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**AN ANALYSIS OF CONSTRUCTION
RELATED CONTRACTUAL ISSUES
(RISK, TIME AND CLAIM RELATED)
IN THE CONTEXT OF THE
CONSTRUCTION RELATED
CONTRACTUAL OBLIGATIONS OF
THE CONTRACTOR AND THE
EMPLOYER IN FIDIC YELLOW
(PLANT and Design-Build) GENERAL
CONDITIONS OF CONTRACT**

by

Hendrik Cornelius Benjamin du Toit

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by

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SUBMITTED TO THE UNIVERSITY OF CAPE TOWN

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Faculty of Law

UNIVERSITY OF CAPE TOWN

Date of submission:

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¹ See BW Totterdill (*FIDIC user’s guide: a practical guide to the 1999 red book* (2001) 239) who argues with respect to the practical importance of the clause 20.1 notices that “These notice are important: - to enable the Engineer to make his own observations and records of the problem – to enable the Engineer to consider possible actions to overcome the problem – to put the problem on record and make it possible for the Contractor to receive a prompt decision on his entitlements.”

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Problem

One would think that analysing major contractual issues (such as risk, time or claim related contractual issues) in terms of the General Conditions of the *FIDIC Conditions of Contract for Plant and Design-Build* 1ed (1999) FIDIC, Switzerland (“the Yellow Book”) would be a relatively straightforward contractual analytical listing exercise and yet there are a number of obligations of the Contractor and the Employer that are influenced by, or that presuppose some of these contractual issues, and that may complicate this seemingly straightforward exercise.

Furthermore, it would also seem a straightforward contractual exercise to analyse the Contractor’s and Employer’s main obligations as found in the Yellow Book, and yet one will find that these obligations interplay to such an extent upon the mentioned contractual issues that it becomes difficult to analyse the Contractor’s and the Employer’s obligations without taking contractual issues into account.

It is also possible that one will find that these contractual issues as well as these obligations, as inbedded in contractual clauses, are formulated in a very construction specific way and that in that sense it may be difficult to distinguish between law of contract and construction law when interpreting these contractual issues.

In other words there may be a variety of contractual issues that directly or indirectly hold hands with the obligations of the Contractor and the Employer and can cause problems with the interpretation and the practical application of this contract, not only because the contract itself is intricate but also because it speaks a contractual language that is very construction specific.

Premises

This dissertation argues that the solution to the problem is the following:

- that the Yellow Book be treated as a specialized contract² – implying that the contractual issues, within the context of the Contractor’s and the Employer’s contractual obligations, be assessed by way of perusal, analysis and interpretation of the clauses in the Yellow Book from a general law of contract point of view but also from a construction law point of view. In other words these clauses should be interpreted from a construction related contractual point of view, also taking into account relevant case law, commentaries and abstracts dealing with these issues.

- that the following major construction related contractual issues be taken into account, within the context of the construction related contractual obligations of the Employer and the Contractor in the Yellow Book:

Risk related contractual issues;

Time related contractual issues;

² Although it has been confirmed in the *National Coal Board v Wm Neill & Son (St Helens)* [1984] 1 All ER 555 case that construction law contracts are not to be interpreted differently from any other contracts, the fact remains that there are certain aspects that definitely distinguish construction agreements from other agreements and hence the consequence that most disputed construction agreements end up in arbitration and not in court and also the fact that construction agreements and the interpretation thereof have become a specialized field over the last century. Even as early as 1939 an English civil engineer and barrister E.J. Rimmer distinguished civil engineering contracts from other contracts by asserting that “The subject matter of an engineering contract is generally such as necessitates that the documents of which the contract is composed must make provision for contingencies and events of a special nature, and it is chiefly in this respect that it has peculiarities not to be found in other forms of contract, and is often inevitably of considerable length” (as referred to by R Seppala in his article entitled ‘Contractor’s Claims under the FIDIC Contracts for Major Works’ (2005) 21 *Const. L.J.* 278-90 at 278). See also RH Christie (‘General Principles of Law of Contract’ (2007) Unpublished article at 1) arguing the relevance of general law of contract principles in the context of engineering and construction contracts.

Claim related contractual issues

- that the construction related contractual issues will be discussed within the context of
 - arguably the two main construction related contractual obligations of the Contractor and Employer respectively, namely
 - The Contractor's obligation to complete the Works (within the Time for Completion);
 - The Employer's obligation to co-operate with and not to prevent the Contractor from completing the Works (within the Time for Completion)
 - arguably the most important procedural obligations of the Contractor, namely
 - The Contractor's claim procedural obligations in terms of clause 20.1.

Methodology

A combination of legal, analytical and progressive approaches will be used in this dissertation

- Legal approach

A legal approach implies that the most relevant commentaries, abstracts as well as case law will be cited, where applicable, to confirm a specific argument or point of view. The arguments in the first instance will be legally based and while the financial implications of certain transactions will also be taken into account, the dissertation will first and foremost aim to provide a legal foundation to the respective construction related contractual issues and obligations in the Yellow Book under discussion.

- Analytical approach

An analytical approach implies that the Yellow Book is analysed clause by clause and that all aspects with respect to the relevant construction related contractual issues are highlighted and discussed within the context of the relevant construction related contractual obligations of the Contractor and the Employer.

- Progressive approach

A progressive approach implies that while certain contractual outcomes stay relatively fixed over time, the interpretation of construction law is changing on a worldwide scale, especially in terms of case law in the United Kingdom, Australia, the rest of the Commonwealth (including South Africa), and the United States of America, and that such transformation of construction law on a worldwide scale has definite effects on the interpretation of the Yellow Book, and, if applicable, should be taken into account.

CHAPTER 1

Introduction

1.1 The Yellow Book as choice of contract with respect to the analysing of the construction related contractual issues in the context of the obligations³ of the Contractor and the Employer

This dissertation will specifically focus on the terms and conditions of the Yellow Book,⁴ with respect to the parties' respective obligations and contractual issues that are directly influenced or are presupposed by these obligations.

The reasons why this dissertation will focus on the Yellow Book are twofold: Firstly, because of the international character of the Yellow Book,⁵ it is a contract that is widely used on an international scale by international engineering firms.⁶

³ Although the term "obligations" should strictly speaking read "construction related contractual obligations," this discussion will mostly only make use of the term "obligations," so as to distinguish the construction related contractual issues from the construction related contractual obligations, and also because the emphasis of this discussion is on the issues within the context of the obligations, and not on the obligations per se.

⁴ Note that a new FIDIC contract entitled "the Gold Book" or "the DBO (Design-Build-Operate) contract" (*The FIDIC Conditions of Contract for Design-Build-Operate* 1ed (2007) FIDIC, Switzerland) and which form of contract is based on the Yellow Book, has been published within the last year by FIDIC and "combines design, construction, and long term operation and maintenance of a facility into one single contract awarded to a single contractor..." (J Glover 'FIDIC: an overview, The latest Developments, Comparisons, Claims and Force Majeure' (2007) at 2 (*Construction Law Summer School 2007, Queens College Cambridge*) Available at http://www1.fidic.org/resources/contracts_overview%20_glover.html [Accessed 25 July 2008].

⁵ This dissertation will not focus exclusively on South African law of contract principles, construction law principles and case law in relation to the Yellow Book but also – because of the international nature of the Yellow Book - on, inter alia, English, Australian, other Commonwealth and American law of contract principles, construction law principles as well as case law in relation

In the instance that the parties require a design-build contract, the Yellow Book is a popular choice of contract, which could be further adapted by way of Particular Conditions to fit the specific circumstances of the respective parties.

Secondly, from a FIDIC perspective, the Yellow Book is an ideal contract to study, because the Yellow Book is seen as a contract that is riskwise drafted somewhere in the middle between the Red Book⁷ (a more traditional construction contract, where the design risk is more allocated in the territory of the Employer), and the more extreme Silver Book⁸ (a turnkey contract, where the Contractor assumes the greater part of the risk).⁹

to the Yellow Book (which law of contract principles and construction law principles in most instances overlap because of the international nature of construction contracts in general). The international nature of FIDIC is described on the Wikipedia website (Searchitem 'FIDIC' Available at <http://en.wikipedia.org/wiki/FIDIC> [Accessed 2 Nov 2008]) as follows: "Located at the World Trade Center in Geneva, Switzerland, FIDIC aims to represent globally the consulting engineering industry by promoting the business interests of firms supplying technology-based intellectual services for the built and natural environment. Run mostly by volunteers, FIDIC is well known in the consulting engineering industry for its work in defining Conditions of Contract for the Construction Industry worldwide."

⁶ See for instance the article by OS Spadavecchia ('M&R wins Bravo, Medupi boiler construction contracts' (2008) Available at <http://www.engineeringnews.co.za/article/mampr-wins-bravo-medupi-boiler-construction-contracts> [Accessed 8 Nov 2008]), in which article the Eskom Medupi and Bravo power projects which were awarded to Hitachi Power Africa and again further subcontracted to South Africa's leading engineering and construction company - Murray & Roberts, are discussed .

⁷ *The FIDIC Conditions of Contract for Construction* 1ed (1999) FIDIC, Switzerland.

⁸ *The FIDIC Conditions of Contract for EPC/Turnkey Projects* 1ed (1999) FIDIC, Switzerland.

⁹ There are other pragmatic reasons, dealing with the mechanical and engineering background of the Yellow Book and its focus on the manufacturing and installation of plant, that explains why the Yellow Book came into being, that falls outside the ambit of this discussion. Glover (note 4) 2 explains some of the pragmatic reasons that led to drafting of the Yellow Book as follows:

1.2 The obligations of the Contractor and the Employer and the freedom of contract principle

The obligations of the Employer and the Contractor are well known concepts in the field of law of construction. Not only in textbooks,¹⁰ but also in various construction contracts¹¹ the obligations of the Contractor and/or the Employer are highlighted and not only indirectly mentioned but also frequently discussed under separate headings.

One should however take into account that these obligations do not fall out of the air but are part of the parties' freedom of contract, that is to say to contract whichever way they want (with some exceptions), even if they contract to their own detriment. They can thus use any construction contract of their preference, and even adapt it further if they deem it necessary, and depending on which contract they choose, their respective obligations may also, to some extent, differ.

Most construction contracts today however, "will be entered into in either a 'traditional' or the 'design build' format,"¹² which of course would also to a great

"One difficulty with the FIDIC contracts was that they were based on the detailed design being provided to the contractor by the employer and or his engineer. It was therefore best suited for civil engineering and infrastructure projects such as roads, bridges, dams, tunnels and water and sewage facilities. It was not so suited for contracts where major items of plant were manufactured away from site. This led to the first edition of the 'Yellow Book' being produced in 1963 by FIDIC for mechanical and electrical works. This had an emphasis on testing and commissioning and was more suitable for the manufacture and installation of plant."

¹⁰ See for instance D Wallace's comments on the obligations of the Contractor and Owner (Employer) in *Hudson's Building and Engineering Contracts* 11ed (1995) 472-611.

¹¹ See for example the *NEC3 Engineering and Construction Contract Guidance Notes* (June 2005) 4-44.

¹² Tolson (note 20) 8.

extent determine the level of the parties' obligations and the respective risk that they will respectively assume.

Likewise, the contracting parties' choice of making use of the Yellow Book as "design build" form of contract implies that the contracting parties will already (presumably) have taken the Contractor's and the Employer's obligations as well as the risk load that the respective parties will assume (in terms of the Yellow Book) into account.

1.3 The construction related contractual obligations of the Contractor and the Employer¹³

In construction law, the obligation of the Contractor to complete the Works would probably be the first obligation of the Contractor to come to mind.¹⁴ When one has to formulate the most basic obligation of the Employer it would probably be the obligation to co-operate with and not to prevent the Contractor from completing the Works.

There are however also claim procedural obligations of the Contractor and Employer which should be taken into account, because of their practical relevance on a financial level,¹⁵ their practical relevance in the avoidance of disputes,¹⁶ and

¹³ Note that these obligations can be contractually speaking - implied obligations and/or express obligations.

¹⁴ Wallace (note 10) 472 refers to the main obligation of the Contractor as the obligation to complete. In the *NEC Guidance Notes* (note 8) 41 the main obligation of the Contractor is also cited as "providing the Works."

¹⁵ According to RP Davison (*Evaluating Contract Claims* (2003) 121) "Cash flow is the lifeblood of the construction contracting business and it is in the interests of the contractor to ensure that early and adequate notice is given."

¹⁶ According to Davison (note 15) 121 "The provision for notices in construction contracts are there to avoid, wherever possible, disputes as to the consequences of events on site." See also NG

also because these claim procedural obligations potentially have an influence on the Contractor's first obligation (to complete the Works) as well as on the Employer's most basic obligation (to co-operate with and not to prevent the Contractor from completing the Works).¹⁷

Consensus with respect to these basic obligations of the Contractor and the Employer (i.e. consensus as to type of contract used) should be achieved before a construction contract can come into being.¹⁸

1.4 Construction related contractual issues

It is the hypothesis of this dissertation that there are a number of specifically construction related contractual issues (meaning that these issues will be both contractual of nature and include construction law principles) that influence or are presupposed by these basic obligations. It will be argued that of these contractual

Bunni (*The FIDIC Forms of Contract 2ed* (2005) 537) asserting with reference to clause 20.1 that "The above-mentioned provisions are extremely important in seeking to reduce a number of usual conflicts that have persisted, and beleaguered the construction industry in the past."

¹⁷ The obligation to complete the Works implies the completion of the Works within the Time for Completion. The obligation to claim according to certain procedures potentially has a direct influence on whether delay damages will be paid because completion was not achieved within the Time for Completion or whether an extension of time will be granted because the Time for Completion was delayed by actions of the Employer. As further discussed in Chap 7 the Contractor's lack of adherence to procedures can arguably cause that the Contractor will have to pay delay damages even in the instance that the Employer did not adhere to its basic obligation (by causing a delay). Also the Contractor's lack of adherence to procedures can arguably cause the Contractor's obligation to complete within the Time for Completion to be burdened because the Contractor is "barred" from achieving an extended Time for Completion by way of a claim for an extension of time, as is further argued in Chap 7.

¹⁸ In this study it will be taken for granted that the Contractor and the Employer have jointly decided to make use of the Yellow Book.

issues, the three most important construction related contractual issues are risk related, time related and claim related contractual issues and that it is not possible to refer to the obligations of the Contractor and the Employer without taking these contractual issues into account.

One should also bear in mind that although these construction related issues are discussed separately, they are all interrelated and intertwined with each other to the extent that risk, time and claim related issues all in some way or the other deal with the allocation of risk. The reason for this can be found in the fact that the way that risk provisions, time provisions and claim provisions are formulated in a contract will per se influence the risk that the respective parties will carry in a contract.¹⁹

1.5 Risk related contractual issues

The Contractor's basic completion obligation in a design-build contract such as the Yellow Book requires that the Works will be completed according to the "fit for its purpose" standard.²⁰ That is to say that the Works are not only to be

¹⁹ See PMM Lane ('Disruption and Delay: Fair Entitlement and the Regulation of Risk' (2006) 22 *Const. L.J.* at 93) discussing the allocation of risk and the contractual provisions with respect to time (including claim related provision dealing with time) in his article entitled "Disruption and Delay: Fair Entitlement and the Regulation of Risk."

²⁰ Although the "fit for its purpose" standard is in any event implied in design-build contracts (S Tolson 'Design Risk, defective buildings and damages seesaw' (Lecture given at Construction Law Summer School Construction Law) Available at <http://www.fenwickelliott.co.uk> [Accessed 28 March 2008] 6), this standard is expressly formulated in the Yellow Book as follows: "When completed, the Works shall be fit for the purposes for which the Works are intended." The implication of this standard will be further discussed in Chap 2. Note that this clause 4.1 is stated so unambiguously that the argument considered in the *Independent Broadcasting Authority v EMI* (1980) 14 BLR 1 case – that the Contractor only contracted (in the respective agreement) to exercise normal professional skill - cannot even be raised. (In this mentioned *Independent Broadcasting Authority* case Viscount Dilhorne at 26 referred to the possible relevance of the

completed according to the standard of “reasonable skill and care,”²¹ but according to the standard that the Works will be “fit for the purposes for which the Works are intended,” which is a much higher standard than to complete with reasonable skill and care.

This obligation that the Works are to be completed according to a certain standard implies that certain degree of risk (inter alia, with respect to design, construction (workmanship), use of materials and the care of the Works)²² is involved should the Works not be completed according to this high standard. This completion obligation also implies that this risk (as well as other related risks) will be carried by the Contractor until the Works are completed and handed over to the Employer.²³

“fitness for purpose” standard in the case as follows “In the circumstances it was not necessary to consider whether EMI had by their contract undertaken to supply a mast reasonably fit for the purpose for which they knew it was intended and whether BIC had by their contract with EMI undertaken a similar obligation but had that been argued, I would myself have been surprised if it had been concluded that they had not done so.”) See also *Bunni* (note 16) 190 formulating the discrepancy that should be drawn between the duties of professional persons in general and contractors as follows: “In general terms, a professional person is under a duty of reasonable skill and care, whereas a contractor is under a duty of fitness for purpose.”

²¹ *Tolson* (note 20) 16 argues that this standard of “reasonable skill and care” implies that negligence will need to be shown before it can be argued that the Contractor did not act in accordance with this standard.

²² In Chap 2 the risk with respect to the Works will be discussed as a general risk that is carried by the Contractor (i.e. inclusive of the general risk carried by the Contractor until the completed Works are “fit for purpose”), but also highlighting the specific risks that are carried by the Contractor (whether it be design, construction risk, risk with respect to the materials or risk with respect to the care of the Works until the completed Works are “fit for purpose.”)

²³ Some of these risks can even be carried after the Time for Completion by the Contractor as will be further discussed in Chap 2.

1.6 Time related contractual issues

Completion as an obligation also implies that the Works are to be completed on the Time for Completion.²⁴ Time related contractual issues such as delay issues, disruption issues and acceleration issues directly or indirectly stand in relation to this obligation of the Contractor to complete the Works within the Time for Completion, and the obligation of the Employer to co-operate with and not to prevent the Contractor from completing the Works within the Time for Completion.

1.6.1 Time related contractual issues and risk

Although time related issues will be discussed as a separate theme within the context of the obligations of the Contractor and the Employer and are to be distinguished from risk related issues, it is relevant to take note that time related issues are always in some way connected to risk related issues, because one of the parties will have to bear the risk for delay costs, disruption costs or acceleration costs or for lost time in terms of the contract.²⁵

1.7 Claim related contractual issues

While taking the mentioned main obligations of the Employer and Contractor into account,²⁶ one should not forget the importance of claim related issues (and claim

²⁴ See for instance clause 8.2 of the Yellow Book.

²⁵ See Lane (note 19) at 93 formulating delays and risk allocation as follows: “The risk allocation for delay is generally governed by two considerations of principle: responsibility for the delay and identify the party who is best able to control the risk. It is accordingly important that the apportionment of the risk is well defined and that the clause makes it clear whether it is intended to be a comprehensive remedy for the delay or is restricted only to certain defined circumstances.”

procedural obligations of the Contractor),²⁷ when discussing risk related issues and time related issues, specifically because claim related issues are so intertwined with the mentioned risk related and time related issues, as further discussed in paragraphs 1.7.1 and 1.7.2.²⁸

1.7.1 Claim related contractual issues and risk

Risk allocation, as mentioned, also implies responsibility and financial liability and thus even though the Contractor carries a certain contractually allocated risk, the carrying of that risk can be “reallocated” on a financial level from the Employer to the Contractor simply by the Contractor ignoring or not acting in accordance with his claim procedural obligations.²⁹ Thus, for example, in the instance of a “Force Majeure” event the risk lies with the Employer.³⁰ However should the Contractor fail, in accordance with his procedural obligations, to give a notice in terms of clause 20.1, the risk of such a “Force Majeure” event will be

²⁶ See these obligations discussed in para 1.3 here above.

²⁷ Bunni (note 16) 293 formulates the relevance of claims procedures as follows: “...all construction contracts place an obligation on the party who wishes to avail themselves of that remedy to follow a set procedure, which is referred to as ‘the claims procedure’.” See M Rowe (‘FIDIC and Time’ (2005) 1-20 at 4 available at http://www1.fidic.org/resources/contracts/ibc_oct05/rowe_time_ibc_oct05.asp [Accessed 20 July 2008]) discussing the procedural obligation of the Contractor to give a notice in terms of clause 20.1.

²⁸ See also the relevance of procedural obligation as discussed in para 1.3.

²⁹ See A McInnis *The New Engineering Contract: A Legal Commentary* (2001) 68 discussing this aspect of risk re-allocation in respect of compensation events in the NEC contract that entitled the Contractor to certain claims. See also Lane (note 19) at 93 discussing the allocation of risk and the relevance of the formulation of the claim procedures, and whether such procedures (such as notices) are strictly formulated or not.

³⁰ As discussed in para 3.2.1.1.

“re-allocated” to the Contractor and in effect be borne by the Contractor³¹ on a financial level, because any possible claim that the Contractor potentially could have enforced would fail.

1.7.2 Claim related contractual issues and time

While the claim related contractual issue of “extension of time” is simultaneously also a time related contractual issue, claim related issues as delay costs, disruption costs and acceleration costs issues are again linked to time related issues such as delay, disruption and acceleration issues. Claim related issues such as “time bar” issues and “time at large” issues also directly or indirectly deal with time and time related issues.

³¹ See JK Hoyle ‘The Rainbow down under – part 2 (Further reflections from the antipodes on aspects of the new FIDIC design-build contracts)’ (2002) 19 *ICLR* at 13 arguing that “...a failure by the contractor to conform with notice provisions will disentitle him to claim for an extension of time...” and “...the contractor’s inability to proceed with an extension of time claim where it has failed to claim has been examined by the courts and they have concluded that **the contractor takes the risk of such failures entirely...**” (own emphasis)

CHAPTER 2

Risk related contractual issues in the context of the obligations of the Contractor

2.1 Risk allocation in construction agreements

The allocation of risk is arguably the single most important aspect to consider in construction agreements.³² The reason for the importance of considering risk allocation lies with the possibility that something can go haywire in a construction project (which is a real possibility in construction projects) and if something does go wrong it is important to establish who carries the risk and who is consequently responsible for any losses or damages suffered in terms of the construction agreement.³³ It is also important to realize that risk can to a certain extent be

³² Bunni (note 16) 530 formulates the importance of the allocation of risks as follows: “Thus, it has been said that the main purpose of a contract is to identify the principles of allocating the risks facing the contracting parties.”

³³ Although risk is to an extent transferred away from the Contractor and the Employer by way of insurance provisions (see for instance clause 18 of the Yellow Book), the focus of this study is not on the insurance aspect but on the risk load that the parties to the contract carry in the context of their respective obligations (regardless of insurance). Also note that in clause 18.1 para 11 [*General Requirements for Insurance*] it is stated that: “*Nothing in this clause limits the obligations, liabilities or responsibilities of the Contractor or the Employer, under the other terms of the Contract or otherwise.*”

shifted through indemnity and waiver provisions³⁴ as “it is always open to the parties to vary the incidence of risk by agreement.”³⁵

Riskwise, it is paramount in construction negotiations for the respective parties to select the appropriate contract suitable to the circumstances and the selection of the appropriate contract is therefore “part of the overall risk strategy.”³⁶

The risk that the Contractor or the Employer has to carry is however directly linked to the contractual obligations of the respective parties. Thus, for example, in construction contracts in general and also in the Yellow Book, the Contractor has the basic and absolute obligation to carry out and to complete the Works, and out of the mentioned obligation will follow the Contractor’s onus of bearing the risk related to the Works until the Taking-Over Certificate has been issued.

After the Taking-Over Certificate has been issued, the Employer, who will be in possession of the Works, will carry the risk of the Works, although the Contractor will stay liable for any losses that may be attributable to any work done by the Contractor before the Taking-Over Certificate has been issued.³⁷

³⁴ K Gagluiso (‘Indemnity and risk shifting in construction contracts: My fault...your problem’ (undated article). Available at http://www.ubcnhvt.org/pdf/article_indemnityrisk.pdf [Accessed 15 February 2008] at 1-3) argues that indemnity and waiver provisions in most standard construction contracts shift risk from one contract party to the other and that construction clients should take cognizance of such provisions.

³⁵ HS McKenzie *The Law of Building and Engineering Contracts and Arbitration* (1994).

³⁶ Tolson (note 20) 5. Tolson (note 20) 5 further argues with respect to the management of risk and the drafting of contracts: “If risk is to be managed then attention must be paid to the clear unambiguous drafting of contracts so that they record exactly what the parties intend.”

³⁷ According to clause 17.2 para 4.

2.2 The Contractor's obligation to complete the Works³⁸

The Yellow Book is entitled PLANT and Design-Build. Thus the title already suggests that the Contractor is to design and to build the Plant³⁹ and that consequently he will in most aspects carry the burden of the design and construction risk until he has completed the Works.⁴⁰

This completion obligation of the Contractor is confirmed in clause 4.1 of the Yellow Book [*Contractor's General Obligations*] where it is stated that:

³⁸ From Chap 4 onwards the obligation of the Contractor will be formulated as an obligation of the Contractor to complete the Works **within the Time for Completion**. Because risk is however more directly focused on the date that the Taking-Over Certificate is issued, (because the risk of the Works passes from the Contractor to the Employer on that date) in this Chapter as well as in the next Chapter the obligation will not be referred to as an obligation to complete the Works **within the Time for Completion**, but only in general terms as an obligation "to complete the Works." (own emphasis)

³⁹ "Plant" is defined in the Yellow Book as follows: "1.1.5.5 'Plant' means the apparatus, machinery and vehicles intended to form or forming part of the Permanent Works." According to PC Loots (*Construction Law and Related Issues* (1995) 345) "In electrical, mechanical and civil contracts *plant* means machinery, materials, and all things to be provided under the contract for incorporation in the works."

⁴⁰ Although Wallace (note 10) 472-73, 517 and 525) formulates the obligation to complete as "a dual obligation that is, both to *carry out* and to *complete* the works," he draws a discrepancy between the obligation to complete and the obligation as to Design and Quality of Materials. According to Tolson (note 20) 6 "In a 'design and build contract,' case law over the years has shown that the contractor, in the absence of an express contractual rebuttal, will be under an obligation to ensure that the finished product will be (reasonably) 'fit for its intended purpose'." In clause 4 of the Yellow Book these two obligations (the completion obligation and the "fitness for purpose" obligation) are linked together by making the "fitness for purpose" standard a prerequisite for the completion of the Works.

“The Contractor shall design, execute and complete the Works in accordance with the Contract,⁴¹ and shall remedy any defects in the Works. When completed, the Works shall be fit for the purposes for which the Works are intended as defined in the Contract.”⁴²

This obligation as to “fitness for purpose” is according to Glover⁴³ an absolute obligation and is not dependent on the proving of negligence on the part of the

⁴¹ See also the completion obligation highlighted by Tolson (note 18) 10 in his discussion of the *Tharsis Sulphur & Copper Co v M'Elroy* (1878) 3 App Cas 1040 case. Tolson argues that in this case the respondents “were obliged to execute the work” where the respondents experienced problems with “casting iron through girders” but could claim for their extra costs because they experienced problems with the “casting of the girders.” Thus, they had the obligation to complete the work regardless of the effort it took to do so or the difficulties they had to overcome.

⁴² In *The FIDIC Contracts Guide* (1ed (2000) 96) it is stated that the “fitness for purpose standard is stated to apply ‘when completed’ and should not be interpreted a decade later for example.” It is also emphasised in *The FIDIC Contracts Guide* (note 42) 97 that “Fitness for purpose is thus the basic criterion with which the Contractor-designed Works must comply.”

⁴³ (note 4) at 4. See also the *Viking Grain Storage v T.H White Installations Ltd* (1985) 33 BLR 103; [1985] 3 ConLR 52 case, in which case it was stated that with respect to design-build contracts “the term of a reasonable fitness for purpose be implied” if it is not expressly so termed in the contract (as discussed by M Furston in the *Powell Smith & Furmston Building Contract Casebook Law Handbook* (2006) 78. See also the ‘EIC Contractor’s Guide to the FIDIC Conditions of Contract for Plant and design-build’ (2003) 20 *ICLR* 332-65, in which Guide the fit for purpose standard is criticized at 343 as follows: “With regard to the full extent of the obligation to design for fitness for the purpose it may not be the possible to pass the full liability on to a third party design consultant appointed by the Contractor” and “...because insurance to cover the risk associated with fitness for purpose is not presently universally available.” See also the *London Borough of Newham v Taylor Woodrow-Anglian* (1982) 19 BLR 99 case, in which case it was held at 127-28 that the Contractor (that was responsible for the designing and construction of tower blocks) was not liable for damage that was caused to the building by internal explosives because he was not negligent and because the building was designed with due caution and care.

Contractor. This obligation is a much heavier obligation to bear by the Contractor than the obligation to design “with reasonable skill and care” because in the case where a Contractor has to design “with reasonable skill and care,” negligence on his part must first be proven before such Contractor will be held liable.⁴⁴

The courts do not in practice break down the “fitness for purpose” obligation under the design and build contract but only look at whether the finished products are fit for the intended purpose. Thus the Contractor would be liable for defects if the product is not fit for its intended purpose, whether such defects be defects with respect to materials, workmanship or design.⁴⁵

⁴⁴ Tolson (note 20) 6. See also D Atkinson ‘Design’ (1999) at 2. Available at <http://www.atkinson-law.cases.CasesArticles/Design.htm>. [Accessed 25 April 2008]) that argues in the same vein: “Design and build contracts can impose a higher standard than reasonable skill and care. This obligation resembles the seller’s duty to supply goods which are reasonably fit for their intended purpose.” K Pickavance (*Delay and disruption in construction contracts* 3ed (2005) 32) also distinguishes between these two types of standards and mentions that the term “fitness for purpose” will be implied in any “contract for the design and supply of a finished product.” See also RH Christie (*Commentary on the FIDIC Contracts* (2007) Unpublished article at 157 (To be read with *The FIDIC Contracts Guide* (note 42)) arguing with respect to clause 4.1 of the FIDIC contracts and the “fitness for purpose” standard that “There is nothing in this subclause to suggest that the Contractor can escape liability for breach of this warranty by showing that his design was not negligent and conformed to accepted professional standards, and no such escape route can be implied.”

⁴⁵ Tolson (note 20) 6 argues that the courts do not in practice break down the “fitness for purpose” obligation. In the *Viking Grain Storage* case (note 43) it was stated by Davies J in his judgment at 117 that: “The virtue of an implied term of fitness for purpose is that it prescribes a relatively simple and certain standard of liability based on the ‘reasonable’ fitness of the finished product irrespective of considerations of fault and of whether its unfitness derives from the quality of work or material or design.” See also the *Test Valley Borough Council v Greater London Council* (1979) 13 BLR 63 case, in which the threefold risk that the Contractor carries when undertaking building or construction was confirmed by Phillips J (whose judgment the Court of Appeal affirmed) which stated: “Where a house proves defective, the defects may be of materials, of

Thus one can argue that risk related contractual aspects are presupposed by the obligation of the Contractor to complete the Works and that the Contractor has the onus of carrying all risk of the Works,⁴⁶ with respect to design,⁴⁷ construction (workmanship)⁴⁸ and materials used⁴⁹ as well as the care of the Works, until the finished product is fit for its purpose (and also at times thereafter).⁵⁰

workmanship or of design.” See also the *Oos-Vrystaat Kaap Bedryf Beperk v Vilmor Boerdery BK en 'n ander* [2001] JOL 7916 (E) case (Available at [butterworths.up.ac.za/nxt/gateway.dll/cc/y28b/b38b/4rec?f=templates\\$fn=...](http://butterworths.up.ac.za/nxt/gateway.dll/cc/y28b/b38b/4rec?f=templates$fn=...) [Accessed 25 November 2008]), in which case it was held that a piece of equipment that was designed, built and installed by way of agreement – was analogous to the completion of a building in a building agreement - in the respect that the final product had to be appropriate or suitable (thus fit for its purpose).

⁴⁶ According to Loots (note 39) 390 “The express obligation to complete has very important legal consequences. Its absolute nature means that the contractor is effectively at risk with regard to the works until completion....”

⁴⁷ Although it was the case in traditional contracts that the design risk was more in the domain of the Employer and that the workmanship risk was more in the domain of the Contractor, in the “package deal” contracts or design-build contracts the Contractor is normally also obliged to carry a part of the design risk, and the level of standard of design could be assessed from the parties’ intention. See for instance the *Greaves & Co (Contractors) Ltd v Baynham Meikle & Partners* (1975) 4 BLR 56; (1975) 2 Lloyd’s Rep 325 case, where Lord Denning MR stated that: “Their common intention was that the engineer should design a warehouse which would be fit for the purpose for which it was required. That common intention gives rise to a term implied in fact.” See also the H Fleming’s article entitled “Fitness for purpose: The implied design obligation in construction contracts” ((1997) 13(4) *Const. L.J.* 227-42) for a detailed analysis of the rationale for the “fitness for purpose” obligation.

⁴⁸ An interesting case which deals with the carrying of construction (workmanship) risk and which is criticized by Wallace (note 10) 533 is the *Lynch v Thorne* [1956] 1 W.L.R. 932 case, in which case the defendant was exculpated by the Court of Appeal, because according to the Court of Appeal the builder (although a defect appeared), “exactly complied with the specification using sound materials and good workmanship....” Wallace (note 10) 533 disagrees and argues that “the buyer or owner is relying upon the builder’s skill and judgment,” and that the builder should therefore still have been held liable. See also the *Hughes v Fletcher* 1957 (1) SA 326 (SR) case, in which case it was held by Young J that where the foundations of a house that was built by the

plaintiff started to crack it was the plaintiff's "implied duty to produce a house fit for human habitation and reasonably permanent. In my judgment the plaintiff has not shown that the cracking cannot, for the most part, anyway, be attributed to defects in construction for which he is responsible." See also the *Strijdom Park Extension 6 (Pty) Ltd v Abcon (Pty) Ltd* (1998) 4 All SA 117 case, in which case it was held by Howie JA at 124 para f, at 125 para a that the respondent breached the contract by not carrying out its construction in a proper and worklike manner and that "it is the contractor's decision how he carries out the construction work and he cannot pass the blame for defective work on to the engineer (or architect, for that matter)."

⁴⁹ The risk that the Contractor carries with respect to the use of the right materials is highlighted in the *Young & Marten Ltd. v McManus Childs Ltd* [1969] 1 A.C. 454; (1969) 9 BLR 77 case, in which case it was held that the Subcontractor who installed tiles were to be held accountable for any latent defects in the tiles, because of the implied warranty that a person, who contracted to do work and supply materials, gave namely that the materials which he uses will be of a good quality and reasonably fit for the purpose for which he is using them. Wallace (note 10) 554-55 also emphasises that in construction contracts the implied warranty with respect to the materials that are provided by the Contractor will be a "higher warranty of suitability" than the warranty of merchantability that will be implied where goods are sold only, because not only the quality of the material is to be warranted but it is also warranted that the materials used will be fit for the purpose it was intended for. See also the *Simon v Klerksdorp Welding Works* case 1944 TPD 52, where in a contract for repairs, a Contractor was held responsible for the unsuitability of materials, where, even though the materials were supplied by the Employer, the Employer acquired specific materials on the advice of the Contractor. See also the *Bruens v Smith* 1951 (1) SA 67 (E) case, in which case it was held by Jennett J in his judgment at 72 para A-H that although a tiled roof showed signs of deterioration because of bad material and workmanship, the appellant could be held accountable in this specific case for leakage and shrinkage because the parties contractually agreed that the maintenance period for leakage and shrinkage was three months and any leakage or shrinkage that occurred after the agreed upon three months maintenance period was therefore not the appellant's responsibility.

⁵⁰ See also the *Basildon District Council v J E Lesser (Properties) Ltd and others* (1985) 1 All ER 21 case, in which case "fitness for purpose" meant "fitness for habitation." In the mentioned case Newy J stated in his judgment at 27 para g: "I hold that it was an implied term of the agreement that the buildings designed by the contractors as dwellings should be fit for habitation on completion."

2.3 The general risk the Contractor has to bear with respect to design, construction (workmanship), use of materials and the care of the Works in the context of the Contractor's obligation to complete the Works⁵¹

As mentioned in paragraph 2.2, risk with respect to the construction of the Works flows out of the absolute obligation imposed on the Contractor to complete the Works – to be “*fit for the purpose that it was intended for.*” In the Yellow Book there are however other contractual clauses that expressly highlight design and construction risk and that should be read hand in hand with the absolute contractual duty on the Contractor to make sure that the completed Works are fit for purpose.

Clause 4.1 of the Yellow Book [*Contractor's General Obligations*] for instance states that:

“The Contractor shall be responsible for the adequacy, stability and safety of all Site operations, of all methods of construction and of all the Works.”

This is very broadly formulated and can again imply design, construction and risk with respect to materials, but also with respect care of the Works itself, because the phrase “all methods of construction” is not further delineated in the clause.

⁵¹ Note that the risk with respect to the care of the Works risk is also listed here, together with design risk, construction risk and risk with respect to the use of the materials, as one of the risks that the Contractor assumes with the aim of completing the Works according to the “fitness for purpose” standard, although the “fitness for purpose” standard is normally only associated with the threefold risk (with respect to design, workmanship and materials) as mentioned in footnote 45. The reason for this is because the risk with respect to the care of the Works is interlinked in the Yellow Book with the design risk, construction risk and use of materials risk (see for instance clause 4.1) and also because the design and construction of the Works hold hands in all respects with the taking care of the Works until the Taking-Over Certificate has been issued.

2.4 The duration for which the Contractor has to carry the general risk with respect to design, construction (workmanship), use of materials and the care of the Works in the context of the Contractor's obligation to complete the Works

In Chapter 17 entitled "Risk and Responsibility" we read as follows in clause 17.2 [Contractor's Care of the Works]:

"The Contractor shall take full responsibility for the care of the Works and Goods from the Commencement Date until the Taking-Over Certificate is issued (or is deemed to be issued under Sub-Clause 10.1 [Taking over of the Works and Sections]) for the Works, when responsibility for the care of the Works shall pass to the Employer...."

After responsibility has accordingly passed to the Employer, the Contractor shall take responsibility for the care of any work which is outstanding on the date stated in a Taking-Over-Certificate, until this outstanding work has been completed.

If any loss or damage happens to the Works, Goods or Contractor's Documents during the period when the Contractor is responsible for their care, from any cause not listed in Sub-Clause 17.3 [Employer's Risks], the Contractor shall rectify the loss or damage at the Contractor's risk and cost, so that the Works, Goods and Contractor's Documents conform with the Contract.

The Contractor shall be liable for any loss or damage caused by any actions performed by the Contractor after a Taking-Over Certificate has been issued. The Contractor shall also be liable for any loss or damage which occurs after a Taking-Over Certificate has been issued and which arose from a previous event for which the Contractor was liable."

Clause 17.2 highlights the fact that the Contractor carries the risk of the Works and Goods (implying the design risk, construction (or workmanship) risk and the risk with respect to the use of materials and the Works) from the Commencement date until the Taking-Over Certificate is issued. Only after the Taking-Over Certificate has been issued does the Employer take over the risk of the Goods and Works with the exception mentioned in Sub-Clause 17.2 paragraph 4, in which it is specifically stated that the Contractor will be liable for any losses or damages after the Taking-Over Certificate has been issued, should such losses or damages be attributable to events for which the Contractor was responsible before the Taking-Over Certificate has been issued.

Clause 17.2 paragraph 4 reads as follows:

“The Contractor shall be liable for any loss or damage caused by any actions performed by the Contractor after a Taking-Over Certificate has been issued. The Contractor shall also be liable for any loss or damage which occurs after a Taking-Over Certificate has been issued and which arose from a previous event for which the Contractor was liable.”

The Contractor potentially carries an onerous burden in terms of this clause 17.2 paragraph 4, because the implication of this clause is that in the event that the construction say collapses after a few years, and it is found that a faulty design, construction or use of materials of the Contractor was the cause of such collapse, then the Contractor could be held liable. That is to say that the obligations of the Contractor in that sense do not always stop at the issuing of the Taking-Over Certificate.

2.5 Site conditions and the Contractor's general risk with respect to design, construction (workmanship), use of materials and the care of the Works in the context of the Contractor's obligation to complete the Works

The risk with respect to Site conditions - specifically with respect to hydrological, climatic and subsurface conditions - is in construction practice also an onerous risk to carry, as will be discussed in more detail in the paragraphs below.⁵²

2.5.1 Site conditions

The Contractor in the Yellow Book is deemed to have inspected the Site conditions before tendering for the construction project.

Clause 4.10 of the Yellow Book [*Site Data*] states that:

“To the extent which was practicable (taking account of cost and time), the Contractor shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Tender or Works. To the same extent, the Contractor shall be deemed to have inspected the Site and examined the Site...and to have been satisfied before submitting the Tender as to all relevant matters, including (without limitation):

- (a) the form and nature of the Site, including sub-surface conditions,*
- (b) the hydrological and climatic conditions,*
- (c) the extent and nature of the work and Goods necessary for the execution and completion of the Works and the remedying of any defects,*

⁵² Note that although general risk related contractual aspects with respect to the Contractor's construction obligation have already been discussed in paragraph 2.3, the risk to be carried with respect to Site conditions (and specifically unforeseeable physical conditions on the Site) is discussed under a separate heading, precisely because of the fact that it is in construction practice such an onerous risk to carry.

- (d) *the Laws, procedures and labour practices of the Country, and*
 (e) *the Contractor's requirements for access, accommodation, facilities, personnel, power, transport, water and other services."*

Clause 4.10 should however be read hand in hand with clause 4.12 [*Unforeseeable Physical Conditions*].

2.5.2 Unforeseeable Physical Conditions

The risk that probably concerns Contractors the most is the risk of unforeseen ground conditions and obstructions.⁵³ This risk is dealt with here below.

In clause 4.12 of the Yellow Book [*Unforeseeable Physical Conditions*] it is stated that:

"If the Contractor encounters adverse physical conditions which he considers to have been Unforeseeable,⁵⁴ the Contractor shall give notice to the Engineer as soon as practicable...

...If and to the extent that the Contractor encounters physical conditions which are Unforeseeable, gives such a notice, and suffers delay and/or incurs Cost due to these conditions, the Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

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

⁵³ The risk with respect to unforeseeable physical conditions is according to Tolson (note 20) 3 probably the single risk that would concern Contractors the most.

⁵⁴ "*Unforeseeable*" in the Definitions clause (Clause 1.1.6.8) "*means not reasonably foreseeable by an experienced contractor by the date for submission of the Tender.*"

The Engineer will then determine after receiving such notice to what extent the physical conditions were unforeseeable and the matters mentioned in (a) and (b) here above.

It would seem however that if any such circumstances can be brought under the provisions of clause 4.10 [*Site Data*], that the Engineer would be hesitant to determine that such physical conditions were unforeseeable, especially because of the deeming provisions of clause 4.10 mentioned here above. The onus would thus be on the Contractor to show that clause 4.12 is applicable and that conditions found are far different from the data on sub-surface and hydrological conditions that was made available by the Employer to the Contractor and the conditions on Site as inspected by the Contractor before submitting its Tender.⁵⁵

⁵⁵ In the case *Compagnie Inter africaine de Travaux v South African Transport Services and others* 1991 (4) SA 217 (A) it was confirmed that the Contractor will only be able to claim for adverse subsurface conditions in terms of an agreement if it was the manifest intention of the contracting parties that a claim for such adverse subsurface conditions could be made by the Contractor. In the mentioned case it was held by Corbett CJ at 232 para E that based on the contract between the parties "...such a claim will lie only where the adverse subsurface conditions result in the materials, etc being different from those originally assumed (that is, there must be a causal connection)...". See also the *Dillingham Const. v Downs* (1980) 13 BLR case, in which case it was held by Hardie J at 112 that the Contractor carries the risk of unforeseen site conditions to the extent that these conditions did in fact already exist when the Contractor tendered but the Contractor did not obtain independent geological advice or make inquiries as to previous dredging operations with respect to the Site conditions. This case can however be criticized from the standpoint that the Employer was aware of "unforeseen circumstances" and yet he did not declare them to the Contractor. The Employer's actions could thus maybe be interpreted as misrepresentation, because the Employer misrepresented the Site conditions to the Contractor without mentioning the existence of worked out mines beneath the contract areas. Thus the legal question in the case should maybe not have been whether the Employer acted negligently (in accordance with the duty of care doctrine) but rather whether the "co-operation and prevention principle" may be applicable (thus that the Employer by way of misrepresentation with respect to the "unforeseen physical conditions," did not adhere to his main obligation – to co-operate with and not to prevent the Contractor from completing the Works).

The risk when encountering hydrological or sub-surface conditions that was not expected will thus stay with the Contractor, as spelled out in clause 4.10's deeming provisions until such time that the Engineer has determined that the conditions were in fact unforeseeable as asserted in the notice sent by the Contractor in accordance with clause 4.12 and clause 20.1.⁵⁶

2.6 The Contractor's design risk in the context of the Contractor's obligation to complete the Works

It has already been argued that the general "fit for purpose" obligation of the Contractor implies the carrying of design risk, construction risk and risk with respect to the use of materials and care of the Works. For the sake of thoroughness - clauses that specifically and exclusively deal with design related

⁵⁶ See E Sunna ('Risk associated Ground Conditions and their treatment under FIDIC 1999 Edition Contracts' (2007) 194 *A.T. Law Update* 2007, 23-25 at 24) that argues that the Employer carries the risk load in the Yellow Book with respect to "...physical conditions which cannot reasonably have been foreseen by an experienced contractor at the time of its tender." See also the *Bothwell v Union Government (Minister of Lands)* 1917 AD 262 case, in which case it was held by Maasdorp JA (with reference to the judgment in the CPD by Kotze JA, from where the case was appealed) at 290, that where clay was found instead of earth, the clay itself was also deemed to be earth and thus that with respect to the clay found, that no unforeseeable ground condition was encountered by the Contractor. See also the *Bacal Construction v Northampton* (1975) 8 BLR 88 case, in which case it was held by Buckley LJ at 100 (confirming Bacal's contentions at 97) that the Employer "was liable for an implied term of warranty that the ground conditions would accord with the hypothesis upon which they were instructed to design the foundations." See also the *Enviroserv Waste Management v Hawkins Hawkins & Osborne (South)(Pty) Ltd* [2007] JOL 20860 (E) case (Available at [butterworths.up.ac.za/nxt/gateway.dll/cc/y28b/b38b/4rec?f_templates\\$fn=...](http://butterworths.up.ac.za/nxt/gateway.dll/cc/y28b/b38b/4rec?f_templates$fn=...) [Accessed 25 November 2008]), in which case it was held that a notice that had to be given as soon as the Contractor encountered adverse physical conditions, was in fact a notice given in accordance with the contract and that the Contractor was therefore entitled to additional payments as stated in the contract.

risk and the Contractor's contractual obligations are also highlighted and discussed here below.⁵⁷

2.6.1 Allocation of design risk

In clause 5.1 of the Yellow Book [*General Design Obligations*] it is stated that: “*The Contractor shall carry out, and be responsible for the design of the Works.*” and “*The Contractor warrants that he, his designers and design Subcontractors have the experience and capability necessary for the design.*”

This duty is an onerous duty. It entails warranties and undertakings of the Contractor with respect to the design.⁵⁸

⁵⁷ Design is discussed under a separate heading in the Yellow Book and therefore design risk is also discussed under a separate heading in this dissertation (although it has already been touched upon, when the general risks in para 2.3 have been discussed).

⁵⁸ Examples of such warranties and undertakings are the following: Clause 5.1 para 2 reads as follows:

“*The Contractor **warrants** that he, his designers and design Subcontractors have the experience and capability necessary for the design.*” (own emphasis); and

Clause 5.3 [*Contractor's Undertaking*] reads as follows:

“*The Contractor **undertakes** that the design, the Contractor's documents, the Execution and the completed Works will be in accordance with:*

(a) *the Laws in the Country, and*

(b) *the documents forming the Contract, as altered or modified by Variations.*” (own emphasis)

2.6.2 Design errors⁵⁹

2.6.2.1 Errors or defects found in the Contractor's documents

In clause 5.8 in the Yellow Book [*Design Error*] it is stated that:

"If errors, omissions, ambiguities, inconsistencies, inadequacies or other defects are found in the Contractor's Documents, they and the Works shall be corrected at the Contractor's cost, notwithstanding any consent or approval under this Clause."

It is clear from clause 5.1 that the risk with respect to the design of the Works is carried by the Contractor and that the Contractor will be held responsible for any defects found in the design and the design documents or should damages occur that are found to be linked to a faulty design.⁶⁰

⁵⁹ Note that in the traditional contract, where the Contractor does not normally bear the design risk, the Contractor, according to Atkinson (note 44) at 2, impliedly has the contractual duty to warn the Employer or to report to the Employer of any design defects known to the Contractor. Atkinson (note 44) at 2 refers to, inter alia, the *Equitable Debenture Assets Corporation Ltd v William Moss and Others* (1984) 2 CLR 1 case, which case confirms the implied duty of the Contractor to report any design defects known to it. In a design-build contract such as the Yellow Book, where the Contractor himself carries most of the design risk, the duty to warn is normally not however applicable.

⁶⁰ In accordance with English law principles "buildability is the province of the builder" (Tolson (note 20) 20) and that also implies that the Contractor warrants that he will be able to construct the permanent works based on his design. See also the *Strijdom Park Extension 6 (Pty) Ltd* case (note 48), in which case Howie JA at 125 para a confirms in his judgment the English law principle that "buildability is the province of the builder" by asserting that "...it is the contractor's decision how he carries out the construction work and he cannot pass the blame for defective work on to the engineer (or architect, for that matter)." See also the *Colin v de Guisti en 'n ander* 1975 (4) SA 223 (NC) case, in which case it was held by Van Rhyn R at 225 para A and 225-26 para H that even where the Owner (Employer) gave the designed plans to the Contractor to build the house accordingly, the Contractor, where he provides the building materials himself, undertakes to build and complete the building with skill and diligence and to make use of the right building materials.

2.7 Risk related contractual aspects with respect to persons and property (other than the Works)

In clause 17.1 [*Indemnities*] under the Chapter heading “Risk and Responsibility” it is stated that:

“The Contractor shall indemnify and hold harmless the Employer, the Employer’s Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of:

- (a) bodily injury, sickness or death, of any person whatsoever arising out of or in the course of or by reason of the design, execution and completion of the Works and the remedying of any defects unless attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer’s Personnel or any of their respective agents; and*
- (b) damage to or loss of any property, real or personal (other than the Works), to the extent that such damage or loss:*
 - (i) arises out of or in the course of or by reason of the design, execution and completion of the Works and the remedying of any defects; and*
 - (ii) is attributable to any negligence, wilful act or breach of the Contract by the Contractor, the Contractor’s Personnel, their respective agents, or anyone directly or indirectly employed by any of them.”* (own emphasis)

This risk indemnification by the Contractor, where the Contractor indemnifies the Employer against claims, damages or losses caused by the injuries or deaths of persons is to be distinguished from the indemnification of the Employer by the Contractor against claims, damages or losses caused by damage or loss of any property (other than Works).⁶¹

⁶¹ See the *Botha v Miodownik & Co (Pty) Ltd* 1966 (3) SA 82 (W) case, in which case the general liability of the Contractor for damages caused to the Employer or third parties is discussed in terms of the Contractor’s liability because of negligence.

In the instance of injuries or deaths of persons, the Contractor bears all the risk, regardless of whether the Contractor acted negligently or not (with the only exception to this risk load that the Contractor carries being when the Employer has negligently, wilfully or because of a breach of the contract caused such injury or death).⁶² In the instance of damages to property, the Contractor only indemnifies the Employer against damages or losses to property, if such damages were caused by the negligence, wilful act or breach of contract by the Contractor.⁶³

2.8 The Contractor's risk with respect to Equipment

2.8.1 The Contractor's Equipment

Clause 4.17 [*Contractor's Equipment*] reads as follows:

"The Contractor shall be responsible for all Contractor's Equipment."

⁶² This will be dealt with in Chap 3, when discussing the risk that the Employer carries with respect to persons and property.

⁶³ This liability of the Contractor as found in clause 17 is in fact delictual liability (or liability in tort) that is carried by the Contractor for damages to property or injuries to persons. Yet this delictual (tort) liability is carried by the Contractor because of the indemnification clause that states that the risk of delictual claims in terms of persons or property will, mostly, be carried by the Contractor. In the well known English case *Donoghue v Stevenson* [1932] A.C. 562 (as referred to by Wallace (note 10) 183), damage that is caused by negligence is discussed in terms of the "duty of care" obligation based upon the principles of "proximity" and "foreseeable harm." In South African law the English "duty of care" doctrine in respect of negligence has however been replaced by the principle of wrongfulness in respect of negligence as is discussed in the *Local Transitional Council of Delmas and another v Boshoff* 2005 (5) SA 514 (SCA) case. For further reference see McKenzie's (note 35) 184 views with respect to the delictual liability (liability in tort) of the Contractor in the instance of damages to property or injuries to persons.

The mentioned responsibility implies that the Contractor will carry all risk with respect to his own equipment, unless the equipment was damaged by the Employer, Employer's Personnel or other Employer's Contractors.⁶⁴

2.8.2 The Employer's Equipment

In Clause 4.20 [*Employer's Equipment and Free-Issue Material*] it is stated that:

"Unless otherwise stated in the Employer's Requirements:

(a) the Employer shall be responsible for the Employer's Equipment, except that

(b) the Contractor shall be responsible for each item of Employer's Equipment whilst any of the Contractor's Personnel is operating it, driving it, directing it or in possession or control of it."

The Contractor will thus carry the risk with respect to the Employer's Equipment in the event that the Contractor is using such Employer's Equipment and any risk of damage or loss of the Employer's Equipment, while under the use of the Contractor, will have to be borne by the Contractor.

2.9 The Contractor's risk with respect to Transport of Goods

The way that risk is allocated with respect to the Transport of Goods could potentially become important once something should happen to the Goods that are transported to the Site. It is thus important to know who carries the risk with respect to the Transport of Goods in terms of the Yellow Book, in the event that damages occur, because the party carrying the risk load in terms of the Yellow Book will be obliged to repair such damages timeously and without delay.⁶⁵

⁶⁴ This can be deduced from the contractual principle that "a party cannot take advantage of his own wrong in enforcing a contract" (as confirmed by Wallace (note 10) 96).

2.9.1 Protection of the Goods

In clause 4.16 [*Transport of Goods*] the following is stated:

“...*(b) the Contractor shall be responsible for packing, loading, transporting, receiving, unloading, storing and protecting all Goods and other things required for the Works; and*

(c) the Contractor shall indemnify and hold the Employer harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from the transport of Goods, and shall negotiate and pay all claims arising from their transport.”

It is clear from this clause that the risk in the Yellow Book with respect to the transport and the protection of the Goods is carried by the Contractor.⁶⁵

2.10 The Contractor’s risk with respect to the protection of the environment

2.10.1 Protection of the environment

Environmental risk could potentially be a heavy contractual burden to carry by a party to the contract, especially if an environmental or nuisance claim based on negligence is brought against such party.

Clause 4.18 [*Protection of the Environment*] reads as follows:

⁶⁵ In practice it is of course possible that insurance can cover transport related aspects and it is also possible that suppliers of goods transported to Site carry some or all of the risk in terms of another contract. In terms of clause 4.16 of the Yellow Book however, the Contractor will ultimately stay responsible for any and all risk of damages occurring during the transport of Goods.

⁶⁶ According to Totterdill (note 1) 115 “The arrangements for access, delivery and storage are the Contractor’s responsibility....”

“The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damages and nuisance to people and property resulting from pollution, noise and other results of his operations.

The Contractor shall ensure that emissions, surface discharges and effluent from the Contractor’s activities shall not exceed the values indicated in the Employer’s Requirements, and shall not exceed the values prescribed by applicable Laws.”

From the above mentioned paragraphs it seems clear that the Contractor carries the risk with respect to environmental damage and nuisance, except in instances where environmental damage can be attributable to the actions of the Employer or the Employer’s Personnel.⁶⁷

2.11 Schedule of risk related contractual issues with respect to risk carried by the Contractor in the context of the Contractor’s obligations

The schedule below summarises and systematizes the risk related contractual issues specifying the risk load of the Contractor in the context of the Contractor’s obligations, as discussed above. Case law that is relevant to a specific risk related contractual issue is also included in the schedule.

Risk related contractual issue	Contractor’s obligations	The Yellow Book Clauses	Relevant Construction Case Law
<u>General Risk of damage or loss of the Works - implying</u>	Obligation to complete the Works according to the	Clauses 4.1, 17.2, 17.3, 2.1, 2.2, 2.3,	<i>Test Valley Borough Council</i> (note

⁶⁷ This can be deduced not only from applying the “prevention principle” (i.e. a person should not be entitled to benefit from his own wrong) as previously discussed, but also because this risk load that the Contractor carries is specifically limited to actions of the Contractor (“... *his operations...*”; “...*from the Contractor’s activities ...*”).

<u>design risk, construction risk and risk with respect to materials and the Works itself</u>	“fitness for purpose” standard	3.3 and 3.4	45); <i>Viking Grain Storage</i> (note 43)
<u>Design risk</u>	Obligation to design according to the “fitness for purpose” standard	Clauses 4.1, 5, 17	<i>Greaves & Co (Contractors) Ltd</i> (note 47)
<u>Construction risk</u>	Obligation to construct according to the “fitness for purpose” standard	Clauses 4.1 and 17.2	<i>Lynch</i> (note 48); <i>Hughes</i> (note 48); <i>Strijdom Park Extension 6 (Pty) Ltd</i> (note 48)
<u>Risk with respect to the use of materials</u>	Obligation to use materials according to the “fitness for purpose” standard	Clauses 4.1 and 17.2	<i>Young & Marten Ltd.</i> (note 49); <i>Bruens</i> (note 49); <i>Simon</i> (note 49)
<u>Risk of damage or loss of property (but for Works)</u>	Obligation to take care that no damages to property occurs, while construction is underway,	Clause 17.1	<i>Donoghue</i> (note 63) (English law principle of duty of care implying “proximity and

	because of negligence, wilful act or breach of the Contract by the Contractor		foreseeable harm” with respect to negligence); <i>Local Transitional Council of Delmas and another</i> (note 63 (South African law principle of wrongfulness))
<u>Risk of injury to third parties</u>	Obligation to take care that no injury to a third party occurs while construction is underway	Clause 17.1	<i>Botha</i> (note 61); <i>Donoghue</i> (note 63) (principles of duty of care implying “proximity and foreseeable harm” with respect to negligence); <i>Local Transitional Council of Delmas and another</i> (note 63 (South African law principle of

			wrongfulness)
<u>Risk with respect to equipment</u>	Obligation to take care of the equipment	Clauses 4.17 and 4.20	
<u>Risk with respect to transport of goods</u>	Obligation with respect to the transport of goods	Clause 4.16	
<u>Risk with respect to the environment</u>	Obligation towards the environment	Clause 4.18	

In the analysis of the risk related contractual issues and the summarized schedule of these risks related contractual issues discussed here above the relevance of discussing these issues within the context of the Contractor's obligation to complete the Works in accordance with the "fit for purpose" standard (as well as other mentioned obligations) was shown.

The general rule is thus that the Contractor carries most of the risk load with respect to the design, construction, materials and care of the Works as well as with respect to persons and property⁶⁸ that arises out of the obligation of the Contractor to complete the Works from the Commencement Date until the Taking-Over Certificate has been issued. Yet, as discussed, the risk can go further than the mentioned date if it can be shown that any losses or damages suffered after the Taking-Over Certificate has been issued, are attributable to a design error, a construction error or an error in the use of materials used by the Contractor before the Taking-Over Certificate has been issued (i.e. damages suffered because the Works were not fit for the purpose that it was intended for).

⁶⁸ Subject to the qualifications mentioned and the specified Employer's risks.

CHAPTER 3

Risk related contractual issues within the context of the obligations of the Employer

3.1 The risk load of the Contractor as potentially influenced by the Employer

3.1.1 The risk load of the Contractor in the context of the general obligation of the Employer to co-operate with and not to prevent the Contractor from completing the Works⁶⁹ (the “co-operation and prevention principle”)

The general obligation of the Employer with respect to the construction and design of the Works by the Contractor is of a positive and of a negative nature. That is to say that the risk load that the Contractor carries should not be burdened by positive or negative actions of the Employer. Thus the obligation of the Employer is described in terms of the “co-operation principle” and the “prevention principle” or the “co-operation and prevention principle.”⁷⁰ The

⁶⁹ See note 36. In later Chapters, the obligation will be formulated as an obligation of the Employer to co-operate with and not to prevent the Contractor from completing the Works **within the Time for Completion**. (own emphasis).

⁷⁰ Wallace (note 10) 568-69; McKenzie (note 35) 18. See also the *Wells v Army and Navy Co-operative Society* (1902) 86 LT 764 case, in which case the “co-operation and prevention principle” is discussed in terms of the “time at large” principle. See also Wallace (note 10) 96 referring to the *Barque Quilpé Ltd. v Brown* [1904] 2 K.B. 264 case at 274 as illustrative of the “prevention principle” and the *Mona Oil Equipment & Supply Co. Ltd v Rhodesia Railways Ltd* [1949] 2 All ER 1014 case at p 1018 as illustrative of the “co-operation principle.” See also the South African *Ranch International Pipelines (Transvaal) (Pty) Ltd v LMG Construction (City)(Pty) Ltd* 1984 (3) SA 861 (W) case, in which case Coetzee J argues at p 877 para D- E that in South African law, in the instance that a creditor refuses to co-operate with a debtor, the creditor is thus in mora creditoris and thus in breach of contract. See also the South African

Employer is thus obligated to co-operate with the Contractor to ensure that the Contractor is able to complete the Works and not to prevent the Contractor from completing the Works.

3.1.2 The risk load of the Contractor as potentially influenced by the specific obligations of the Employer

The general obligation of the Employer to co-operate with and not to prevent the Contractor from completing the Works has been discussed in paragraph 3.1.1. It was argued that this general obligation of the Employer is there to ensure that the contractual risk of the Contractor is not further burdened. Some of the more

Appellate Division decision *Alfred McAlpine & Son (Pty) Ltd v Transvaal Provincial Administration* 1974 (3) SA 506 (A) case, in which case Corbett AJA at 534 para A-H discusses the principle of “contractual co-operation” and specifically the implied obligation of the Engineer (as agent of the Employer) to co-operate with the Contractor by supplying drawings and instructions to the Contractor to enable the Contractor to carry out the contract. See also the *Martin Harris & Seuns OVS (Edms) Bpk v Qwa Qwa Regeringsdiens* 2000 (3) SA 339 case, in which case it was stated by Nienaber AR at 350 para B that lack of co-operation on the part of the Employer can be interpreted as breach of contract by way of *mora creditoris*, but only in the instance that the Contractor requested specific co-operation from the Employer and did not receive such co-operation. See however the *A. E. Farr, Ltd v The Admiralty* (1953) 2 All ER 512 case, in which case it was confirmed by Parker J in his judgment at 514 para C-G that the “co-operation and prevention principle” cannot be used to destroy the construction ordinarily given to words in a contract. The last mentioned case went so far as to attribute all damages to the Contractor, by interpreting “any cause whatsoever” to include damages caused by the Owner (Employer). This is arguably a too literal interpretation of the words “any cause whatsoever,” because of the manifest absurdity that would follow should the Owner (Employer) hypothetically decide to deliberately damage the Works on a daily basis (see McKenzie (note 35) 14 that confirms that in the case of an inconsistency or ambiguity in the contract “a construction will be avoided which leads to an absurdity”). See also the *London Borough of Merton v Leach* (1985) 32 BLR 51 case, in which case it was held by Vinelott J at 79 that a term should be implied in the contract that the Employer will not hinder or prevent the Contractor from carrying out its obligations in terms of the contract. See also RH Christie (*The Law of Contract in South Africa* 5ed (2006) 512) for a discussion on the legal aspect of *mora creditoris* in light of the “co-operation and prevention principle.”

specific obligations of the Employer (based on the principles of prevention and co-operation) with respect to the construction of the Works and as found in the Yellow Book are the following:

3.1.2.1 The obligation to give access to the Site

Clause 2.1 in the Yellow Book [*Right of access to the Site*] reads as follows:

“The Employer shall give the Contractor right of access to, and possession of, all parts of the Site within the time (or times) stated in the Appendix to Tender...If, under the Contract, the Employer is required to give (to the Contractor) possession of any foundation, structure, plant or means of access, the Employer shall do so in the time and manner stated in the Employer’s Requirements...”

If no such time is stated in the Appendix to Tender, the Employer shall give the Contractor right of access to, and possession of, the Site⁷¹ within such times as may be required to enable the Contractor to proceed in accordance with the programme submitted under Sub-Clause 8.3 [Programme].

If the Contractor suffers delay and/or incurs Cost as a result of a failure by the Employer to give any such right or possession within such time, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor’s Claims] to:

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

⁷¹ Wallace (note 10) 572 asserts that possession “does not mean exclusive possession in the legal sense (as would be the case in a tenancy for example) but merely a temporary and revocable right of occupation incidental to, and only to the extent reasonably required by, the work undertaken by the contractor in his contract.” See also McKenzie (note 35) 18 discussing the obligation of the Employer to give possession of the Site to the Contractor.

Although not expressly stated in the Yellow Book as an obligation of the Employer,⁷² it is impliedly an obligation of the Employer to give the Contractor access to the Site,⁷³ and the consequences of disallowing the Contractor access to the Site gives the Contractor a potential remedy to claim in terms of clause 20.1.⁷⁴

Disallowing the Contractor access to the Site implies that the Contractor cannot commence and/or complete the Works and would be carrying the risk of the Works without being able to either commence and/or complete the Works.⁷⁵

3.1.2.2 The obligation to provide licences or approvals

Clause 2.2 of the Yellow Book [*Permits, Licences or Approvals*] reads as follows:

“The Employer shall (where he is in a position to do so) provide reasonable assistance to the Contractor at the request of the Contractor:

- (a) by obtaining copies of the Laws of the Country which are relevant to the Contract but are not readily available; and*
- (b) for the Contractor’s applications for any permits, licences or approvals required by the Laws of the Country....”*

⁷² Compare clause 4.1 entitled “Contractor’s General Obligations.”

⁷³ According to *The FIDIC Contracts Guide* (note 42) 75 “The Employer is only required to grant the Contractor the ‘right’ of access to the Site, it being assumed that there is a route along which access either is already physically practicable or can be constructed by the Contractor.”

⁷⁴ According to *The FIDIC Contracts Guide* (note 42) 75 “Non availability of the Site constitutes a substantial failure and entitles the Contractor to terminate the contract under P&DB (the Yellow Book) clause 16.2 (d).”

⁷⁵ See the Supreme Court Canada Case - *Penvidic v International Nickel* [1976] 1 S.C.R. 267 at 276, as discussed by Wallace (note 10) 572.

This obligation of reasonable assistance⁷⁶ again implies that the Employer co-operates with the Contractor, in order that the Contractor can fulfil his prime obligation (i.e. to complete the Works), and in effect assists the Contractor so that the Contractor is not further burdened on a risk related level. That is to say that the risk that the Contractor carries in terms of the Works can potentially be further burdened because certain permits have not been approved, which need to be approved prior to the construction of the Works.⁷⁷

3.1.2.3 The obligation to see to it that the Employer's Personnel co-operate with the Contractor

Clause 2.3 [*Employer's Personnel*] reads as follows:

"The Employer shall be responsible for ensuring that the Employer's Personnel and the Employer's other contractors on the Site:

- (a) co-operate with the Contractor's efforts under Sub-Clause 4.6 [Co-operation] and;*
- (b) take actions similar to those which the Contractor is required to take under subparagraphs (a), (b) and (c) of Sub-Clause 4.8 [Safety Procedures] and under Sub-Clause 4.18 [Protection of the Environment]."*

⁷⁶ *The FIDIC Contracts Guide* (note 42) 76 emphasises the relevance of "reasonable assistance" given by the Employer to the Contractor as follows: "Sub-Clause 2.2 does not relieve the Contractor from his responsibilities under Sub-Clause 1.13 or otherwise, provided the Employer provides the reasonable assistance requested." See also Totterdill (note 1) 86 confirming that "The obligation is qualified as 'reasonable' and the Employer being in the position to give assistance."

⁷⁷ See Loots (note 39) 384 discussing the Employer's obligations with respect to permits and licences and the fact that in traditional contracts the Employer is usually responsible for the obtaining of any required permits or licences.

In this clause it is emphasised that all actions of the Employer's Personnel⁷⁸ and other contractors of the Employer on Site are the responsibility of the Employer. Thus the duties of the Employer not to prevent the completion of the Works by the Contractor and to co-operate with the Contractor as far as possible are also applicable to the actions of the Employer's Personnel and the Employer's contractors on Site.

3.1.2.4 The obligation to appoint the Engineer and to see to it that the Engineer issues appropriate Instructions and Determinations

The Employer is responsible for the appointment of the Engineer and the Engineer shall in most instances be deemed to act as agent for the Employer.⁷⁹

In risk related terms the duties of the Engineer (for instance the issuing of Instructions and/or Determinations by the Engineer) can potentially have a direct effect on risk load that the Contractor carries from the Commencement Date.⁸⁰

⁷⁸ The definition of "Employer's Personnel" in clause 1.1.2.6 of the Yellow Book reads as follows: "*Employer's Personnel*" means the Engineer, the assistants referred to in Sub-Clause 3.2 [Delegation by the Engineer] and all other staff, labour and other employees of the Engineer and of the Employer; and any other personnel notified to the Contractor, by the Employer or the Engineer, as Employer's Personnel." See also *The FIDIC Contracts Guide* (note 42) 77 emphasising that the Employer's Personnel includes the Engineer.

⁷⁹ According to clause 3.1 of the Yellow Book. See also F Reilly and A Tweeddale ('FIDIC's New Suite of Contracts' (2000) 16 *Const. L.J.* 187-98 at 190) stating, with reference to the FIDIC contracts, that "The engineer is deemed to act for the employer unless otherwise stated."

⁸⁰ Note that Wallace's (note 10) 311 argues that the risk load of the Contractor that may potentially be burdened because of Instructions that were not issued by the Engineer as the Employer's agent will in all probability have to be argued in terms of the obligation of the Employer to give effect to "business efficacy" but not in terms of the duty of the Contractor to economically and expeditiously progress in terms of the Contract. Maybe Wallace's statement

The reason for that is that in the event that the Engineer does not issue the necessary Instructions and/or Determinations (in accordance with clause 3.3 and clause 3.5 of the Yellow Book) at the key points of the construction of the Works, the lack of Instructions/Determinations being issued by the Engineer could in effect be deemed to be an act of prevention or a lack of co-operation by the Employer, because the Engineer is deemed to be acting as agent of the Employer when issuing Instructions and/or Determinations.⁸¹

3.1.2.5 The obligation to pay interim payments

In construction agreements the obligation of the Employer to pay the Contractor for the completed Works does not normally arise until the whole of the Works has

with respect to “business efficacy” can be criticized to the extent that a prevention by the Engineer (Employer) necessarily implies that the Contractor’s obligation “to proceed with due expedition and without delay” is impeded. See also S Furst and V Ramsey (*Keating on Building Contracts* 7ed (2001) 66 London, Sweet & Maxwell) stating that “The implied term of co-operation extends to those things which the architect must do to enable the contractor to carry out the work and the employer is liable for any breach of this duty by the architect.”

⁸¹ The obligation of the Employer (or the Engineer on behalf of the Employer) to supply Instructions is referred to in *Alfred McAlpine & Son (Pty) Ltd* (note 70) at 529. In the *London Borough of Merton* case (note 70) it was confirmed by Vinelott J at 83 that the architect was under an implied obligation to “administer the contract in an efficient and proper manner.” Although it was not in this case expressly stated that a lack of co-operation on the part of the Architect (Engineer) would imply a lack of co-operation on the part of the Owner (Employer), it was stated at p 77, 78 that “The contract provides the contractor with express remedies if the architect fails to carry out some administrative duty (for instance to supply instructions or drawings requested by the contractor in due time).” The fact that the Contractor can thus claim against the Employer should the architect or the Engineer not fulfil his administrative duty, suggests that a lack of co-operation on the part of the architect or the Engineer is deemed to be a lack of co-operation on the part of the Employer, with specific remedies available to the Contractor, such as claims for extension of time and/or additional payment.

been completed, and therefore the obligation to pay at interim stages will only arise if it is expressly so stated in the contract.⁸²

Yet, after the enactment of the Housing Grants, Construction and Regeneration Act 1996 (HGCRA) in the United Kingdom it can be argued in terms of section 109 (1) of the Act (“...party to a construction contract is entitled to payment by instalments, stage payments or other periodic payments for any work under the contract.... ”)⁸³ that the payment of interim payments is in fact an obligation of the Employer, even if not expressly stated in the contract.⁸⁴

⁸² Wallace (note 10) 570. See also the South African *Thomas Construction (Pty) Ltd (In Liquidation) v Grafton Furniture Manufacturers (Pty) Ltd* 1986 (4) 510 (N) case, in which case it was held that “as a progress payment was essentially a prepayment of the eventual contract sum, if payment of the contract sum could no longer be enforced, neither could the prepayment so that an undertaking to effect the prepayment should therefore no longer have to be honoured.”

⁸³ This section 109 (1) of the HGCRA is referred to and discussed by McInnis (note 29) 364.

⁸⁴ The first case that to a large extent tested these principles referred to in the HGCRA and specifically section 109 (1) of the HGCRA with respect to the payment of interim payments was the *Melville Dundas v George Wimpey* [2007] 3 All ER 257 case, in which case it was held by Hoffmann LJ at 896 that the clause stating that the Contractor would be disentitled to an interim payment, was in the specific circumstances not invalidated by the terms of the HGCRA, one reason being that the ground of the disentitlement arose only after the final date for payment. The importance of the parties’ freedom of contract was emphasised in this decision and the decision illustrated that although the HGCRA protected a Contractor in principle by enforcing the regular payment of interim payments, it was still possible to contractually agree otherwise. See also the *Reinwood v L Brown & Sons* [2008] 2 All ER 885 case, in which case it was held at 900 para 53 by Lord Neuberger that in this instance where the Employer deducted an amount of delay damages from the amount due to the Contractor under an interim certificate, and the Employer did give notice that he intends to withhold payment, (even where extensions of time were later granted and thus some of the deducted liquidated damage amounts invalidated) that section 111 (1) of the HGCRA was not transgressed. Section 111 (1) of the HGCRA (as paraphrased by Lord Hope at 889 para 3 of the *Reinwood v L Brown & Sons* [2008] 2 All ER 885 case) stipulates that ‘a party to a construction contract may not withhold payment after the final date for payment of a sum due under the contract unless he has given an effective notice of intention to withhold payment.’

In the Yellow Book it is however also expressly stated that interim payments should be paid once interim payment certificates have been issued. Clause 14.7 of the Yellow Book [*Payment*] reads as follows:

“The Employer shall pay to the Contractor...

*...(b) the amount certified in each Interim Payment Certificate within 56 days after the Engineer receives the Statement and supporting documents ...”*⁸⁵

Furthermore we note in clause 16.1 of the Yellow Book [*Contractor’s Entitlement to Suspend Work*] that the Contractor may after 21 days notice to the Employer *“suspend work or reduce the rate of the work, unless and until the Contractor has received the Payment Certificate, reasonable evidence or payment ...”*

Taking the general obligation of the Employer “to co-operate” and “not to prevent” into account and also in light of the express provision of the Yellow Book as well as the HGRCA provisions, one can definitely make out an argument that interim payments that are not paid may have an influence on the risk load of the Contractor.⁸⁶

3.2 The Employer’s risk

Although the greater part of the risks is undoubtedly carried by the Contractor in the Yellow Book, as discussed in Chapter 2, there are certain risks, specifically with respect to the Works and to lesser extent with respect to persons, property, design, construction and use of materials, that the Employer does carry. The risk

⁸⁵ The Engineer is obliged in terms of clause 14.6 (except for two exceptions mentioned in clause 14.6) to issue such Payment Certificate within 28 days after receiving the Statement and supporting documents (see clause 14.3 of the Yellow Book) from the Contractor.

⁸⁶ Interim payments that are not paid could in fact create a cash flow problem to the Contractor.

occupation of any part of the Permanent Works or for design of any part of the Works undertaken by the Employer.⁹¹

3.2.1.2 The Employer's risk with respect to taking over of the Works

The Employer carries the risk with respect to the Works from the date that the Taking-Over Certificate is issued or is deemed to be issued.⁹² In clause 17.2 of the Yellow Book [*Contractor's Care of the Works*] it is stated as follows:

“The Contractor shall take full responsibility for the care of the Works and Goods from the Commencement Date until the Taking over Certificate is issued (or is deemed to be issued under Sub-Clause 10.1 [Taking Over of the Works and Sections]) for the Works, when responsibility for the care of the Works shall pass to the Employer.”

⁹¹ NG Bunni ('FIDIC's new suite of contracts – clauses 17 to 19: Risk, responsibility, liability, indemnity, insurance and *force majeure*' (2001) 18 *ICLR*, 523-37) at 524 criticizes the current formulation of clause 17, by stating that clause 17 entitled "Employer's Risks" should rather be redrafted to read "Employer's Risks of loss and damage" to prevent the clause from implying that all risks that are not mentioned in this clause, are the Contractor's risks.

⁹² V Van Houtte ('The role and responsibility of the Owner' [1999] 16 *ICLR* 59-79 at 76) confirms this passing of risk from the Contractor to the Employer as follows: "The acceptance of the works has several consequences. The most important is that the risk passes from the contractor to the employer...." See also McKenzie (note 35) 24 referring to the *Oerlikon South Africa (Pty) Ltd v Johannesburg City Council* 1970 (3) SA 579 (A) decision at 583-84, as one of the cases that confirms the fact that risk passes to the Employer on completion of the Works.

3.2.1.3 The risk that the Employer assumes when occupying any part of the Permanent Works during construction

The Employer has a basic right to occupy the Permanent Works at any time during construction. This right however implies a risk transfer from the Contractor to the Employer as soon as this right is enforced by the Employer.

Clause 17:3 (f) [*Employer's Risks*] reads as follows:

"The risks referred to in Sub-Clause 17.4 below are:

... (f) use or occupation by the Employer of any part of the Permanent Works, except as may be specified in the Contract...."

That risk of the Contractor is however transferred to the Employer when the Employer uses or occupies any part of the Permanent Works.

The reason for this risk transference is possibly to be found in clause 10.2 [*Taking over of Parts of the Work*] under the main clause 10 heading – "Employer's Taking Over." In such clause it is made clear that:

"the Employer shall not use any part of the Works (other than as a temporary measure which is either specified in the Contract or agreed by both Parties) unless and until the Engineer has issued a Taking-Over Certificate for this part. However, if the Employer does use any part of the Works before the Taking-Over Certificate is issued:

- (a) the part which is used shall be deemed to have been taken over as from the date on which it is used,*
- (b) the Contractor shall cease to be liable for the care of such part as from this date, when responsibility shall pass to the Employer, and*
- (c) if requested by the Contractor, the Engineer shall issue a Taking-Over Certificate for this part."*

Thus from the perspective of clause 10.2 it is clear that the risk with respect to the Works is transferred from the Contractor to the Employer in terms of clause 17.4 (f) when the Employer uses or occupies any part of the Works.

3.2.2 The Employer's design risk

Clause 17.3 (g) does foresee the possibility that the Employer can assume a part of the design risk in the event that the Particular Conditions of Contract revises some of the Yellow Book clauses and designates some design responsibility to the Employer's Personnel.⁹³ In other words, only in the instance and to such an extent that design risk is designated to the Employer in the Particular Conditions of Contract will the Employer carry any design risk.

Clause 17.3 (g) [*Employer's Risks*] reads as follows:

"The risks referred to in Sub-Clause 17.4 below are:

...(g) design of any part of the Works by the Employer's Personnel or by others for whom the Employer is responsible, if any...."

The "fit for purpose" standard is however not applicable to the design for which the Employer is responsible because such standard only applies to design-build work done by the Contractor in terms of Clause 4.1. The onus with respect to any design done by the Employer of any part of the Works will thus arguably only be the normal standard of designing with reasonable skill and care.

⁹³ The reason why the Contractor carries the design responsibility in the Yellow Book is because the Yellow Book is a design-build contract, implying that the Contractor carries the responsibility and the risk of the design and the construction of the Works, as discussed in Chap 2. The only exception to this rule is when some of the design responsibility is allocated to the Employer in the Particular Conditions of Contract.

3.2.3 The Employer's risk with respect to persons and property

In the previous paragraphs we discussed the risk that the Contractor carries with respect to persons and property flowing out of his obligation to complete the Works.

There are however two exceptions to the abovementioned risk that the Contractor carries and these exceptions are found in the last paragraph of clause 17.1 [Indemnities] which reads as follows:

“The Employer shall indemnify and hold harmless the Contractor, the Contractor's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of (1) bodily injury, sickness, disease or death, which is attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and (2) the matters for which liability may be excluded from insurance cover, as described in sub-paragraphs (d)(i), (ii) and (iii) of Sub-Clause 18.3 [Insurance Against Injury to Persons and Damage to Property].”⁹⁴

The above clause makes it clear that the Employer will be liable for any injury or death of persons that arises from the negligent acts of the Employer or the Employer's Personnel.

Also, the reference of Clause 18.3 (d) (iii) to the Employer's Risks in clause 17.3 (that may possibly be excluded in an in insurance cover) could imply that all damages to property and persons caused by the “Force Majeure” events⁹⁵ or

⁹⁴ The insurance aspect dealt with in the latter part of this paragraph, is only mentioned here in general terms, as a detailed discussion with respect to insurance does not fall within the ambit of this study.

damages to property and persons attributable to the Employer, are damages for which the Employer will be obliged to carry the risk.⁹⁶

3.3 Schedule of risk related contractual issues with respect to risk carried by the Contractor in the context of the Employer's obligations

The schedule below summarizes and systematizes the risk related contractual issues specifying the risk load of the Contractor in the context of the Employer's obligations, as discussed above. Any case law that is relevant to a specific risk related contractual issue is also included in the schedule.

Risk related contractual issue	Employer's obligations	The Yellow Book Clauses	Relevant Case Law
<u>Contractor's general design-, construction, use of materials- and care of the Works risk</u>	General obligation to co-operate with and not to prevent the Contractor from completing the Works	Clauses 2 and 3	<i>Wells</i> (note 70); <i>Barque Quilpé Ltd</i> (note 70); <i>Mona Oil Equipment & Supply Co. Ltd</i> (note 70); <i>Ranch International Pipelines (Transvaal) (Pty) Ltd</i> (note 70); <i>Martin Harris & Seuns OVS (Edms) Bpk</i> (note 70); <i>Alfred McAlpine & Son (Pty)</i>

⁹⁵ Although not all aspects mentioned in clause 17.3 are identical to the aspects mentioned in the "Force Majeure" clause (clause 19.1), many of the "Force Majeure" aspects mentioned in clause 17.3 do in fact overlap with many of the aspects mentioned in the "Force Majeure" clause (clause 19.1) (compare clause 17.3 (a), (b) and (c) with clause 19.1 subparagraph (i), (ii) and (iii)).

⁹⁶ See also note 33.

			<i>Ltd (note 70)</i>
<u>Contractor's general design-, construction, use of materials- and care of the Works risk</u>	Obligation to give access to Site	Clause 2.1	<i>Penvidic (note 75)</i>
<u>Contractor's general design-, construction, use of materials- and care of the Works risk</u>	Obligation to assist the Contractor with the achieving of permits	Clause 2.2	
<u>Contractor's general design-, construction, use of materials- and care of the Works risk</u>	Obligation to see to it that Employer's Personnel co-operates	Clause 2.3	<i>Mona Oil Equipment & Supply Co. Ltd (note 70)</i>
<u>Contractor's general</u>	Obligation as to "business efficacy"	Clause 3	<i>Alfred McAlpine & Son (Pty) Ltd (note 70); Barque</i>

<u>design-, construction, use of materials- and care of the Works risk</u>	and to act in terms of the express requirements of the contract (such as the appointment of Engineer deeming to act as agent of the Employer in giving Instructions and making Determinations		<i>Quilpé Ltd</i> (note 70)
<u>Contractor's general design-, construction, use of materials- and care of the Works risk</u>	Obligation to pay interim payments once interim payment certificates have been issued	Clause 14.7	<i>Thomas Construction (Pty) Ltd (In Liquidation)</i> (note 82); <i>Melville Dundas</i> (note 84); <i>Reinwood</i> (note 84)

In the analysis of the risk related contractual issues with respect to risk carried by the Contractor and the summarized schedule of these risk related contractual issues discussed here above the relevance of discussing these issues within the context of the Employer's general obligation to co-operate with and not to prevent the Contractor from completing the Works (as well as other more specific obligations) was shown.⁹⁷

⁹⁷ In the event that the Employer's breach of its obligations delays the completion of the Works and/or burdens the Contractor with more costs, the Contractor will potentially have a claim against the Employer in terms of clause 20.1. This aspect will be more extensively discussed in Chap 6.

3.4 Schedule of risk related contractual issues with respect to risk carried by the Employer in the context of the Employer's obligations

The schedule below summarizes and systematizes the risk related contractual aspects specifying the risk load of the Employer in the context of the Employer's obligations, as discussed above. Case law that is relevant to a specific risk related contractual issue is also included in the schedule.

Risk related contractual issue	Employer's obligations/right	The Yellow Book Clauses	Relevant Case Law
<u>Employer's risk with respect to "Force Majeure" events</u>	No obligation of the Employer is here applicable. "Force Majeure" can normally not be prevented by a specific obligation on the Employer to prevent such occurrence	Clauses 17.3 and 19	<i>Bothwell</i> (note 56)
<u>Employer's risk when taking over the Works</u>	Obligation to take care of the Works from the date that the Taking-Over Certificate is issued	Clause 17.2	<i>Oerlikon South Africa (Pty) Ltd</i> (note 92)
<u>Employer's risk when taking over part of the</u>	Obligation to take care of the part of Works that the Employer has taken	Clauses 17.3 (f) and 10.2	<i>Oerlikon South Africa (Pty) Ltd</i> (note 92)

<u>Permanent Works</u>	over from the date that the Employer has taken over that part of the Works (The Employer has the right to occupy parts of the Permanent Works)		
<u>Employer's design risk</u>	Obligation to carry out the design with reasonable skill and care	Clause 17.3 (g)	
<u>Employer's risk with respect to persons and property</u>	Obligation to take care that no injury to a third party or damage to property is caused while construction is underway because of negligence, wilful act or breach of the Contract by the Employer	Clause 17.1	<i>Donoghue</i> (note 63) (English law principles of duty of care implying "proximity and foreseeable harm") with respect to negligence; <i>Local Transitional Council of Delmas and another</i> (note 63) (South African law principle of wrongfulness)

In the analysis of the risk related contractual issues with respect to risk carried by the Employer and the summarized schedule of these risk related contractual issues discussed here above the relevance of discussing these issues within the context of the Employer's obligation to take care of the Works from the date that the Taking-Over Certificate is issued (as well as other obligations) was shown.

It is interesting to note that the Employer does not take over all the risks of the Contractor on the date that the Taking-Over Certificate is issued. For instance the Contractor's risk with respect to construction (workmanship), design, and materials are not taken over by the Employer (the only exception being the instance where the Employer takes on the responsibility for designing any part of the Works).

The only risk that the Employer does take over on the date that the Taking-Over Certificate is issued, is the risk with respect to the Works (i.e. if damage or loss of the Works should occur). However, as mentioned in Chapter 2, if damages to the Works occur because of the acts or omissions of the Contractor before the Taking-Over Certificate was issued the Contractor will continue to carry the risk of the Works, in that respect.⁹⁸

The other risks that the Employer assumes before the Taking-Over Certificate has been issued deal with aspects such as injuries to third parties or damages to property, where the risk is normally carried by the Contractor, except for instances where the injuries or damages could be attributed to actions or omissions of the Employer.

⁹⁸ The "right" of the Employer to occupy parts of the Permanent Works again holds hands with the risk that the Employer assumes from the date that the Taking-Over Certificate is issued.

CHAPTER 4

Time related contractual issues in the context of the obligations of the Contractor

4.1 The importance of time in construction contracts

Time related contractual issues are probably the most important contractual issues, after and together with risk related contractual issues (and at times overlapping with risk related and other issues), mainly because of the prominent role that certain dates (such as Commencement Date, the Time for Completion and the dates that the Taking-Over Certificate, and the Performance Certificate are issued) play, throughout the contract period, in the context of the obligations of the Contractor and the Employer.⁹⁹

In the Yellow Book one finds that the relevance of time is directly and indirectly visible in the majority of the clauses of the Contract. For example:

⁹⁹ See E Finsen (*The Building Contract: A commentary on the JBCC Agreements* 2ed (2005) 147) who formulates the importance of the time factor for Owners (Employers) and Contractors in building contracts as follows: "Time is usually an essential element of building contracts. Owners and developers are continuously pressing for shorter construction periods with larger penalties to compensate themselves for high holding costs during the construction period and for the financial losses that follow when the contract overruns its time. Contractors faced with the financial losses of running a contract beyond its allotted time on top of penalties for late completion, seek additional time to stave off penalties, together with financial reimbursement for their additional management costs." See also Bunni (note 16) 343 formulating the importance of time in construction contracts as follows: "If time is not 'of the essence,' it is certainly of fundamental importance. In practice, projects are required to be completed by a certain date and in the case of commercial projects, this usually means as soon as possible. In some cases, the design is conceived with a certain date for completion in mind as budgets, interest rates, rents, leases and saleability are worked into a formula by the promoter's or employer's financial advisers. Time is also of fundamental importance to the contractor in that he must assess his performance capabilities and resources to carry out and complete the works within a given time."

- Some of the definitions deal with time, take over of the Works and completion;
- Clause 8 deals extensively and directly with a variety of time related issues;
- Clauses 9, 10, 11, 12, and 13 also deal with a variety of time related issues (though a bit more indirectly).¹⁰⁰

The fact that the construction of the Works that is to start on the Commencement Date and only finishes on the date that the Taking-Over Certificate is issued, with possible delay damage consequences should the Contractor not complete on the Time for Completion, implies that all the actions of the Contractor and the Employer deal on some level with time.

Furthermore, the actions and reactions of the Contractor and the Employer between the Commencement Date and the Time for Completion, can have an influence on the “Time for Completion,” and its possible postponement. That is where the contractual obligations (and rights) of the Employer and Contractor with respect to time come into play.¹⁰¹

¹⁰⁰ Although a discussion of the Letter of Acceptance falls outside the ambit of this dissertation, it is important to take note that in practice the Contractor’s time issues already potentially start to become relevant at the date of the Letter of Acceptance of the Tender. See for instance clause 8.1, in which clause it is stated that *“Unless otherwise stated in the Particular Conditions, the Commencement Date shall be within 42 days after the Contractor receives the Letter of Acceptance.”*

¹⁰¹ The procedural obligations of the Contractor, and the potential effect of the adherence or non-adherence to such obligations on the Time for Completion and its possible postponement will be discussed in Chap 6.

4.2 General obligations of the Contractor as to time

The general obligation of the Contractor to complete the Works has already been discussed in Chapter 2, where risk related contractual issues were discussed in the context of the Contractor's obligations.

This general obligation to complete the Works as formulated in clause 4.1, is however an obligation to complete within a specified time frame and the relevance of such time frame in the Yellow Book is found in clauses 8.1, 8.2 and 8.3.

4.2.1 The obligation to complete within the Time for Completion [The obligation to complete by a specified date is usually the **Contractor's first obligation as to time**]¹⁰² (own emphasis)

In clause 8.2 of the Yellow Book [*Time for Completion*] it is stated that:

"The Contractor shall complete the whole of the Works, and each Section (if any), within the Time for Completion of the Works or Section (as the case may be), including:

- (a) achieving the passing of the Tests on Completion, and*
- (b) completing all work which is stated in the Contract as being required for the Works or Section to be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections]."*

¹⁰² D Atkinson ('Delay and Disruption - The Contractor's Obligations as to Time' (2001) at 1. Available at <http://www.atkinson-law.com/homeCLawArticlesR.htm>. [Accessed on 25 April 2008]) formulates the obligation to complete by a specified date as the Contractor's first obligation as to time. Note that Clause 8.2 comes under discussion before clause 8.1, simply because the obligation of the Contractor to complete within the Time for Completion is arguably the Contractor's first obligation as to time.

This first obligation as to time is of such importance, because in the event that the Contractor does not adhere to this obligation, it gives the Employer the right to claim delay damages, in accordance with the terms of clause 8.7 and clause 2.5, from the Contractor, for every day that the Contractor fails to complete within the Time for Completion.¹⁰³

4.2.2 The obligation to proceed with due expedition and without delay¹⁰⁴ [The obligation to proceed with due expedition and without delay is the **Contractor's second obligation as to time**]¹⁰⁵ (own emphasis)

¹⁰³ See Loots (note 39) 390 confirming that where the Contractor is late in completing the Works, the Employer is entitled to recover any damages sustained.

¹⁰⁴ From the Employer's perspective the obligation of the Contractor (the obligation to proceed with due diligence and without delay) is important, because the Employer can only terminate for default of completing on the Time for Completion once the Time for Completion has occurred within the context of the first obligation but, because the term "with due expedition and without delay" is implied (in the Yellow Book expressly formulated) the Employer may terminate before the Time for Completion should the Contractor breach the second obligation as to time (according to Wallace (note 10) 1115). See also Bunni (note 16) 225 who formulates the Contractor's obligation to proceed with due expedition and without delay after the Commencement Date as "the contractor's first obligation" under the heading: "Construction and completion of the works with due diligence and within the time for completion." See also the *GLC v Cleveland Bridge and Engineering Co* (1984) 34 BLR 50 case, in which case it was contended by the applicants that the respondents were guilty of default because they did not act with diligence and due expedition, despite the fact that they were not held to be liable for liquidated damages, because they did achieve the key dates (as extended). Staughton J however held in his judgment at 67 that because the key dates and the completion date, as extended, was achieved, that an obligation as to due diligence (if such a term was to be implied in the contract) would have been adhered to in any event.

¹⁰⁵ Atkinson (note 102) 1 formulates the obligation to proceed regularly and diligently as the Contractor's second obligation as to time. Note however that Atkinson uses the words "regularly and diligently" instead of the words *with due expedition and without delay* used in the Yellow Book.

In clause 8.1 [*Commencement of Work*] it is stated that:

“The Contractor shall commence the design and execution of the Works as soon as is reasonably practicable after the Commencement Date, and shall then proceed with due expedition and without delay.” (own emphasis)

4.2.3 The obligation to prepare and work to an accepted programme, and also to update or revise the programme (when applicable) [The obligation to prepare and work to an accepted programme is the **Contractor’s third obligation as to time**]¹⁰⁶ (own emphasis)

In clause 8.3 [*Programme*] it is stated that:

“The Contractor shall submit a detailed programme to the Engineer within 28 days after receiving the notice under Sub-Clause 8.1 [Commencement of Works]. The Contractor shall also submit a revised programme whenever the previous programme is inconsistent with actual progress or with the Contractor’s obligations. Each programme shall include:

- (a) the order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage of design, Contractor’s Documents, procurement, manufacture, inspection, delivery to Site, construction, erection, testing, commissioning and trial operation,*
- (b) the periods for reviews under Sub-Clause 5.2 [Contractor’s Documents] and for any other submissions, approval and consents specified in the Employer’s Requirements,*
- (c) the sequence and timing of inspections and tests specified in the Contract, and*
- (d) a supporting report which includes:*
 - (i) a general description of the methods which the Contractor intends to adopt, and of the major stages, in the execution of the Works, and*

¹⁰⁶Atkinson (note 102) 1 formulates the obligation to prepare and work to an accepted programme as the Contractor’s third obligation as to time.

- (ii) *details showing the Contractor's reasonable estimate of the number of each class of Contractor's Personnel and of each type of Contractor's Equipment, required on the Site for each major stage.*

Unless the Engineer, within 21 days after receiving the programme, gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the programme, subject to his other obligations under the Contract. The Employer's Personnel shall be entitled to rely upon the programme when planning their activities.

The Contractor shall promptly give notice to the Engineer of specific probable future events or circumstances which may adversely affect the work, increase the Contract Price or delay the execution of the Works. The Engineer may require the Contractor to submit an estimate of the anticipated effect of the future event or circumstances, and/or a proposal under Sub-Clause 13.3 [Variation Procedure].

If at any time, the Engineer gives notice to the Contractor that a programme fails (to the extent stated) to comply with the Contract or to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised programme to the Engineer in accordance with this Sub-Clause."

The importance of this obligation of the Contractor to submit the programme and any revised programmes to the Engineer should not be underestimated. The reason for that is because a programme is an important tool when it comes to the assessing of the feasibility of claims.¹⁰⁷

¹⁰⁷ According to R McKibbin and M Stokes (Preparation & presentation of claims for delay' (2005) 1-14 at 5. (Available at http://www1.fidic.org/resources/contracts/icc_oct05/McKibbin_icc05.pdf [Accessed 10 April 2008]) "Perhaps the biggest incentive to provide a programme of a required detail is that the contractor would be in a difficult position to support any delay or disruption related claim." According to Wallace (note 10) 1129 however the purpose of programmes "is primarily to enable the owner or his A/E, to plan their own arrangements for giving possession, supplying information and working drawings, and co-ordinating the work of

The fact that clause 8.3 requires a programme to exhibit the order in which the Contractor intends to carry out the Works is also of relevance, because the specific order in the programme can assist the Contractor and the Employer in keeping up to date with whether the Contractor is ahead of or behind the projected progress.¹⁰⁸

The second last paragraph of clause 8.3 is also to be taken into account, specifically because the obligation of the Contractor with respect to the programme is shown to extend beyond the programme itself to the Contractor being obliged to give notice of “... *probable future events or circumstances which may adversely affect the work, increase the Contract Price or delay the execution of the Works.*”

4.3 Time related contractual issues within the context of the Contractor’s obligations as to time

There are arguably three main contractual issues that influence or are presupposed by the Contractor’s obligations as to time. These three main contractual issues are delay issues, disruption issues and acceleration issues.¹⁰⁹

other contractors or nominated sub-contractors, and only secondary for use in connection with the contractor’s extension of time obligations or monetary claims, or to impose additional time obligations on him.” See also Bunn (note 16) 354 criticizing the fact that the FIDIC contracts do not give guidance with respect to programmes “...as to which type of form, presentation and content might be suitable for a particular project.”

¹⁰⁸ In the instance that a programme is found to be “*inconsistent with actual progress or with the Contractor’s obligations...*”, “...*the Contractor shall also submit a revised programme....*”

¹⁰⁹ These three issues are regularly discussed and compared in construction law textbooks. See for instance BB Bramble and MT Callahan *Construction delay claims* 2ed (1992) 14-16 discussing and comparing delay, disruption and acceleration issues.

4.3.1 Delay issues within the context of the Contractor's obligations as to time

A delay can be defined as "...the time during which some part of the construction project has been extended beyond what was originally planned due to an unanticipated circumstance."¹¹⁰

The time "that has been extended" implies that the Contractor has certain obligations as to time, such as the obligation to complete the Works within the Time for Completion. Thus one will have to discuss delay issues within the context of the Contractor's obligations as to time, because only in the context of the obligations as to time will the relevance of delay issues in construction contracts become visible.

4.3.1.1 Delay issues within the context of the Contractor's first obligation as to time

One cannot discuss delay issues without having regard to the Contractor's first obligation as to time - namely to complete the Works within the Time for Completion.¹¹¹ The reason for that is because delay issues are per definition measured against the Time for Completion.

A delay can thus, arguing from within the terminology used in the Yellow Book, be defined as "the time during which some part of the construction project has been extended beyond the **Time for Completion** due to an unanticipated circumstance."¹¹²

¹¹⁰ Bramble and Callahan (note 109) 1.

¹¹¹ "Time for Completion" in the Yellow Book is defined as "... *the time for completing the Works or a Section...*"

4.3.1.2 Delay issues within the context of the Contractor's second obligation as to time

The discussion of delays should also never disregard the second obligation as to time – namely to proceed with due expedition and without delay because, although critical delays always have regard to the Time for Completion, the damages caused by noncritical delays (as discussed in paragraph 4.3.1.4.3 below) can arguably be claimed based on the second obligation.¹¹³

4.3.1.3 Delay issues within the context of the Contractor's third obligation as to time

The third obligation (The obligation to prepare and work to an accepted programme, and also to update or revise the programme) again holds hands with both the first and the second obligation because delay issues are practically monitored not only by way of logbooks and progress reports but also specifically by way of the programme.¹¹⁴

This monitoring of delays by reference to programmes is essential because it enables the Contractor to prove its delay claims and specifically to prove the aspect of criticality in delay claims (as discussed in paragraph 4.3.1.4.3 here below).

¹¹² This definition is based on the definition of a delay formulated by Bramble and Callahan (note 109) I as follows: “a delay can be...the time during which some part of the construction project has been extended beyond what was originally planned due to an unanticipated circumstance....”

¹¹³ See however the *GLC v Cleveland Bridge and Engineering Co* (1984) 34 BLR 57 case (as discussed in footnote 104) in which case it was held that adherence to the first obligation necessarily implied adherence to the second obligation.

¹¹⁴ According to Atkinson (note 102) at 2 “the first role of the programme under the FIDIC Forms is to monitor the progress of the works by comparison of actual progress with the programme....”

4.3.1.4 Excusable delays, compensable delays, critical delays and concurrent delays

A Contractor will potentially have a claim for an extension of time in terms of clause 8.4 and clause 20.1 for any delay caused as long as it is an excusable and a critical delay, as well as potentially have a claim for additional payment if it is also a compensable delay. Concurrency should also be taken into account, because it may make a difference to whether a claim for an extension of time and/or additional payment will fail or succeed.

These types of delay (excusable, compensable, critical and concurrent delays) will be discussed in more detail in the paragraphs to follow.

4.3.1.4.1 Excusable and nonexcusable delays

The first aspect that should be considered when analysing a delay is whether the delay is an excusable or a non-excusable delay.¹¹⁵

An excusable delay is according to Bramble and Callahan¹¹⁶ “one that will serve to justify an extension of the contract performance time. It excuses the party from meeting a contractual deadline.”¹¹⁷ A nonexcusable or inexcusable delay will be on the other hand a delay that will not serve to justify an extension of the contract performance time.¹¹⁸

¹¹⁵ Bramble and Callahan (Note 109) at 2.

¹¹⁶ (note 109) at 2.

¹¹⁷ See also NJ White *Principles and Practices of Construction Law* (2002) 249 defining an excusable delay as “...a delay for which the general contractor is excused or does not have to pay any damages to the owner relating to that delay.”

Whether a delay is excusable or nonexcusable is normally found within the contract,¹¹⁹ and one will have to closely analyse the Yellow Book to see which delays are reckoned excusable, because only such delays will potentially enable a Contractor to claim for an extension of time subject to the terms of clause 20.1.

However such a claim will still not be realized if the excusable delay was not also a critical delay, as was mentioned previously.

4.3.1.4.2 Compensable and noncompensable delays

According to Bramble and Callahan¹²⁰ “Excusable delays may be further classified as compensable or noncompensable. If the delay is deemed *compensable*, the party will be entitled to additional compensation for the costs of the delay, as well as additional time for contract performance.”¹²¹ It is also

¹¹⁸ A nonexcusable delay can in certain instances be interpreted as a breach of contract according to Bramble and Callahan (note 109) 2. See also White (note 117) 249 describing an “Inexcusable delay” as a delay where “...the contractor pays the owner for the owner’s costs associated with the delay.”

¹¹⁹ It should however be noted that although a compensable delay in principle entitles one to claim for additional time and/ or additional payment, it may in theory be possible that additional payment is granted and an extension of time refused. The reason for that is that the granting of an extension of time is not a condition precedent for the granting of additional payment by the Engineer as was confirmed by HH Judge Fox-Andrews in the *H Fairweather & Co v Wandsworth* (1987) 39 BLR 106 case at 120.

¹²⁰ (note 109) 6.

¹²¹ White (note 117) 252 defines a compensable delay as follows: “A compensable delay is a delay for which the owner pays the contractor its costs associated with the delay.”

important to note that a delay can only be compensable to a party, when that specific party does not also contribute to the delay.¹²²

In terms of the wording of clause 20.1 of the Yellow Book, a compensable delay will be a delay for which the Contractor can potentially claim for additional payment and/or an extension of time.

4.3.1.4.3 Critical and noncritical delays

A critical delay¹²³ is a delay that delays the overall completion of the Works.¹²⁴ It has been mentioned above that in order to claim for an extension of time for a delay, such a delay will have to be not only an excusable delay but also a critical delay.¹²⁵

¹²² According to Bramble and Callahan (note 109) 6. See para 4.3.1.4.4 for a further discussion on concurrent delays.

¹²³ Also called a “prolongation delay” and defined by McKibbin and Stokes (note 107) 3 as follows: “Prolongation delays are those that extend the period to complete one or more critical activities and in doing so they delay the overall completion date for the project.” Bunni (note 16) 366 defines prolongation as “...a critical delay which results when the time necessary to complete a critical activity is prolonged...thus extending the time for completion of the whole of the works.” See the *Henry Boot Construction Ltd v Malmaison Hotel* (2000) 70 ConLR 32 case, in which case it was held by Dyson J at para 15 that the delays that were caused by the respondent (employer) were not critical delays because the activities delayed were not on the critical path.

¹²⁴ Although the term “critical delay” is not defined in the Yellow Book it has, through trade usage and custom, become a term that is used on a daily basis in the field of construction law.

¹²⁵ S Townsend (‘Resolving complex delay claims’ (2001) 17(1) *Const. L.J.* 2001 86-89 at 87) refers to the *Ascon Contracting Limited v Alfred McAlpine Construction Isle of Man Limited* (1999) 66 ConLR 119 case and asserts that in the mentioned case the relevance of criticality with respect to extension of time claims is confirmed.

When looking at critical delays one will also have to take into account the possibility that the critical path method analysis¹²⁶ is used to verify the feasibility of a claim for an extension of time by assessing whether a particular delay is in fact critical or not. This type of method analysis is used so frequently that it has become almost impossible to verify the feasibility of certain claims, without making use of such a method analysis, although there is no mention made of critical delays or the critical path method in the Yellow Book.¹²⁷

It is not to say that if a delay is noncritical that the delay is not relevant and that no damages can potentially be claimed. Specifically the second obligation of the Contractor with respect to time (“to proceed with due expedition and without delay”) is not in the first instance focused on critical delays (delays that delay the Time for Completion) but on “delays in progress during construction,” which delays can “occur long before the completion date has arrived, and so not qualify for reimbursement under the liquidated damages clause.”¹²⁸

4.3.1.4.4 Concurrent delays

According to Bramble and Callahan¹²⁹ “Concurrent delay occurs when there are two or more independent delays during the same time period.”

The reason why a discussion with respect to concurrent delays is relevant in terms

¹²⁶ As further discussed in Chap 6.

¹²⁷ According to Bunni (note 16) 354 “There is neither mention of network analysis nor of the critical path(s).” See also note 123.

¹²⁸ As argued by Wallace (note 10) 1124. According to McKibbin and Stokes (note 107) 3 such a non-critical delay is termed “Elongation” by Bunni (note 16) who describes “Elongation” as “... a non-critical delay of an activity that has a positive float.”

¹²⁹ (note 109) 8.

the Yellow Book,¹³⁰ is because in the instance that both the Employer and the Contractor caused delays during the same time period, and these concurrent delays cannot be apportioned, neither party will be able to recover damages for delay damages from the other party.¹³¹ Apportionment may also imply that in the

¹³⁰ Although according to Hoyle (note 31) at 15 FIDIC is entirely silent on the issue of concurrent delays.

¹³¹ See Bramble and Callahan (note 109) 8 formulating the problems associated with the apportionment of concurrent delays as follows: "If concurrent delays cannot be apportioned, neither the owner nor the contractor can recover delay damages from the other. Although many courts endeavor to apportion the concurrent delays between the parties, the intertwining nature or inadequate documentation of delays may make the apportionment difficult if not impossible." See also L Di Paolo ('Concurrent delays' (2006) 23 *ICLR* 373-85 at 373) discussing the possibility of the apportionment of concurrent delay events by way of a critical path method analysis. See however P Tobin ('Concurrent and Sequential Causes of Delay' (2007) 24 *ICLR*, 142-67 at 167) arguing that even in the event that concurrent delay events cannot be proportioned and the Contractor can thus not separate his losses from the Employer's "...it may be appropriate in certain circumstances to apportion the contractor's losses between the owner and contractor as opposed to allowing an "all or nothing" entitlement. Such an approach would be consistent with the 'common sense' apportionment approach applied under contributory negligence and the recent amendments to proportionate liability legislation." Note that the South African position with respect to concurrent delays in construction is currently uncertain. While it is stated in South African case law such as the *Breeders' Association of South Africa v Price Waterhouse* 2001 (4) SA 551 (SCA) case (at par 72) that there is not currently provision made in South African law for the apportioning of damages with respect to concurrent breaches of contract, the need that South African legislation addresses the issue of concurrency with respect to contractual breaches is formulated in the same case (in an obiter statement by Nienaber JA) as follows: "There is, I believe, for the reasons stated by him, a pressing need for legislative intervention in a situation such as the present where the defendant's breach of contract is defined in terms of his negligent conduct but the plaintiff, by his own carelessness, contributed to the ultimate harm." One of the exceptions to the rule (that there is not currently provision made in South African law for the apportioning of damages with respect to concurrent breaches of contract) is however also stated by Nienaber JA in the same *Breeders' Association of South Africa* case (at par 82) - being a contractual term in a contract that highlights such concurrency of contractual breaches. In such an instance one would be able to argue possible simultaneous breaches of contract and possible apportioning of damages. From the viewpoint of the Yellow Book (and from the viewpoint of

event that loss resulted from concurrent causes and it is possible to identify the dominant cause in respect of such loss, the person responsible for such dominant or operative cause would then be responsible for the entirety of the loss.¹³²

With respect to the Contractor's entitlement to extensions of time because of delays, it is however important to note that even if concurrent delays have been apportioned with success, the Contractor may only be entitled to extensions of time for delays that are simultaneously deemed excusable delays and also critical delays.¹³³ The Contractor may however claim extensions of time for the whole periods that he was delayed by the Employer regardless of the fact that the Contractor also caused critical delays in the same time periods.¹³⁴

construction contracts in general) one could possibly argue that seeing that the main (stated and implied) obligations of the Contractor as well as the Employer are to such an extent linked to the Date of Completion (as argued in this Chapter 4 and in Chapter 5) - that the occurrence of concurrent delays (caused by the Contractor and the Employer) should be deemed to be such an exception to the rule as stated in the *Breeders' Association of South Africa* case, and that the apportioning of damages could in such an instance take place.

¹³² See Furst and Ramsey's (note 80) 246 discussion with respect to the liability of the respective parties in concurrency cases and the "dominant cause" approach.

¹³³ As discussed in para 4.3.1.4.1 and para 4.3.1.4.3 here above.

¹³⁴ As confirmed in the *Henry Boot Construction Ltd* case (note 123) by Dyson J at para 13 as follows: "...it is agreed that if there are two concurrent causes of delay, one of which is a relevant event and the other is not, then the contractor is entitled to an extension of time for the period of delay caused by the relevant event notwithstanding the concurrent effect of the other event." See also the *Steria Ltd v Sigma Wireless Communications Ltd* (2008) BLR 79 case, in which case HH Judge Stephen Davies at 101 para 130 confirmed the decision reached in the *Henry Boot Construction Ltd* case (note 123) with respect to concurrency as stated in this same footnote. See also the article "concurrent and Sequential Causes of Delay" by Tobin (note 131) at 167 with respect to concurrency and extensions of time that "If an owner-caused event actually delays the contractor then an extension of time should be awarded regardless of whether a contractor event causes concurrent delay."

4.3.1.5 Delay damages and extensions of time

Extensions of time have already been touched upon in paragraphs 4.3.1.4.1 and 4.3.1.4.3 and it has been mentioned that extensions of time can only be claimed in the instance of an excusable delay which is also a critical delay.

One should also however take note of the interaction between delay damages¹³⁵ and claims for extension of time, because both delay damages and extensions of time rotate around the Time for Completion.¹³⁶

4.3.2 Disruption issues within the context of the Contractor's obligations as to time

“Disruption is an interruption to the planned work sequence or the method of working.”¹³⁷ The effect of disruption is a loss of efficiency or lost productivity on the side of the Contractor due to the interruptions in the planned work sequence.¹³⁸

¹³⁵ “Delay damages” is also better known in construction law as “liquidated damages.” According to Hoyle (note 31) at 16 “In FIDIC, liquidated damages are now called ‘delay damages.’”

¹³⁶ See the *Group Five Buildings Ltd v Minister of Community Development* 1993 (3) SA 629 (A) case 597, in which case it was held that the Employer was entitled to delay damages due to late completion of the works. Extensions of time and delay damages are also discussed as claim related issues in Chap 6 and Chap 7.

¹³⁷ McKibbin and Stokes (Note 107) at 3. See also Bunni (note 16) 368 defining “disruption” as “...the effect of an event or a number of events on the efficiency and loss of productivity of the execution of the works, irrespective of whether or not there had been a delay to a critical activity.”

¹³⁸ Bramble and Callahan (note 109) 134 describes loss of efficiency as follows: “Loss of efficiency is a generic phrase that encompasses a wide range of phenomena afflicting construction projects. At its core, loss of efficiency relates to an additional expenditure of limited resources, that is, labor, material, and equipment, without achieving a commensurate increase in

Disruption is not defined in the Yellow Book and neither does any clause in the Yellow Book deal directly with disruption.¹³⁹ The Yellow Book does however provide for the recovery of additional payment in clause 20.1, which can also include disruption costs.¹⁴⁰

Yet, because delay and disruption are in practice so intertwined with one another¹⁴¹ and because disruptions can cause delays and vice versa¹⁴² it is difficult to always distinguish between delays and disruptions.¹⁴³ For that reason

productivity.” See also the *Group Five Buildings Ltd* case (note 136), in which case it was argued by the plaintiff at 649 para A that the defendant caused “disruption of the works by orders not given timeously in relation to the progress of the works or given at inopportune times or in such a manner as to disrupt the progress, momentum, method and sequence of the construction of the works.”

¹³⁹ As confirmed by McKibbin and Stokes (note 107) 3 with reference to the Red Book: “In short it is not defined in the contract and there is no single clause that deals with disruption. It is raised in two clauses but the references are to potential causes without consideration of the central issue and how it should be addressed.” See also Lane (note 19) at 94 stating with reference to the Red Book: “While delay for the purpose of granting extensions of time is dealt with extensively in the Red Book and GCC 1999 there is scant reference to disruption....”

¹⁴⁰ As confirmed by McKibbin and Stokes (note 107) 4 in their discussion of disruption claims in the Red Book.

¹⁴¹ In practice one may find that delay and disruption claims are sometimes listed in the same pleading, even if listed as two separate claims. See for instance the *Martin Harris & Seuns OVS (Edms) Bpk* case (note 70) at 345 par D, E where reference is made to a delay claim and a disruption claim in the same pleading.

¹⁴² According to McKibbin and Stokes (note 107) 3 “...it is difficult to allocate delaying events to any one disruption or delay as delays have a disruptive effect and in turn rolling disruptions cause delay.”

¹⁴³ According to Bramble and Callahan (note 109) 16 “...in practice, delay and disruption go hand-in-hand, and disruption is often the cause of the project delay.”

disruption issues are very relevant within the context of all three obligations of the Contractor as to time and it can be argued that the term “delay” in the Yellow Book should not be read in the strict sense to denote an excusable and critical delay only, but also to include disruption.¹⁴⁴

4.3.2.1 Disruption issues within the context of the Contractor’s first obligation as to time

With respect to the Contractor’s first obligation as to time - namely to complete the Works within the Time for Completion, although disruptions are not always perceived as having the same potential effect on the Time for Completion as are delays, they potentially always influence the Time for Completion on a direct or indirect level (even in the instance that the Time for Completion may be adhered to).¹⁴⁵ One should also bear in mind that any interruptions to the planned work sequence (in accordance to the programme) always create a delay risk, which could potentially influence the Time for Completion.

¹⁴⁴ In clause 8.5 the term delay is for instance used to denote delays and disruptions. See also clause 8.4 (e) where the words “delay, impediment and prevention” are used to denote delays caused by the Employer. Presumably “disruptions” can also be read into this wide description of “delay.”

¹⁴⁵ For instance in cases where the Contractor because of disruption (and the consequential negative effect that the disruption has on the progress of the Works) has to accelerate his working efforts to keep within the Time for Completion. See also McKibbin and Stokes (note 107) 3 confirming that “disruption may occur on projects with prolonged completion dates and also on those where the contract completion date is actually achieved.” See also McKenzie (note 35) 54 confirming that “Delay in the production of plans, the giving of instructions, the appointment of nominated subcontractors and like matters will not necessarily affect the date of completion as the contractor may be able to reorganize and increase the rate of progress of the contract work. None the less, in such a case, the contractor may well be able to claim for ‘disruption’ or ‘acceleration’.”

4.3.2.2 Disruption issues within the context of the Contractor's second obligation as to time

The second obligation as to time - namely to proceed with due expedition and without delay - may also be relevant, because, although disruptions are not directly associated with the obligation to proceed with due expedition and without delay as are delays, (because the effect of disruption does not always directly have an influence on the Time for Completion), disruptions do cause Contractors to proceed with less effectiveness and at times also cause delay.¹⁴⁶ Thus, in that respect, any disruptions that cause delay necessarily impacts upon this mentioned second obligation and the second obligation (the obligation to proceed with due expedition and without delay) will have to “reckon” with such disruptions that occur.

4.3.2.3 Disruption issues within the context of the Contractor's third obligation as to time.

The third obligation (The obligation to prepare and work to an accepted programme, and also to update or revise the programme) is also relevant to disruption issues because “for all but the simplest disruption issues recourse to analysis based on the contractor's planned programme for works will be required.”¹⁴⁷

¹⁴⁶ Atkinson (note 102) at 2 argues that the obligation to proceed with due expedition and without delay implies that the Contractor proceeds “continuously, industriously and **efficiently**.” (own emphasis). A lack of efficiency caused by disruption would thus necessarily have the effect that the second obligation of the Contractor as to time is impeded.

¹⁴⁷ McKibbin and Stokes (note 107) 5.

4.3.2.4 Compensable and noncompensable disruptions

Not all disruptions are per se compensable disruptions. According to McKibbin and Stokes¹⁴⁸ “examples of non-compensable events are those that:

- the contractor should have anticipated
- are expressly excluded by the terms of the contract
- affect an activity but no damages result from the event.”

In order to prove the compensability of a disruption that may have occurred within the context of a specific contract, it is always useful to make use of and to refer to the Contractor’s planned programme for the Works.¹⁴⁹

4.3.3 Acceleration issues within the context of the Contractor’s obligations as to time

Acceleration per se implies that the Contractor aims to achieve the progress of the Works in a shorter time period,¹⁵⁰ and that the Contractor’s obligations as to time will thus have to be taken into account, whether the Contractor is behind time and receives an instruction to accelerate by the Engineer or whether the Contractor decides on his own accord to accelerate the progress of the Works.

¹⁴⁸ (note 107) 4.

¹⁴⁹ See McKibbin and Stokes (note 107) 6 discussing the usefulness of programmes in the proving of compensable as well as noncompensable disruptions.

¹⁵⁰ According to Bramble and Callahan (note 109) 16 “*Acceleration* is an attempt to speed up the progress of the work in order to achieve an earlier project completion or to overcome previous delays.”

4.3.3.1 Acceleration issues within the context of the Contractor's first obligation as to time¹⁵¹

A discussion of acceleration issues will always have to take the Contractor's first obligation, namely to complete the Works within the Time for Completion, into account, because acceleration is almost always measured against the Time for Completion, whether the "period of performance is shortened" or whether "one is required to accomplish increased, additional or delayed work" by the Time for Completion.¹⁵²

The fact that the Time for Completion is always relevant when discussing acceleration issues is emphasised by the wording of clause 8.6 of the Yellow Book [*Rate of Progress*] where the issue of acceleration is formulated as follows:

"If, at any time:

(a) actual progress is too slow to complete within the Time for Completion, and/or

(b) progress has fallen (or will fall) behind the current programme under Sub-Clause 8.3 [Programme],

other than as a result of a cause listed in Sub-Clause 8.4 [Extension of Time for Completion], then the Engineer may instruct the Contractor to submit, under Sub-Clause 8.3 [Programme], a revised programme and supporting report describing

¹⁵¹ The emphasis in this discussion with respect to acceleration issues will be on the first obligation and not on the second or third obligations, because of the central role that the first obligation and the Time for Completion plays with respect to acceleration issues and also because the second and third obligations as to time are also necessarily implied by the first obligation. If acceleration should take place, because of an adherence to the first obligation, the Works will necessarily proceed with due expedition and without delay (second obligation) and the obligations with respect to the programme (third obligation) will also necessarily be adhered to.

¹⁵² Bramble and Callahan (note 109) 168.

*the revised methods which the Contractor proposes to adopt in order to expedite progress and complete within the Time for Completion.*¹⁵³

*Unless the Engineer notifies otherwise, the Contractor shall adopt these revised methods, which may require increases in the working hours and/or in the numbers of Contractor's Personnel and/or Goods, at the risk and cost of the Contractor. If these revised methods cause the Employer to incur additional costs, the Contractor shall subject to Sub-Clause 2.5 [Employer's Claims] pay these costs to the Employer, in addition to delay damages (in any) under Sub-Clause 8.7 below."*¹⁵⁴

The importance of an acceleration clause such as clause 8.6 of the Yellow Book should not be underestimated. Such a clause entitles an Engineer (as agent of the Employer) to direct acceleration but without such a clause the Employer may be in breach of contract when the Engineer directs such an acceleration.¹⁵⁵

In terms of clause 8.6 the Engineer has the authority to request the Contractor to expedite progress (by way of a revised programme) in the two abovementioned circumstances (i.e. slow progress implying that the Works won't be completed

¹⁵³ As confirmed on the Exponent website entitled 'Time Extension / Delay / Acceleration Analysis' Available at http://www.exponent.com/time_extension/ [Accessed 2 August 2008] "In either situation, directed or constructive acceleration, it is important to establish what the status of the project's completion was before the acceleration begins."

¹⁵⁴ Bramble and Callahan (note 109) 173 emphasise that this type of obligation of the Contractor to accelerate because of slow progress does not entitle the Employer to direct the Contractor to accelerate purely because the Employer "wishes to use the project prior to the contract completion date."

¹⁵⁵ See Bramble and Callahan (note 109) 175, who argues that an Employer cannot authorise direct acceleration (as remedy for late completion) without an acceleration clause because the appropriate remedy that the Employer has for any late completion is delay damages payable to such Employer.

within the Time for Completion and in the instance that the progress has fallen or will fall behind the current programme).¹⁵⁶

Also importantly all costs related to such acceleration will be borne by the Contractor and not by the Employer. If the Employer has to carry any costs related to the acceleration, the Contractor will also be liable to repay these costs to the Employer in addition to delay damages (if any).

4.3.3.2 Direct (Actual) acceleration

Direct acceleration occurs when “...an owner either recognizes the effect of delays on the construction schedule and requires the contractor to speed up the remaining work or intentionally shortens the contract duration without the occurrence of any delays....”¹⁵⁷

In terms of clause 8.6 [*Rate of Progress*] direct acceleration would imply that the Engineer (as agent of the Employer) instructs the Contractor to accelerate because “*actual progress is too slow to complete within the Time for Completion*” or “*progress has fallen (or will fall) behind the current programme under Sub-Clause 8.3 [Programme]*.”

It is noteworthy to mention that in terms of clause 8.6 the Engineer (as agent of the Employer) is not allowed to instruct the Contractor to accelerate if the delay in progress is due to circumstances mentioned in clause 8.4, and thus for any

¹⁵⁶ See Atkinson (note 102) at 4 formulating the right of the Engineer to instruct the Contractor to accelerate in terms of clause 8.6, when the actual progress is too slow to complete within the Time for Completion, as follows: “The measure of progress against the Clause 8.3 programme can therefore define the right of the Employer to order acceleration and the obligation of the Contractor to do so.” (Atkinson is possibly referring to the Silver Book in this paraphrase and the word “Employer” can be substituted by the word “Engineer”).

¹⁵⁷ Bramble and Callahan (note 109) 172.

circumstances for which the Contractor would be potentially entitled to claim for an extension of time.¹⁵⁸

4.3.3.3 Constructive acceleration

Although constructive acceleration is not mentioned in the Yellow Book, the doctrine of constructive acceleration has been recognized as an accepted doctrine in terms of which damages can be claimed where an extension of time has been claimed by the Contractor but refused by the Engineer (as agent of the Employer).¹⁵⁹

¹⁵⁸ Taking the exception mentioned in clause 8.4 into account, such a direct acceleration instruction may mostly be applicable in circumstances where the progress is slow due to a delay, impediment or prevention caused by the Contractor or in the case of adverse (but not exceptionally adverse) climatic conditions. In the event however that the Employer or a “Force Majeure” event is responsible for a delay and the Employer still wants to instruct the Contractor to accelerate, he will according to J Hackett (*Construction Claims: Current practice and case management* (2000) 76) have to negotiate an additional payment with the Contractor for such acceleration and it may even imply a new deal altogether. In the words of Hackett “This will inevitably involve ‘wiping the slate clean’, i.e. not only settling all previous disputes, but agreeing a new programme to completion and a new price – usually based on overtime working, extended preliminaries, incentivising the key sub-contractors and of course rewarding the contractor by way of a bonus if the new target is met.”

¹⁵⁹ According to Davison (note 15) 56 “there is now judicial approval for the claiming of acceleration costs where reasonable claims for an extension of time have been refused.” Davison (note 15) 56 further refers to the *Motherwell Bridge Construction (t/a Motherwell Bridge Storage Tanks) v Micafil Vakuumtechnik and Another* [2002] 15 BLISS 11; [2002] 81 ConLR 44; CILL 1913 case and states that in the particular case “the judge accepted that Motherwell were entitled to recover acceleration costs in the face of a refusal of extensions to the contract completion date.” See also the article by N Lane ‘Constructive Acceleration’ (2000) 16 *Const. L.J.* 231-41 at 241, arguing with respect to the doctrine of constructive acceleration that “...although constructive acceleration is not recognised in English Law for the very good reason that English law is capable of dealing with similar factual situations (which might in the United States give rise to constructive acceleration) without inventing such a doctrine.” See however Pickavance (note 44)

The five elements that must be present in order to establish a constructive acceleration claim are the following:¹⁶⁰

1. There must be an excusable delay;
2. There must have been timely notice of the delay and a proper request for a time extension;
3. The time extension request must either be postponed or refused;
4. The Employer or other party must act by coercion, direction, or in some other manner that reasonably can be construed as an order to complete within the unextended performance period;
5. The Contractor must actually accelerate its performance and thereby incur added costs.

If all five of these elements are present the Contractor can potentially claim the costs for damages suffered because of the acceleration.¹⁶¹ Another option would be that the Contractor refuses to accelerate and decides to use the doctrine of constructive acceleration (of which the first three of the five elements be present) as a defence against any claims that the Employer may have for delay damages.¹⁶²

397 confirming his support in favour of the application of the doctrine of constructive acceleration.

¹⁶⁰ Bramble and Callahan (note 109) 179 list these five elements that must be present in order to establish an acceleration claim.

¹⁶¹ See however Rowe (note 27) 5 that argues that “it is commonly argued that a failure to grant an extension of time in due time or for a proper duration gives rise to a claim for acceleration costs if the contractor accelerates to meet the incompletely extended completion date but the legal basis for such a claim under FIDIC Contract is doubtful.” See also NJ Carnell (*Causation and Delay in Construction Disputes 2ed* (2005) 118) arguing that although constructive acceleration claims are theoretically possible such claims may be extremely difficult to prove.

4.4 Schedule of time related contractual issues in the context of the Contractor's obligations

The schedule below summarises and systematizes the time related contractual issues specifying the relevant time related issue in the context of the Contractor's obligations, as discussed above. Case law that is relevant to a specific time related contractual issue is also included in the schedule.

Time related contractual issue	Contractor's obligations	The Yellow Book Clauses	Relevant Construction Case Law
<u>Delay issues</u>	Obligation to complete the Works within the Time for Completion; Obligation to proceed with due expedition and without delay; Obligation to prepare and work to an accepted programme	Clauses 8.1, 8.2, 8.3, 8.4 and 8.6	<i>Group Five Buildings</i> (note 136); <i>Martin Harris & Seuns OVS (Edms) Bpk</i> (note 70); <i>Henry Boot Construction Ltd</i> (note 123)
<u>Disruption issues</u>	Obligation to complete the Works within the Time for Completion; Obligation to proceed with due expedition and without delay; Obligation to prepare and work to an accepted programme	Clauses 8.1, 8.2, 8.3, 8.4 and 8.6	<i>Group Five Buildings</i> (note 136); <i>Martin Harris & Seuns OVS (Edms) Bpk</i> (note 70)

¹⁶² According to Bramble and Callahan (note 109) 179 the doctrine of constructive acceleration can also be used as a defence against any claims that the Employer may have against the Contractor for delay damages.

<u>Acceleration issues</u>	Obligation to complete the Works within the Time for Completion	Clauses 8.1, 8.2, 8.3, 8.4 and 8.6	
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In the analysis of the time related contractual issues discussed here above and the summarized schedule of these time related contractual issues the relevance of discussing these issues within the context of the Contractor's three obligations as to time (the Contractor's obligation to complete the Works within the Time for Completion; the Contractor's obligation to proceed with due expedition and without delay; the Contractor's obligation to prepare and work to an accepted programme) was shown.

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CHAPTER 5

Time related contractual issues in the context of the obligations of the Employer

5.1 The obligations of the Employer

5.1.1 The general obligation of the Employer

The general obligation of the Employer “to co-operate” and “not to prevent” has been discussed in Chapter 3.

This obligation also implies that the Employer is obligated not to cause delays or disruptions that would hinder the Contractor from fulfilling his obligations to complete the Works within the Time for Completion,¹⁶³ to proceed with due expedition and without delay and to prepare and to update the programme.

5.2 Time related contractual issues within the context of the Employer’s obligations

The most important contractual issues within the context of the Employer’s mentioned obligations are delay issues, disruption issues and acceleration issues.

¹⁶³ Note that the obligation of the Employer to co-operate with and not to prevent the Contractor from completing the Works within the Time for Completion does not include an obligation on the part of the Employer to assist the Contractor in completing earlier than the Time for Completion, even if such earlier date was a projected date on the programme. In the *Glenlion Construction v The Guinness Trust* (1987) 39 BLR 94 case it was held by HH Judge Fox-Andrews at 99 and 103 that the question “Whether there was an implied term of the contract between the applicant and the respondent that, if and in so far as the programme showed a completion date before the date of completion the employer...should so perform the said agreement as to enable the contractor to carry out the works in accordance with the programme and to complete the works on the said completion date, the answer is ‘No’.”

Delay issues, disruption issues and acceleration issues have to a certain extent already been discussed in Chapter 4. These issues will again for the sake of clarity be addressed in the context of the Employer's obligations with respect to extension of time issues.

5.2.1 Delay issues within the context of the general obligation of the Employer to co-operate with and not to prevent the Contractor from completing the Works (the "co-operation and prevention principle")

The Employer is in terms of the "co-operation and prevention principle" obliged not to delay the completion of the Works by the Contractor.¹⁶⁴

In accordance with clause 8.4 (e) [*Extension of Time for Completion*] "any delay, impediment or prevention caused by or attributable to the Employer, the Employer's Personnel, or the Employer's other contractors on the Site," entitles the Contractor to a claim for an extension of time in terms of clause 8.4.¹⁶⁵

¹⁶⁴ Especially because the Employer would in terms of clause 8.7 potentially benefit from such a delay, by claiming delay damages for every day that the Contractor is late in completing the project. See also J Dörter ('The effect of contract clauses on claims for delay and disruptions' (2002) 19 *ICLR* 313-32 at 318) arguing that an Employer who prevents a Contractor from completing will jeopardise his own chances of procuring delay damages.

¹⁶⁵ According to Hoyle (note 31) at 11 the central purpose of an EOT clause is to give "... the contractor an entitlement where there has been an act of prevention on the part of the Employer." Hoyle goes on to argue that "It is interesting to note in this context that the FIDIC forms do not expressly raise an entitlement for breach of contract by the employer." This argument of Hoyle can possibly be countered by arguing that the words "*any delay, impediment or prevention caused by or attributable to the Employer*" in clause 8.4 (e) expressly raises an entitlement for breach of contract (namely an entitlement to claim for an extension of time) and "prevention" of the Employer will in this sense necessarily be a breach of one of his main obligations towards the Contractor.

Examples of such instances where delay caused by the Employer would enable the Contractor to potentially claim for such an extension of time in the Yellow Book is categorized, by Seppala as follows:¹⁶⁶

“1.9 Errors in the Employer’s Requirements	Contractor may claim extension of time, Cost and reasonable profit for error in Employer’s Requirements which was not previously discoverable
2.1 Right to Access to the Site	Contractor may claim extension of time, Cost and reasonable profit if Employer fails to give right of access to Site within time stated in the Contract
4.7 Setting Out	Contractor may claim extension of time, Cost and reasonable profit for errors in original setting-out points and levels of reference
4.8 Fossils	Contractor may claim extension of time, Cost attributable to an instruction to Contractor to deal with an encountered archeological finding

¹⁶⁶ See the 2005 article by Seppala (note 2) in which article he categorizes and discusses the Contractor’s claim entitlements. Not all the sub-clauses that Seppala mentioned is paraphrased here but only those clauses for which the Employer (or his agents) himself caused the delay or carries the responsibility for the delay.

7.4 Testing	Contractor may claim extension of time, Cost and reasonable profit if testing is delayed by (or on behalf of) Employer
8.9 Consequences of Suspension	Contractor may claim extension of Time and Cost if Engineer instructs a suspension of progress
10.3 Interference with Tests on Completion	Contractor may claim extension of Time, Cost and reasonable profit if Employer delays a Test on Completion
16.1 Contractor's Entitlement to Suspend Work	Contractor may claim extension of Time, Cost and reasonable profit if Engineer fails to certify or if Employer fails to pay amount certified or fails to evidence his financial arrangements, and Contractor suspends work
17.4 Consequences of Employer's Risks	Contractor may claim extension of Time, Cost and (in some cases) reasonable profit if Works, Goods or Contractor's Documents are listed in Sub-Clause 17.3"

It can be noticed from the examples listed here above that not only delays caused by the Employer or his personnel but also delays caused by the Engineer (acting in the capacity as agent of the Employer) will entitle the Contractor to claim an extension of time (and in some instances also to claim additional payment in the form of Cost and/or reasonable profit).

5.2.2 Disruption issues within the context of the general obligation of the Employer to co-operate with and not to prevent the Contractor from completing the Works (the “co-operation and prevention principle”)

Disruption issues should also be interpreted in the context of the main obligation of the Employer, namely to co-operate with and not to prevent the Contractor from completing the Works within the Time for Completion, because the “co-operation and prevention principle” per se implies that the completion progress should not be disrupted by the Employer even if the actions of the Employer do not necessarily hinder the Contractor from completing the Works within the **Time for Completion** (which is relevant when discussing delay issues). (own emphasis)

There are different examples of actions by the Employer that can be described as potentially disrupting the completion progress, such as:

Giving the Contractor late access to the Site; the giving of late instructions or late information; various contract variations; and direct acceleration.¹⁶⁷

¹⁶⁷ According to McKibbin and Stokes (note 107) 9 “There are many different potential causes of disruption to site based work including late information, restricted access, adverse weather, insufficiently skilled labour and inadequate supervision to name but a few.” See also Bramble and Callahan (note 109) 138 that describes some factors that the courts have recognized as causes of loss of efficiency due to disruption.

Although these actions are not categorized as disruption events in the Yellow Book¹⁶⁸ (see the discussion on delay issues) but rather as potential delay events, it has been mentioned in Chapter 4 that disruption related issues can never be totally separated from delay related issues, because not only are the terms “delay” and “disruption” intertwined, but it would seem as if the term “delay” in the Yellow Book is formulated wide enough to incorporate the terms “delay” and “disruption.”¹⁶⁹

In practice one will thus have to acknowledge that all the aspects mentioned in par 5.2.1 as “delays” could potentially be reckoned to be “delays” and/or “disruptions,” and that an additional payment claim by the Contractor in terms of Clause 20.1, could also be a claim for the damages caused by a delay and/or a claim for the loss of productivity costs caused by the relevant disruption.¹⁷⁰

¹⁶⁸ See para 5.2.1 here above.

¹⁶⁹ In claims however it would be wise to distinguish and to categorize the several causes that may effect certain delays and/or disruptions in a specific case and not only to list all the causes for delay and disruption into one undefined claim, as is confirmed in the *Imprefed (Pty) Ltd v National Transport Commission* 1993 (3) SA 94 (A) case by Kumleben JA and Nienaber JA at 122.

¹⁷⁰ In practice one will have to weigh up every claim of a Contractor and decide whether the claim is more delay or more disruption related or maybe both. It would thus make sense in the event that both delay and disruption damages are claimed “to quantify the effect of each separate cause contributing to the overall delay in completing the contract” (according to Kumleben JA and Nienaber JA in the *Imprefed (Pty) Ltd* case (note 169) at 122 para A). Kumleben JA and Nienaber JA also held in their judgment at 122 para B that “The claim, thus based on non-productive units of the plant, failed to connect the global sum claimed to the various alleged delays and disruptions.”

5.2.3 Acceleration issues within the context of the general obligation of the Employer to co-operate with and not to prevent the Contractor from completing the Works (the “co-operation and prevention principle”)

Acceleration issues are also to be interpreted within the context of the basic duty of the Employer to co-operate with and not to prevent the Contractor from completing the Works, specifically because, in the instance that the Contractor claims for an extension of time and the Employer (or rather the Engineer on behalf of the Employer) does not grant such an extension, it could be deemed that by not co-operating with the Contractor he is in effect forcing the Contractor to accelerate should the Contractor still want to achieve the Time for Completion and that such acceleration again raises the possibility that a loss of efficiency/productivity may follow.¹⁷¹

It has also been mentioned in Chapter 4 that in the instance that an Employer does not grant an extension of time, he may face a constructive acceleration claim should the Contractor decide to accelerate, but may also face a constructive acceleration defence, when claiming delay damages, should the Contractor decide not to accelerate.

5.3 Schedule of time related contractual issues in the context of the Employer’s obligations

The schedule below summarises and systematizes the time related contractual aspects specifying the time related issues in the context of the Employer’s obligations, as discussed above. Case law that is relevant to a specific time related contractual issue is also included in the schedule.

¹⁷¹ See also Bramble and Callahan (note 109) 147 discussing acceleration and the possibility that it may cause lost productivity costs.

Time related contractual issue	Employer's obligations	The Yellow Book Clauses	Relevant Construction Case Law
<u>Delay issues</u>	General Obligation to co-operate and not to prevent the Contractor from completing the Works within the Time for Completion	Clauses 8.1, 8.2, 8.3, 8.4 and 8.6	<i>Imprefed (Pty) Ltd</i> (note 169)
<u>Disruption issues</u>	General Obligation to co-operate and not to prevent the Contractor from completing the Works within the Time for Completion	Clauses 8.1, 8.2, 8.3, 8.4 and 8.6	<i>Imprefed (Pty) Ltd</i> (note 169)
<u>Acceleration issues</u>	General Obligation to co-operate and not to prevent the Contractor from completing the Works within the Time for Completion	Clauses 8.1, 8.2, 8.3, 8.4 and 8.6	

In the analysis of the time related contractual issues discussed and the summarized schedule of these time related contractual issues here above the relevancy of discussing these delay, disruption and acceleration issues within the context of the general obligation of the Employer (to co-operate with and not to prevent the Contractor from completing the Works within the Time for Completion) was shown.

CHAPTER 6

Claim related contractual issues in the context of the claim procedural obligations of the Contractor

6.1 The relevance of the Contractor's obligation to claim in accordance with the clause 20.1 procedures in the context of the Contractor's main obligation to complete the Works within the Time for Completion and the Employer's main obligation to co-operate with and not to prevent the Contractor from completing the Works within the Time for Completion

In the previous Chapters risk and time related issues were discussed in the context of the obligations of the Contractor (inter alia, to complete the Works within the Time for Completion) and the obligations of the Employer (inter alia, to co-operate with and not to prevent the Contractor from completing the Works within the Time for Completion).

In this Chapter the focus will be on the claim related contractual issues within the context of the claim procedural obligations of the Contractor in terms of clause 20.1.¹⁷²

These claim procedural obligations of the Contractor can however be linked to the main obligation of the Contractor (to complete the Works within the Time for Completion) as well as the main obligation of the Employer (to co-operate with and not to prevent the Employer from completing the Works), because the

¹⁷² Note that clause 20.1 is not a clause that stands totally separate with respect to the claim procedures from the rest of the clauses in the Yellow Book, because these claim procedures are already anticipated in numerous clauses that refer to potential claims that the Contractor could have for an extension of time and/or additional payment, for instance clauses 1.9, 2.1, 4.7, 4.12, 4.24, 7.4, 8.4, 8.9, 10.2, 10.3, 12.2, 13.7, 16.1, 17.4 and 19.4.

procedures in clause 20.1 are to a large extent focused on the Contractor's aim to complete the Works within the Time for Completion, by way of claiming extensions of time in order to postpone the Time for Completion. Any additional payments claimed by the Contractor, by way of these procedural obligations, are in its turn frequently linked with the fact that the Employer did not adhere to his main obligation, by causing delays etc.

Also, it will become apparent from the discussion, that contractual related issues such as "time bar" issues, delay damages issues, global claim issues, "time at large" issues and extension of time issues (to name but a few issues discussed in this Chapter and Chapter 7) cannot be discussed without taking the main obligations of the Contractor and the Employer, as well as, to a greater or lesser extent, the contractual issues discussed in the previous Chapters, into account.

6.2 The relevance of the claim procedures, "time bars" and the principle of "time at large" in the Yellow Book.

Clause 20.1 is arguably one of the most important clauses in the Yellow Book, because this clause deals with the overall claim procedures that the Contractor¹⁷³

¹⁷³ See Totterdill (note 1) 27 stating with respect to the FIDIC contract claims that "Most claims are made by the Contractor and may be claims for an extension of time for completion of the Works, or for reimbursement of money which has been spent or will be spent." The discussion of the claim procedures of the Employer and the Contractor are thus treated differently in the Yellow Book. Glover (note 4) 8 describes the reasoning behind the differences in the FIDIC Forms as follows: "The rationale for the difference in treatment between the Employer and Contractor is that presumably in the majority of, if not all, situations, the Contractor will be (or should be) in a better position to know what is happening on site and so will be much better placed to know if a claims situation is likely to arise than an Employer...." In light of Totterdill's and Glover's statements this discussion will focus on the claim procedures of the Contractor, because the claim procedures in the Yellow Book is mostly focused on claims lodged by Contractors. Note that the Employer's claims would rarely (if ever) include claims for extensions of time, because the Time for Completion fixed in the contract already counts in the Employer's favour. In practice the Employer will also normally not need to claim for delay and disruption costs to the extent that the

will have to adhere to when aiming to enforce any of its claims against the Employer.

Clause 20.1 can also possibly be interpreted as a catch all clause where various possible claims that the Contractor may have against the Employer are brought together under one claim procedure.¹⁷⁴

Within these mentioned clause 20.1 claim procedures, there are a few important issues at stake, for example the “time bar” issue¹⁷⁵ and the “time at large” issue.¹⁷⁶

Although the use of “time bar” clauses are not unknown in construction agreements, they more than ever have come under the spotlight, arbitrationwise,

Contractor claims for delay and acceleration costs, because the Employer, in terms of the delay damages clause (clause 8.7), can already deduct delay damages in the instance that the Contractor does not complete the Works on the specified date. Should the Employer however decide to claim delay costs or disruption costs in terms of clause 2.5, (for instance in the instance that the Contractor claims for additional payment in terms of clause 20.1 and the Employer lodges a counter-claim) it is highly probable that such a claim of the Employer will make reference to the Employer’s entitlement to damages in terms of the delay damages clause (clause 8.7).

¹⁷⁴ This is apparent, when one takes into account the fact that all the clauses in the Yellow Book that refer to claims also refer to clause 20.1. McKibbin and Stokes (note 107) 2 state that “Claims for delay in construction can be presented under four legal frameworks: **Claims under the contract where remedies are defined in the terms and conditions**, Claims arising out of the contract where the remedies are provided for under the applicable law, Claims arising out of the applicable law which could include third party actions in tort for example, Claims relying on the principles of quantum meruit.” (own emphasis) Note that although there are other types of claims that may also be relevant outside the ambit of clause 20.1, only the contractual claims and the procedures mentioned in clause 20.1 (“Claims under the contract where remedies are defined in the terms and conditions” referred to in this note) will come under discussion.

¹⁷⁵ As discussed in this Chap 6.

¹⁷⁶ As discussed in Chap 7.

since the introduction of the claim procedures in clause 20.1 of the FIDIC forms.¹⁷⁷

One of the reasons why the discussion with respect to “time bars” has also become such a relevant topic of debate is probably because of the farreaching effects, for better or for worse,¹⁷⁸ that “time bars” potentially could have on a Contractor’s claims (a Contractor could potentially be “time barred” should the Contractor not give notice within 28 days after becoming aware of a possible claim event).

Another reason why “time bar” clauses are held to be such a priority topic is because “if the ‘time bar’ clause is held to be ineffective then, in the absence of any extension of time award, the time for completion is ‘at large’ such that the employer will lose the ‘automatic’ right to delay damages.”¹⁷⁹

¹⁷⁷ H Lal ‘The rise and rise of “time-bar” clauses: The “real issue” for construction arbitrators’ (2007) 24 *ICLR* 118-31 at 122. The fact that the FIDIC contracts are of an international nature could of course be one of the reasons why every clause in the FIDIC contracts, including the “time bar” clause are so closely scrutinized by various scholars.

¹⁷⁸ While many Contractors would argue for a longer time period than the 28 day time period as stated in Clause 20.1 of the Yellow Book before being “time barred,” many Employers would argue for a shorter time period before the Contractor is “time barred.” See for instance the EIC’s argument (note 43) at 363, that from the viewpoint of Contractors the 28 day period within which a notice should be lodged is “unduly harsh.” See also Lal (note 177) at 120 mentioning that “It ought to be noted of course some employers may consider the 28-day time-limit ought to be reduced but that the FIDIC drafting committee considered 28 days to be a reasonable period.”

¹⁷⁹ Lal (note 177) at 119. This aspect of “time at large” and the possible invalidation of the delay damages clause (clause 8.7) will be discussed more thoroughly in Chap 7.

6.3 The claim procedural obligations of the Contractor in terms of clause 20.1

As mentioned above, the Contractor's obligation as to the procedural prerequisites mentioned in clause 20.1 can not be accentuated enough, specifically because in the event that the claim procedures with respect to notices are not strictly adhered to, the Contractor may default on any rights that he may have in terms of the claim.¹⁸⁰

Sub-Clause 20.1 [*Contractor's Claims*] shortly provides for the following procedure:

*"If the Contractor considers himself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give notice to the Engineer, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 28 days after the Contractor became aware, or should have become aware, of the event or circumstance..."*¹⁸¹

¹⁸⁰ See also G Xavier ('Construction Claims and Related Disputes-a Malaysian Perspective' (2000) 16 *Const. L.J.* 172-86 at 174) emphasising the procedural requirements of claims as follows: "A claim may not be enforceable unless the procedural requirements are satisfied. Such requirements have to be complied with when making such a claim and sometimes, non-compliance with such requirements may actually be fatal to an otherwise successful claim. See also the *All-Gen v Gordon Forbes* (2003) BLR 282 case, in which case the argument of the applicant with respect to the procedural clause in the FIDIC civil engineering contract (pre-1999 Red Book) is stated as follows by Sanders J at p 283 para 3 "It is argued by the applicant that the intention of clause 53 is to provide a disciplined way of dealing with claims for additional payment...Sub-clauses 53.1 to 53.3 set out a clear and ordered way of dealing with any claim for an additional payment: claims have to be notified at the time they arise, contemporary records have to be kept and regular accounts rendered."

¹⁸¹ "Time bar" issues are discussed in paragraph 6.4.1.4.

...Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Engineer, the Contractor shall send to the Engineer a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed.”

From the reading of the clause one can reformulate this general procedural obligation of the Contractor as two obligations namely:

- 6.3.1 The Contractor’s claim procedural obligation as to time (specifically with respect to the giving of a notice¹⁸² within a specified time), and
- 6.3.2 The Contractor’s claim procedural obligation to specify and substantiate the claim (with respect to notices and claims)

Both these obligations (the obligation to adhere to claim procedural aspects as to time and the obligation to specify and substantiate the claim) are relevant to the extent that non-adherence to one or the other could potentially cause that a claim for an extension of time and/ or additional payment will fail.

¹⁸² Totterdill (note 1) 239 argues with respect to the practical importance of the clause 20.1 notices that “These notice are important: - to enable the Engineer to make his own observations and records of the problem – to enable the Engineer to consider possible actions to overcome the problem – to put the problem on record and make it possible for the Contractor to receive a prompt decision on his entitlements.”

6.4 Claim related contractual issues within the context of the Contractor's claim procedural obligations as to time.

There are a few claim related issues that will be discussed within the context of the Contractor's mentioned procedural obligations. These issues include i) delay damages issues, delay disruption and acceleration costs issues, extension of time issues and "time bar" issues, ii) global claim issues, and iii) substantiation (supporting particulars, records and critical path method) issues.

6.4.1 Delay damages issues, delay, disruption and acceleration costs issues, extension of time issues and "time bar" issues within the context of the Contractor's claim procedural obligations as to time.

Delay damages issues, delay, disruption and acceleration costs issues, extensions of time issues and "time bar" issues are within the context of the procedural obligations of the Contractor all grouped together under the above heading, because not only are these mentioned issues presupposed by and do they impact upon the procedural aspects in clause 20.1,¹⁸³ but all these issues also to a greater or lesser extent rotate around whether the Works were completed or will be completed within the Time for Completion or not.¹⁸⁴

¹⁸³ Note that the clause 20.1 procedures are already anticipated throughout the Yellow Book (e.g. clause 8.4 refers to the clause 20.1 procedures and the possibility that the Contractor will claim for an extension of time and/or additional payment). See also clause 8.7, which clause although it does not directly refer to the clause 20.1 procedures, do indirectly link up with the clause 20.1 procedures, because the Employer's entitlement to delay damages mentioned in clause 8.7 stands (to a certain extent) moneywise directly in opposition to the Contractor's entitlement to an extension of time in terms of the clause 20.1 procedures.

¹⁸⁴ Dorte (note 164) 323 formulates this interplay between extensions of time, delay damage and delay costs as follows: "The old adage of 'time for time and money for money' has gone in most construction contracts. Not only does the contractor want to protect himself from liquidated damages by getting extensions of time (and the employer sometimes wishes to protect himself from losing its liquidated damages by ensuring that the contractor is entitled to an extension of

Thus, in the event that some of the procedures are not adhered to, the Contractor will not be able to claim (or rather will be “time barred” from claiming) an extension of time or additional payment in a delay claim, disruption claim or an acceleration claim. Also, the Employer will be entitled to deduct the agreed amount of delay damages for every day that the Contractor is late in completing the Works. However, should the Contractor succeed by way of a claim for an extension of time, the Time for Completion will in effect be postponed and the Employer will in such an event lose out on some (or all) of the delay damages that he could have deducted.

Schematically the interaction of these issues can be illustrated as follows:

Contractor’s claims in terms of clause 20.1 (which the Contractor forfeits when “time barred”)	Employer’s entitlement to delay damages in terms of clause 8.7
Claim for an extension of time	Delay damages
Claim for additional costs (delay, disruption or acceleration costs)	Delay damages

This scheme illustrates the fact that the Contractor’s potential claims (timewise and moneywise) stand in direct opposition to the Contractor’s entitlement to delay damages.

time instead of relief from liquidated damages), but the contractor wants compensation for what the delay costs him....” See also the discussion on delay, disruption and acceleration issues in Chap 4.

6.4.1.1 Delay damages issues¹⁸⁵ within the context of the Contractor's claim procedural obligations as to time

Delay damages clauses¹⁸⁶ enable an Employer to deduct an amount of delay damages from a Contractor for every day that the Contractor is late in completing the Works or parts of the Works.¹⁸⁷

¹⁸⁵ The discussion of delay damages is relevant when discussing the clause 20.1 claim procedures, because the Contractor's entitlement to claim extensions of time potentially undermines the Employer's entitlement to delay damages.

¹⁸⁶ According to Bunni (note 16) 373 one should differentiate between delay damages (liquidated damages) clauses and penalty clauses, because while delay damages clauses are perceived as clauses exhibiting a genuine pre-estimate of the relevant loss, penalty clauses are regarded as unconscionable. See the *Arnold & Co Ltd v Attorney General of Hong Kong* (1989) 47 BLR 129 case, in which case it was held that the delay damages clause in the respective contract was in fact a penalty clause. See also the *Alfred McAlpine Capital Projects Limited v Tilebox Limited* (2005) BLR 271 case, in which case it was held at 279 para 48 and at 285 para 93 by Jackson J that the delay damages clause was not unenforceable as a penalty because the pre-estimate of the damages which were likely to be suffered was not unreasonable. See also the *Steria Ltd* (note 134) case, in which case it was also held by HH Judge Stephen Davies at 98-99 that the delay damages clause in a subcontract should not be interpreted as a penalty, because "...there is no substantial discrepancy between the liquidated damages provisions of the subcontract and the level of damages to be suffered..." Note that in South Africa in accordance with the terms of the Conventional Penalties Act 15 of 1962, a delay (liquidated) damages clause will not be held to be unenforceable should it appear that the amount is disproportionate to damages actually suffered by the Employer. According to McKenzie (note 35) 120 "Where it appears to a court that the 'penalty' is out of proportion to the prejudice suffered the court has power to reduce the 'penalty' to such extent as it may consider equitable in the circumstances."

¹⁸⁷ According to Davison (note 15) 157 "The deduction of liquidated damages will usually occur when the contractor has failed to complete by the contract completion date, and the period of the over-run beyond the contract date is not covered by any granted extension of time." See the *Bilton v Greater London Council* (1982) 20 BLR 1 case, in which case it was held by Lord Fraser at 13 that "The General Rule is that the main contractor is bound to complete the work by the date for completion stated in the contract. If he fails to do so, he will be liable for liquidated damages to

It is important to take note of a “delay damages” clause within the context of the procedural obligations of the Contractor, as mentioned in paragraph 6.4.1, because in the event that the Contractor does not adhere to his procedural obligations, the Employer will normally be entitled to the whole amount of delay damages for that delay time period, because the Contractor failed to achieve a postponement of the Time for Completion (by way of an extension of time claim).¹⁸⁸

Such a “delay damages” clause is found in clause 8.7 of the Yellow Book [*Delay Damages*] and reads as follows:

“If the Contractor fails to comply with Sub-Clause 8.2 [Time for Completion], the Contractor shall subject to Sub-Clause 2.5 [Employer’s Claims] pay delay damages to the Employer for this default. These delay damages shall be the sum stated in the Appendix to Tender, which shall be paid for every day which shall elapse between the relevant Time for Completion and the date stated in the Taking-Over Certificate ...

...These delay damages shall be the only damages due from the Contractor for such default, other than in the event of termination under Sub-Clause 15.2 [Termination by Employer] prior to completion of the Works. These damages

the employer.” See also the *Collins Submarine Pipelines Africa (Pty) Ltd v Durban City Council* 1968 (4) SA 763 (A) case, in which case it was held that it is contractually possible that parties agree that delay damages can be deducted from time to time during the progress of the contract, and not only after the eventual completion of the work. See also the interesting *Temloc v Erril Properties* (1988) 39 BLR 30 case, in which case it was held by Nourse LJ at 39-40 that an amount of nil pounds that was fixed for delay damages in the appendix should not only be interpreted to invalidate the delay damages clause but in effect should be interpreted to invalidate any claim that the Employer can have for damages (liquidated or unliquidated) because of late completion.

¹⁸⁸ Note however, that it is held in certain case law (as discussed in Chap 7) that even in the event that the procedural obligations of the Contractor were not adhered to, that the Employer may in certain circumstances still not be entitled to delay damages, because of the “prevention principle.”

shall not relieve the Contractor from his obligation to complete the Works, or from any other duties, obligations or responsibilities which he may have under the Contract.”

In this clause we thus find, as mentioned, that delay damages are directly linked to the default of the Contractor in completing the Works within the Time for Completion.¹⁸⁹

6.4.1.2 Extension of time issues within the context of the Contractor’s claim procedural obligations as to time

One of the focus points of the clause 20.1 procedures is that the Contractor is entitled to claim for an extension of time, and in a sense it could be argued that such a claim for an extension of time, is nothing else but the Contractor aiming to prevent the Employer from deducting delay damages.¹⁹⁰

¹⁸⁹ The date as stated in the Appendix to Tender as the “Time for Completion” should not be interpreted too statically, although the Time for Completion in the Yellow Book (clause 1.1.3.3) is defined as “the time for completing the Works... as stated in the Appendix to Tender.” The reason for that is because extensions of time which are granted by the Engineer in terms of clause 20.1 will extend (postpone) the “Time for Completion.” See also the *Administrasie van Transvaal v Oosthuizen en ‘n ander* 1990 (3) SA 387 case, in which case it was held by McCreath R at 396 para D that, in terms of the delay damages clause in the respective contract, delay damages could be deducted at any time during the contract and even after the certificate of completion has already been issued.

¹⁹⁰ The reason for that is because delay damages are normally payable for every day that the Contractor is late in completing the Works within the Time for Completion. See the *Motherwell Bridge Construction (t/a Motherwell Bridge Storage Tanks)* case (note 159) at para 594, 598, in which case the claim of the Subcontractor for an extension of time was met with a counterclaim of the Contractor for delay damages and in which case the claim for an extension of time was granted.

Extensions of time are relevant in the context of the claim procedural obligations of the Contractor, because the Contractor is only entitled to claim for an extension of time in accordance with the procedures as laid down in clause 20.1 of the Yellow Book.¹⁹¹

In the Yellow Book the Contractor can potentially claim for extensions of time for reasons listed in clause 8.4.¹⁹²

Clause 8.4 of the Yellow Book [*Extension of Time for Completion*] reads as follows:

“The Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor’s Claims] to an extension of the Time for Completion if and to the extent that completion for the purposes of Sub-Clause 10.1 [Taking Over of the Works and Sections] is or will be delayed by any of the following causes:

- (a) a Variation (unless an adjustment to the Time for Completion has been agreed under Sub-Clause 13.3 [Variation Procedure],*
- (b) a cause of delay giving an entitlement to extension of Time under a Sub-Clause of these Conditions,*
- (c) exceptionally adverse climatic conditions;*
- (d) Unforeseeable shortages in the availability of personnel or Goods caused by epidemic or governmental actions, or*
- (e) any delay, impediment or prevention caused by or attributable to the Employer, the Employer’s Personnel, or the Employer’s other contractors on the Site.”*

¹⁹¹ Extensions of time have already been touched upon in para 4.3.1.4.1 and para 4.3.1.5.

¹⁹² See Chap 4, in which Chapter excusable delays and critical delays are discussed and it is argued that an extension of time can only be claimed in the instance that a delay is both excusable and critical.

One should however, in reading clause 8.4 within the context of the procedural obligations of clause 20.1, take note that an extension of time that is granted does not imply that a new Time for Completion (or a ‘gross’ extension of time) substitutes the existing Time for Completion, but only that the existing Time for Completion is postponed (extended) to a later date (a ‘net’ extension of time).¹⁹³ One should also take note that “the granting of an extension of time does not necessarily mean that the contractor is also entitled to the costs or damages associated with the delay for which he received an EOT.”¹⁹⁴

6.4.1.3 Delay costs, disruption costs and acceleration costs issues¹⁹⁵ within the context of the Contractor’s claim procedural obligations as to time

Delay costs issues,¹⁹⁶ disruption costs issues and acceleration costs issues with respect to claims, all deal with additional payments that are claimed by the Contractor in terms of the clause 20.1 procedures.¹⁹⁷

¹⁹³ As was held in the *Balfour Beatty v Chestermount Properties* (1993) 62 BLR 1 case, in which case a discrepancy between a ‘gross’ extension of time (implying a new fixed Time for Completion) and a ‘net’ extension of time (implying that the fixed Time for Completion is postponed) was drawn. See also the *Aliwal North Municipality v Crawford* 1964 (1) SA 344 (A) case, in which case it was held at 348-49 that where an extension of time was granted in terms of an architect’s certificate, the time amount allowed (as an extension of time) was a fixed time amount, because the time amount granted (in terms of an extension of time claim by the respondent) was not disputed by the respondent and therefore for the rest of the time that exceeded the Time for Completion the appellant was allowed to deduct liquidated damages.

¹⁹⁴ Hoyle (note 31) 19.

¹⁹⁵ See also Chap 4 for a discussion of delay, disruption and acceleration as time related issues.

¹⁹⁶ To be distinguished from “delay damages” discussed in para 6.4.1.1 here above. According to Davison (note 15) 149 one of the most common claims in respect of construction contracts are

Any claim of the Contractor will have to adhere to the clause 20.1 claim procedures as to time and specifically claim procedures as to time with respect to notices, otherwise the Contractor may be “time barred” from proceeding with a claim.

But for the claim procedural obligations as to time that should be adhered to, the Contractor will also have to adhere to the procedural aspects with respect to the substantiation of a claim (i.e. substantiation of the claim in the notice to the claim as well as in the claim itself).¹⁹⁸

6.4.1.4 “Time bar” issues within the context of the Contractor’s claim procedural obligations as to time

It is a “condition precedent” in terms of clause 20.1 that a Contractor adheres to the stipulated notice period before such a Contractor can lodge a claim. This implies that, in the instance that the Contractor does not adhere to the “condition

claims for additional payment as a result of delays to the contract works resulting in a delay to the contract completion date. See also para 4.3.1.4.2 where compensable delays are discussed.

¹⁹⁷ See also the discussion on delay, disruption and acceleration issues within the context of the obligations of the Contractor as to time in Chap 4.

¹⁹⁸ Such substantiation or lack of substantiation in a claim can make all the difference in whether one succeeds with a claim or not. In the elaborate *Motherwell Bridge Construction (t/a Motherwell Bridge Storage Tanks)* case (note 159), (in which case the parties made use of a contract that was based on the Yellow Book), it was held by HH Judge Toulmin at para 745-50 that the disruption claim of the Subcontractor (MBST) against the Contractor (Micafil) fails because as is stated by HH Judge Toulmin “The claim is in the nature of a vague sweeping up claim which is not based on credible evidence.” Substantiation is especially relevant with respect to disruption claims and for such disruption claims, according to Hackett (note 158) 81, would need site labour records, i.e. names of each operative, what time they presented themselves for work each day and at what time they individually left site and these labour records should also include weekend site labour records.

precedent” (i.e. give notice within the stipulated period), the Contractor will forfeit its right to claim.¹⁹⁹ In other words he is effectively “time barred” from proceeding further with the claim,²⁰⁰ because he did not adhere to his claim procedural obligations.

¹⁹⁹ R Knowles (*150 Contractual Problems and their solutions* (2005) 164) formulates the effect of such a “condition precedent” as follows: “Where the contract states that a notice is a condition precedent then a lack of notice will be fatal.” See also Reilly and Tweeddale (note 79) 189 stating with reference to clause 20.1 of the FIDIC contracts that “...if the contractor fails to give notice of a claim within 28 days of when it became aware, or ought to have been aware, of the event giving rise to the claim the employer is discharged from all liability. This now means that the contractor must act timeously.” For an example of a case where it was held that in certain contracts the giving of a notice can even be a “condition precedent” for the deduction of delay damages see the *Finnegan v Community Housing Association* (1996) 77 BLR 22 case at 25 para B. See also the *Humber Oils Terminal v Hersent Offshore* (1981) 20 BLR 22 case, in which case it was held by Goff J at 28 that in the instance that a contractual clause requires a Contractor encountering unforeseen physical conditions to give a notice specifying the extent of the delay to be suffered, such a notice will deem not to have been given if such specification is not included in the notice. See also the *BWP (Architectural) v Beaver* (1988) 42 BLR 86 case, in which case it was held at 94 that a Contractor could not set off an amount due to a Subcontractor, because the Contractor gave the notice too late (the timing of the notice being a condition precedent) and also did not quantify (thus substantiate) the claim amount in detail, as was required by the specific clause of the contract between the parties. See also the *Steria Ltd* case (note 134), in which case it was stated that a time period mentioned could be interpreted to be a condition precedent even though it is not specifically stated as such that one will be “time barred” should one not give a notice within a certain time. See however the *London Borough of Merton* case (note 70), in which case it was held at 91 by Vinelott J that in the specific contract the giving of a notice was not a condition precedent to the claiming for an extension of time for a delay but that the lack of giving such a notice would imply a breach on the part of the Contractor. (Possibly the fact that no “time bar” aspect was formulated as part of the clause in the contract caused such a giving of notice not to be interpreted as a condition precedent).

²⁰⁰ In the *Enviroserv Waste Management* case (note 56) Jones J overruled the decision of the South Eastern Cape Local Division of the High Court. (In the South Eastern Cape Local Division of the High Court it was held that the giving of a notice in a specific contract was a condition precedent for claiming additional payment for additional work where adverse physical conditions were encountered, and that because no notice was given the Contractor was not entitled to the additional

See however the interesting *Barkhuizen v Napier*²⁰¹ South African Constitutional Court case, in which case the court had to address the issue whether a “time bar” in an insurance contract contravened section 34 of the Constitution (“...anyone has the right to have a dispute ...decided in a fair public hearing before a court.”) and was thus contrary to public policy. The court however (by a majority) held at 343 para 66-67 that the 90 day time limit (within which a notice should be given in terms of the contract) was not manifestly unreasonable and the “time barring” itself was thus not contrary to public policy. The court also held that there was no evidence brought before the court that showed that the contract was not freely concluded between the parties. Thus in some countries (for instance South Africa) the principle of freedom to contract could in some instances be limited by the Constitution.

The second paragraph of clause 20.1 of the Yellow Book [*Commencement of Work*] reads as follows:

“If the Contractor fails to give notice of a claim within such period of 28 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Employer shall be discharged from all liability in connection with the claim...”(own emphasis)

payment). Jones J held at 12-13 para 15-16 that such a notice has in fact been given and left open the question whether the specific notice as required in the contract was to be interpreted as a condition precedent. See also the *Motherwell Bridge Construction (t/a Motherwell Bridge Storage Tanks)* case (note 159), in which case it was held in his judgment by HH Judge Toulmin at para 569 that although the Contractor argued that the Subcontractor was “barred” from claiming an extension of time because it did not adhere to the FIDIC claim procedures, HH Judge Toulmin accepted the argument of the Subcontractor that the procedural time limits were not clearly incorporated into the contract and that the time limits in the specific contract did not herefore amount to a condition precedent. See also Hoyle (note 31) at 13 confirming with respect to the FIDIC contracts that “...failure to come within these notice provisions operates as a bar to the EOT claim.”

²⁰¹ 2007 (5) SA 323 (CC).

This clause 20.1 paragraph 2 is a condition precedent²⁰² for the Contractor to claim an extension of time and/or additional payment.²⁰³

6.4.2 Global claim” issues within the context of the Contractor’s claim procedural obligations as to time

“Global claims” or “rolled up” claims implies “...a claim for an extension of time and for the recovery of loss and expense which does not precisely detail the period of delay and the amount claimed in respect of each claim matter causing delay (i.e. a failure to link cause and effect)...”²⁰⁴

²⁰² Glover (note 4) 7; See also the *Edward L Bateman Ltd v C A Brand Projects (Pty) Ltd* 1995 (4) SA 128 case, in which case De Villiers J emphasizes at 139 para F-H that a time prerequisite that has to be adhered to before an Employer can enforce a claim, can be deemed a “condition precedent” in the sense that if the “condition precedent” has not been adhered to by the Employer, the Contractor cannot be held liable and the claim cannot be enforced. De Villiers J referred in his decision to the *Resisto Diary (Pty) Ltd v Auto Protection Insurance Co Ltd* 1963 (1) SA 632 (A) case, in which case a distinction was drawn between a “condition precedent” such as the procedural duty to give a notice within a certain time before being entitled to claim and a “condition precedent” in the sense of a “suspensive condition” which is a “condition proper.” See also Knowles (note 199) 160-64 for a detailed discussion on the procedural prerequisites of notices.

²⁰³ BK Clayton (‘Can a contractor recover when time barred?’ (2005) 22 *ICLR* 341-78 at 341) describes the financial consequences of a “time bar” as follows: “The financial ramifications of being time-barred – such as being unable to claim for additional work or an increased exposure to liquidated damages – can be very severe for the contractor.”

²⁰⁴ According to Knowles (note 199) 60. See also the *John Holland v Kvaerner RJ Brown* (1996) 82 BLR 81 case, in which case it was held by Byrne J at 91 that with respect to the “global claim” the plaintiff failed to demonstrate the causal nexus between the alleged breaches and the damages suffered, as well as the *Bernhard's v Stockley Park* (1997) 82 BLR 39 case, in which case it was held by HH Judge Lloyd, with respect to a “global claim” for extensions of time and additional payment caused by certain events, at 77 gave leave for the plaintiff to amend its statement of claim by providing more particulars to substantiate the claim by providing detail of the events that lie on the critical path and how the costs were caused by such events.

The problem with “global claims” is thus the fact that cause and effect are not always substantiated, and thus “global claims” are in that respect to be viewed in the Yellow Book within the context of the procedural obligation of the Contractor to substantiate the claim.

This requirement of substantiation with respect to “global claims” is also emphasized in The Society of Construction Law Delay and Disruption Protocol 2002 document, which document states the following:²⁰⁵

- “1.14.1 The not uncommon practice of contractors making composite or global claims without substantiating cause and effect is discouraged by the Protocol and rarely accepted by the courts.
- 1.14.2 If the Contractor has made and maintained accurate and complete records, the Contractor should be able to establish the causal link between the Employer Risk Event and the resultant loss and/or expense suffered, without the need to make a global claim.
- 1.14.2 In what should only be rare cases where the financial consequences of the accurate Apportionment of the compensation claimed cannot be made between the several causative effects, then in this rare situation it is acceptable to quantify individually those items of the claim which can be dealt with in isolation and claim compensation for the remainder as a composite whole.
- 1.14.3 The Contractor will nevertheless need to set out the details of the Employer Risk events relied on and the compensation claimed with sufficient particularity so that the employer knows the case that is being made against it.”

Although it would seem that courts would not in principle reject most “global claims,”²⁰⁶ the view is held in The Society of Construction Law Delay and

²⁰⁵ Available at http://www.eotprotocol.com/documents/SCL_Delay_Protocol_Reprint.pdf (As referred to and paraphrased by Knowles (note 199) 60).

Disruption Protocol 2002 document that the use of “global claims” could still be valid, but only as a last resort and in very particular circumstances.²⁰⁷ Therefore, from the procedural viewpoint of the Yellow Book, such “global claims” will have to be substantiated with particulars, as far as possible.

6.4.3 Issues with respect to supporting particulars, records and the critical path method in the context of the Contractor’s claim procedural obligation to specify and substantiate his claim.²⁰⁸

These issues (with respect to supporting particulars, records and the critical path method) will be discussed as a group of issues, separately from the previous claim procedural issues, because these issues are in some way to be understood within the context of the Contractor’s obligation to substantiate a claim, while the previous issues discussed were issues that were discussed within the context of the Contractor’s claim procedural obligation as to time.

6.4.3.1 Notices and supporting particulars in the context of the Contractor’s claim procedural obligation to specify and substantiate his claim

²⁰⁶ According to Knowles (note 199) 66. See the *Laing Management (Scotland) Ltd v John Doyle Construction Ltd* (2004) BLR 295 case, in which case it was held by Lord MacLean at 300 para 10 that for a “global claim” to succeed, the Contractor must in principle aver and prove three matters: “first, the existence of one or more events for which the employer is responsible; secondly, the existence of loss and expense suffered by the contractor; and, thirdly, a causal link between the events and the loss and expense.”

²⁰⁷ (note 205) at 26.

²⁰⁸ See also the *Motherwell Bridge Construction (t/a Motherwell Bridge Storage Tanks* case (note 159) at para 555, 556, in which case the relevance of the substantiation of disruption claims is illustrated by the fact that a disruption claim by the claimant which was substantiated was allowed.

instruct the Contractor to keep further contemporary records. The Contractor shall permit the Engineer to inspect all these records, and shall (if instructed) submit copies to the Engineer.

Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim...the Contractor shall send to the Engineer a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed....”

The availability of contemporary records²¹³ mentioned in clause 20.1 paragraph 4 can be relevant in the “substantiation of the Contractor’s claims,”²¹⁴ but also enables the Engineer to make sure that the records²¹⁵ verify the claim rights of the Contractor.²¹⁶ Without such contemporary records to back the claim the claim will in all probability fail.²¹⁷

²¹³ Pickavance (note 44) 458 describes the relevance of contemporaneous records as follows: “Records documenting events while they occur or shortly afterwards are more likely to be accurate than those recalling events some time in the past and relying on the memory of the recorder.” See also the *Att-Gen* case (note 180) case in which case Sanders J stated at 284 para 24, with respect to contemporaneous records as formulated in the FIDIC contracts, that “...the requirement that a record be contemporary is an important one, and it would in my opinion be exceptional if any record could be regarded as contemporary if made more than a few weeks after the event it records.”

²¹⁴ Note that in terms of the substantiation of claims the aspect of “causality” should not be forgotten. See Xavier (note 180) at 173 emphasising the fact that many claims would require the element of causation to be proved. See Carnell (note 161) 131 also arguing the importance of making the connection between cause and effect in claims.

²¹⁵ Note that these records should be available from the time that the notice is given.

²¹⁶ Examples of such records or evidence, according to Hackett (note 158) 54, 55 would be “Labour and plant records, dated photographs, manufacturer’s or suppliers’ certificates (eg. Proof of stress grading or structural timbers, fire door certification and glazing), handover certificates

even case law supporting the assertion that without a critical path method analysis proving that a delay was in fact critical²²¹ the courts cannot and will not allow critical path delay costs to be considered.²²²

6.5 Schedule of claim related contractual issues in the context of the Contractor's claim procedural obligations

The schedule below summarises and systematizes the claim related contractual issues in the context of the Contractor's claim procedural obligations, as discussed above. Case law that is relevant to a specific risk related contractual issue is also included in the schedule.

²²⁰ The importance of revised or updated programmes is formulated by P Cohan "Common Law 'Time at Large' arguments in a Civil Law contract" (2007) 23(8) *Const. L.J.* 592-605 at 592 as follows: "Whilst, under most forms of contract, the failure to submit updated programmes is not fatal to the contractor's rights to claim extensions of time... it can be prejudicial to the contractor's position. This is because: (a) it creates inevitable disputes about what baseline programme should be used for assessing the delays; and (b) what the as-built state of the works was when the delay events occurred." See also Hackett (note 158) 78 stressing that critical path method programmes are not infallible, because the software can be faulty and can easily be manipulated and that each programme used in a specific construction contract should therefore be "interrogated" to monitor whether the respective programme accurately reflects what actually happened on Site.

²²¹ In the *Motherwell Bridge Construction (t/a Motherwell Bridge Storage Tanks)* case (note 159) at para 585 it is mentioned that the Contractor (the defendant) disputed the fact that the delays caused by the Subcontractor (the claimant) were critical delays.

²²² According to Wickwire and Ockman (note 219) at 13 referring to the United States case *Hoffman Construction Co. v United States* 40 Fed. Cl, 184 (Fed. Cl. 1998). See however Carnell (note 161) 131 arguing that "Provided that the claimant makes the connection between cause and effect, the method adopted will not be important."

Claim procedural related contractual issue	Contractor's obligations	The Yellow Book Clauses	Relevant Construction Case Law
<u>Delay Damages issues</u>	Procedural obligation to claim in accordance with the clause 20.1 claim procedures (the Contractor's claim procedural obligations as to time)	Clause 20.1	<i>Collins Submarine Pipelines Africa (Pty) Ltd</i> (note 187); <i>Motherwell Bridge Construction (t/a Motherwell Bridge Storage Tanks)</i> (note 159)
<u>Extension of Time issues</u>	Procedural obligation to claim in accordance with the clause 20.1 claim procedures (the Contractor's claim procedural obligations as to time)	Clause 20.1	<i>Motherwell Bridge Construction (t/a Motherwell Bridge Storage Tanks)</i> (note 159)
<u>Delay costs, disruption costs and acceleration costs issues</u>	Procedural obligation to claim in accordance with the clause 20.1 claim procedures (the Contractor's claim procedural obligations as to time)		<i>Motherwell Bridge Construction (t/a Motherwell Bridge Storage Tanks)</i> (note 159)
<u>"Time bar" issue (condition precedent)</u>	Procedural obligation to claim in accordance with the clause 20.1 claim	Clause 20.1	<i>Enviroserv Waste Management</i> (note 56); <i>Motherwell</i>

	procedures (the Contractor's claim procedural obligations as to time)		<i>Bridge Construction (t/a Motherwell Bridge Storage Tanks)</i> (note 159); <i>Barkhuizen v Napier</i> (note 201)
<u>Global Claim issues</u>	Procedural obligation to claim in accordance with the clause 20.1 claim procedures (the Contractor's claim procedural obligations as to time)	Clause 20.1	<i>Laing Management (Scotland) Ltd</i> (note 206)
<u>Supporting particulars, records and the making use of the critical path method issues</u>	Procedural obligation to claim in accordance with the clause 20.1 claim procedures (the Contractor's claim procedural obligation to specify and substantiate its claim)	Clause 20.1	<i>Motherwell Bridge Construction (t/a Motherwell Bridge Storage Tanks)</i> (note 159)

In the analysis of the claim procedural related contractual issues discussed and the summarized schedule of these claim related contractual issues here above the relevance of discussing these issues within the context of the claim procedural obligations of the Contractor (claim procedural obligation as to time and claim procedural obligation to specify and substantiate its claim) was shown.

CHAPTER 7

Claim related (“Time at large” and “time bar”) issues in the context of the obligations of the Employer

7.1. The general obligation of the Employer

It was mentioned that the Employer has a general obligation towards the Contractor to co-operate with and not to prevent the Contractor from completing the Works.²²³

This obligation of the Employer to co-operate with and not to prevent the Contractor from completing the Works should however also be understood within the context of the obligation of the Contractor to claim in accordance with a specific procedure,²²⁴ the reason being that claim related contractual issues such as “time at large” issues and “time bar” issues (which issues are directly or indirectly linked with the claim procedural obligations of the Contractor) may become relevant once the Employer prevents the Contractor from completing the Works.

²²³ As already extensively discussed in Chap 3.

²²⁴ It is important to note there is a difference of opinion on whether the procedural obligations of the Contractor are to be interpreted as obligations in the sense that they can be described as a breach of contract should they not be adhered to, or that they should rather be viewed as conditions precedent in the sense that the Contractor will lose out on any entitlement he would have had if he did not adhere to these procedural obligations. See the *City Inn Ltd v Shepherd Construction* (2003) BLR 468 case, in which case it was held at 474 para 25 that the failing of action on the part of the Contractor in terms of the procedural obligations should not be interpreted as a breach of contract. See however the *London Borough of Merton* case (note 70) as described in note 197 for support of the view that lack of adherence to the procedural obligations should be interpreted as a breach of contract.

7.2 “Time at large” issues in the context of the obligation of the Employer not to prevent the Contractor from completing the Works.

As a general principle it can be argued that the Employer loses his right to delay damages if he commits an act of prevention, because otherwise the Employer would be entitled to benefit from his own wrong.²²⁵ One can also argue that “time is set at large” by the Employer’s act of prevention.²²⁶

However, in order to bypass this predicament that delay damages clauses will be invalidated by an act of prevention by the Employer, extension of time clauses, ironically, provide the remedy, in order that delay damages clauses can stay alive and in that respect extension of time clauses are there primarily for the benefit of the Employer and not of the Contractor.²²⁷

It is important to note however that it is not sufficient to insert an extension of time clause in order to ensure that the delay damages clause remains valid in the

²²⁵ NA Brown ‘Liquidated Damages: is One Man’s Floor Another Man’s Ceiling?’ (2001) 17 *Const. L.J.* 302-307 at 306. See also B Eggleston (*Liquidated Damages and Extensions of Time in Construction Contracts* (1997) 81) arguing in the same vein: “...whether or not the principle of prevention derives from a rule of law or from implied terms,...there is no doubt of its effect on an employer’s right to recover liquidated damages. The principle proves perhaps the most effective and most used defence against liquidated damages.” See also Lord Fraser confirming this principle in the *Bilton* case (note 187) at 13 as follows: “...the employer is not entitled to liquidated damages if by his acts or omissions he has prevented the main contractor from completing his work by completion date.”

²²⁶ According to Eggleston (note 225) 83 “In practical and financial terms for the parties it amounts to much the same thing – whether prevention has invalidated liquidated damages or whether prevention has put time at large.”

²²⁷ According to Eggleston (note 225) 83 “...extension of time provisions are included in construction contracts with the primary purpose of keeping liquidated damages clauses alive in the event of prevention.”

event of an act of prevention by the Employer, but the clause should also specifically make provision for the possibility to claim an extension of time in the event that a delay is caused by the Employer, otherwise an extension of time would not be claimable by the Contractor for the Employer's delays and the delay damages clause will still be invalidated.²²⁸

7.3 “Time bar” (condition precedent) issues in the context of the obligation of the Employer not to prevent the Contractor from completing the Works within the Time for Completion

Within the context of the “prevention principle” it has been argued in a few court decisions that even in the event that the Contractor should fail in his procedural obligations by not giving the required notice, the Contractor would in principle still be able to claim an extension of time if the Employer by acts of prevention delayed completion of the Works (with the Employer's prevention causing “time to be set at large” and the Employer consequently losing out some of his delay damages).²²⁹

²²⁸ See the *Peak Construction (Liverpool) Ltd v McKinney Foundations Ltd* (1970) 1 BLR 111 case, in which case it was held by Salmon LJ at 121 that in the event that an extension of time clause does not provide for the fact that an extension can be claimed in the instance that delays are caused by the Employer, the Employer will not be able to deduct liquidated damages, in the event that the Employer delays the Contractor.

²²⁹ See Carnell (note 161) 94 confirming this viewpoint. See also G Smith ('The “prevention principle” and conditions precedent: Recent Australian developments' [2002] 19 *ICLR* 397-404 at 403) referring to the *Gaymark Investments Pty (Ltd) v Walter Construction Group Ltd* [1999] NTSC 143 decision and the *Abigroup Contractors Pty Ltd v Peninsula Balmain Pty Ltd* [2001] NSWSC 752 decision, and arguing that “In the light of the decisions in *Gaymark* and *Abigroup*, the condition precedent to an extension of time in subclause 20.1 of the new suite of FIDIC forms...if governed by Australian law, could result in the employer being prohibited from recovering liquidated damages in circumstances where the employer delays the contractor and the contractor fails to comply with clause 20.1.” In the mentioned *Gaymark Investments Pty (Ltd)* decision it was held by Bailey J at para 62 that it would be absurd to argue that delay damages can

It seems however that the “prevention principle” has been relativised to the extent that it has been implied in the landmark *Multiplex Constructions (UK) Ltd v Honeywell Control Systems Ltd (No 2)* case²³⁰ (at paragraphs 66 and 104) that in the event that it is stated in a clause that one should adhere to the notice procedures in a claim and it is further stated that in the event that the notice procedures are not adhered to that the Contractor will lose out on the claim – the Contractor will (if he does not adhere to the notice procedures) in effect be “time barred” from claiming an extension of time and/or additional payment and “time will not be set at large” in terms of the “prevention principle.”²³¹

Still, within the year of 2008 the “prevention principle” was even further relativised by it being held in the *Steria Ltd* case²³² (at paragraph 91) that the fact

still be recovered after the Employer was in error by preventing the Contractor to complete on time.

²³⁰ [2007] EWHC 447. In the same *Multiplex Constructions (UK) Ltd* case it was confirmed by Jackson J at par 56 that: 1. Actions by the employer which are perfectly legitimate under a construction contract may still be characterised as prevention, if those actions cause delay beyond the contractual completion date; 2. Acts of prevention by an employer do not set time at large, if the contract provides for extension of time in respect of those events. 3. In so far as the extension of time clause is ambiguous, it should be construed in favour of the contractor.

²³¹ See also the *City Inn Ltd* case (note 224), in which case it was even argued by one of the parties at 472 that a clause that bars a Contractor from an extension of time and still allows delay damages to be deducted is a penalty clause. Clerk LJ at 474 however rejected this line of argument in the mentioned case and held that a Contractor that did not act in accordance with the procedural requirements did not act in accordance with the condition precedent of the case and therefore lost out on the extensions of time and that the validity of the delay damages clause was not in any way affected.

²³² (note 134). In this *Steria Ltd* case (in which case the conclusions reached in the *Multiplex Constructions (UK) Ltd* case (note 230) was confirmed) HH Judge Stephen Davies stated in his judgment at par 91 that “I consider that a notification requirement may, and in this case does, operate as a condition precedent even though it does not contain an express warning as to the consequences of non-compliance.” This case stands in direct contrast with the conclusion reached with respect to what a condition precedent entails in the *London Borough of Merton* case (note 70)

that a notice should be given within a certain time limit could still act as a condition precedent even though it was not specifically stated that the Contractor will lose out on his claim (thus “time barred”) if he does not adhere to the time limits within which he should give such a notice.

7.4 Time at large issues and the Yellow Book

Although “time at large” is not explicitly mentioned in the Yellow Book it is a well known contractual issue that is specifically applied in construction contracts.²³³

In the Yellow Book - the clause 8.4 extension of time clause - does give the Contractor the opportunity to claim an extension of time for, inter alia, “*any delay, impediment or prevention caused by or attributable to the Employer, the Employer’s Personnel, or the Employer’s other contractors on the Site.*”

(also discussed in footnote 208). One possible problem with the viewpoint as formulated in the *Steria Ltd* case (note 134) is that it potentially opens the door for all time limits stated in contracts to be interpreted as conditions precedent (i.e. one is effectively “time barred” from claiming should one not adhere to the time limit) without it being necessary to state in the contract itself what the effect of non-adherence to procedural obligations will have on the claim (i.e. that a “time bar” on the claim itself will take effect).

²³³ D Atkinson (‘Time At Large’ (2007) at 1 Available at http://www.atkinson-law.com/cases/CasesArticles/Articles/Delay_and_Disruption_Time_at_Large.htm [Accessed on 25 April 2008])

argues four situations in which “Time is made ‘at large’:

1. No time or date is fixed by the terms of the contract by which performance must take place or be completed.
2. The time for performance has been fixed under the contract, but has ceased to apply either by agreement or by an act of prevention (which includes additional work) or breach of contract by the Employer with no corresponding entitlement to extension of time.
3. The Employer has waived the obligation to complete by the specified time or date.
4. The Employer has interfered in the certification process to prevent proper administration of the contract.” (own emphasis)

Because this clause 8.4 is drafted in very wide terms and, as mentioned, also specifically incorporates any acts of prevention by the Employer, it is highly unlikely that the clause would be interpreted as ambiguous by a court of law. It would thus follow that because such clause 8.4 extension of time clause exists, formulated in clear terms which include general as well as specific terms, and also because clause 8.4 also provides a remedy - to claim for an extension of time in accordance with the clause 20.1 procedures - that time will in most instances not be “set at large” in the Yellow Book (meaning that because of the “prevention principle” and the Contractor being unable to make use of the terms of the clause 8.4 clause to lodge a claim for an extension of time, that “time is set at large”), but for if both parties forget to insert a specific Time for Completion in the contract.²³⁴

This clause is thus beneficial to the Employer²³⁵ in the sense that because the Contractor is entitled to claim for an extension of time in terms of clause 8.4, time will not easily “become at large” because the Contractor will still be obliged to complete by a specified date (the Time for Completion as extended by extension of time claims approved by the Engineer).

²³⁴ See also the South African case – *Kelly and Hingle’s Trustees v Union Government* 1928 TPD 272, in which case it was stated by Feetham J in the judgment at 284 that where “...any such delay had been occasioned the provision regarding liquidated damages became wholly inoperative, inasmuch as the building owner had by his own act prevented the completion of the building within the time provided in the contract.” See however also the *Group Five Buildings Ltd* case (note 136) in which case Nienaber JA at 650-51 para I, J, and A by way of obiter statements hinted that he is uncertain about the applicability of the “time at large” principle in South African law. See also Lane (note 19) 96 confirming that the application of the “time at large” principle in South African courts is currently uncertain. For further reference see also the article by Cohan (note 220) 592-605 for a detailed discussion on “time at large” issues.

²³⁵ According to Atkinson (note 233) at 2 “The extension of time clauses are for the benefit of the Employer. They keep alive the contractor’s obligation to complete by a specified date and preserve the Employer’s right to deduct liquidated damages for breach of that obligation.”

7.5 Schedule of claim related contractual issues in the context of the Employer's obligations

The schedule below summarises and systematizes the claim related contractual issues in the context of the Employer's obligations, as discussed above. Case law that is relevant to a specific risk related contractual issue is also included in the schedule.

Claim procedural related contractual issue	Employer's obligations	The Yellow Book Clauses	Relevant Construction Case Law
<u>"Time at large"</u> and <u>"time bar"</u> issues	General obligation to co-operate with and not to prevent the Contractor from completing the Works	Clauses 8.4, 20.1	<i>Gaymark Investments Pty (Ltd)</i> (note 229); <i>Multiplex Constructions (UK) Ltd</i> (note 230); <i>Steria Ltd</i> (note 134); <i>Balfour Beatty</i> (note 193); <i>Kelly and Hingle's Trustees</i> (note 234); <i>Group Five Buildings Ltd</i> (note 136)

In the analysis of the claim procedural related contractual issues discussed and the summarized schedule of these claim related contractual issues here above the relevance of discussing these issues within the context of the general obligation of

the Employer (to co-operate with and not to prevent the Contractor from carrying out and completing the Works) was shown.

With respect to the case law listed in the above schedule, although all the mentioned decisions deal with “time at large issues,” and “time bar” issues, it was mentioned that some of the decisions stand in direct opposition to one another.

Two of the landmark decisions that stand in direct opposition to each other are probably the *Gaymark Investments Pty (Ltd)* decision and the *Multiplex Constructions (UK) Ltd* decision,²³⁶ as discussed. While it was argued in the *Gaymark Investments Pty* decision²³⁷ that based on the “prevention principle” that it would be absurd to allow an Employer to benefit from his own error, it was argued in the *Multiplex Constructions (UK) Ltd* decision that in the instance that an extension of time clause does exist then the “prevention principle” would not be applicable anymore. It was further implied (in the same *Multiplex Constructions (UK) Ltd* decision) that in the instance that a clause exists that refers to a “time bar” provision in terms of a claim notice - that one should give adherence to “the time” bar provision, otherwise the freedom of contract principle would be undermined.²³⁸

²³⁶ Note 229 and note 230 respectively. It was mentioned that the *Multiplex Constructions (UK) Ltd* decision (note 230) was followed by the *Steria Ltd* decision (note 134).

²³⁷ It was argued in this decision that the “prevention principle” takes precedence over the adherence or non-adherence of any “time bar” clauses in the contract.

²³⁸ Note however that in Chapter 6 it was also argued that the freedom of contract principle can in its turn be limited by the Constitution (in the instance of South Africa) as was argued in the *Barkhuizen v Napier* decision (note 201).

CHAPTER 8

Conclusion

In this conclusion I will:

- discuss the relevance of interpreting the Yellow Book as a specialized contract with construction related contractual issues and obligations that are at stake;
- provide criticism on case law examples where the courts did not take construction related contractual issues into account;
- provide a short overview on the construction related contractual issues discussed within the context of the obligations of the Contractor and the Employer;
- discuss the interplay between the main obligations of the Contractor (to complete the Works within the Time for Completion and the claim procedural obligations) and the obligation of the Employer (to co-operate with and not to prevent the Contractor from completing the Works within the Time for Completion);
- discuss the interplay between the risk related, time related and claim related contractual issues; and
- close with a few recommendations

8.1 The relevance of interpreting the Yellow Book as a specialized contract with construction related contractual issues and construction related contractual obligations at stake (implying that these issues are based on law of contract and construction law principles)

It has been stated in the premises that the Yellow Book should be interpreted from not only a law of contract point of view but also from a construction law point of view and vice versa. Thus the discussion in the previous Chapters centered around the construction related contractual issues (risk, time and claim related) in the context of the main construction related contractual obligations of the Contractor and Employer, implying that specific construction related principles, as built upon general contractual principles, should be taken into account. The Yellow Book can thus be seen as a specialized contract precisely because of the fact that it is a contract that incorporates both law of contract principles as well as construction law principles.

It is interesting to note that some general contractual principles developed into construction law principles (or rather construction related contractual issues or obligations). An example of such a principle is the “prevention principle” which is a well known general contractual principle, but has developed to such an extent in construction contracts that the Employer’s obligation - not to prevent the Contractor from completing the Works within the Time for Completion - is probably known in construction law as the most important obligation of the Employer.²³⁹

Out of the “prevention principle” (which is in effect a construction related contractual obligation) developed such a construction specific issue such as the

²³⁹ See Wallace (note 10) 96 discussing the importance of the “co-operation and prevention principle” in construction contracts and the fact that because of the specific terms of a construction contract “unusual practical importance” is given to the implied term that the Employer (Owner) is obliged to co-operate with and not to prevent the Contractor from completing the Works.

“time at large” issue, with the implication that the Employer loses its right to claim delay damages should “time be at large.”²⁴⁰

Another example of a contractual issue that is associated specifically with construction contracts (and again arguably developed out of the “time at large” issue)²⁴¹ is the issue of extensions of time that are claimed for delays caused by the Employer. Although it makes sense contractually that a specific date such as the Time for Completion is extended, because of delays caused, it is not in every other contract (that is not construction of nature) that one finds a clause that enables the one party to claim extensions of time in order to extend (postpone) the Time for Completion (in order to put a halt on the deduction of delay damages). This issue has developed to such an extent in construction contracts that intricate issues such as whether the extension of time is to be calculated on a “net” or “gross” basis have been argued in case law.²⁴²

Again, another issue that holds hands with the contractual issues of delays and extensions of time, is the issue of the critical path method (or the making use of a

²⁴⁰ See Chap 7 for a discussion of the “time at large” issue.

²⁴¹ See Chap 7.

²⁴² An example of a construction specific issue that does not hold hands with the general principles of law of contract but rather holds hands with the general principles of law of tort (or law of delict) is the issue of concurrent critical delays and damages suffered. Just as general law of tort focuses on the aspect of apportionment when concurrency of liability is discussed, in the same way does the aspect of apportionment of damages in construction law focus on the principle of apportionment. However, with respect to the occurrence of concurrent critical delays and the claiming of extension of time, some of the most recent authorities and case law do not support the principle of apportionment, but remain construction specific in their conclusion reached by holding that regardless of concurrent critical delays caused by a Contractor and Employer, the Contractor will be entitled to the whole period with respect to the extension of time claimed (See paragraph 4.3.1.4.4 and the discussion with respect to concurrent delays).

critical path method analysis by way of software schedules or bar charts with respect to the programme). The whole issue of the critical path method (i.e. that one cannot claim an extension of time for a delay if such a delay is not a critical delay (and thus on the critical path) is construction specific and is not an issue that developed directly out of general law of contract principles, but rather directly out of construction law principles, which in its turn developed out of law of contract principles.²⁴³ Thus in many construction contracts, although the issue of the critical path method is not mentioned at all, it is assumed that the programme used by the Contractor will indicate the critical path.²⁴⁴

Thus from these examples given we can see that while the “prevention principle” (or the main construction related contractual obligation of the Employer not to prevent the Contractor from completing the Works within the Time for Completion) has developed directly out of law of contract principles, some construction related contractual issues developed more directly out of construction law principles and more indirectly out of law of contract principles (such as the “time at large” issue and the critical path method issue).

²⁴³ The aspect of criticality is linked to the critical path method (CPM) was developed as a project management technique by M.R. Walker of E.I. Du Pont de Nemours & Co and J.E. Kelly of Remington Rand in 1957 as a method to keep control of time activities when delays (such as shut-downs) occur in construction projects (according to the article entitled ‘PERT/CPM Project Scheduling & Management’ (undated article, no author). Available at <http://www.interventions.org/pertcpm.html> [Accessed 1 August 2008]).

²⁴⁴ The making use of the critical path method has developed to such an expertise field that it is sometimes criticized for the fact that it is difficult to distinguish the legal aspects from the software aspects.

8.2 Case law interpretation of law of contract principles and/or construction law principles

Although construction related contractual issues and obligations have directly and indirectly developed out of general law of contract principles (as argued), it was mentioned that certain case law judgments, that were referred to throughout the discussion in the previous Chapters, in some instances tended to overemphasise general contractual principles, without taking law of construction principles into account and in other instances tended to overemphasise construction law principles without taking general law of contract principles into account.

Four examples of this type of discrepancy found in case law (already referred to and to some extent discussed in the footnotes) are the following: The *Yorkshire Water Authority* case, the *Dillingham Const.* case, the *A. E. Farr, Ltd* case and the *Steria Ltd* case.²⁴⁵

The decision in the *Yorkshire Water Authority* case²⁴⁶ can arguably be criticized as follows:

From a law of contract point of view:

In this case it was held that a tender and a written acceptance letter of the tender was “a provisional document and it contemplates no assumption of obligations by either party to perform any of the works until a formal contract has been concluded.”²⁴⁷

²⁴⁵ The *Yorkshire Water Authority* case (note 219), the *Dillingham Const.* case (note 55), the *A. E. Farr, Ltd* case (note 70) and the *Steria Ltd* case (note 134).

²⁴⁶ The *Yorkshire Water Authority* case (note 219).

²⁴⁷ The *Yorkshire Water Authority* case (note 219) at 120.

The legal question should possibly not have been a question of delict (tort), as was argued in the case (thus whether the Employer acted negligently by not disclosing the physical conditions he was aware of),²⁵¹ but rather a question of contract and specifically a question whether the Employer in terms of the “prevention principle” should be allowed to benefit from his own wrong. The Employer, by not disclosing the physical condition that he was aware of to the Contractor, not only benefited from this wrong (by the fact that the Contractor tendered lower than he would if he had known of the physical conditions), but also prevented the Contractor from tendering in accordance with the Site conditions information and in effect prevented the Contractor to complete the Works within the Time for Completion.

Thus the “prevention principle” (a general law of contract principle that arguably developed into one of the most important construction law principles) should have been taken into account in the specific case.

The decision in the *A. E. Farr, Ltd* case²⁵² can arguably be criticized for the following reasons:

From a law of contract point of view:

In this case it was held that the “co-operation and prevention principle” is not applicable, because the ordinary meaning of the words “any cause whatsoever” includes damages caused to the works by the Owner (Employer) and such words cannot be made undone by the “prevention principle.”

The words “any cause whatsoever” in the relevant contract should possibly not have been interpreted so wide as to include acts of prevention by the Employer, because then it may hypothetically mean that regardless of any damage caused

²⁵¹ The *Dillingham Const.* case (note 55) at 112.

²⁵² See note 70.

The words “any cause whatsoever” in the relevant contract should possibly not have been interpreted so wide as to include acts of prevention by the Employer, because then it may hypothetically mean that regardless of any damage caused (even wilfully) on a daily basis by the Employer to the works the Contractor will have to bear the responsibility (which is manifestly absurd). Therefore, the rule of interpretation that a too literal interpretation can lead to a manifest absurdity²⁵³ should possibly have been taken into account of from a law of contract point of view.

The decision in the *Steria Ltd* case²⁵⁴ can arguably be criticized for the following reasons:

From a construction law point of view and a law of contract point of view:

One of the issues that was at stake in the *Steria Ltd* case was whether a time limit stipulated in a construction contract for a notice to be given was in fact a condition precedent or not. In this case it was found to be a condition precedent although there was no indication that one would be “time barred” should one not give such a notice in time.

Compare however the decision in the *London Borough of Merton* case²⁵⁵ in which case it was held that in the specific contract the giving of a notice was not a condition precedent to the claiming for an extension of time but that the lack of giving such a notice would imply a breach on the part of the Contractor.

²⁵³ See note 70.

²⁵⁴ See note 134. As also discussed in note 232.

²⁵⁵ See note 70. Also as discussed in note 199.

in the respective clause of being “time barred” or losing out on the claim should the Contractor not adhere to the provision, as is normally found with “time bar” provisions. The word “provided” means that this is a provision or a condition (i.e. implying that unless ‘this’ happens ‘that’ cannot happen or should not happen). However, in order to unambiguously (in law of contract terms and in construction law terms)²⁵⁶ interpret such a condition as a condition precedent it should in fact have been stated that you will be “time barred” from proceeding to the next step in the event that such a condition is breached. As stated by D Atkinson²⁵⁷ “For a notice to be a condition precedent, the clause must state the precise time within the notice is to be served and **must make plain by express language that unless the notice is served within the time, the party required to give notice will lose its right to an extension of time under the contract.**”(own emphasis)

To interpret a condition automatically as being a condition precedent (as was done in *Steria Ltd* case) could also have dire effects on the interpretation of clauses in construction contracts in general, because many time periods are stated as provisions (for instance in the Yellow Book the Contractor has 42 days to deliver a claim from the time of the claim event, and the Engineer has 42 days to respond to such a claim).²⁵⁸

The proper contractual remedy in such a case where a condition has been breached should rather be that a breach by the Contractor of a condition (for instance the condition to give notice within a specified time) should be taken into

²⁵⁶ “Time bars” is a well known concept in construction contracts.

²⁵⁷ ‘Administration of claims’ (2002) Nov *Construction Law Handbook* 4.1/1-4.1/74 at 4.1/41.

²⁵⁸ The implication of the *Steria Ltd* decision (note 134) is that a Contractor’s claim would be “time barred” if the 42 days are exceeded. The question remains whether the Engineer that does not respond to a claim within 42 days of receiving a claim would also be “time barred” to respond and any response from his side after 42 days would be deemed to be no response at all?

account by the Engineer when granting or refusing an extension of time,²⁵⁹ than to translate such a condition automatically into a condition precedent.

From the cases discussed above we can again conclude that construction contracts (with the inclusion of the Yellow Book) are specialized contracts, implying that both law of contract and construction law principles are combined in such contracts in a singular way (thus merging into “construction related contractual issues”).²⁶⁰

8.3 Construction related issues within the context of the obligations of the Contractor and the Employer

8.3.1 An overview of the aspects discussed

In the previous Chapters risk related, time related and claim related contractual issues were discussed within the context of, inter alia, the Contractor’s obligation to complete the Works (within the Time for Completion), the Employer’s obligation to co-operate with and not to prevent the Contractor from completing the Works (within the Time for Completion), and the claim procedural obligations of the Contractor.

²⁵⁹ Even HH Judge Stephen Davies in the *Steria Ltd* case (note 134) at 96 stated, with respect to the instances where it was uncertain whether a notification was to be interpreted as a condition precedent or not, as follows: “the principle which applies here is that if there is a genuine ambiguity as to whether or not a notification is a condition precedent, then the condition should not be construed as being a condition precedent, since such a provision operates for the benefit of only one party, ie the employer, and operates to deprive the other party (the contractor) of rights which he would otherwise enjoy under the contract.”

²⁶⁰ Thus the making use of the term “construction related contractual issues” throughout the discussion.

It was also argued that the Employer had the obligation to co-operate with and not to prevent the Contractor from completing the Works within the Time for Completion.

Lastly we discussed the procedural claim obligations of the Contractor in the event that he wanted to claim an extension of time or additional payment, and mentioned that the Employer did not have to claim an extension of time or additional payment, because by default the Employer was already entitled to delay damages in terms of clause 8.3.

Throughout the previous Chapters we also systematized and categorized the respective construction related contractual issues (risk related, time related and claim related) within the context of the respective construction related contractual obligations of the Contractor and the Employer.

8.3.2 The interplay between the main obligations of the Contractor (to complete the Works within the Time for Completion and the claim procedural obligations) and the obligation of the Employer (to co-operate with and not to prevent the Contractor from completing the Works within the Time for Completion).

One can argue, based on the discussions in the previous Chapters, that the main obligation of the Contractor (to complete the Works within the Time for Completion) and the main obligation of the Employer (to co-operate with and not to prevent the Contractor from completing the Works within the Time for Completion), have the same goal in mind, namely to assist the Contractor to complete the Works within the Time for Completion. Both parties will pay a price if they do not fulfil their respective basic obligations. While the Contractor will in all probability pay delay damages should he not complete the Works within the Time for Completion, the Employer could, depending on the contractual terms

and the court or arbitration's outcome,²⁶¹ lose out on his right to delay damages should he prevent the Contractor from completing the Works within the Time for Completion.

As mentioned,²⁶² one can also argue that the claim procedural obligations of the Contractor hold hands with the main obligation of the Contractor to complete the Works within the Time for Completion. The reason for that is that the main obligation of the Contractor (to complete the Works within the Time for Completion), is potentially influenced by the claim procedural obligations of the Contractor, because in the event that the Contractor does not adhere to his procedural obligations, he may fail to achieve an extended Time for Completion date (by way of an extension of time) either because he is "time barred" or because his claim is refused. This in effect means that he will not be able to adhere to his main obligation (to complete the Works within the Time for Completion).

Also, as mentioned,²⁶³ one can argue that the claim procedural obligations of the Contractor hold hands with the main obligation of the Employer (to co-operate with and not to prevent the Contractor from completing the Works within the Time for Completion). The reason for that (according to the most recent case law)²⁶⁴ is because, even though the Employer breached his main obligation, the Contractor's lack of adherence to the clause 20.1 procedural obligations may have

²⁶¹ The contradictory court decisions with respect to the validity of delay (liquidated) damages clauses, in the event that the Employer prevented the Contractor from completing the Works within the Time for Completion, and the relevance of "time bar" clauses have been discussed in Chap 7.

²⁶² See Chap 6, Chap 7 and Chap 1 note 12.

²⁶³ See Chap 7.

²⁶⁴ See the *Steria Ltd* decision (note 134).

the effect that the “prevention principle” will be relativised by the “time bar” provision, with the implication that the delay damages clause will stay intact.

8.3.3 The interplay between the risk related, time related and claim related contractual issues

Although risk related, time related and claim related issues were discussed as separate issues throughout the discussion it has been mentioned that these issues are interrelated and that they interplay upon one another.²⁶⁵

Not only do these issues interrelate but it is even possible to argue that all three issue types discussed (risk, time and claim related contractual issues) deal with the allocation of risk.²⁶⁶

The fact that risk related contractual issues deal with risk speaks for itself. Time and claim related issues and specifically the formulation of time and claim related issues also to an extent deal with the allocation of risk, because the way that the Contractor’s entitlements to an extension of time and/or additional payment (when delay, disruption or acceleration events occur) are contractually formulated will necessarily have an effect on the financial risk the parties will respectively have to carry.²⁶⁷

²⁶⁵ See Chap I and the discussing of claim and time related issues and risk.

²⁶⁶ See note 23, 27 and 29. See also Lane (note 19) at 93 discussing the effect that strict notice procedures as well as the formulation of delay remedies in contracts have on the allocation of risks in contracts.

²⁶⁷ It should also be noted that claim and time related issues interrelate to the extent that the time related issues (delay, disruption and acceleration issues) are enforced by the claim procedures as formulated in clause 20.1.

The claim procedure itself also arguably deals with the allocation of risk, because “time bars” potentially burden the risk load that the Contractor carries, while the absence of “time bars” will potentially burden the risk load that the Employer carries.

We have noted that all three issue types (risk, time and claim related) are prevalent in the Yellow Book and that they all interrelate on more than one level. A time related issue such as an extension of time is at the same also a claim related issue, while delay, disruption and acceleration issues which are all time related issues, are also at the same time claim related issues (discussed as delay costs, disruption costs and acceleration costs issues).

This interrelatedness of issues (discussed as risk, time or claim related) as found in the Yellow Book, to a certain extent highlights the relevance of discussing these specific issues in the context of the obligations of the Contractor and the Employer.

We can summarize the construction related contractual issues that we have discussed within the context of the main construction related contractual obligations of the Contractor and the Employer schematically as follows:

<p>The obligation of the Contractor to complete the Works (within the Time for Completion) and the procedural obligations of the Contractor with respect to claims</p>	<p>The obligation of the Employer “to co-operate and not to prevent” the Contractor from completing the Works (within the Time for Completion)</p>
<p><u>Risk Related Issues:</u> Carrying the risk load of the Works,</p>	<p><u>Risk Related Issues:</u> Obligation not to negatively influence</p>

design construction and materials and unforeseeable physical conditions ²⁶⁸ until the taking over of the Works (and at times even thereafter)	the risk load of the Contractor until the Time for Completion; Carrying the risk load from the taking over of the Works; Carrying the risk load of “Force Majeure” events
<u>Time Related Issues:</u> Delay issues, disruption issues and acceleration issues	<u>Time Related Issues:</u> Delay issues, disruption issues and acceleration issues
<u>Claim Related Issues:</u> Delay damages issues, extension of time issues, delay costs, disruption costs and acceleration costs issues, “time bar” issues, global claim issues, substantiation (supporting particulars, records and the critical path method) issues	<u>Claim Related Issues:</u> “Time at large” and “time bar” issues

8.4 Closing remarks and Recommendations

It is recommended that the fact that construction contracts are in fact specialized contracts should be emphasized in construction law and law of contract circles. Furthermore it should be emphasized that one of the implications of dealing with specialized contracts such as construction contracts, is that the issues discussed in terms of such contracts are construction related contractual issues that developed out of general principles of contract law.

²⁶⁸ Although the Contractor is entitled to claim in terms of clause 20.1 when encountering unforeseeable physical conditions, it has been argued in Chap 2 that the Contractor continues to carry the risk load with respect to unforeseen physical conditions until the Engineer decides otherwise by way of the making a Determination in favour of the Contractor with respect to the conditions encountered by the Contractor.

In other words when interpreting a construction contract such as the Yellow Book one will not only have to take general law of contract principles into account (because construction contracts are still contracts) but also construction specific related contractual principles (or construction related contractual issues), acknowledging that certain of these general law of contract principles have developed further, specifically within the context of the uniqueness of the construction field, and that many of these construction related contractual issues, as inbedded in contractual clauses, are to be found exclusively in construction contracts.

Also, when interpreting construction contracts and specifically the Yellow Book it is recommended that construction related contractual issues (risk, time and claim related) are discussed within the context of the main (construction related contractual) obligations of the Contractor and the Employer (also taking the Time for Completion and the date that the Taking-Over Certificate is issued into account) and also vice versa. The reason for that is because construction related contractual issues (risk, time and claim related) and the obligations of the Contractor and the Employer interplay to such an extent that it is difficult to analyse these issues without taking the obligations of the Contractor and the Employer into account, and also because it systematizes the issues and the obligations to the extent that each issue is discussed within the context of a certain obligation.

Lastly, it is recommended that the interplay and even inter-dependency of the discussed construction related contractual issues (risk, time and claim related) are more recognized and that in practice lawyers and academics come to realize that to formulate a claim related issue without taking cognizance of risk related issues and time related issues, to formulate a risk related issue without taking cognizance of time related issues and claim related issues or to formulate a time related issue without taking cognizance of risk related issues or claim related issues would limit one's understanding of the respective issues at hand.

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