurrent delay, where it was agreed between the parties that if there are two concurrent causes of delay, one of which is an owner's risk event, and the other is not, then the contractor is entitled to an extension of time for the delay caused by the owner's risk event notwithstanding the concurrent effect of the other event and provided that it can be shown that the owner's risk event caused a critical delay.

However, in certain circumstances the English courts have diverged from this widely accepted principle and instead held the contractor liable for its part in the delay. H.Fairweather v Borough of Wandsworth⁴⁶ is one such instance where the judge expressly disapproved the use of the dominant cause test when dealing with concurrent delays for claims for an extension of time. Also, in Balfour Beatty Building Ltd v. Chestermount Properties Ltd⁴⁷ the question was whether, under a JCT contract, an extension of time for an owner's risk event occurring after the completion date should be calculated from the date of the event (the "gross" method) or from the date when the works ought to have been completed (the "net" method). It was held that the net method applied and the contractor was not relieved of liability for those delays for which it was responsible.

Notwithstanding, In Steria Ltd v. Sigma Wireless Communications Ltd⁴⁸ It was noted by HHJ Stephen Davies that the decision in Malmaison was approved in Keating on Construction Contracts⁴⁹, and added that although Dyson J. who arrived at the decision in Malmaison was noting an agreement between the parties rather than reaching a decision himself, the fact that such an experienced judge "noted the agreement without

⁴⁵ [1999] 70 Con LR 32.

⁴⁶ [1987] 39 BLR 106

⁴⁷ [1993] 62 BLR 12, 32 Con LR 139

⁴⁸ [2007] EWHC 3454 (TCC)

⁴⁹ Furst and Ramsey, 2006, Keating on Construction Contracts at para. 8-021

adverse comment is a strong indication that he considered that it correctly stated the position. [. . .] Accordingly, I intend to adopt that approach [. . .]” That approach was further ratified in *Motherwell Bridge Construction v. Micafil Vakuumtechnik and Another*⁵⁰. But, in *Royal Bromptom v Hammond*⁵¹ the judge sought to distinguish between “Simultaneous” and “Sequential” concurrencies. HHJ Seymour said that the decision in *Malmaison* related to a situation where during the regular progress of works two delaying events had occurred at the same time, one of which was a Relevant Event and the other was not (Simultaneous concurrency). In that situation, there was “True Concurrency”. That decision did not apply where the works were already in delay due to contractor’s default, and then a Relevant Event occurred (Sequential concurrency). In this situation, by virtue of the existing delay, the Relevant Event might make no difference if its effect was not critical. Therefore, the decision in *Royal Bromptom* runs contrary to the widely accepted position in *Malmaison* where the very existence of a Relevant Event causing critical delay was sufficient to entitle a contractor to an EOT.

There are many instances wherein the position in *Malmaison* was upheld and others where it was rejected as being inapplicable, one such consenting decision was in *City Inn v Shepherd*⁵². In this Scottish case the judge questioned the decision in *Royal Bromptom* to distinguish between simultaneous and sequential concurrent delays. In the Scottish judge’s view both situations involve concurrent delay and the contractor is entitled to a fair and reasonable extension of time in both cases, however, it is relevant to consider which event was the “dominant cause” of delay, but if that cannot be established then it may be appropriate to apportion responsibility for the delay between the two causes on a fair and reasonable basis. Although, this judgement was revolutionary in its approach as it prescribed the apportioning of responsibility between the parties for their respective contributions in the delay, sadly it has not found any takers in the courts of England and Wales where the general stand has been that either

⁵⁰ [2002] 81 Con LR 44

⁵¹ [2001] 76 ConLR 148

⁵² [2008] 8 BLR 269 (CSOH); [2010] BLR 473 (CSIH)

the claimant or the defendant are completely held liable for the entire delay, without any scope for apportioning.⁵³

Whereas, in *De Beers UK v Atos*⁵⁴ the Malmaison approach was followed and the contractor was awarded time without costs, in *Adyard v SD Marine*⁵⁵ it was decided that variations instructed by the owner when the contractor was already in culpable delay had no effect on the already delayed completion date. The judge in this case appears to have applied the dominant cause test approach without regard to the prevention principle. Also, in *Jerram v Fenice*⁵⁶ the judge followed the decision in *Adyard* and further suggested that if an owner's risk event occurs when the contractor is already in culpable delay, then the prevention principle will not apply.

Therefore, the above authorities suggest that there is no single acceptable approach that is adopted by the English courts in the case of concurrent delays and it really depends upon the facts of each case and the situations in which the respective concurrencies occur, which will influence the court's decision. Accordingly, the courts may consider an owner's risk event to be preventing the contractor from achieving completion and may sometimes award an extension of time to the contractor, or may not in other cases depending upon the situation in which the concurrent delays occur and if the contractor's delay was found to be the more dominant one.

⁵³ *Walter Lilly v MacKay* [2012] BLR 503 – In his judgment the judge confirmed that there was a difference of approach in England and Scotland when dealing with concurrency. The judge confirmed that the 'apportionment approach' was not applicable in England. The English approach may be stated thus: if there are two events causing concurrent delay, one of which is caused by the employer, then the contractor is entitled to an extension of time and there is no reason (or legal basis in England) to apportion delay.

⁵⁴ [2010] EWHC 3276

⁵⁵ [2011] BLR 384

⁵⁶ [2011] BLR 644

4.0 Chapter 4 - UAE law dealing with delay and liquidated damages

4.1 Construction contracts under UAE law

The UAE courts recognize and accept the FIDIC standard forms of contract and the parties have the freedom to contract based on their own choice of contract terms and conditions. However, several principles of the UAE law prevail over the parties' contracts and impact them in a major way. UAE is a civil law state, and the principles of the law are mainly codified in the Civil Transaction Law No. 5 of 1985, as amended by Federal Law No. 1 of 1987 (Civil Code) and in the Commercial Transactions Law No. 13 of 1993 (Commercial Code). Moreover, the construction contracts that fall under the jurisdiction of UAE law are governed by Articles 872 to 896 of the Civil Code dealing with muqawala contracts (contracts to build), and other general principles codified in the Civil Code and the Commercial Code. Some of these provisions are mandatory, meaning that the parties cannot contract out of them as they are binding on the parties by default. There are also other rules related to public order, which are binding on the parties, regardless of what they might have contractually agreed.⁵⁷

Many of the UAE's larger construction projects have adopted either the FIDIC 1987 or 1999 forms of contract, both of which post-date the UAE's Civil Code of 1985. However, FIDIC 1987 form can be traced back to its English ICE origins which was drafted based on common law principles⁵⁸. Therefore patently there is a problem in interpretation or sometimes the lack of recognition of the contract conditions when subject to UAE Law⁵⁹.

⁵⁷ Andrew Mackenzie and Andrew Massey, Legal issues relating to construction contracts in the United Arab Emirates, Construction and Projects Global Guide, dated May 27 2019 – Web resource available at <https://www.lexology.com/library/detail.aspx?g=a9f585ef-4d01-4d28-baf7-6efa07329c96>; <https://me-insights.bakermckenzie.com/2019/04/18/legal-issues-relating-to-construction-contracts-in-the-united-arab-emirates/>; and [https://uk.practicallaw.thomsonreuters.com/w-018-8564?transitionType=Default&contextData=\(sc.Default\)&firstPage=true&bhcp=1](https://uk.practicallaw.thomsonreuters.com/w-018-8564?transitionType=Default&contextData=(sc.Default)&firstPage=true&bhcp=1) - Accessed on 08-01-2020

⁵⁸ Dean O'Leary (April 2014) Dealing with Concurrency in Construction Delay Claims, at foot note 22, web resource available at <https://www.tamimi.com/law-update-articles/dealing-with-concurrency-in-construction-delay-claims/>

⁵⁹ Ibid supra note 57

4.2 Subcontracting under UAE Law

Subcontracting is permitted under UAE law, unless the parties' contracts provide otherwise, which is in accordance with article 890 of the UAE Civil Code. The contractual relationship is limited between the contractor and subcontractor and does not extend or assign any rights to the owner. The contractor remains responsible for the works of the subcontractor. "Pay when paid" or "back-to-back" clauses are valid and recognized by the UAE courts and such mechanisms are often used by the main contractors to flow-down liquidated damages applicable under the main contract on to their subcontractors in the event of delays by the subcontractors and to restrict payments to the subcontractors, when the main contractor has not been paid by the owner.⁶⁰

4.3 Delay under UAE law

Concepts such as 'concurrent delay', 'extension of time', 'prevention principle' and 'time at large' are not expressly provided for within UAE law⁶¹. However, there are other comparable provisions which can be found within the UAE Civil Code that may bring about a similar effect. Some of these relevant provisions of the UAE law are discussed below.

Concurrent delay are not expressly addressed in the UAE Civil Code. However, various general principles of the Law favour apportioning the liability for delay proportionally between the parties with respect to their respective contribution in the delay. These legal principles can be found in Articles 287, 290 and 291 of the UAE Civil Code and have been constantly relied upon by the courts in the context of contractual liability.⁶²

Article 877 of the UAE Civil Code is of special importance as it provides that a contractor must complete the works in accordance with the conditions of the contract, this may be understood as providing no scope for the contract to be extended without agreement. However, contractors sometimes rely on the following articles 247, 249, 287, 414 and 472 of the UAE Civil Code to seek extension of time⁶³. These provisions

⁶⁰ Ibid supra note 56

⁶¹ Ibid supra note 57

⁶² Ibid supra note 56

⁶³ Ibid supra note 57

of the UAE Civil code and their impact on the parties' contractual liability for delay are elaborated below.

Article 247 provides that: "In contracts binding upon both parties, if the mutual obligations are due for performance, each of the parties may refuse to perform his obligation if the other contracting party does not perform that which he is obliged to do." So, In essence the main contractor/ subcontractor can delayed his performance if he is affected by the owner's/ main contractor's delay in say releasing the agreed payments or any other deliverable like drawings to execute the work in time.

And, article 249 states that : "If exceptional circumstances of a public nature which could not have been foreseen occur as a result of which the performance of the contractual obligation, even if not impossible, becomes oppressive for the obligor so as to threaten him with grave loss, it shall be permissible for the judge, in accordance with the circumstances and after weighing up the interests of each party, to reduce the oppressive obligation to a reasonable level if justice so requires, and any agreement to the contrary shall be void." This article provides the much needed reprieve to contractors in situations of unforeseen circumstances of exceptional nature like a general labour strike or trade embargo affecting the execution of work or timely delivery of goods, requiring an extension of time to complete the works.

Similarly, article 287 can be relied upon by contractors for claiming extension of time in the case of delays caused due to the owners own fault or that of any third parties or in the event of a force majeure. Article 287 states that: "If a person proves that the loss arose out of an extraneous cause in which he played no part such as a natural disaster, unavoidable accident, force majeure, act of a third party, or act of the person suffering loss, he shall not be bound to make it good in the absence of a legal provision or agreement to the contrary."

Further, Article 414 states that: "Any person who is obliged to perform a thing may refrain from so doing so long as the obligor has not discharged an obligation of his arising by reason of an obligation of the obligee and connected with it." This again covers the delays affected due to the non-performance of obligations that are due by the

owner, whereby preventing the contractor from completing the works in accordance with the contract.

And, article 472 provides that: “The right shall expire if the obligor proves that the performance of it has become impossible for him for an extraneous cause in which he played no part.” This covers delays due to third parties or other reasons that are not attributable to the contractor.

4.4 Liquidated damages under UAE law

The contractor will generally be liable for liquidated damages under FIDIC or other standard forms of contract upon failure to meet the completion date. However, Article 878⁶⁴ of the UAE Civil Code provides that a contractor shall be liable for damages resulting out of his own doing but shall not be liable for damages arising out of an event which he could not have prevented (e.g. an owner caused delay or delay caused by third parties over whom the contractor has no control e.g. public authorities). Therefore, if there is any act of prevention by the owner then contractor will not automatically be liable for liquidated damages upon failure to meet the completion date and if the reason for such delay is the owner’s own delay. Also, under Article 290⁶⁵ of the UAE Civil Code a judge may reduce the contractor’s liability for damage by taking into account the extent of the claimant’s (the owner) own contribution in its loss when assessing contractor’s liability for damages. Further, Article 291⁶⁶ of the UAE Civil Code gives the judge a discretionary power to apportion liability in cases of the involvement of multiple persons responsible for the loss or damages, which can be interpreted to include the situation of concurrent delay. Therefore, the concept of apportionment of liability in

⁶⁴ Article 878 states that: “The contractor shall be liable for any loss or damage resulting from his act or work whether arising through his wrongful act or default or not, but he shall not be liable if it arises out of an event which could not have been prevented.”

⁶⁵ Article 290 states that “It shall be permissible for the judge to reduce the level by which an act has to be made good or to order that it need not be made good if the person suffering harm participated by his own act in bringing about or aggravating the damage.”

⁶⁶ Article 291 – “If a number of persons are responsible for a harmful act, each of them shall be liable in proportion to his share in it, and the judge may make an order against them in equal shares or by way of joint or several liability.”

case of concurrent delays is very much applicable under the UAE law, unlike in English law⁶⁷.

The prior agreement of liquidated damages in a contract by the parties is a concept that is permitted and held valid under Article 390 (1)⁶⁸ of the UAE Civil Code. However, and notwithstanding the fundamentals of “freedom of contract” under the UAE law, a party may petition the courts for adjustment to the amount of liquidated damages if they consider that the liquidated damages applied were not commensurate to the losses actually suffered by the injured party, this is possible under the discretionary powers given to the judge under Article 390 (2)⁶⁹ of the UAE Civil Code.

In principle, liquidated damages clauses are valid and enforceable under UAE Law. However, the courts retain the power to reassess the pre agreed damages in the parties’ contract and upon request made by any party, irrespective of the parties’ prior agreement on the damages. And, any agreement limiting the parties’ ability to request such an intervention by the courts to reassess the damages will be held as null and void, as it is considered contrary to public order to impose such restriction on rights of the parties’.

Right of an injured party to recover actual damages from the party causing the damage is recognized under UAE Law. However, the said damages claimed by the injured party must fit the below description and the burden of proof will solely lie with the party making the request:⁷⁰

- The damages must arise out of the direct result of acts or omission of the other party alone.
- They must be certain and foreseeable at the time of contracting.
- They must be quantifiable.

Further, in relation to the owner unilateral application of liquidated damages under the contract, which is often seen in the case of concurrent delays, it is important to pay heed

⁶⁷ Ibid supra note 57

⁶⁸ Article 390 (1) states that “The contracting parties may fix the amount of compensation in advance by making a provision therefor in the contract or in a subsequent agreement, subject to the provisions of the law.”

⁶⁹ Article 390 (2) “The judge may in all cases, upon the application of either of the parties, vary such agreement so as to make the compensation equal to the loss, and any agreement to the contrary shall be void.”

⁷⁰ Ibid supra note 56

to the provisions of the UAE Civil code under article 246(1)⁷¹, which states that the performance under any contract must be in accordance with its contents and in a manner consistent with the requirements of “good faith” and as per article 106⁷² the act of intentional and unlawful exercise of its rights by any party such that it infringes upon the rights of the other, is prohibited. Therefore it can be understood that the unilateral application of liquidated damages under a contract by an owner, without firstly allowing for a reasonable extension of time for the contractor to complete the work may be held as void under the UAE law.

⁷¹ Article 246 (1) states that “The contract must be performed in accordance with its contents, and in a manner consistent with the requirements of good faith.”

⁷² Article 106 (1) states that “A person shall be held liable for an unlawful exercise of his rights.” and article 106 (2) states that “The exercise of a right shall be unlawful: (a) if there is an intentional infringement (of another's rights);”

5.0 Chapter 5 - Possible methods for dealing with subcontractors' liability for delay

The various approaches for dealing with subcontractors' liability for delay are enumerated below based on a review of available literature and by the researcher's own judgement. The same were included in a survey questionnaire as indicative approaches, further asking the participants to concur if the same were actually employed in practice or not and to add to the list if they had come across any other methods in addition to the ones enumerated below. The survey questionnaire was developed using 'Google Forms' and the 'on-line' link for completing the survey was sent by email to the targeted participants, who are either sub-contractors or practicing professionals with industry knowledge and experience of dealing with subcontracts. It is appreciated that practicing professionals are able to provide the required feedback based on their working knowledge gained by dealing with subcontracts in the UAE.

Due credit is given to the empirical work carried out by David Greenwood et al in the UK, which was published in the Journal of Financial Management of Property and Construction⁷³. This was the major source of inspiration behind the survey work associated with this dissertation.

The various approaches for dealing with subcontractors' liability for delay are:

5.1 Subcontractor is liable under the subcontract for whole of the main contract LDs ('Full LDs')

Liquidated Damages or LDs are commonly used to cover owner's delay damages when the contractor fails to complete on time. LDs are generally expressed in terms of a daily rate and most often the subcontracts typically flow-down the same main contract rate for LDs for subcontractor's delay. The standard rule for LDs is that the amount must be a reasonable estimate of the expected damages at the time of contract and actual damages must be difficult to prove⁷⁴. Only when these two requirements are met, the LDs become enforceable. Some courts also consider whether the LDs stipulated in the

⁷³ David Greenwood, Keith Hogg And Stanley Kan (August 2005) Subcontractors' liability for project delays Journal of Financial Management of Property and Construction Volume 10, Number 2, pp107 – 113

⁷⁴ Robert F. Cushman & James J. Myers, Construction Law Handbook (1999), pp 1172-78. As referred in Carl S. Beattie, Apportioning the Risk of Delay in Construction Projects: A Proposed Alternative to the Inadequate "No Damages for Delay" Clause, 46 Wm. & Mary L. Rev. 1857 (2005), <https://scholarship.law.wm.edu/wmlr/vol46/iss5/5>

contract was imposed on a party of inferior bargaining power⁷⁵. However, imposing the entire main contract LDs on the subcontractor may not always be reasonable or practical as the subcontract price is sometimes a fraction of the main contract price and the subcontractor cannot be expected to bear the entire LDs which cumulatively may run into many folds of the subcontract price itself. And, then there is the problem of apportioning liabilities due to the complicated causation issues, such as interferences by the owner or main contractor and concurrent delays. Nevertheless, sometimes in practice and owing to the superior bargaining power of the main contractors, the subcontractors are made to accept this excruciating condition of back-to-back LDs or 'Full LDs'.

5.2 Subcontractor is liable under the subcontract for the whole of the main contract LDs up to a limit agreed with the main contractor ('Full LDs + Limit')

To address the above practical problem the flow down LDs clause in the subcontract is modified to include an upper limit, which can either be a specific amount or a specified percentage of the subcontract price. This method retains most of the general characteristics of the Full LD clause but it also offers some additional benefits over it. The concerns regarding apportioning causation in the event of a lengthy delay is eased and similarly, the limit once crossed renders it futile to fight over the exact division of liability, for concurrent delays, as no further recovery is attainable. This method is also advantageous to subcontractors who want to be certain of their maximum exposure to liability at the beginning of the project. Nevertheless, this method may lead to under-recovery by main contractor of the LDs under the main contract, as the same would now be subject to a maximum limit under the subcontract. In that sense the main contractor faces a considerable risk when using this method, when compared to the Full LD clause. Although, it can easily be perceived that the entire delay could be caused by a single subcontractor, yet the entire main contract LD could not be fully recovered from that

⁷⁵ Carl S. Beattie, Apportioning the Risk of Delay in Construction Projects: A Proposed Alternative to the Inadequate "No Damages for Delay" Clause, 46 Wm. & Mary L. Rev. 1857 (2005), <https://scholarship.law.wm.edu/wmlr/vol46/iss5/5>

subcontractor due to the limit on LDs in the subcontract. Also, the subcontractors will have little motivation to avoid delays once the limit is exceeded.

5.3 Subcontractor is liable under the subcontract for an agreed proportion of the main contract LDs ('Proportionate LDs')

In the case of a concurrent delay by the owner and main contractor, it is a non-excusable but compensable type of delay and the main contractor usually receives an extension of time without cost. However, in the case of a concurrent delay by main contractor and his subcontractors, there is no doubt that it is non-excusable and non-compensable delay for which the main contractor is liable for LDs under the main contract. This will require the main contractor to seek recovery of these damages from the responsible subcontractors by way of an acceptable method to distribute the damages proportionally among the responsible subcontractors. However, such a method is not always available and there could be considerable resistance from the subcontractors to agree on any single method as the nature of subcontracted works and the subcontractor organization vary considerably.⁷⁶

For the purposes of understanding how the Proportionate LDs methods could work, a few potential methods are presented below:

1) Equal Apportionment

The equal apportionment method distributes the main contract LDs equally among the subcontractors responsible for the concurrent delay. This is a very simple method and does not rely on any detailed delay analysis work. This method is arbitrary and often unreasonable as it does not take into consideration the different levels of effort by the responsible subcontractors.

2) Subcontract Value Based Apportionment

In this method, the subcontract values are used to calculate proportional weightages. Where the damages to be paid by each responsible party will be a factor of its subcontract value to the sum of subcontract values of all the responsible parties

⁷⁶ Concurrent Delays and Apportionment of Damages William Ibbs, M.ASCE1; Long D. Nguyen; and Lonny Simonian DOI: 10.1061/(ASCE)CO.1943-7862.0000259 JOURNAL OF CONSTRUCTION ENGINEERING AND MANAGEMENT © ASCE / FEBRUARY 2011 / pp 119 – 126

multiplied by the LDs applicable under the main contract for the concurrent delay. This method is fairly simple to use as no project data is required and subcontract price is almost always readily available.

3) Direct Cost Based Apportionment

In this method, the direct costs (estimated or actual) are used to calculate proportional weightages. Where the damages to be paid by each responsible party will be a factor of its direct cost component to the sum of direct costs for all the responsible parties multiplied by the LDs applicable under the main contract for the concurrent delay. This method is more difficult to use as it relies on project data for calculating direct costs and the direct costs during delay periods are not only difficult to ascertain but most often disputed.

4) Labour Hour Based Apportionment

In this method, the subcontractor labour hours (planned or actual) are used to calculate proportional weightages. Where the damages to be paid by each responsible party will be a factor of its labour hours to the sum of labour hours for all the responsible parties multiplied by the LDs applicable under the main contract for the concurrent delay. Like the direct cost based method, this is also a more difficult method as it relies on project data for calculating the labour hours, which is not easy to accurately ascertain during delay periods and moreover the hours are often disputed between the main contractor and subcontractor.

5.4 No LDs apply, and the subcontractor is liable under the subcontract for whatever the main contractor's actual loss turns out to be ('Actual Loss')

This is possibly the most onerous method where the subcontractor's liability for delay damages is unlimited as it may not only include the delay damages applicable under the main contract but also the main contractor's own prolongation costs and the associated damages claims from other subcontractors. This is an open-ended approach and the subcontractor's ultimate liability for delay damages cannot be ascertained at any point before the effects of the delay have fully subsided. It will be unreasonable for subcontractors to accept such unlimited liability, it is difficult to estimate the subcontractor's exposure at the time of signing the contract and therefore it is difficult

to put a price against this risk and as a result this method is not usually preferred by subcontractors. Enforcement of the 'Actual Loss' clause may present a problem in the courts under most jurisdictions like in the case of 'No Damages for Delay' clause.⁷⁷ Although, courts generally construe such clauses strictly, because they are exculpatory in nature, they are reluctant to enforce claims on account of delays that are not contemplated by the parties at the time of contracting. The rationale behind this is that the subcontractor may be responsible for the risk of common and expected delays, however, it is inequitable to hold him responsible for delays that were completely unexpected and outside the parties' original contemplation. Similarly, another exception to the enforcement of this clause is seen in the cases of affirmative or willful acts or omissions by the enforcing party, whereby unreasonably interfering with the subcontractor's performance. This exception is based on the principle that an owner or main contractor should not be allowed to exculpate themselves from their own acts that lead to the delay.⁷⁸

5.5 No LDs apply, and the subcontractor is liable under the subcontract for whatever the main contractor's actual loss turns out to be, up to a limit agreed with the main contractor ('Actual Loss + Limit')

This is a modification to the 'Actual Loss' method by inserting an upper limit to the subcontractor's liability for delay, which can either be a specific amount or a specified percentage of the subcontract price. This method retains the general characteristics of the 'Actual Loss', where the subcontractors liability is for any or all actual losses which may be incurred by the main contractor on account of the subcontractor's delay, including but not limited to delay damages applicable under the main contract, the main contractor's own prolongation costs and the associated damages claims from other subcontractors, but it provides an upper limit for such liability. Although, the terms are essentially based on 'Actual Loss' the main contractors need to be careful, as once the limit is crossed there will be no further recovery attainable from the subcontractor. On the other hand this method is advantageous to subcontractors who want to be certain of

⁷⁷ Ibid supra note 76

⁷⁸ Ibid supra note 76

their maximum exposure to liability at the beginning of the project. Nevertheless, this method may lead to under-recovery by main contractor of delay damages from the responsible subcontractor beyond the specified limit of liability in their subcontract.

5.6 Subcontractor has no liability under the subcontract for delay damages, either in the form of LDs, LDs with a limit, actual losses or actual losses with a limit ('No Liability')

A common contractual mechanism used by owners and main contractors to shift the risk of delays away from themselves is the "No Damages for Delay" clause. This is imposed by owners on main contractors or on subcontractors by main contractors. A no damages for delay clause within a subcontract essentially states that the subcontractor will not be entitled to monetary damages in the event of a delay and is often used in connection with conditions stating that an extension of time is the sole remedy for subcontractor's delay⁷⁹. However, the 'No Liability' for delay, which is the equivalent of no damages for delay clause but working to exonerate the subcontractor from liability for delays is prima facie unlikely to be acceptable to main contractors. And, therefore it is unusual to find such provisions within the subcontracts⁸⁰. Nevertheless, the No Liability for delay clause may be used in case of certain listed causes, which are outside the control of the subcontractor like force majeure or to cover delays resulting from the acts of the owner, architect and main contractor or to cover those delays caused by other subcontractors.

⁷⁹ Ibid supra note 76

⁸⁰ Ibid supra note 74

6.0 Chapter 6 - Opinion relating to sub-contractor preference, frequency of use and subcontractor attributes.

6.1 Subcontractor preference

In order to discover the subcontractors' relative preferences towards the methods used to apportion LDs, the participants who are practicing professionals were asked to rank the methods in order of their preference. It is acknowledged that the practicing professionals having subcontracting backgrounds would be able to identify subcontractor preference and rank the methods accordingly.

6.2 Frequency of methods used in practice

The participants were also asked to indicate the frequency of use of each of the possible methods in practice. In order to get a comparable and relevant response back, it was important to maintain a similar number of recent projects, on which the respondents would report on. To achieve this the participants were asked to indicate the method of dealing with delay damages that had been agreed with the main contractor on each of their five (5) most recent projects. It was decided based on the researchers judgement that five (5) projects would represent a reasonable number for which information would be readily available and which would also represent the current industry trend. Anonymity and confidentiality were assured in the email to avoid potential bias in response and to increase the rate of return.

6.3 Attributes of the participating subcontractors

The survey considered the following key factors to assess subcontractor standing:

- 1) Nature of work undertaken;
- 2) Size of the organization based on annual turnover; and
- 3) Criticality of the subcontracted works in the overall construction program.

These are considered to be important indicators of a subcontractor’s bargaining power, and therefore can influence the outcome of negotiation with the main contractor on agreeing the method for apportioning LDs in the subcontract.

6.4 Analysis of the results

6.4.1 Subcontractor Preference

Participants were asked to rank the possible approaches for dealing with subcontract delay damages in order of their preference. Fourteen (14) participants took part in the survey. The rankings are shown in the table 1 below.

Table 1: Subcontract method for apportioning delay damages in order of subcontractors’ preference

Reference (Abbreviated)	Description	Preference Ranking
‘NO LIABILITY’	No liability for delays that we cause	1
‘PROPORTIONATE LDs’	Liable for an agreed proportion of the main contract LDs	2
‘ACTUAL + LIMIT’	Liable for whatever the main contractor’s actual loss turns out to be up to an agreed limit	3
‘FULL LDs + LIMIT’	Liable for the whole of the main contract LDs up to a limit agreed with the contractor	4
‘ACTUAL’	Liable for whatever the main contractor’s actual loss turns out to be	5
‘FULL LDs’	Liable for the whole of the main contract LDs	6
Any other methods	None indicated	N/a

The most preferred method indicated by the respondents is 'NO LIABILITY' for delays by subcontractors (out of the 14 respondents 8 ranked this method as No. 1, whereas, 4 ranked 'PROPORTIONATE LDs' as No. 1 and 2 ranked 'ACTUAL + LIMIT' as No.1). 'NO LIABILITY' for delays by subcontractors is understandably the most desired outcome by subcontractors should they be held responsible for causing a delay. However, it would naturally be unacceptable to the main contractors, who would likely transfer the main contract LDs to their subcontractor rather than assume the risk themselves. The second preference was for 'PROPORTIONATE LDs', where an agreed proportion of the main contract LDs would be applicable to the subcontractor. The third preference was for 'ACTUAL + LIMIT' which involves the subcontractor to be liable for actual damages suffered by the main contractor, but restricted to an agreed upper limit of liability. The fourth preference was 'FULL LDs + LIMIT', i.e. for the subcontractor to be liable for the whole of the main contract LDs but up to a limit agreed with the main contractor, in the event of delays caused by subcontractor. The fifth preference is for 'ACTUAL', whereby the subcontractor is liable for the actual damages suffered by the main contractor without any limit whatsoever. And, the least preferred method is 'FULL LDs', where the subcontractor is liable for the whole of the main contract LDs, without any limit.

6.4.2 Frequency of methods used in practice

The participants were asked to indicate the frequency of use of each of the methods on five (5) of their most recent projects. The following table 2 shows the methods listed in order of their frequency of use (highest to least used method).

Table 2: The frequency of the different methods used for apportioning delay damages in subcontracts

Reference (Abbreviated)	Description	Frequency (% of projects reported)
‘PROPORTIONATE LDs’	Liabe for an agreed proportion of the main contract LDs	39%
‘FULL LDs + LIMIT’	Liabe for the whole of the main contract LDs up to a limit agreed with the contractor	26%
‘ACTUAL + LIMIT’	Liabe for whatever the contractor’s actual loss turns out to be up to an agreed limit	11%
‘FULL LDs’	Liabe for the whole of the main contract LDs	9%
‘NO LIABILITY’	No liability for delays that we cause	7%
‘ACTUAL’	Liabe for whatever the contractor’s actual loss turns out to be	4%
‘DON’T KNOW’	We do not know what the contractual liability is for delays that we cause	4%

The most commonly used method for dealing with subcontractors’ liability for delay appears to be the application of an agreed proportion of the main contract LDs (‘PROPORTIONATE LDs’), this method was adopted within the subcontracts of 39% of the projects reported. The second most commonly used method is ‘FULL LDs + LIMIT’ where the main contract LDs are transferred to the subcontractor up to a limit agreed with the main contractor, this approach

was followed in 26% of the projects reported. The third most commonly used method is 'ACTUAL + LIMIT' where the damages are not specified in the subcontract but are calculated based on whatever the main contractor's losses turn out to be, whilst being subjected to an agreed limit, this approach was used in 11% of the projects reported. Other methods used include 9% 'FULL LDs' (i.e transferring the whole of the main contract LDs to the subcontractor without any limit), 'NO LIABILITY' for delays by subcontractor was applicable for 7% of the projects, which is an unexpectedly high percentage of instances where the main contractor is exposed to the risk of bearing the entire main contract LDs without any contractual recourse to recover the same from the subcontractors in the event of delays by subcontractors, and finally 4% of the projects used 'ACTUAL' (i.e delay damages not specified and calculated based on whatever the main contractor's actual loss turns out to be, without any limit) and on 4% of the projects the respondents stated that they did not know what their contractual liability for delay was.

6.4.3 Attributes of the participating subcontractors

Three (3) respondents were large sized civil contracting firms with annual turnover of around AED 1000 million, reporting that their work is on the critical path most of the time and their subcontract value would normally be in excess of 50% of the main contract price. Three (3) respondents were MEP (Mechanical, Electrical & Plumbing) firms with annual turnover in the range of 400 - 600 million, also reporting that their work is on the critical path most of the time, making up to 50% of the main contract price. Four (4) were smaller companies performing structural, pipelining and infrastructure works with annual turnover in the range of AED 100 – 300 million and another four (4) firms doing architectural, interiors and maintenance works with turnover of AED 50 – 100 million. Although, the smaller firms have also reported that their work is on the critical path sometimes, they are generally less critical than some of the core building trades like civil and MEP and usually contribute to 10 -25% of the main contract price.

6.5 Discussion on survey findings

Subcontracting is a risky business for the main contractor, studies have previously indicated that up to 49% of all delays on projects are caused by subcontractors, which is substantial in terms of the potential it carries for the main contractor to be exposed to under recovery of LDs from the subcontractors, if adequate contractual methods to transfer this risk to the subcontractors is not provided within the subcontracts. However, the survey shows that in 39% of the projects reported, the main contractor retains a major portion of this risk, where the apportioning of LDs is based on a proportionate approach. In such cases when delays caused by subcontractors occurs, the main contractor will stand to lose out on a significant portion of the main contract LDs as a result of not being able to transfer the entire LDs on to the defaulting subcontractor, beyond a certain proportion agreed in the subcontract. Also, a further 26% of the projects used the approach of FULL LDs + LIMIT, which also prevents the main contractor from recovering the entire main contract LDs due to the limit on recoverable LDs being applicable. Based on the consensus view the most preferred method for apportioning LDs for subcontractors delay is the approach entailing no liability for delays caused by subcontractors ('NO LIABILITY'). However, this approach is not reflected in the survey results for the frequency of methods used. The approach of no liability for delays was ranked 5th overall and was used in only 7% of the projects reported (see Table 2).

From the survey it was assessed that projects utilizing the core building trades of civil and MEP used the approaches of either 'PROPORTIONATE LDs' or 'FULL LDs + LIMIT'. It is noteworthy that the main contractors on such projects are accommodative of the risk relating to delay by subcontractors considering the fact that these trades tend to be on the critical path most of the time. Therefore, it alluded to the bargaining power of the subcontractors of this type of trades who generally tend to be in a strong commercial position to negotiate a limit on their liability for delays. The other aspect that needs to be considered is the relative importance of the subcontractors' work in the project. The subcontract values for these core building trades of civil and MEP could make up more than 50% of the main contract price and they play an important role in

the economic success of the project. The size of such companies tend to be large as well and they are usually inclined to not accept unfavorable risks owing to their greater capacity of doing multiple projects. In other words, they cannot be compelled to accept unfavorable conditions by main contractors. This would also mean that smaller organizations executing less important trades would find it difficult to negotiate with the main contractors for limits on LDs applicable to them unlike in the case of larger core trade subcontractors. Although, it is not the norm that bargaining power decreases with decrease in size of the organization and/or importance of their trades in relation to the project, but it is often the case. Incidentally, some smaller subcontractors of less important trades may be able to negotiate less onerous terms on a case by case basis.

Further, the market conditions sometimes influence the acceptance of more onerous risk by subcontractors who are in dire need to get new jobs to have a sustainable cash flow. Hence, subcontractors may be prepared to accept disproportionate LDs in the interest of not losing out on a new opportunity even if it means that the results of an unexpected delay could be detrimental to them. In such cases the financial stability of the subcontractor may be eroded and it may go into bankruptcy causing an absolute default of its obligations under the subcontract. When this happens the main contractor is faced with a secondary risk that may potentially jeopardize its own performance under the main contract forcing it to default on its part, whereby exposing it to far greater liability than compared to under recovery due to limits being applicable on subcontractors' liability for delays.

7.0 Chapter 7 – Conclusion

This research shows that unlike the Liquidated Damages provisions of main contracts there is very little consensus on a method that is entirely satisfactory to the main contractor and subcontractor for dealing with subcontractors liability for delays. From the survey, it is found that the most common method for dealing with subcontractors' liability for delays within the subcontracts in the UAE is by the use of proportionate LDs. This method goes against the accepted principle that any pre-agreed damages should be a genuine pre-estimate of the loss. Also, this arrangement may turn out to be quite onerous for the main contractors as they may have to compensate the owner for large portions of the main contract LDs that are not recoverable from subcontractors.

The problem of apportioning subcontractors' liability for delay is a significant one with many approaches being followed in practice but none providing a completely satisfactory result for all the parties involved. There is a dearth of research currently available on the subject, but there is plenty of scope to put together a comprehensive research in future to develop acceptable approaches depending upon the different situations in which subcontractors' delays occur. Any possible solution should address concerns regarding under recoveries by the main contractors whilst avoiding the overburdening of subcontractors by disproportionate LDs. This study has only touched on the surface of a larger issue that needs the involvement of wider organizations of both main contractors and subcontractors to possibly come up with viable solutions to the problem of apportioning subcontractors' liability for delays.

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