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Dispute Resolution under the FIDIC and NEC Conditions: Paradox of Philosophies and Procedures?

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ABSTRACT

A careful reader of the philosophical underpinnings and the dispute resolution frameworks of the FIDIC and NEC Conditions of Contract will likely be baffled by the paradoxical relationship between the underpinning ethos of these forms and the approaches to dispute handling: the more traditional of the two sets of Conditions - the FIDIC forms - has more collaborative approaches to dispute resolution than the NEC Conditions which have collaboration as a central theme. This piece discusses this paradox. It sets out the theoretical contexts of these Conditions and examines how they shape dispute resolution expectations under the forms.

Key terms: Construction and Engineering contracts, Dispute resolution, International projects, Philosophical underpinnings

INTRODUCTION

Use of standard form contracts is customary practice in the construction industry. Sweet¹ provides several reasons for this; familiarity, efficiency and the availability of precedents on interpretation of relevant terms.² In the context of international construction, two sets of forms stand out,³ the International Federation of Consulting Engineers' (FIDIC)⁴ Conditions of

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¹ Sweet, J., "Standard Construction Contracts: Some advice to Construction Lawyers" (1988-1989) 40 South Carolina Law Review 823,824; Sweet, J., "Judging Contracts: Some Reflections on the Third International Construction Law Conference"(1994) ICLR 413-ff

² Sweet, J., "Standard Construction Contracts: Some advice to Construction Lawyers" (1988-1989) 40 South Carolina Law Review 823, 824. Cf. Kessler, F., "Contracts of Adhesion – Some thoughts about Freedom of Contract" (1943) 43 Columbia L R 629; Radin, M.J., *Boilerplate: The Fine Print, Varnishing Rights, and the Rule of Law*, (Princeton University Press, 2013).

³ There are other specialised forms of contract with international appeal. These include the Orgalime Conditions of contract; the Engineering Advancement Association of Japan (ENAA) model forms for international construction contracts (for the construction of Process Plants and Power plants); International Chamber of Commerce (ICC) Model Turnkey Contract and the Institution of Chemical Engineers (ICChemE) forms.

⁴ FIDIC is a federation of national association of consulting engineers established in 1913 with its headquarters in Switzerland and has a presence in about 70 countries worldwide.

Contract (the FIDIC forms)⁵ and the NEC⁶ Conditions of Contract (NEC forms)⁷ developed by the Institution of Civil Engineers (ICE). The FIDIC forms are used in most places around the world. They have received the endorsement of many Multilateral Development Banks (MDBs),⁸ which currently use various editions of the forms for funded projects. The appeal of the NEC forms as a standard forms for international construction and engineering projects is relatively recent.⁹ They have been used in the delivery of a number of high profile projects including the 2012 Olympics, the Halley VI British Antarctic base, the International Criminal Court and the on-going Crossrail project. The NEC3 forms have also been used on projects in New Zealand, Australia, South Africa and Singapore.

The two sets of forms are underpinned by different philosophies. The FIDIC forms have been known to emphasize balanced and fair distribution of risk, rights and obligations.¹⁰ They are often criticised for their limited focus on co-operation between parties and the lack of emphasis on innovative project management. These factors are the strong points of the NEC forms, also noted for their emphasis on collaboration. The impact of these philosophical peculiarities on the structure and processes of these Conditions of Contract are often evident. The underpinning philosophies have implications for party relations, project execution and culture on project sites. But the effect of the respective ethos of both sets of forms on dispute resolution (under the forms) is not always clear. Much has been written about the dispute resolution processes under both suite of Conditions, especially the FIDIC forms¹¹ but the relationship between the underpinning philosophies and the dispute resolution mechanisms advocated by the forms has, rather surprisingly, received very little attention.

⁵ Contracts under the FIDIC family include the Conditions of Contract for Construction (First Edition, 1999) – the Red Book; Conditions of Contract for Plant and Design-Build (First Edition, 1999)–the Yellow Book; Conditions of Contract for EPC/Turnkey Projects (First Edition, 1999) - the Silver Book; Short Form of Contract (First Edition, 1999) – the Green Book; and Conditions of Contract for Construction (the MDB Harmonised Edition, 2010) – the Pink Book. Other forms under the FIDIC Contract suite are Condition of Contract for Dredging and Reclamation Works the “Dredgers Contract” – the Blue Book; the Design Build and Operate (DBO) Condition of Contract; the Agreement for engagement of Consultants- the White Book; the form of agreement for engaging Sub-consultants; and the joint venture agreement form.

⁶ Formerly known as the New Engineering Contracts

⁷ Forms under the NEC3 Suite include NEC3 Engineering and Construction Contract (ECC); NEC3 Engineering and Construction Subcontract (ECS); NEC3 Professional Services Contract (PSC); NEC3 Engineering and Construction Short Contract (ECSC); NEC3 Engineering and Construction Short Subcontract (ECSS); NEC3 Adjudicator’s Contract (AC); NEC3 Term Service Contract (TSC); NEC3 Term Service Short Contract (TSSC); NEC3 Framework Contract (FC); NEC3 Supply Contract (SC); and NEC3 Supply Short Contract (SSC).

⁸ Including the African Development Bank, Asian Development Bank, Black Sea Trade and Development Bank, Caribbean Development Bank, Council of Europe Development Bank, European Bank for Reconstruction and Development, Inter-American Development Bank and International Bank for Reconstruction and Development (The World Bank).

⁹ The consultative and formal editions of the first NEC contract form was published in 1991 and 1993 respectively.

¹⁰ Bunni, N. G., *The FIDIC forms of contract: the fourth edition of the Red Book, 1992, the 1996 Supplement, the 1999 Red Book, the 1999 Yellow Book, the 1999 Silver Book*, 3rd Edn (Oxford: Blackwell Publishing, 2005) (hereafter “Bunni”), Ch. 7.

¹¹ Seppala, C., “FIDIC’s New Standard forms of contract: Claims, Resolution of Disputes and the Dispute Adjudication Board”, (2001) IBLJ 3; Al-Dine Nasser, J., “Claims, Disputes and Arbitration under the Redbook and the New Red Book (Part 1)” (2009) 25 Const. L.J. 403; Seppala, C., “How not to Interpret the FIDIC Dispute Clause: The Singapore Court of Appeal judgment in Persero” [2012] ICLR 4. There are commentaries on the nature and workings of the FIDIC dispute resolution process which are found in practice-based articles (not always strictly academic) available on the FIDIC website - <http://fidic.org/node/6159>

Using the FIDIC and NEC Conditions for Works - Conditions of Contract for Construction (for Building and Engineering Works designed by the Employer) (hereafter the 'Red Book 1999') and the NEC¹² Engineering and Construction Contract, third edition (NEC3 ECC)- as exemplars, this study critically evaluates the dispute resolution options and processes under the FIDIC and NEC forms relating to construction works, discusses the extent to which these options align with the philosophies of the respective forms, and examines the impact on dispute handling. The aim is explored through examination of relevant case law, commentaries and articles from subject-specific journals. There is also a textual analysis of the relevant content of the two conditions of contract and related forms. For clients who are drawn to one set of Conditions or the other as a result of the underpinning ethos, this analysis aims to provide additional illumination on the extent to which the expected benefits of these ideological positions extend to the dispute resolution process.

Notwithstanding the launch of new NEC forms¹³ and impending release of new FIDIC forms, this analysis remains relevant as it goes to the philosophical underpinnings of the forms which will be unaffected by the introduction of newer editions of both FIDIC and NEC forms. Furthermore, many international projects still rely heavily on the 1999 Editions of the FIDIC forms and NEC3 forms and will continue do so for some years to come. For users of NEC4, this study provides a conceptual background to some of the changes to be encountered in the new forms.¹⁴

The term 'dispute resolution' is used in the context of this work loosely to include dispute prevention/reduction, management and resolution. The paper is in four parts. The first part provides brief background information on both FIDIC and NEC suites of contracts (in particular the Red Book 1999 and the NEC3 ECC) and examines the philosophical underpinnings of both sets of forms. The second part examines the dispute resolution provisions of the Red Book 1999 and the NEC3 ECC respectively. The third part discusses the extent to which the dispute resolution provisions reflect the underpinning philosophies of the Conditions and how this impacts dispute processes and outcomes. The final part pulls together the core arguments.

FIDIC and NEC FORMS: BACKGROUND & PHILOSOPHIES

The FIDIC standard forms of contract were first published in 1957. They were based on the Institute of Consulting Engineer's (ICE) form published in 1956 and the international version known as the Overseas (Civil)

¹² Formerly known as the New Engineering Contracts

¹³ NEC4 was released on 24th June, 2017

¹⁴ The changes introduced by NEC4 are not discussed here. Separate detailed analysis of the changes is required.

Conditions of Contract (ACE Form).¹⁵ Between 1957 and 1999, FIDIC published four separate editions of its contract forms. In line with FIDIC's practice of constantly improving its family of contract forms, it set up a committee in 1994 to review the Conditions of Contract for Works of Civil Engineering Construction, fourth edition (the Red Book, 1987), the last of the four editions. On the back of overwhelming desire of users for a simpler contract, what began as a review of the existing contract forms later resulted in the publication of four new forms in 1999. Consequently, the 1999 forms represented significant improvement over the old forms in the area of organization of clauses,¹⁶ simplicity of language and the streamlining of the role of the engineer.

The Red Book 1999, one of the four forms is suitable for Employer-designed projects. It is in three parts, the General Conditions, Guidance on the preparation of Particular Conditions and sample forms (of Letter of Tender, Contract Agreement and the Dispute Adjudication Agreement). The General Conditions had standard clauses which address rights, duties and obligations of the Employer, Contractor and the Engineer; issues relating to cost, time and quality; matters regarding risk, liability, insurance, termination and dispute resolution, among other themes. The Particular Conditions are to be used to amend the General Conditions and cater for the peculiarities of specific projects. As a typical traditional contract form, the Red Book is written in legal language with cross-references.

Compared to the FIDIC forms, the NEC3 forms are relatively new and strikingly distinct. The NEC forms are products of debates within the engineering community spearheaded by the ICE on how existing contract strategies could be improved.¹⁷ The focus of traditional contracts on rights and obligations of the parties often resulted in conflicts and did little to minimize disputes, it was argued.¹⁸ A new approach which emphasized project management was required. The NEC consultative edition published in 1991 was a response to these concerns. In 1993, the first set of NEC forms were published. Following the release of the Latham Report in 1994, the second and third editions were published in 1995 and 2005 respectively.¹⁹ The NEC Engineering and Construction Contract, third edition (NEC3 ECC) is one of the well-known forms in the NEC3 suite.

¹⁵ The international version was the product of two professional groups, Association of Consulting Engineers, UK and the Export Group for the Construction Industry in the United Kingdom with the approval of the ICE. See Bunni, 4.

¹⁶ Unlike the old FIDIC forms, each of the 1999 forms is organised into twenty clauses, with vastly similar clauses and wording except where differences in emphasis and purpose warrants distinct clause formulations.

¹⁷ Eggleston, B., *The NEC 3 Engineering and Construction Contract: A Commentary*, 3rd Edn (Wiley- Blackwell, 2006) (hereafter "Eggleston") 1-2.

¹⁸ *ibid*

¹⁹ The latest amendments and reprint of NEC3 is dated 2013.

The NEC3 ECC has four different sets of clauses - nine core clauses, six payment option clauses numbered A-F,²⁰ two dispute resolution option clauses²¹ and several secondary clauses.²² The core clauses cover key standard provisions dealing with matters such as responsibilities of the parties, time and cost issues (payment and compensation events), quality issues (e.g. testing and defects), risks and insurance.²³ The core clauses are part of every NEC3 ECC contract. In addition to these, parties are free to choose one main option (a payment/procurement option), a dispute resolution option and a number of secondary options, depending on their needs.

The drafting of the Red Book 1999 was informed by different notions on how construction and engineering contracts should be organised and administered. Bunni²⁴ identifies some of the key concepts that characterize the FIDIC forms, including the Red Book 1999: They were modelled on a domestic English contract, based on the common law and follow English drafting rules. The forms are noted for the prominent roles of the Engineer as a designer, Supervisor and dispute resolver and the concept of remuneration is based on re-measurement.²⁵ Perhaps, the most notable of the concepts underpinning the FIDIC forms (including the Red Book 1999) is balanced risk sharing.²⁶ Under the Red Book 1999, risks are allocated between parties 'on a fair and equitable basis taking account of such matters as insurability, sound principles of project management, and each party's ability to foresee, and mitigate the effect of, the circumstances relevant to each risk'.²⁷ The Contractor bears risks which it can reasonably foresee, price and control or manage.²⁸ The significance of the concept of equitable and balanced risk-sharing to the FIDIC forms is that it remains the 'spine' of the entire contractual and construction process. Risk identification and allocation have effect on fair distribution of rights, responsibilities and obligations, determination of liability and indemnity/insurance. It is a critical factor in dispute resolution.

²⁰ Option A: Priced contract with activity schedule; Option B: Priced contract with bill of quantities; Option C: Target contract with activity schedule; Option D: Target contract with bill of quantities; Option E: Cost reimbursable contract; and Option F: Management contract.

²¹ Option W1 and W2 (which complies with the provisions of the Housing Grants, Construction and Regeneration Act, 1996 (as amended))

²² These provide a wide range of options on important issues relating to construction and engineering projects such as change in the law, bonus for early completion and limitation of the Contractor's design liability. They are numbered X1-7, X12-18, X20 and Z. Numbers X8-11 and X19 are not part of the secondary clauses in the NEC3 ECC. These could be found in the NEC3 Professional Services Contract (PSC).

²³ The matter covered under the NEC core clauses are similar to those covered by the FIDIC. The matters covered under the NEC3 ECC core clauses are similar to those under the FIDIC General conditions.

²⁴ Bunni, Chapters 2-7

²⁵ *ibid*

²⁶ *Ibid* 105. Risks are shared on the basis of declared principles encapsulated by four key words/ phrases: control, foreseeability, ability to best manage and or benefits/incentive. These concepts are discussed in detail elsewhere in the relevant literature on the subject- see Abrahamson, M., "Risk Management" [1983] ICLR 241; Thompson, P. and Perry, J. G., *Engineering construction risks : a guide to project risk analysis and assessment implications for project clients and project managers*, (London : T. Telford, 1992); Lloyds, H., "The Grove Report" [2001] 2 ICLR302; Bunni, Chapter 7

²⁷ Booen, P., *The FIDIC Contracts Guide – 1999 Conditions for Construction, Plant and DB and EPC/T* (FIDIC, 2000) 4

²⁸ As a general principle, the Contractor bears all the risk on a project except those expressly allocated to the Employer. See McInnis, A., *The New Engineering Contract: A Legal Commentary* (Thomas Telford Publishing, 2001) 60-69; Bunni, Chapter 7; Erikson, C.A., "Risk Sharing in Construction Contracts", PhD Dissertation, University of Illinois, 1979, 6.

At the heart of the NEC3 ECC philosophy is the notion of culture change; from an adversarial approach to contracting to a collaborative process built on the spirit of mutual trust and cooperation; from emphasis on legal relationships (rights and obligations) to a contracting process which pays equal attention to efficient project management; and from a 'reactive and hindsight-based decision making and management approach to one that is foresight-based, encouraging a creative environment with pro-active and collaborative relationships'.²⁹ The aim is to minimise distractions caused by disputes and to achieve project objectives (cost, time, quality). Cultural change is to be achieved through three key objectives - flexibility, clarity and simplicity and good management³⁰ - and a number of measures.³¹

Of the three key objectives on which the NEC3 ECC architecture stands, the most substantive appears to be the use of the form as a stimuli for good project management.³² This concept is at the heart of the NEC3 dispute minimisation agenda. For the drafters, contracts are as much about proactive project management as they are about rights, responsibilities and liabilities.³³ The argument here runs as follows: 'foresighted, cooperative management of the interaction between the parties can reduce the risk inherent in construction and engineering work'.³⁴ NEC3 ECC splits the roles of the traditional engineer among four different professionals namely the Designer, Project Manager, Supervisor and the Adjudicator. The goal is to enhance accountability and improve overall management of the project. Parties to the NEC3 ECC and some key employees³⁵ are expressly enjoined to act in accordance with the provisions of the contract.³⁶ This traditionally obvious requirement is coupled with the instruction to act in the 'spirit of mutual trust and co-operation'.³⁷ This second duty, originating from the Latham Report,³⁸ is nebulous³⁹ and open to different interpretations.⁴⁰ The impact of this duty on the dispute resolution process is explored under part four.

²⁹ NEC Panel, *Procurement and Contract Strategies* (Thomas Telford Publishing, 2013) 1

³⁰ These objectives were set by the Institution of Civil Engineers in 1986 when a decision was made to develop a new form of contract. See Broome, J., *The NEC Engineering and Construction Contract – A User's Guide* (Thomas Telford Publishing, 1999)4.

³¹ These include early warning (NEC ECC, Clause 16), change management (NEC ECC, Clause 60) and effective use of programmes (NEC ECC clauses 11.2, 31 & 32). See also Rawlinson, M., *A practical Guide to the NEC3 Engineering and Construction Contract* (John Wiley and Sons, 2016) 13

³² See NEC, *Guidance Notes for the Engineering and Construction Contract* (Thomas Telford Publishing, 2013) 3 where this objective is named as 'perhaps the most important characteristic' of the ECC.

³³ Eggleston, 3

³⁴ NEC, *Guidance Notes for the Engineering and Construction Contract* (Thomas Telford Publishing, 2013) 3

³⁵ The Project Manager and Supervisor

³⁶ NEC ECC Clause 10.1

³⁷ *ibid*

³⁸ Latham, M., *Constructing the Team- Final Report of the Government/Industry Review of Procurement and Contractual Arrangements in the UK Construction Industry*, (London: HMSO, 1994)39

³⁹ Rosher, P., "NEC3 contracts: Partnering Benefits, Drawbacks and Adaptation under French law" (2015) *IBLJ* 311, 317

⁴⁰ Note how Terrence Davis and Peter Newson Thurlow, "Good faith obligations in NEC Contract", (2016) *Proceedings of the Institution of Civil Engineers : Management, Procurement and Law, Vol 169, Issue MP4*,145-146 equates the concept of trust under clause 10.1 with the legal concept of trust and a trustee in property law. See also Christie, D., "How can the use of 'Mutual Trust and Cooperation' in the NEC 3 Suite of Contracts help Collaboration?" (2017) *ICLR* 34(2), 93-112.

DISPUTE RESOLUTION PROCESSES

Under FIDIC Red Book 1999

The dispute resolution edifice under the Red Book 1999 reflects improvements on weaknesses in the framework under the previous form,⁴¹ especially the position of the Engineer as the first tier of dispute resolution.⁴² This role understandably attracted many criticisms⁴³ in view of the Engineer's other roles and the potential for conflict of interest.⁴⁴ As an agent of the Employer, the role of the Engineer as an adjudicator of disputes was viewed with scepticism.⁴⁵ Therefore, it is not surprising that under the Red Book 1999, the position of the Engineer as an adjudicator has been taken over by the Dispute Adjudication Board, a neutral body.

Clause 20.4 of the Red Book 1999 provides that disputes 'of any kind whatsoever', arising between the parties 'in connection with, or arising out of the Contract, or the execution of the Works' are to be referred to, in the first instance, the *Dispute Adjudication Board (DAB)* for its decision, with copies to the Engineer and the other party. The language of clause 20.4 is all-encompassing and covers both contractual and common law rights. The DAB is to give its decision on the dispute within 84 days of the reference.⁴⁶ The decision of the DAB, though subject to review by an arbitrator, is binding pending an *amicable settlement* or a *reference to arbitration*. A party dissatisfied with the decision of the DAB is to serve notice of dissatisfaction within 28 days of receiving the decision otherwise it becomes final. This is comparable to the equivalent timetable under the NEC3 ECC. The status/effect of a DAB decision after a notice of dissatisfaction is served and prior to the conclusion of the arbitration has been the subject-matter

⁴¹ FIDIC Red Book, 1987 (4th Edition) – under this form disputes were resolved by the engineer, amicable settlement and international arbitration

⁴² Disputes under the Red Book, 1987, 4th Edition were referred to the Engineer in the first instance. Failing an amicable resolution, persisting disputes were then referred to international arbitration - FIDIC Red Book, 1987 (4th Edition), Clause 67

⁴³ Ndekugri, I., Smith, N. & Hughes, W., "The Engineer under FIDIC's Conditions of Contract for Construction" (2007) *Construction Management and Economics*, 25(7), 791-799. See also Mortimer-Hawkins, M., "FIDIC: An Engineer's View of the Engineer's Role" (1984) 2 *ICLR*, 4-7; Westring, G., "The Balance of Power in the FIDIC Contract with Special Emphasis on the Powers of the Engineer" (1984) *ICLR*, 1(1), 117-25; Rubino-Sammartano, M., "The Role of the Engineer: Myth or Reality". *International Business Lawyer*, March, 81-6; Nicklish, F., "The Role of the Engineer as Contract Administrator and Quasi-Arbitrator in International Construction and Civil Engineering Projects" (1990) *ICLR*, 7(3), 322-38; Latham, M., *Constructing the Team- Final Report of the Government/Industry Review of Procurement and Contractual Arrangements in the UK Construction Industry*, (London: HMSO, 1994)

⁴⁴ Ndekugri, I., Smith, N. & Hughes, W., "The Engineer under FIDIC's Conditions of Contract for Construction" (2007) *Construction Management and Economics*, 25(7), 791-799

⁴⁵ For parties from civil law jurisdictions, the fact that the concept of an engineer with a quasi-judicial role is foreign to them only enhances the scepticism.

⁴⁶ The DAB may extend this date with the approval of the Parties.

of controversy.⁴⁷ The notice is a pre-condition to commencing arbitration under the Red Book 1999.⁴⁸

Clause 20(5) provides for a 56-day cooling off period (between the date the notice of dissatisfaction is served and the date of commencement of arbitration) within which parties are required to attempt to settle the dispute. The clause use the word 'shall' in relation to the attempt to settle the dispute but the impact of this word is immediately clawed back by the phrase that arbitration is to commence on or after the fifty-sixth day 'even if no attempt at amicable settlement has been made'.

At the apex of the multi-tier dispute resolution system under the Red Book 1999 is international arbitration. Clause 20(6) provides that all disputes not resolved finally by the DAB are to be resolved by international arbitration. These include three categories of disputes namely disputes addressed by the DAB, which are subject to notice of dissatisfaction; disputes arising from failure to comply with a DAB decision;⁴⁹ and disputes which arise out of or in connection with the contract and the execution of Works where there is no DAB in place.⁵⁰ Unless the parties otherwise agree, the default arbitration rules are the Rules of the International Chamber of Commerce under the contract. The dispute is to be settled by three arbitrators who shall have power to evaluate the dispute without any limitations. The Red Book 1999, a supposedly traditional contract, provide a range of dispute mechanisms from the soft, party-controlled approaches (e.g. amicable settlement), to binding, third-party controlled approaches as exemplified by use of international arbitration.

Under NEC3 ECC

The NEC forms classify disputes into four categories namely actions/decisions of a Project Manager/Supervisor; inactions of a Project Manager/Supervisor; a quotation for compensation event treated as having been accepted; and any other matter arising under or in connection with the contract.⁵¹ For the first two classes of disputes, the Contractor is to initiate action by serving the appropriate notice. The Employer initiates the process leading to referral to adjudication for the third class of disputes. This makes sense as the Employer is the likely loser where quotation for a

⁴⁷ See *PT Perusahaan Gas Negara (Persero) TBK v CRW Joint Operation* [2010] SGHC 202; 137 Con. L.R. 69; *PT Perusahaan Gas Negara (Persero) TBK v CRW Joint Operation* [2014] SGHC 146; [2015] B.L.R. 119 (Singapore High Court decision); *PT Perusahaan Gas Negara (Persero) TBK v CRW Joint Operation* [2015] SGCA 30; [2015] B.L.R. 595 (Singapore Court of Appeal decision) (The Persero cases); Seppala, C., "How Not to Interpret the FIDIC Dispute Clause: The Singapore Court of Appeal judgment in Persero" (2012) ICLR 4; Butera, G., "Untangling the Enforcement of DAB Decisions" (2014) ICLR 36-61. Questions about the enforceability of DAB decisions pending arbitration are addressed further under Part III.

⁴⁸ There are two exceptions to this principles and these are found in clause 20(7) (on failure to comply with DAB decision) & clause 20(8) (expiry of DAB's appointment).

⁴⁹ Such disputes need not comply with the requirements under Clause 20(4) and (5). See FIDIC Guidance Memorandum to Users of the 1999 Conditions of Contract dated 1st April 2013.

⁵⁰ See Red Book, 1999, clause 20(8).

⁵¹ Mitchell B. and Trebes, B., *Managing Reality – Book 3 Managing the Contract* (Thomas Telford Ltd, 2005)p.75

compensation event is treated as accepted due to failure on the part of the Employer's agent to act timeously. Where the dispute falls outside the remit of the first three classes but arises out of or in connection with the contract, either party may commence the referral process.

NEC3 ECC provides a two-tier dispute resolution process; reference to adjudication and then a Tribunal (litigation/arbitration). There are two options for adjudication. Option W2 is to be used by parties to contracts, which are subject to the Housing Grant, Construction and Regeneration Act, 1996 (HGCRA).⁵² Option W1 is purely contractual, and applies where the HGCRA does not apply. This is the option of interest in this piece as many projects using NEC3 outside the UK use this Option.

Generally, the referral procedure runs as follows:⁵³ A Contractor or Employer who intends to refer a dispute to adjudication is under obligation to notify the Project Manager of its intention within four weeks of the occurrence of the event the subject-matter of the dispute.⁵⁴ A party who fails to comply with the notice requirement will not be entitled to extra payment or additional time. If the incident complained of is not remedied, the Contractor or Employer must refer same to adjudication within two to four weeks of the notice. The party against whom the claim is made responds and submits relevant documents to the adjudicator within four weeks of the referral. The party referring the dispute also has the right to submit additional information to the adjudicator during this period. In all cases, copies of a party's submissions to the adjudicator must be served on the other party. The adjudicator has four weeks within which to notify the parties of his decision and reasons for his conclusions.⁵⁵ This timeframe falls short of the 84 days available to the DAB under the Red Book 1999 and may signal a speedier resolution process. However, it is unlikely that complex adjudications could be completed within twenty-eight days. The decision of the adjudicator is binding on the parties unless revised by the Tribunal and 'is enforceable as a matter of contractual obligation between the parties and not as an arbitral award'.⁵⁶

If a party is dissatisfied with the decision of the adjudicator, it is required to serve notice of dissatisfaction and intention to refer the dispute to a Tribunal within four weeks of the notification of the adjudicator's decision. This timeframe is comparable to the 28-day referral period in the Red Book

⁵² As amended by the Local Democracy, Economic Development and Construction Act, 2009 (LDEDCA).

⁵³ The procedure here differs in some respects from referrals under Option W2 under the HGCRA (as amended by LDEDCA). E.g. the time limit within which the Project Manager must be notified of a party's intention to refer a dispute to adjudication under Option 1 does not apply under Option W2 – See the HGCRA, 1996, s.108 (2) which states that a party can give notice of its intention to refer a dispute to adjudication at any time.

⁵⁴ See NEC3 ECC Option W1.3 – the adjudication time table.

⁵⁵ NEC3 ECC Option W1.3 (8).

⁵⁶ NEC3 ECC Option W1.3 (10).

1999. Both the adjudication process and the notice of dissatisfaction served within the agreed time are conditions precedent to resort to the Tribunal.⁵⁷

Rather curiously, the Tribunal is chosen by the Employer alone under Part 1 of the Contract Data.⁵⁸ The question remains whether the Contractor contributes to this choice in any way? The decision to litigate or arbitrate is an important and defining one in the context of international construction and should be agreed by both parties, not just the Employer. Further, it is intriguing that the NEC3 dispute resolution framework does not include any formal mechanism for dispute resolution which provides the parties the opportunity to take control/responsibility to resolve disputes themselves prior to resort to the inquisitorial/adversarial processes of adjudication, arbitration or litigation. For a contract which is built on a collaborative ethos, this must be a grave omission.

DISCUSSIONS

A careful student of the philosophical underpinnings and the dispute resolution frameworks of the Red Book 1999 and the NEC3 ECC will likely be puzzled by the paradoxical relationship between the underpinning ethos and the approaches to dispute handling: the more traditional of the two contract forms has more collaborative approaches to dispute resolution than the form which has collaboration as a central theme. This paradox requires further interrogation. A few questions need addressing: What is the theoretical context in which these contract forms sit? How does this theoretical context shape expectations regarding how disputes should be resolved? To what extent have the respective theoretical backgrounds and ethos influenced dispute handling under the respective forms in reality? These and other pertinent lingering issues are examined in this part.

Two Theoretical Backgrounds, Two Approaches

The NEC3 forms are often touted as representing a new approach to construction contracting.⁵⁹ Whilst this is true in some respects,⁶⁰ the different contractual approaches utilised by drafters of the FIDIC and NEC forms respectively reflect long standing debates between formalism and contextualism.⁶¹ The FIDIC forms are aligned to the formalists' notion of contract formation and interpretation, whilst the NEC3 forms sit more comfortably within the perspective of the contextualists. A brief review of these philosophical positions is provided here.

⁵⁷ NEC3 ECC Option W1.4 (1) & (2).

⁵⁸ Mitchell B. and Trebes, B., *Managing Reality – Book 3 Managing the Contract* (Thomas Telford Ltd, 2005)78

⁵⁹ Eggleston, 2

⁶⁰ e.g. in the area of drafting style and structure

⁶¹ A sociological view on how contracts, particularly standard form contracts, should be viewed. See Morgan, J., *Great Debates in Contract Law* (2nd Edn. (London: Palgrave,2015)71

English law does not require most contracts to be in writing.⁶² However, the practice of capturing parties' intentions, rights and obligations, liabilities and remedies in writing has been generally encouraged leading to the development of rules on parole evidence and entire agreement clause.⁶³ This practice serves well venerated English law principles of predictability and certainty. The judge's job is made relatively easier if what is expected of him is to interpret and apply the parties' objective intentions as gathered from written agreements, relying on context only when it is warranted.⁶⁴ Lord Hodges summed up the current approach to judicial interpretation of contracts in the recent Supreme Court decision in *Wood v Capita Insurance Services Limited*⁶⁵ in the following terms:

The court's task is to ascertain the objective meaning of the language which the parties have chosen to express their agreement. It has long been accepted that this is not a literalist exercise focused solely on a parsing of the wording of the particular clause but that the court must consider the contract as a whole and, depending on the nature, formality and quality of drafting of the contract, give more or less weight to elements of the wider context in reaching its view as to that objective meaning.⁶⁶

There is judicial consensus that the starting point for any judicial interpretation is the text of the agreement. This point of view reflects the view of formalists and neo-formalists who argue that an objective and rule-based approach to contracting is to be preferred to a contextual approach steeped in subjective positions of the parties.⁶⁷ Relationships are governed by the express terms of the contract. Dispute resolution, according to this view, is to be conducted primarily at arm's-length as outcomes are defined mainly by the terms and the applicable law as interpreted by the courts or a body charged with such responsibility. The formalist approach to contract dominates judicial reasoning in English law.⁶⁸ The FIDIC approach to contract drafting aligns with this perspective and is appropriately referred to as the more traditional of the two set of forms. Whilst FIDIC

⁶² *Blue v Ashley* [2017] EWHC 1928 (Comm) [49].

⁶³ Morgan, J., *Great Debates in Contract Law*, 2nd Edn. (London: Palgrave, 2015) 71

⁶⁴ The extent to which the courts can rely on text and or context and extraneous sources in interpreting a contract document has been a subject of recent judicial discourse. See decisions in *Rainy Sky SA v Kookmin Bank* [2011] 1 WLR 2900; *Arnold v Britton* [2015] AC 1619; *Wood (Resp) v Capita Insurance Services Limited (App)* [2017] UKSC 24

⁶⁵ [2017] UKSC 24.

⁶⁶ *Ibid* at para 10

⁶⁷ Schwartz, A. and Scott, R. E. , "Contract Theory and the limits of Contract Law" (2003) 113 Yale LJ 541

⁶⁸ *Balmoral Group Limited v Borealis (UK) Limited* (2006) EWHC 1900 (Comm). See also *Constain Limited v Tarmac Holdings Limited* [2017] EWHC 319, [42] (TCC) per Coulson J. Recent developments in England point to courts encouraging more relational means of resolving disputes.

acknowledges that good relationship and communication are important to the success of a contract, it does not elevate relationships and trust between parties to the same level as the formal text of the contract.

The contextualists approach to contracting, on the other hand, emphasises relationships. The formal written agreement, in their view, does not represent the entire agreement between the parties;⁶⁹ indeed, the written agreement may run parallel to what they refer to as the 'real deal'.⁷⁰ Where there is trust, the parties to a transaction may not make much of the written contract. Consequently, trust and cooperation between parties ensure that the 'real deal', not the paper deal, is enforced. Complex and long-term contracts require trust and cooperation as necessary elements.⁷¹ Collins⁷² argues that the duty to cooperate, in appropriate instances, should not only supplement the written terms but override them; the implicit dimension of the commercial relationship is more important than the intentions captured by the drafters of the express terms.⁷³

Contextualists hold the view that parties to contracts expect disputes between them to be addressed cooperatively as they arise. Macaulay's definition of 'real deal' actually includes what he called 'the generalised expectation that a trading partner will behave reasonably in solving problems as they arise'.⁷⁴ The rationale for this expectation could be deduced from the negative effects disputes are likely to have on both parties and transactions. For contextualists, success of a transaction rests with the quality of relationship. Disputes can potentially wreck relationships. Thus, it is not surprising that the contextualists will consider dispute a threat to both the relationship and the transaction. Early resolution averts this catastrophe. Cooperating to resolve disputes is a logical step towards the success of a transaction.

It is not difficult to see elements of the contextualists' approach to contracting in the NEC3 forms. Clause 10.1 of NEC3 elevates the concept of mutual trust and cooperation to equal status as the written clauses of the contract. It provides that the key personnel in the contract⁷⁵ 'shall act as stated in the contract [the written terms] **and in a spirit of mutual**

⁶⁹Macaulay, S., "The real and Paper deal: Empirical Pictures of Relationships, Complexity and the Urge for Transparent Simple Rules" (2003) 66 MLR 44

⁷⁰ Ibid. 46 (see footnote 6 where the author defines what he meant by real deal). See also Macaulay, S., "Non-contractual relations in Business: A preliminary study" (1963) 28 American Sociological Rev.1; Morgan, J., *Great Debates in Contract Law* (2nd Edn. (London: Palgrave,2015)71; Macaulay, S., "The real and Paper deal: Empirical Pictures of Relationships, Complexity and the Urge for Transparent Simple Rules" (2003) 66 MLR 44

⁷¹ See MacNeil, I.R., *and The relational Theory of Contract: Selected Works of Ian MacNeil* (Sweet and Maxwell, 2001).

⁷² Collins, H., *Regulating Contracts* (OUP,1999); Collins, H., "The Research Agenda" in D. Campbell, H. Collins and J. Wightman, *Implicit Dimensions of Contract* (Hart Publishing ,2003)

⁷³ Ibid. For a critique of this view, see Gava J. and Greene, J., "Do we need a Hybrid Law of Contract? Why Hugh Collins is wrong and Why it matters" (2004) CJL 605,620; Morgan, J., *Great Debates in Contract Law* 2nd Edn. (London: Palgrave,2015) 73

⁷⁴ Macaulay, S., "The real and Paper deal: Empirical Pictures of Relationships, Complexity and the Urge for Transparent Simple Rules" (2003)66 MLR 44,46 (see footnote 6)

⁷⁵ The Employer, the Contractor, the Project Manager and the Supervisor

trust and cooperation’.⁷⁶ In line with contextualists’ thinking, NEC3 ECC requires parties to address issues cooperatively as they arise. The NEC3’s philosophical alignment with the contextualists’ perspective implies that more party-controlled approaches to dispute resolution will be a natural fit for the forms. However, this is not the case in reality as these approaches to dispute resolution are largely absent from the forms.

FIDIC (Red Book 1999): Dispute Handling Strategy in search of Culture

The balanced risk sharing approach of FIDIC means there is emphasis on risks identification and allocation at the onset of the project leading ultimately to equitable apportioning of responsibility under the contract. Balanced risk sharing implies balanced responsibilities and liabilities. The Red Book 1999 anticipates that there will be unplanned issues relating to time, cost and quality and thus, makes provision for how these issues should be addressed after they have materialised.⁷⁷ If any of these unplanned issues threaten to or offset the balance of the contract, the form has in-built counter-balancing mechanisms.⁷⁸ Preventing, managing and resolving disputes are crucial aspects of the process of maintaining balance under the Red Book 1999.

Dispute Prevention/reduction

There are at least four aspects to dispute prevention under the Red Book 1999: project management measures, claims procedure, the conflict resolution role of the Engineer and the DAB process. The FIDIC forms provide administrative procedures such as those on quality assurance,⁷⁹ reporting,⁸⁰ and programme,⁸¹ which are intended to facilitate contract administration and ultimately contribute to conflict-free project delivery.⁸² Atkinson⁸³ has argued that these administrative procedures, especially the provisions on communications, are not radical enough and fall short of current trends in the industry in the UK. The contribution of two of these measures – programme and early warning notification of anticipated events – to dispute prevention are briefly examined.

Under the Red Book 1999, programmes are not approved by the Employer or its agents. The Employer’s agents only need to notify the Contractor of

⁷⁶ Emphasis added

⁷⁷ See e.g. FIDIC Red Book, clause 8(4).

⁷⁸ See variations (clause 13), extension of time (clause 8.4), suspensions (clause 8.8-8.11); value engineering (clause 13.2), claims procedure (clause 20.1), dispute resolution (clause 20.2- 20.8) etc. See also Axel-Volkmar, J. and Götz-Sebastian, H., *FIDIC – A Guide for Practitioners* (Berlin Heidelberg: Springer- Verlag, 2010) [7.1.2].

⁷⁹ Red Book, clause 4.9

⁸⁰ Red Book, clause 4.21

⁸¹ Red Book, clause 8.3

⁸² See also clauses 2.4(on disclosure of financial arrangements for the project); 3.5 (the Engineer’s initial determination); 13.2 (value engineering-proposals); 14.3 (interim payment valuation) etc.

⁸³ Atkinson, D., “The New FIDIC forms” (FIDIC, 1999) (available at <http://fidic.org/node/6159>) accessed on 19th April 2017.

the extent to which the programme does not meet contract requirements.⁸⁴ The Employer is not obligated to ensure that the programme is up to date. There is a general expectation that an experienced Contractor will always have an up to date programme. The risk of having an updated programme is with the Contractor; it is in a better position to carry it. Atkinson⁸⁵ argues that the lack of clear sanctions for failure to produce a programme or an updated one diminishes the important role it plays in management of projects.⁸⁶ Given the relevance of the programme to the overall delivery of the project, a more active interrogation of its viability/practicality earlier on by the Employer's agent can lead to some savings on cost and time and consequently, avoid disputes. The NEC3 takes a more radical approach of empowering the Project Manager to sanction lax Contractors for failure to deliver their first programme on time.⁸⁷

Further, there is an obligation on the Contractor to promptly notify 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' under clause 8.3 of the Red Book 1999.⁸⁸ This is the FIDIC version of early warning. However, the Employer has no equivalent responsibility. FIDIC's explanatory notes on clause 8.3 indicates that the Employer is encouraged to similarly notify the Contractor of future events likely to impact on time, cost and quality of the project. This 'encouragement' is not captured in the General Conditions because FIDIC did not want failure by the Employer to notify the Contractor of relevant future events to constitute a basis for delayed completion.⁸⁹ FIDIC's failure to impose a contractual obligation on the Employer to notify the Contractor of future events is a missed opportunity to have a full and effective early warning system. This has a negative effect on the balance of responsibility under the contract. The role could have been assigned to the Engineer, in which case any issues of liability could be effectively addressed by reference to clause 3.1(b) and (c) of the General Conditions.⁹⁰

Additionally, the Engineer may request that the Contractor submits an estimated impact of an anticipated event and may address such events through the variation procedure under sub-clause 13.3 of the Red Book. This is a proactive step, which could be used to good effect to anticipate and deal with change issues. However, the gains to be made by the proactive notification is clawed back by reason that the early notification process is hampered by the process of interim valuation of variation under

⁸⁴ Booen, P., *The FIDIC Contracts Guide – 1999 Conditions for Construction, Plant and DB and EPC/T*, (FIDIC, 2000) 171

⁸⁵ Atkinson, D., "The New FIDIC forms", FIDIC,1999" (available at <http://fidic.org/node/6159>) accessed on 19th April 2017)

⁸⁶ See clause 8.3 of the Red Book,1999

⁸⁷ Comparatively, NEC3 is more decisive on sanction for failure to submit a programme –see NEC3 ECC, clause 50.3.

⁸⁸ Booen, P., *The FIDIC Contracts Guide – 1999 Conditions for Construction, Plant and DB and EPC/T*, (FIDIC, 2000) 172

⁸⁹ *ibid*

⁹⁰ Invariably, the Employer acts through the Engineer and in any case, failure to notify the Contractor of future events by the Employer should be taken into account by the Engineer in making a determination under sub-clause 3.5 determinations. Why not?

FIDIC, which leaves forecasted cost of such change events open to future review and contention. The Red Book 1999 is not explicit on the use of project management/administrative measures as dispute prevention strategies. It is suggested that this ought to be the case. Processes of ascertaining and allocating risks, assigning roles, obligations and liabilities and managing change could be better focused and considered part of an express strategy to avert conflicts and disputes.

Still on prevention, more explicit language on dispute prevention could be gleaned from the provisions on claims.⁹¹ Sub-clauses 2.5 and 20.1 set out the procedure for both Employer and Contractor claims respectively. The FIDIC commentary on these clauses depict a desire for a cooperative approach to claims determination. Parties are enjoined not to see claims as a bad thing; they are not to be viewed as 'inevitable' or 'unpalatable'.⁹² Compliance with claim procedures need not be adversarial, 'an aggressive act' or a blame game.⁹³ The FIDIC Guide notes that 'complying with these procedures and maintaining a cooperative approach to the determination of all adjustments should enhance the likelihood of achieving a successful project'.⁹⁴ The Engineer's determination is to be preceded by consultation with each party separately and then jointly. The goal is to achieve an agreement.⁹⁵ The claim stage is pre-dispute. Thus, the Engineer's role here is to assist the parties to prevent the occurrence of dispute.

The dispute prevention role of the Engineer has not attracted sufficient attention in academic discourse. A number of issues on the subject require consideration. Firstly, is the engineer the appropriate person to play this role? Secondly, what does this obligation on the Engineer to 'consult with each party in an endeavour to reach agreement'⁹⁶ mean? On the first issue, it is important to emphasise that the Engineer under the Red Book 1999 primarily acts for the Employer.⁹⁷ He is neither a 'wholly impartial intermediary' nor does he act for the Employer in all situations.⁹⁸ The dispute prevention role advocated under sub-clause 3.5 may be one instance where the Engineer is required to play a neutral role. However, the Engineer may be deeply entangled in issues leading to the claim and may therefore be tempted to 'defend his corner'. This is where the Engineer's professionalism may be tested. In any case, being an informal process of dispute prevention, the issue of trust in the Engineer emerges. This will require some clear rules/guidelines on how such consultations

⁹¹ Red Book, Sub-clauses 2.5 (Employer claims), 20.1 (Contractor claims) and 3.5 (Engineer's determination).

⁹² Booen, P., *The FIDIC Contracts Guide – 1999 Conditions for Construction, Plant and DB and EPC/T*, (FIDIC, 2000) 88

⁹³ Ibid. 89

⁹⁴ Booen, P., *The FIDIC Contracts Guide – 1999 Conditions for Construction, Plant and DB and EPC/T*, (FIDIC, 2000) 89

⁹⁵ See Red Book, sub-clause 3.5; FIDIC's Commentary on sub-clause 3.5, See Booen, P., *The FIDIC Contracts Guide – 1999 Conditions for Construction, Plant and DB and EPC/T*, (FIDIC, 2000) 89.

⁹⁶ Red Book, sub-clause 3.5

⁹⁷ Red Book, 1999, sub-clause 3.1(a)

⁹⁸ Booen, P., *The FIDIC Contracts Guide – 1999 Conditions for Construction, Plant and DB and EPC/T*, (FIDIC, 2000) 82

should be conducted. In this regard, ideas from established mechanisms such as negotiation and mediation could be adopted to guide the Engineer's effort.

Another dispute prevention mechanism under FIDIC is the Dispute Adjudication Board. The DAB is assigned an advisory role expected to help parties diffuse potential disputes. Clause 20.2⁹⁹ of the Red Book 1999 provides that 'if at any time the parties so agree, they may jointly refer a matter to the DAB for it to give its opinion...' A party can only use this facility if the other party agrees. It is also possible that the mere presence of a distinctly dispute-focused entity, the DAB, on the project from the onset has a deterrent effect on emergence of disputes.

Dispute Management and Resolution

The DAB under the Red Book 1999 is also a dispute management tool. Indeed, this is the DAB's main role. Disputes submitted to the DAB are, in theory, 'managed' pending final determination by international arbitration or amicable settlement. Disputes are not to be allowed to fester and immobilise the project. Quick, but rough and ready decisions are to ensure that there is cash flow and continuity. Thus, under the Red Book parties cede control over dispute management to the DAB, which examines relevant documents, investigates issues and or hears parties, and arrive at a decision within 84 days. By its very nature,¹⁰⁰ decisions reached by the DAB are binding but interim,¹⁰¹ and should be immediately enforced. If a losing party fails to give a Notice of Dissatisfaction within 28 days, the DAB decision becomes final, binding and directly enforceable through international arbitration under clause 20.6.¹⁰²The timeframe here is comparable to that under the NEC3 dispute arrangement.¹⁰³

The issue of enforcement of DAB decisions under the Red Book 1999, especially when a party gives a Notice of Dissatisfaction and decides not to comply pending arbitration, has attracted attention of the courts, arbitral tribunals, practitioners and academics alike. How is a DAB decision to be enforced in such circumstance? Should failure to comply with the DAB decision ('second dispute') be referred to the DAB, be subjected to amicable settlement before referral to arbitration? Should such a dispute be referred

⁹⁹ Paragraph 7 thereof

¹⁰⁰ For more information on the nature and roles of the DAB, see Matyas, R. M., Mathews, A., Smith, R.J. and Sperry, P., *Construction Dispute Review Board Manual* (New York: McGraw-Hill, 1996); Gerber, P. and Rogers, L., "The Changing Face of Construction Dispute Resolution in the International Arena: Where to From Here?" (2000) *Australian Construction Law Newsletter* (73); Harmon, K. M.J., "Case Study as to the Effectiveness of Dispute Review Boards on the Central Artery/Tunnel Project" (2009) *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, 1, 18; McMillan, D. D. and Rubin, R.A. "Dispute Review Boards: Key Issues, Recent Case Law, and Standard Agreements" (2009) *Constr. Law*, 25, 14; Ndekugri, I. Chapman, P., Smith, N. and Hughes, W "Best Practice in the Training, Appointment and Remuneration of Members of Dispute Boards for Large Infrastructure Projects" (2014) *Journal of Management in Engineering* 30 (2),185-193

¹⁰¹ Red Book, sub-clause 20.4

¹⁰² Red Book, 1999, clause 20.7 and the FIDIC Guidance Memorandum to Users of the 1999 Conditions of contract dated 1st April 2013.

¹⁰³ Party disagreeing with the adjudicator's decision is to serve notice of the dissatisfaction within 28 days.

directly to international arbitration for an interim award? Must such a dispute be treated as a breach of contract with remedy in damages? These questions reflect the different views on the subject.¹⁰⁴ Some are of the view that such a dispute is 'new', does not come within the purview of sub-clause 20.6 (on arbitration) and must therefore follow the procedure set out in sub-clause 20.4 and 5 (referral to DAB and Amicable settlement).¹⁰⁵ Others hold the view that failure to comply with the decision of a DAB constitutes a breach of contract, for which the aggrieved party has its redress in damages; clause 20 provides no remedy for such situations.¹⁰⁶ Then there is the prevailing view that a DAB decision could be enforced by direct referral of the second dispute to arbitration under clause 20.6 of the Red Book for an interim award.¹⁰⁷ The ability to enforce an interim DAB decision is critical to the goal of dispute management and uninterrupted project delivery. Where disputes are not finally addressed through the DAB process, parties have the opportunity to proceed to international arbitration, after a window of opportunity to settle the dispute amicably.

Good mix of Strategies

From the ensuing discussion, it is worth noting that the FIDIC Red Book 1999 has a good mix of strategies on dispute prevention, management and resolution. On prevention there are administrative measures, the Engineers' attempt at agreement prior to determining a claim and the DAB's involvement with the project and its advisory opinion. The DAB is also an effective dispute management strategy. The two key dispute resolution approaches - amicable settlement and international arbitration - are at the opposite ends of the dispute resolution continuum. In a sense, there are opportunities for the parties to own and control the process of dispute handling, if they so desire. When that fails, disputes are adequately managed through DABs, leaving unresolved issues to two key channels of redress, namely amicable settlement and international arbitration. At each stage of dispute handling (prevention, management and resolution), the Red Book 1999 offers both soft and hard options, demonstrating balance and flexibility - see table below.

¹⁰⁴ Tweeddale, A., "FIDIC's Guidance Memorandum to Users - A half-baked solution?" (2014) 9 Construction Law International 23

¹⁰⁵ *PT Perusahaan Gas Negara (Persero) TBK v CRW Joint Operation [2010] SGHC 202*; Gillion, F. "Enforcement of DAB Decisions under the 1999 FIDIC Conditions of Contract: a Recent Development: *CRW Joint Operation v PT Perusahaan Gas Negara (Persero) TBK*" [2011] ICLR 388; Dedezade, T., "Are 'binding' DAB decisions enforceable?" (2011) 6(3) Const. Law Int 13.

¹⁰⁶ Bunni, N.G., "The Gap in Sub-Clause 20.7 of The 1999 FIDIC Contracts for Major Works" (2005) ICLR 272

¹⁰⁷ See FIDIC Guidance Memorandum to Users of the 1999 Conditions of Contract dated 1st April 2013. See also decision in *PT Perusahaan Gas Negara (Persero) TBK v CRW Joint Operation [2015] SGCA 30*; [2015] B.L.R. 595; Seppala, C., "How not to interpret the FIDIC Dispute Clause" [2012] ICLR 4. See also Tweeddale, A., "FIDIC's Guidance Memorandum to Users - A half-baked solution?" (2014) 9 Construction Law International 23 - this paper argues in part that the FIDIC Memorandum is essentially an admission that the provisions under clause 20 of the Red Book, 1999 did not address the issue clearly. For contracts based on the original clause 20.7, the FIDIC Memorandum clarifying its intention on the subject will be of no assistance.

Table 1: Range of Dispute Handling Options under the Red Book

Dispute handling stages	'Soft' approaches	'Hard' approaches
<i>Dispute prevention</i>	Engineers attempt to secure agreement (sub-clause 3.5) DAB Advisory decision (sub-clause 20.2)	Engineer makes determination in the absence of agreement (sub-clause 3.5)
<i>Dispute management</i>	Standing DAB's presence on project	DAB decision (sub-clause 20.4)
<i>Dispute resolution</i>	Amicable settlement (sub-clause 20.5)	International arbitration (sub-clause 20.6-8)

The dispute resolution strategy in the Red Book 1999 will do well as part of a Condition of contract with a collaborative ethos. A notable deficiency of the FIDIC form is the absence of a collaborative culture. Compared to the NEC3 ECC, the Red Book 1999 places little emphasis on the behaviour/culture and relationships of the parties and the key personnel involved with the project. Relational words such as 'trust', 'collaboration' and 'cooperation' are rare in the Red Book 1999. This is not surprising, giving the formalists theoretical underpinning of the form. The effect of the lack of emphasis on a culture of cooperation is that parties downplay the usefulness of the dispute prevention approaches. The traditional culture of adversarialism in construction often hold sway. A relational culture and express emphasis on dispute prevention as an objective will improve the effectiveness of the dispute handling strategy of the FIDIC forms including the Red Book.

NEC3 ECC: Good Culture and Ethos in search of Complementary Dispute strategies

In contradistinction to the Red Book 1999, the NEC3 forms openly make the development of a new collaborative culture a central focus. This 'new' ethos¹⁰⁸ provide an appropriate context for the NEC's stated goal of minimising the incidences of disputes.¹⁰⁹ The link between theory and practice of dispute reduction/prevention and resolution under NEC3 ECC has received judicial recognition. At paragraph 86 of his decision in *WSP Cel Ltd v Dalkia Utilities Services Plc.*,¹¹⁰ Ramsey J made the following

¹⁰⁸ Deriving from the contextualists' perspective on contract and dispute resolution – see Macaulay, S., "The real and Paper deal: Empirical Pictures of Relationships, Complexity and the Urge for Transparent Simple Rules" (2003)66 MLR 44

¹⁰⁹ Mitchell, B. and Trebes, B., *Managing Reality – Book 3 Managing the Contract* (Thomas Telford Ltd, 2005)p.64

¹¹⁰ [2012] EWHC 2428 (TCC).

observation regarding the relationship between the NEC ethos and disputes:

The philosophy of the NEC Conditions is to avoid disputes at the end of a project by having intensive management machinery to deal with issues during the process of a project. The notification of disputes and the reference to an adjudicator is a necessary part of the detailed management philosophy under the NEC Conditions. This requires disputes to be referred to the adjudicator in a timely manner so that they can be resolved at the time. This necessarily means that for each of the stages of a compensation event, there may need to be a reference to the adjudicator to resolve the dispute.¹¹¹

Under the NEC3 forms, dispute reduction is to be achieved through a management machinery characterised by collaborative foresight, clear division of responsibilities, rigorous project management and speedy resolution of disputes through adjudication and litigation or arbitration. Carefully crafted procedures including early warning,¹¹² compensation events,¹¹³ valuation of change based on forecast defined cost of the work not yet executed¹¹⁴ and submission and revision of the programme¹¹⁵ are required to put into operation the 'management machinery' with the aim of reducing the incidences of dispute. Two of the procedures, early warning and compensation events illustrate how disputes may be reduced under the NEC forms.

Early Warning & Compensation Events

Clause 16 (1) of the NEC3 ECC requires the Contractor and the Project Manager to notify each other promptly of any matter which could 'increase the total of the Prices [cost], delay Completion [time], delay meeting a Key Date [time] or impair the performance of the works in use [quality]'. All such matters, except those which have been notified as compensation events, are to be entered as early warning matters in the Risk Register. The Project Manager and the Contractor may meet to discuss the matters identified. Both parties are enjoined to cooperate¹¹⁶ in the search for a mutually beneficial solution to notified matters and consider steps to mitigate their impact on the project.¹¹⁷ The early warning procedure is a risk management and allocation process; the parties do not only discuss possible mitigation measures but also risk allocation. Regular review of the

¹¹¹ Ibid. para 86

¹¹² NEC3 ECC Clause 16

¹¹³ NEC3 ECC Clauses 60 – 65. See also Mitchell B. and Trebes, B., *Managing Reality – Book 1 Introduction to the engineering and construction contract* (Thomas Telford Ltd, 2005)7; Mitchell, B. and Trebes, B., *Managing Reality – Book 3 Managing the Contract* (Thomas Telford Ltd, 2005) 71-74

¹¹⁴ NEC3 ECC Clause 63.1

¹¹⁵ NEC3 ECC Clauses 31&32

¹¹⁶ The meaning and extent of this responsibility under NEC3 ECC is unclear

¹¹⁷ NEC3 ECC Clause 16.3

notified matters means parties monitor these risks until threats posed are addressed.

Notified early warning matters may require changes to be made to the contract/Works and this may result in extension of time and increased prices. The mechanism for change management is compensation events,¹¹⁸ which is expressly noted as an example of the NEC's procedures to actualise key objectives such as minimisation of dispute and good management.¹¹⁹ Clause 60.1 of NEC3 ECC outlines the different scenarios which constitute compensation events.¹²⁰ Essentially, these are events which warrant a revision of prices or key dates.

The procedure for compensation events runs briefly as follows: Both Project Manager and Contractor are required to notify each other of compensation events.¹²¹ In the case of the Project Manager, this is to be done at the same time as instructions are communicated. For the Contractor, the events are to be notified within eight weeks. Different quotations reflecting alternative solutions to the events must then be prepared by the Contractor on the basis of a forecast of the impact of the events on time and cost. The Project Manager selects one of the options based on lower cost, least delay and or best quality, and notifies the Contractor of his acceptance of a particular quotation or the Project Manager's own assessment. The Project Manager's assessment of cost is based on the effect of the compensation events on actual Defined cost of work done, forecast Defined cost of work yet to be done and the resulting Fees. If the Project Manager fails to respond to a quotation within a specified period, it is deemed to have been accepted. Similarly, if he rejects a quotation and fails to make his own assessment of a compensation event, the earlier quotation will be deemed to have been accepted. The Project Manager can make his own assessments of compensation events if the Contractor delays in submitting its quotation, have issues with its programme or the initial assessment is judged incorrect by the Project Manager.

The compensation event procedure is underpinned by cooperation and regular communication between the parties and is expected to result in amicable management of change events.¹²² The procedure is intended to help the parties think ahead, have certainty about cost and time implications of change and also make risks associated with compensation

¹¹⁸ NEC3 ECC Clauses 60-65

¹¹⁹ See Guidance Notes for the NEC Engineering and Construction Contract, p.3

¹²⁰ Eggleston identifies compensation events under eight categories namely: Employer's risk events; Employer's default events; events related to the Project Manager and Supervisor; and measurement related events. The other four categories are prevention, physical conditions, adverse weather and Secondary option clause events – B. Eggleston, *The NEC 3 Engineering and Construction Contract: A Commentary*, 3rd Edn (Wiley- Blackwell, 2006),220-240. Eggleston also listed five additional compensation events identifiable under the Options.

¹²¹ NEC3 ECC Clauses 61.1.& 61(3)

¹²² See Guidance Notes for the NEC Engineering and Construction Contract, p.3

events easy to carry by the Contractor.¹²³ The compensation events procedure is often presented as a process which reduces problems relating to change, valuation of work and extension of time,¹²⁴ implying a reduction in disputes overall.

The picture in practice is not always as rosy. As Eggleston¹²⁵ demonstrates, the compensation events procedure is built on some flawed assumptions which can stifle the achievement of the intended goals. Compensation events are regular occurrence on construction sites; this is not the reality on which the form is based. The sheer number of events and the need to take each through the processes outlined in the NEC forms¹²⁶ could be daunting. The pressure on the Contractor to prepare relevant quotations and have up-to-date programme for purposes of the assessments can lead to wrong forecasting which may end up being higher or lower than it ought to be.¹²⁷ The burden on the Project Manager to make assessments of quotations within the timeframe provided can be overwhelming and may affect the quality of decisions.¹²⁸ Thus, there is a likelihood that disputes may arise. Under NEC3 ECC disputes are to be resolved promptly before the end of the project.¹²⁹ There is evidence that this is not always the case as there are instances where parties to adjudicated disputes refer outcomes of such adjudications to the relevant Tribunals long after such disputes have been adjudicated and the project has been concluded.¹³⁰ Disputes are to be referred to adjudication in the first instance, and then to litigation or arbitration. The main rationale for the use of adjudication appears to be the need for an independent intermediate dispute mechanism which is binding and can deliver quick outcomes.¹³¹

For a Contract Condition based on relationship and collaboration (mutual trust and cooperation), it is rather surprising that no provision is made in the NEC3 ECC forms for parties to attempt to resolve disputes by softer non-binding party-controlled mechanisms such as negotiation, mediation, conciliation or review boards.¹³² Admittedly, the guidance notes admonish parties to attempt amicable resolution of disputes through informal negotiation, mediation or conciliation.¹³³ There is also an acknowledgement that parties outside the UK using Option W1 will have limited time within which to attempt to resolve disputes through the 'non-binding'

¹²³ See Guidance Notes for the NEC Engineering and Construction Contract, p.3

¹²⁴ *ibid*

¹²⁵ B. Eggleston, *The NEC 3 Engineering and Construction Contract: A Commentary*, 3rd Edn (Wiley- Blackwell, 2006) 210-211

¹²⁶ NEC3 ECC Clauses 60-65

¹²⁷ B. Eggleston, *The NEC 3 Engineering and Construction Contract: A Commentary*, 3rd Edn (Wiley- Blackwell, 2006) 211

¹²⁸ *ibid*

¹²⁹ *WSP Cel Ltd v. Dalkia Utilities Services Plc* [2012] EWHC 2428

¹³⁰ See Ndekugri, I., "Late Disputes and the NEC3 Engineering and Construction Contract", (2016) *Proceedings of the Institution of Civil Engineers Management, Procurement and Law* 169, Issue MP2, 65-76

¹³¹ See NEC, *Guidance Notes for the Engineering and Construction Contract* (Thomas Telford Publishing, 2013) 92

¹³² The new NEC4 has only partly addressed this omission.

¹³³ See NEC, *Guidance Notes for the Engineering and Construction Contract* (Thomas Telford Publishing, 2013) 92

processes.¹³⁴ The suggested way out is that the parties could agree to extend the time limit for the submission of disputes to adjudication.¹³⁵ Parties using Option W2 are in a better position as disputes can be referred to adjudication at any time. The weakness of the suggestion on the use of non-binding dispute resolution mechanisms is that there are no contract clauses offering users these options.¹³⁶ Parties are to decide whether they want to use the processes after disputes have emerged. At this stage, they may have little or no motivation to agree on a resolution mechanism.¹³⁷

Lack of more dispute resolution options, particularly more collaborative processes under the NEC3 is 'out of sync' with the essence of its underpinning relational philosophy. A form built on relational ethos ought to encourage amicable dispute resolution through approaches like negotiation and mediation.¹³⁸ Naturally, it is expected that the idea that parties act in the spirit of mutual trust and cooperation will facilitated trust and cooperation in dispute resolution and advance the use of quicker, less costly party-controlled dispute processes. This expectation raises a question about the extent to which the concepts of mutual trust and cooperation under the NEC3 ECC forms have any impact, if at all, on dispute resolution.

Considered together, the concepts of mutual trust and co-operation are regarded as connoting good faith.¹³⁹ In the context of construction law, this may require parties to deal with each other honestly in the disclosure of information, act fairly and reasonably in the exercise of discretion and or take account of interests of others.¹⁴⁰ This is the import of the decision in the recent case of *Costain Limited v Tarmac Holdings Limited*.¹⁴¹ This connotation of 'mutual trust and co-operation' has three implications for dispute handling under NEC3. Firstly, parties involved in dispute avoidance, management and resolution have a general obligation to act honestly and transparently. They must not do anything that amount to withholding information from each other or misleading the other party.¹⁴² Parties must cooperate during risk meetings. In the assessment of compensation events, parties are expected to act honestly and fairly, not exploiting each other.

¹³⁴ *ibid*

¹³⁵ *ibid*

¹³⁶ Unless parties decide to exercise the option to introduce non-binding dispute resolution mechanisms through the Z-clauses.

¹³⁷ There is a suggestion that alternative dispute resolution approaches could be made part of the Tribunal under the NEC3 - See Broome, J., *The NEC Engineering and Construction Contract: A User Guide, 1999* (Thomas Telford, 1999) 58.

¹³⁸ Macaulay, S. "The real and Paper deal: Empirical Pictures of Relationships, Complexity and the Urge for Transparent Simple Rules" (2003) 66 MLR 44

¹³⁹ See Mosey, D., and "Good Faith in English Construction Law- What does it mean and does it matter?" (2015) ICLR 392; Fuchs, J.B. and Jackson, S. "Good Faith: An Anglo-German Comparison" (2015) ICLR 404; Christie, D., "How can the use of 'mutual trust and cooperation' in the NEC 3 suite of contracts help collaboration?" (2017) ICLR 34(2), 93-112; Thomas, D. QC, "Keating on NEC3" (Sweet and Maxwell, London, 2012). See also the decisions in *Gold Group Properties Ltd v BDW Trading Ltd* [2010] EWHC 1632 (TCC); *Costain Limited v Tarmac Holdings Limited* [2017] EWHC 319 (TCC), paras 118- 121 and *Automasters Australia PTY Limited v Bruness PTY Limited* [2002] WASC 286

¹⁴⁰ Mosey, D., "Good Faith in English Construction Law- What does it mean and does it matter?" (2015) ICLR 392

¹⁴¹ [2017] EWHC 319 (TCC)

¹⁴² *Northern Ireland Housing Executive v Healthy Buildings (Ireland) Limited* [2017] NIQB 43

The same attitude is expected during adjudications and in the course of proceedings before chosen Tribunals.¹⁴³ Furthermore, unless previously agreed, a party to a NEC3 ECC contract cannot rely on the mutual trust and cooperation clause to expand the scope of dispute resolution options available. In *Costain Limited v Tarmac Holdings Limited*,¹⁴⁴ a suggestion that Clause 10.1 should play a role in the selection of the appropriate dispute resolution process in a sub-contract incorporating two separate terms and conditions, each having separate dispute resolution mechanisms, was rebuffed by the court.¹⁴⁵ This approach was likely to promote uncertainty. Elaborating on the basis of the rejection of this view, Coulson J noted as follows:

Dispute resolution provisions require certainty. The parties need to know from the outset what to do and where to go if a dispute arises. On the claimant's construction, there would be no such certainty; everything would depend on the attitudes the parties adopted in discussions, once the dispute had arisen.

A party cannot demand that more cooperative/collaborative approaches to dispute resolution be adopted because of the obligation to co-operate under clause 10.1. Finally, the benefit of the obligation under clause 10.1 is likely limited to setting expectations regarding parties' conduct during dispute resolution.¹⁴⁶ As Baatz¹⁴⁷ put it, 'it may be however that the useful force of these obligations lies in the obligation to perform the problem solving and dispute avoidance or resolution obligations scrupulously.'

From the foregoing, it follows that the gap in the dispute resolution provisions under NEC3 in the area of collaborative dispute resolution cannot be filled simply by reference to its collaborative ethos. Thus, it is not surprising that some NEC3 ECC users have resorted to the use of Z-clauses to introduce dispute resolution processes aligned to the NEC3's philosophy. Some make it mandatory for disputes to be escalated to senior management of the parties prior to recourse to adjudication. Others rely on more sophisticated processes which are collaborative and less adversarial in character. A prime example of this is the Conflict Avoidance Panel (CAP) process developed by Transport for London (TfL) and the Royal Institution of Chartered Surveyors (RICS) to augment the NEC dispute

¹⁴³ Detailed analysis of the concepts of mutual trust and co-operation and their impact on dispute handling is covered elsewhere – e.g. *Northern Ireland Housing Executive v Healthy Buildings (Ireland) Limited* [2017] NIQB 43; *Mid Essex NHS Trust v Compass Group UK and Ireland Ltd* [2013] EWCA Civ 200; *Gold Group Properties Ltd v BDW Trading Ltd* [2010] EWHC 1632 (TCC); *TSG Building Services Ltd v South Anglia Housing* [2013] EWHC 1151 (TCC)

¹⁴⁴ [2017] EWHC 319 (TCC)

¹⁴⁵ *ibid* paras 38-41

¹⁴⁶ *Northern Ireland Housing Executive v Healthy Buildings (Ireland) Limited* [2017] NIQB 43

¹⁴⁷ Baatz, N., "Problem Management/ Dispute resolution in partnering contracts" (2008) *Proceedings of the Institution of Civil Engineers Management, Procurement and Law* 161, Issue MP3,115

provisions.¹⁴⁸ NEC4 attempts to address this challenge but in a very limited way through reference of disputes to party representatives prior to reference to adjudication and the Dispute Avoidance Board.¹⁴⁹ Though a good step, it remains only but a step in a journey to a more collaborative dispute handling strategy.

CONCLUSION

The 1999 FIDIC Red Book and the NEC3 ECC, well known standard forms for international construction and engineering projects, are built on very different philosophies. Whilst the former follows a more traditional/formalists' approach to contracting, the latter is aligned with a more contextual/relational perspective. This study has explored the extent to which the philosophies underpinning the FIDIC and NEC forms have influenced the dispute resolution approaches advocated in these Conditions of Contract. Contrary to expectations that the FIDIC Condition, with a more traditional approach to contracting, will support a formal/narrow view of dispute resolution, the available evidence indicates this is not the case. Although it does not emphasise dispute avoidance as openly, aggressively and, perhaps conceptually as the NEC3 ECC does, the Red Book provides wide-ranging dispute resolution options cutting across both softer collaborative approaches and hard, third party controlled, binding processes. The Engineer has an informal role to resolve differences between parties. The DABs have a dual role of nipping disputes in the bud before they bloom or manage them once they emerge. Parties have a choice to resolve their disputes amicably or resort to international arbitration. The range of dispute handling options available under the Red Book 1999 is the kind one will expect under a contract which supports collaboration such as the NEC3.

The philosophy of the Red Book is not as focused on dispute reduction as the NEC3 philosophy. The culture underpinning the FIDIC forms is largely adversarial and does not significantly bolster a cooperative/collaborative spirit between parties. The absence of a collaborative culture and philosophy and expressly stated proactive dispute reduction strategy weakens the overall FIDIC approach to dispute handling. Addressing these challenges will make the FIDIC dispute resolution more comprehensive and effective.

NEC3 ECC on the other hand, has a strong dispute prevention strategy which is intrinsically tied to its collaborative dispute avoidance philosophy. Collaborative foresight, clear allocation of responsibility, the early warning

¹⁴⁸ For more information on the CAP, see RICS, *Guidance on CAP Process for Tfl, Contractors and CAP Members* (RICS, 2014) 2. Accessed on 1/6/17 at [https://uk.practicallaw.thomsonreuters.com/4-616-9849?_lrTS=20170601105535689&transitionType=Default&contextData=\(sc.Default\)&firstPage=true&bhcp=1](https://uk.practicallaw.thomsonreuters.com/4-616-9849?_lrTS=20170601105535689&transitionType=Default&contextData=(sc.Default)&firstPage=true&bhcp=1)

¹⁴⁹ NEC4 ECC Option W3.

procedure, change management and effective use of programmes are all measures geared towards effective project delivery and dispute reduction. However, the relational/collaborative spirit of the NEC3 ECC is less visible when disputes arise. This is mainly because the form offers very narrow dispute resolution options, which are all inquisitorial/adversarial in character, and arguably, less aligned to the NEC3's philosophy. Parties looking for a relational, collaborative and less adversarial dispute resolution approaches have had to resort to Z clauses to incorporate softer/cooperative resolution mechanisms. These allow dispute escalation from softer, cooperative, party-controlled approaches to more adversarial third-party controlled processes. Attempt by the drafters of NEC4 to address some of these concerns is partial and did not go far enough. Nevertheless, the very attempt by the drafters of NEC4 to address this fundamental issue is an admission of the gap in the NEC3 dispute resolution edifice.