

Kaleidoscope: All Change in the FIDIC Forms of Contract

The announcement by FIDIC¹ that the long-awaited new editions of its principal forms of contract would be launched at its annual London Users' Conference² created an exciting opportunity for us. Since the conference opened on 5th December, our Society of Construction Law / Technology and Construction Bar Association presentation that evening represented an immediate opportunity to give a response to the new editions. Almost certainly, this was the first independent evaluation of the contracts anywhere in the world. This paper is a version of that presentation, edited to focus exclusively on the changes introduced by FIDIC, which had begun in February 2017 with the launch of the new White Book.

The FIDIC White Book 2017³

Although it is not as venerable as FIDIC's Red and Yellow Books,⁴ the White Book now runs to five editions and 27 years. That it bridges the past and the modern era is illustrated by the quaint narrative in the White Book Guide⁵ to the effect that 'Godfrey Ackers'⁶ wife, Wendy, typed many early drafts of these documents'. However homely its beginning, the White Book has become the most influential contract for professional services in the international construction market, certainly when the project is being executed with a FIDIC construction contract.⁷

The White Book's History

1st edition 1990	White Book Guide
2nd edition 1991	1st edition 1991
3rd edition 1998	2nd edition 2001
4th edition 2006	New edition expected 2019
5th edition 2017	



Ellis Baker

Partner, London

T +44 20 7532 1601

E ebaker@whitecase.com



Anthony Lavers

Counsel, London

T +44 20 7532 1607

E alavers@whitecase.com

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¹ Fédération Internationale Des Ingénieurs-Conseils.

² 30th FIDIC Users Conference.

³ FIDIC Client/Consultant Model Services Agreement (5th edition 2017) (White Book).

⁴ 1st editions 1957 and 1965 respectively.

⁵ 1st edition 1991.

⁶ Godfrey Ackers was an early member of the drafting committee.

⁷ Axel-Volkmar Jaeger and Götz Sebastian Hök, *FIDIC – A guide for practitioners* (Springer 2010), pages 230–231.

Until comparatively recently, the White Book was produced quite independently of the FIDIC Contracts Committee. The Client/Consultant Relationships Committee prepared drafts of the early editions in consultation with major stakeholders including the World Bank, the Asian Development Bank, the Arab Fund for Economic and Social Development and the UK's Association of Consulting Engineers.

The 2017 drafts were sent to (*inter alia*) the French Development Agency, European International Contractors (who almost invariably comment on FIDIC construction contracts), AECOM (Hong Kong), Dolphin Energy (UAE) and individual reviewers in the UK, France and Denmark.

The purpose of the modern White Book is to provide an agreement for professional services for the purposes of:

- pre-investment and feasibility studies;
- detailed design;
- contract administration and project management.

It is intended for use both on employer-design projects where the contract is between employer and consultant and design and build projects where the contract is between contractor and consultant. FIDIC also regards the White Book as suitable for both international and domestic projects, since it is not prepared for any particular jurisdiction. The White Book has been published in conjunction with two other documents. These are the Sub-Consulting Agreement, which is to be used where a Consultant appointed under the White Book wishes to sub-contract part of the services, and the Model Joint Venture Consortium Agreement, which is for use where an unincorporated JV acts as consultant under the White Book.

The Terms of Reference laid down by the Contracts Committee (which took over responsibility for the White Book from the Client/Consultant Relationships Committee) required the review of the previous edition to consider the professional's duty of care and the Task Group charged with the review considered:

- up-to-date practice worldwide in drafting consultancy agreements;
- a fair balance of risk between the Client and the Consultant;
- the professional's obligation in respect to due skill and care;
- available insurance.

Obligation of Consultant

Under the previous edition of the FIDIC White Book⁸ the Consultant's obligation was strictly limited:⁹

'Notwithstanding anything else in this Agreement or any legal requirement of the Country or any jurisdiction (including, for the avoidance of doubt, the jurisdiction of the place of establishment of the Consultant), the Consultant shall have no other responsibility than to exercise reasonable skill, care and diligence in the performance of his obligations under the Agreement' [emphasis supplied].

The new edition of the White Book has made a significant change to the emphasised wording:¹⁰

'shall have no other responsibility than to exercise the reasonable skill, care and diligence to be expected from a consultant experienced in the provision of such services for projects of similar size, nature and complexity' [emphasis supplied].

To establish whether reasonable skill and care represents an industry standard, FIDIC examined over 20¹¹ standard forms worldwide. The conclusion was: 'that it was not a fair or reasonable balance of risk to make the Consultant strictly liable for the outcome of the professional services in situations where there was no evidence of fault or breach on its behalf'.

This was so despite the observation that 'in certain civil law jurisdictions strict liability for defective services is imposed on the Consultant' and insurance is available, indeed, mandatory. The Task Group and the FIDIC Contracts Committee determined 'that the appropriate standard of care to be imposed on a Consultant was that of reasonable care and skill to be expected from an experienced consultant'.

At first sight, it appears that a form of fitness for purpose obligation has been imported into the new edition of the White Book. The authors observe that the apparent provision for fitness for purpose¹² is diluted by the qualification which precedes it:

'To the extent achievable using the standard of care in Sub-Clause 3.3.1 and without extending the obligation of the Consultant beyond that required under Sub-Clause 3.3.1' [emphasis supplied] the Consultant shall perform the Services with a view to satisfying any function and purpose that may be described in Appendix 1 [Scope of Services].

⁸ White Book 4th edition 2006.

⁹ White Book 4th edition 2006, Sub-Clause 3.3.1.

¹⁰ White Book, Sub-Clause 3.3.1.

¹¹ Unspecified.

¹² White Book, Sub-Clause 3.3.2.

That is still an obligation of reasonable skill and care. The nearest to a strict obligation is what follows:¹³ 'The Consultant shall comply with all regulations, statutes, ordinances and other forms of standards, codes of practice and legislation applicable to the Services and the Agreement' though even this, it is submitted, must be read in conjunction with the first words of Sub-Clause 3.3.1:¹⁴ 'Notwithstanding any term or condition to the contrary in the Agreement ...'

FIDIC has defended its refinement of the Consultant's obligations. It 'recognised considerable pressure from some parts of the industry to enhance the obligations placed on the Consultant to ensure that the professional services and deliverables would be fit for purpose'.¹⁵ However, its conclusion was that 'there is no common understanding of due skill and care or fitness for purpose either between clients and consultants or between legal advisors in various jurisdictions'.

What is beyond question is that FIDIC has introduced in the White Book an obligation of good faith:¹⁶ 'In all dealings under the Agreement the Client and the Consultant shall act in good faith and in a spirit of mutual trust'. It is interesting to compare this with the new NEC equivalent,¹⁷ which is now separated into two components, requiring that the Parties, Project Manager and Supervisor shall: "act as stated in this Contract" and "act in a spirit of mutual trust and co-operation".

The White Book has introduced a number of other significant changes:

- Variations;
- Suspension and Termination;
- Defined Terms;
- Scope of Services.

Variations

Under the previous edition,¹⁸ provision for variation was almost minimalist. Variation of the Agreement was possible by written agreement,¹⁹ while variation of the Services was to be prepared by the Consultant if requested by the Client²⁰ and the Consultant was not required to commence Varied Services until the Client approved the fees.²¹

The new edition has a whole new clause on Variations to Services.²² The Client can request a Variation to the Services but subject to the restriction that 'Any such variation shall not substantially change the extent or nature of the Services'.²³ There is a list of circumstances where a Variation to Services may be issued²⁴ and a requirement for Consultant notification of the Client of claimed entitlement to a Variation.²⁵ The Consultant potentially benefits considerably from the reservation²⁶ that it is bound by the Variation unless it 'promptly' notifies the Client that it does not possess the relevant skills or resources to carry out the Variation or that '*the Consultant considers* [emphasis supplied] that the Variation will substantially change the extent or nature of the Services': the emphasised words represent a significant qualification of the obligation.

Suspension and Termination

Under the previous edition, provision was limited, including a right of suspension or termination for the Client's convenience on 56 days' notice²⁷ and a right of termination for cause where the Consultant was 'without good reason not discharging his obligations'.²⁸ The Consultant had a right to suspend or terminate for non-payment or to terminate where there had been 182 days' suspension of Services due to Changed Circumstances or as a result of Client's notice to suspend.²⁹

13 White Book, Sub-Clause 3.3.3.

14 White Book, Sub-Clause 3.3.1.

15 White Book 5th edition Foreword.

16 White Book, Sub-Clause 1.16.1.

17 NEC4, Sub-Clauses 10.1 and 10.2.

18 White Book 4th edition, Sub-Clause 4.3.

19 White Book 4th edition, Sub-Clause 4.3.1.

20 White Book 4th edition, Sub-Clause 4.3.2.

21 White Book 4th edition, Sub-Clause 4.3.3.

22 White Book, Clause 5.

23 White Book, Sub-Clause 5.1.1.

24 White Book, Sub-Clause 5.1.2.

25 White Book, Sub-Clause 5.1.3.

26 White Book, Sub-Clause 5.1.4.

27 White Book 4th edition, Sub-Clause 4.6.1.

28 White Book 4th edition, Sub-Clause 4.6.2.

29 White Book 4th edition, Sub-Clause 4.6.3.

Under the new edition, there is much more detailed provision for Suspension and Termination by both Client and Consultant and regarding causes and consequences.

The Client has the right of suspension at will.³⁰ The Consultant has the right of suspension³¹ for non-payment, for an Exceptional Event³² and for the failure of the Client to meet its Financial Arrangements obligations.³³ Clause 6 also deals with post-suspension matters: Resumption³⁴ and Effects of Suspension.³⁵

Termination by the Client³⁶ is available for cause after a cure period of 28 days, for an insolvency event by the Consultant, or corruption. It is also available for convenience on 56 days' notice and on an Exceptional Event leading to 168 days of Suspension of Service.

Termination by the Consultant is available on suspension by the Client for more than 168 days, on insolvency or corruption by the Client, or non-payment, or a failure by the Client to meet its Financial Arrangements obligations. It is also available where there has been suspension by the Contractor for more than 168 days due to an Exceptional Event.

Changes to Defined Terms

To the right is a table of the main changes to Defined Terms under sub-clause 1.1. of the 5th edition. It shows those terms which have been removed (Out), those which have been inserted (In) and those which have been significantly changed (Amended).

OUT	AMENDED	
Works	Agreement	Services
Written/in writing	Client	Party/Parties
Agreed Compensation	Commencement Date	Time for Completion
	Consultant	Year
	Country	
IN		
Background Intellectual Property	Exceptional Costs	Notice
Client's Representative	Exceptional Event	Programme
Confidential Information	Foreground Intellectual Property	Variation/Variation to the Services
Consultant's Representative	Form of Agreement	Variation Notice
Effective Date	Intellectual Property	Works Contract

30 White Book, Sub-Clause 6.1.1.

31 White Book, Sub-Clause 6.1.1.

32 Under White Book, Sub-Clause 1.1.13.

33 Under White Book, Sub-Clause 2.4.

34 White Book, Sub-Clause 6.2.

35 White Book, Sub-Clause 6.3.

36 White Book, Sub-Clause 6.4.1.

Scope of Services

Under the previous edition, the express provision for Scope of Services was hardly more than minimalist. Appendix 1 consisted of little more than a blank page for the parties to fill (or not) as they chose.

The new edition gives guidance to the Parties to assist them with completion of Appendix 1.³⁷ The specification of the scope of the Consultant's Services should include any exclusions and the Parties are referred to FIDIC's Definition of Services. The Parties should describe the function and purpose of the Services, relating these to scope and to the standard of care. The Parties should specify information relied upon by the Consultant which it cannot review for accuracy, for example sub-surface conditions. The Parties should also specify any contract administration requirements to be fulfilled by the Consultant, for example under the construction contract and specify responsibility for interface between Services and services provided by others.

The guidance in the other Appendices has been expanded more modestly than that in Appendix 1:

- Appendix 2 – Personnel, Equipment and Services of Others to be Provided by the Client
- Appendix 3 – Remuneration and Payment
- Appendix 4 – Programme (replaces Time Schedule for Services)

but the trend is the same: a somewhat higher degree of prescription or guidance than the previous edition.

The 2017 Editions of the Red, Yellow and Silver Books

The launch of the new editions of the FIDIC Red,³⁸ Yellow³⁹ and Silver⁴⁰ Books on 5th December 2017 was the most important event in international construction contracting for at least eighteen years. Given that the first edition of the Rainbow Suite, as it became known, was released in 1999, FIDIC could not be accused of acting with undue haste, especially in the context of the 12-year gap between 1987⁴¹ and 1999. This section of the paper seeks to provide some preliminary indications as to whether the wait will have been worthwhile.

The New Offering

The new suite comprises substantially revised versions of FIDIC's three core contracts.

The Red Book is FIDIC's 'traditional procurement' Employer-design contract. It is a re-measurement contract, though with the alternative of lump sum payment. Contract administration is undertaken by the Engineer.

The Yellow Book has a dual function. It is FIDIC's 'design-and-build'/Contractor-design contract; it can also be used specifically for mechanical/electrical plant. The Contractor designs and builds the Works according to the Employer's Requirements. This is a lump sum contract and is also administered by the Engineer.

The Silver Book is FIDIC's EPC/Turnkey Contract. It is also a lump sum design-and-build contract, but the Contractor accepts a much greater allocation of responsibility and risk than under the Yellow Book. The new Silver Book is to be administered by an Employer's Representative.

If FIDIC took too long to produce the new contracts, it cannot be accused of lack of industry. The 1999 forms were each about 60 pages long with some 20 pages of guidance notes. Each of the new contracts is over 100 pages, with more than 40 pages of guidance notes. As well as greater volume, the new contracts also contain a striking new feature. FIDIC's Task Group 15,⁴² which reported to the FIDIC Contracts Committee, produced a set of criteria known as the 'Golden Principles', which a contract has to satisfy if it is to be regarded as a FIDIC contract.

The Golden Principles⁴³

- GP1 The duties, rights, obligations, roles and responsibilities of all the Contract Participants must be generally as set out in the General Conditions and appropriate to the project.
- GP2 Particular Conditions must be clear and unambiguous.
- GP3 The Particular Conditions must not change the balance of risk/reward allocation provided for in the General Conditions.

³⁷ The guidance (Page d) is provided in the Appendix itself.

³⁸ FIDIC Conditions of Contract for Construction, 2nd edition 2017 (Red Book).

³⁹ FIDIC Conditions of Contract for Plant & Design Build, 2nd edition 2017 (Yellow Book).

⁴⁰ FIDIC Conditions of Contract for EPC Turnkey Projects, 2nd edition 2017 (Silver Book).

⁴¹ The previous versions of the Red Book 4th edition and Yellow Book 3rd edition.

⁴² Comprising Husni Mardi (Team Leader – Jordan), Donald Charrett (Principal Drafter – Australia), Axel Jaeger (Germany), Rafel Morek (Poland) and Kaj Möller (Sweden).

⁴³ These are contained in the Guidance for the Preparation of Particular Conditions, page 8 of each of the three 2nd editions.

GP4 All specified time periods must be reasonable.

GP5 All formal disputes must be referred to a DAAB⁴⁴ as a condition precedent to arbitration.

Of these, GP1, GP2 and GP4 can be regarded as unexceptional and unexceptionable. But GP3 is a remarkable statement. First, it is widely known that parties have for years routinely made significant changes to the risk allocation in FIDIC contracts, as they do in using any standard form contracts. Second, FIDIC has long included, and continues to include, in its contracts guidance notes on alternative clauses which, if adopted, significantly change risk allocation. It seems reasonable to ask why, if these can be adopted without infringing GP3, other amendments might not also be permissible. A standard form contract is surely only a starting point.

GP3 may be remarkable but it is less so than GP5. Making it an essential requirement that all disputes must go to a DAAB as a condition precedent to arbitration is all the more extraordinary when one realises that FIDIC 'strongly recommends that the DAAB be appointed as a "standing DAAB"'.⁴⁵ While it is fully appreciated that a dispute board is one of a number of important techniques of alternative dispute resolution and as such should be considered for use where appropriate, it is difficult to accept that a standing DAAB will always be appropriate, especially having regard to the wide variety of projects in terms of size, complexity and jurisdiction where the FIDIC contracts are used. In certain markets, notably in the Middle East, the DAB provision in the FIDIC 1999 editions is very frequently deleted. In these circumstances, it is difficult to avoid the conclusion that the elevation of a standing DAAB to a Golden Principle is not justified and is not in tune with a significant part of FIDIC usage.

The Major Changes in the 2017 Editions

The major changes in the 2017 editions will be considered under three main themes:

- Product, Risk Allocation and Time;
- Contract Administration and Claims; and
- Dispute Avoidance and Resolution.

Analysis in terms of Product and Time follows the structure adopted by the authors in their text on the 1999 Suite.⁴⁶

Product

The treatment of Product will focus on obligations in relation to quality and standards.

The first of these is fitness for purpose, specifically under the Yellow and Silver Books, always a sensitive issue in negotiating design-build contracts. The Employer requires the security of knowing that the asset can be used as intended, while the Contractor will wish to avoid vague and ill-defined obligations which are difficult to fulfil.

The 1999 Yellow and Silver Books contained limited fitness for purpose obligations by which the Contractor undertook that 'when completed, the Works shall be fit for the purposes for which the Works are intended as defined in the Contract',⁴⁷ the definition typically being as stated in the Employer's Requirements, absent which the obligation fell away.

The 2017 Yellow and Silver Books also contain a general obligation upon the Contractor: 'When completed, the Works ... shall be fit for the purpose for which they are intended, as defined and described in the Employer's Requirements or, where no purpose(s) are so defined and described, fit for their ordinary purpose(s).'⁴⁸

The 2017 editions of the Yellow and Silver Books contain much stronger fitness for purpose obligations than their predecessors. The Contractor's Indemnities provision⁴⁹ states that the Contractor:

'shall indemnify and hold harmless the Employer against all acts, errors or omissions by the Contractor in carrying out the Contractor's design obligations that result in the Works (or Section or Part or major item of Plant, if any), when completed, not being fit for the purpose(s) for which they are intended under Sub-Clause 4.1'.

In addition, the Contractor is obliged, under the Insurance provisions, if required by the Contract Data, to effect and maintain professional indemnity insurance⁵⁰ against liability arising out of any act, error or omission by the Contractor in carrying out the Contractor's design obligations under the Contract that results in the Works (or Section or Part or major item of Plant, if any), when completed, not being fit for the purpose for which they are intended under Sub-Clause 4.1. The insurance requirement has to be seen against the reality

44 Dispute Avoidance/Adjudication Board, Red and Yellow Books 2017, Sub-Clause 1.1.22; Silver Book 2017, Sub-Clause 1.19.

45 Guidance for the Preparation of Particular Conditions, Red Book 2017, page 47; Yellow Book 2017, page 51.

46 E Baker, B Mellors, S Chalmers and A Lavers, *FIDIC Contracts: Law and Practice* (Informa, London 2009).

47 Sub-Clause 4.1 in Yellow and Silver Books 1999.

48 Sub-Clause 4.1 (Contractor's General Obligations).

49 Sub-Clause 17.4 in Yellow and Silver Books 2017.

50 Yellow and Silver Books 2017, Sub-Clause 19.2.3.

that relatively few design/build EPC contractors routinely carry such cover, and may well find difficulty in obtaining it.

The second element of provisions governing quality and standards of the Product which has seen major change is that of Performance Liquidated Damages. The 1999 FIDIC Suite was curiously out of line with international contracting on this issue. Bespoke contracts have for many years often included both delay damages and performance liquidated damages provisions. The approach taken by FIDIC in the 1999 Rainbow Suite was idiosyncratic. The result of the failure to pass Tests on Completion⁵¹ was that the Contract Price was 'reduced by such amount as shall be appropriate to cover the reduced value to the Employer...' Curiously, failure of Tests after Completion was deemed to constitute a pass, where 'the relevant sum payable as non-performance damages' was stated in the Contract and paid by the Contractor.⁵²

The 2017 revisions define Performance Damages⁵³ and payment of them is expressed as an entitlement on failure to pass tests on completion where the Employer requests the issue of a Taking Over Certificate⁵⁴ and on failure of tests after completion where the applicable Performance Damages are set out in the Schedule of Performance Guarantees.⁵⁵

These much needed amendments bring the FIDIC Forms into line with mainstream international practice and are to be welcomed.

Risk Allocation

The most important area of change in risk allocation is to limitation of liability. Two components will be considered: exclusion of consequential loss and caps on liability. Basically, indirect and consequential loss are excluded under the FIDIC contracts, with certain exceptions. Neither party is liable for such loss except under:⁵⁶

Sub-Clause 8.8 [Delay Damages]

Sub-Clause 13.3.1(c) [Variation by Instruction]

Sub-Clause 15.7 [Payment after Termination for Employer's Convenience]

Sub-Clause 16.4 [Payment after Termination by Contractor]

Sub-Clause 17.3 [Intellectual and Industrial Property Rights]

Sub-Clause 17.4 [Indemnities by Contractor]

Sub-Clause 17.5 [Indemnities by Employer]

So far as limitation of liability is concerned, FIDIC has provided a choice. The basic position under the General Conditions is that total liability is capped at the sum stated in the Contract Data⁵⁷ or, if none, the Accepted Contract Amount⁵⁸ or Contract Price⁵⁹ with the following exceptions:

Sub-Clause 2.6 [Employer-Supplied Materials and Employer's Equipment]

Sub-Clause 4.19 [Temporary Utilities]

Sub-Clause 17.3 [Intellectual and Industrial Property Rights]

Sub-Clause 17.4 [Indemnities by Contractor]

However, FIDIC also offers an alternative⁶⁰ in the Guidance for the Preparation of Particular Conditions. Under this alternative regime, there are separate liability caps for consequential losses⁶¹ and the Contractor's liability for other losses is capped at the value of insurance cover for each.⁶²

It is not suggested that this alternative is inherently objectionable, and indeed, in the oil and gas industry, for example, limitation of liability by reference to insurance is comparatively common. Nevertheless, this is a completely different approach from that set out in the General Conditions. And that would appear to conflict with Golden Principle GP3 to the effect that Particular Conditions must not change the balance of risk and reward in the General Conditions. The inclusion of the alternative limitation of liability regime, justifiable in itself, demonstrates most clearly that the Golden Principle approach – that risk allocation in the General Conditions must never be changed – is simply unsustainable.

51 Yellow Book 1999, Sub-Clause 9.4.

52 Yellow Book 1999, Sub-Clause 12.4.

53 Yellow Book 2017, Sub-Clause 1.1.63.

54 Yellow Book 2017, Sub-Clause 9.4(d).

55 Yellow Book 2017, Sub-Clause 12.4.

56 The examples are from the 2017 Yellow and Silver Books.

57 Yellow Book 2017, Sub-Clause 1.15; Silver Book 2017, Sub-Clause 1.14.

58 Yellow Book 2017.

59 Silver Book 2017.

60 Yellow Book 2017, pages 16–17; Silver Book 2017, pages 17–18.

61 Sub-Clause (b).

62 Sub-Clauses (c)–(g).

Two further areas of risk allocation require comment: risk of loss and force majeure.

The background to these areas requires an understanding of recent FIDIC history. The FIDIC Gold Book⁶³ introduced an entirely new regime of risk allocation,⁶⁴ by which *all* risks were allocated between the Parties (with differentiation between Design-Build Period risks and Operation Service Period risks) rather than just loss or damage. The Gold Book's Risk Allocation clause distinguished between Employer's Commercial Risks, Employer's Risks of Damage and Contractor's Risks. FIDIC had widely encouraged the expectation that the new editions would follow the direction taken by the Gold Book as part of a commitment to the evolution of current best practice, both generally, and specifically in relation to risk allocation.

This encouragement was carried on into FIDIC's Pre-Release Editions of the Yellow Book, distributed in London⁶⁵ and Abu Dhabi⁶⁶ respectively, where the provisions⁶⁷ on care of the works and indemnities followed the Gold Book approach. It will therefore be a surprise to those studying the actual 2017 editions to find that the Gold Book/Yellow Book Pre-Release approach was abandoned just a few months later in favour of a conventional care of the works clause,⁶⁸ by which the Contractor is made fully responsible for care of the Works, subject to the exceptions expressly set out.⁶⁹

One of the express exceptions is the category of 'Exceptional Events', which has replaced 'Force Majeure', though with a list setting out the meaning of 'an event or circumstance'⁷⁰ which is broadly the same as the Force Majeure provisions in the 1999 Rainbow Suite;⁷¹ it may be mentioned that 'tsunami' has been added to the 'natural catastrophes'.⁷²

Time

Two points of particular significance should be noted in relation to time for performance.

First, FIDIC has offered the possibility of an additional sub-clause in its Guidance for the Preparation of Particular Conditions⁷³ which would allow the Employer⁷⁴ to designate Milestones, defined as 'a part of the Plant and/or a part of the Work stated in the Contract Data (if any) and described in detail in the Employer's Requirements⁷⁵ as a Milestone'.⁷⁶ These 'milestones' must be completed by specified dates. The milestones are not 'sections', so, if this provision is used, the dates are in addition to any for sectional completion, and also in addition to the Time for Completion of the Works. Delay damages would of course be payable in the event that these dates are not met, in addition to those for missing a Milestone. This is a further example of an optional provision permitting a substantial re-allocation of risk, in apparent contradiction of Golden Principle GP3.

The second major departure relating to time is in respect of programming. In the 2017 contracts, FIDIC has introduced a much more detailed and prescriptive programme clause.⁷⁷ This is a welcome revision, since the 1999 programming provisions were generally regarded as outdated. However, the new guidance on programming makes one very telling concession regarding the degree of detail which has been introduced:⁷⁸ 'For less complex projects, the Employer may consider simplifying the requirements for the Contractor's programme' and replacing them with the equivalent requirements from the 1999 contracts. While it would be unfair to criticise an attempt to be practical, this does raise a fundamental question. On any view, at over 100 pages, the new contracts are complicated. It may be that for smaller, and/or less complex projects there will be other provisions that should be replaced with their simpler

63 FIDIC Conditions of Contract for Design Build and Operate Projects 2008 (Gold Book).

64 For a detailed analysis see E Baker, B Mellors, S Chalmers and A Lavers, Chapter 7.

65 Conditions of Contracts (sic) for Plant & Design Build Pre Release Second Edition 2017, launched in London December 2016.

66 Conditions of Contracts (sic) for Plant & Design Build Pre Release Second Edition 2017, launched in Abu Dhabi February 2017.

67 Pre-Release editions, Clause 17.

68 Red, Yellow and Silver Books 2017 editions, Sub-Clause 17.1.

69 Red, Yellow and Silver Books 2017 editions, Sub-Clause 17.2.

70 Red, Yellow and Silver Books 2017 editions, Sub-Clause 18.1.

71 Sub-Clause 19.1 of the 1999 Red, Yellow and Silver Books.

72 Red, Yellow and Silver Books 2017 editions, Sub-Clause 18.1(f).

73 Guidance for the Preparation of Particular Conditions Page 27.

74 Red, Yellow and Silver Books 2017 editions, Sub-Clause 4.24.

75 Yellow and Silver Book, 'specification' (Red Book).

76 New definition inserted under Sub-Clause 1.1 of the 2017 editions.

77 Sub-Clause 8.3 in Red, Yellow and Silver Books 2017 editions.

78 Guidance for the Preparation of Particular Conditions Yellow Book 2017 pages 34–35; Silver Book 2017 page 35; Red Book 2017 pages 33–34.

predecessors. The ultimate destination of that line of thinking is, of course, to ask whether there will be a category of 'less complex' projects for which it is better to retain a 1999 edition in its entirety.

There is one further aspect in relation to time which is worthy of comment. The issue of concurrent delay is notoriously contentious and a source of great uncertainty in construction claims and dispute resolution in many jurisdictions.⁷⁹ Because of this, in some standard form contracts, there is express provision as to how the matter should be resolved. This is especially so in Australia, where the Australian Form AS4000 provides⁸⁰ that 'when both non-qualifying and qualifying causes of delay overlap, the Superintendent⁸¹ shall apportion the resulting delay (to completion) according to the respective causes contribution'. It is further provided that the Superintendent shall disregard questions of whether practical completion could nevertheless be achieved without an extension of time or whether the contractor can accelerate: 'but shall have regard to what prevention and mitigation of the delay has not been effected by the Contractor'.

It is therefore noteworthy that contracts as prescriptive as the 2017 FIDIC standard forms take no express position in the General Conditions. Instead, the Parties are invited to agree their own arrangements:

'If a delay caused by a matter which is the Employer's responsibility is concurrent with a delay caused by a matter which is the Contractor's responsibility, the Contractor's entitlement to EOT shall be assessed in accordance with the rules and procedures stated in the Special Provisions (if not stated, as appropriate taking due regard of all relevant circumstances).'⁸²

FIDIC's somewhat defensive explanation for this is given in the Guidance for the Preparation of Particular Conditions⁸³ namely that 'there is no one standard set of rules/procedures in use internationally' and 'different rules/ procedures may apply in different jurisdictions'.

Rather surprisingly, this is qualified by the observation that the approach in the SCL Delay and Disruption Protocol⁸⁴ 'is increasingly being adopted internationally'. Whether or not this is correct, it is likely that many parties will not make express provision, leaving the Contractor's entitlement to be assessed 'as appropriate taking due regard of all relevant circumstances'.⁸⁵

Contract Administration and Claims

The status of the contract administrator has changed with each of the modern FIDIC editions. Thus in the 4th edition of the Red Book,⁸⁶ it was provided⁸⁷ that where the Engineer was required to exercise his discretion by

- (a) giving his decision, opinion or consent
- (b) expressing his satisfaction or approval
- (c) determining value or
- (d) otherwise taking action which may affect the rights and obligations of the Employer or the Contractor

he shall exercise such discretion impartially, within the terms of the Contract and having regard to all the circumstances [emphasis supplied].

In the 1999 Edition of the Red Book,⁸⁸ a differentiation was expressly made between situations where 'Except as otherwise stated' in 'carrying out duties or exercising authority, specified in or implied by the Contract, the Engineer shall be deemed to act for the Employer'⁸⁹ on the one hand and, where making determinations,⁹⁰ 'the Engineer shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances' [emphasis supplied].

The 2017 2nd Editions of the Red and Yellow Book have moved on again, although some of the 1999 features are preserved in a modified form.

⁷⁹ For a trans national comparison see Matthew Cocklin, 'International approaches to the legal analysis of concurrent delay: is there a solution for English law?' SCL Paper 182 (April 2013).

⁸⁰ AS4000, Sub-Clause 34.4.

⁸¹ The equivalent of the Engineer in FIDIC as contract administrator.

⁸² Sub-Clause 8.5 of the Red, Yellow and Silver Books 2017.

⁸³ Red Book page 34; Yellow Book page 35; Silver Book page 36.

⁸⁴ Society of Construction Law Delay and Disruption Protocol 2nd edition 2017.

⁸⁵ Sub-Clause 8.5 in the Red, Yellow and Silver Books 2017.

⁸⁶ Conditions of Contract for Works of Civil Engineering Construction 4th edition 1987 Reprinted 1992.

⁸⁷ Red Book 4th edition, Sub-Clause 2.6.

⁸⁸ And in the Yellow Book.

⁸⁹ Red and Yellow Books 1999 editions, Sub-Clause 3.1.

⁹⁰ Red and Yellow Books 1999 editions, Sub-Clause 3.5.

Thus again, 'Except as otherwise stated', 'whenever carrying out duties or exercising authority, specified in or implied by the Contract, the Engineer shall act as a skilled professional and *shall be deemed to act for the Employer*'⁹¹ and in making a determination 'the Engineer shall make a *fair determination* of the matter or Claim, in accordance with the Contract, taking due regard of all relevant circumstances'⁹² [emphasis supplied].

But now, when carrying out his/her duties under the Agreement or Determination Sub-clause⁹³ 'the Engineer *shall act neutrally between the Parties* and shall not be deemed to act for the Employer' [emphasis supplied].

By this last provision, FIDIC has introduced a new concept, a new creation, even: the 'neutral Engineer'. What meaning is assigned to 'neutrality' will depend, presumably, partly on the national law of the Contract. FIDIC has given some indication of its own intention in introducing the new concept in its Guidance Notes:⁹⁴

'By these statements it is intended that, although the Engineer is appointed by the Employer and acts for the Employer in most other respects under the Contract, when acting under (Sub-Clause 3.7) the Engineer treats both Parties *even-handedly, in a fair-minded and unbiased manner*' [emphasis supplied].

Whether FIDIC's intentions are realised will depend upon how they are implemented by the Parties.

Contract administration is, of course, treated quite differently by the Silver Book, in that there is no Engineer appointed, leaving responsibility for the task with the Employer. Here too, however, there has been a major change, potentially of real significance. Under the 1999 Silver Book,⁹⁵ in exercising discretion under the Determinations provision, 'the Employer shall make a *fair determination* in accordance with the Contract, taking due regard of all relevant circumstances.' [emphasis supplied]. The Employer was entitled ('may appoint') to have an Employer's Representative to act on his behalf under the Contract.⁹⁶

The 2017 2nd Edition of the Silver Book has changed the context of this arrangement radically, while preserving its nominal appearance to some extent. The Employer is now *obliged* ('shall appoint') an Employer's Representative, who is 'deemed to act on the Employer's behalf under the Contract.'⁹⁷ A Silver Book project under the new edition will therefore always have a 'third person' engaged in contract administration. Furthermore, the status of the Employer's Representative appears to have changed. It is now not the Employer, but the Employer's Representative who has a duty to 'make a fair determination of the matter or Claim'.⁹⁸ And most intriguingly in carrying out duties under the Agreement or Determination provisions, 'the Employer's Representative *shall not be deemed to act for the Employer*'.⁹⁹

While the new Silver Book does not go the length of requiring the Employer's Representative to be 'neutral', it seems unnecessarily confusing to create a position where the role of the Employer's Representative is expressly *not* to represent the Employer.

There is nothing inherently repugnant about a contract administered by the Employer; certainly not under English law. In *Balfour Beatty Civil Engineering v Docklands Light Railway*,¹⁰⁰ the ICE 5th edition¹⁰¹ had been amended to allow an Employer's Representative to act in place of the Engineer and in *Scheldebouw v St James Homes*¹⁰² the then Jackson J held that an employer was capable of performing the role of contract administrator, though he accepted that it would be 'more difficult for the employer than it is for a professional agent'.¹⁰³ In the case of the 2017 Silver Book, it can no longer be said, as it could of its 1999 predecessor, that contract administration is simply allocated to the Employer, but it stops short of moving to the new 'neutral Engineer' model of the new Red and Yellow Books; it appears to occupy some intermediate position, which will need to be fully evaluated before being used.

91 Red and Yellow Books 2017 editions, Sub-Clause 3.2.

92 Red and Yellow Books 2017 editions, Sub-Clause 3.72.

93 Red and Yellow Books 2017 editions, Sub-Clause 3.7.

94 Red and Yellow Books 2017 Guidance for the Preparation of Particular Conditions, page 21.

95 Silver Book 1999, Sub-Clause 3.5.

96 Silver Book 1999.

97 Silver Book 2017, Sub-Clause 3.1.

98 Silver Book 2017, Sub-Clause 3.5.2.

99 Silver Book 2017, Sub-Clause 3.5.

100 *Balfour Beatty Civil Engineering Ltd v Docklands Light Railway Ltd* (1996) 78 BLR 42 (CA), 49 Con LR 1.

101 Institution of Civil Engineers Conditions of Contract 5th edition (1973 revision).

102 *Scheldebouw BV v St James Homes (Grosvenor Dock) Ltd* [2006] EWHC 89 (TCC). Also 105 Con LR 90, [2006] BLR 113.

103 *Scheldebouw v St James Homes*, para [46].

Claims Procedure

Probably the most controversial element of the 1999 procedure for bringing claims was the time-bar provisions. These too have been subject to change in each of the modern editions. The 4th Edition of the FIDIC Red Book did not exclude contractor claims for additional payment brought after the time-limit, but they were limited to 'such amount as the Engineer or any arbitrator or arbitrators appointed ... considers to be verified by contemporary records.'¹⁰⁴ The time-limit for additional payment claims was 'within 28 days after the event giving rise to the claim has first arisen.'¹⁰⁵ The (separate) equivalent for extension of time claims was notification within 28 days as well, with detailed particulars to be submitted within a further 28 days,¹⁰⁶ absent which the Engineer was not bound to make any determination.

The procedures for extension of time and additional payment were consolidated under the 1999 contracts and the condition precedent of compliance with the 28-day time-bar introduced was supported by the sanction of absolute disentitlement:

'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.'¹⁰⁷

Contractors objected strongly to the 1999 provisions: 'This is, in my opinion, an unfair term ... Why should the contractor lose his entitlement on such formal grounds?' asked Agne Sandberg, then Head of Legal at Skanska International,¹⁰⁸ while Frank Kennedy, Chairman of the European International Contractors Conditions of Contract Working Group, observed¹⁰⁹ that:

'The penalty for failure to comply with a purely technical requirement to give notice of a claim is unduly harsh. This is the first time that a FIDIC contract has removed the fundamental right of the Contractor to make a claim merely as a result of a failure to comply with a fixed period of time to submit the required notice.'

It was a further source of grievance to contractors that claims by the Employer were not time limited, merely having to be made 'as soon as practicable after the Employer became aware of the event or circumstances giving rise to the claim'¹¹⁰ which European International Contractors commented 'demonstrates ... the unfair balance between the obligations carried by the Employer and the Contractor.'¹¹¹

FIDIC's response has been lengthy, both in terms of time and volume. In the period between the 1999 and 2017 editions, it produced two quite different models. Under the Gold Book in 2008, FIDIC gave to the Dispute Adjudication Board power to overrule the 28-day time limit for a Contractor's claim if 'in all the circumstances it is fair and reasonable that the late submission be accepted'¹¹² which 'mitigates the harshness of the condition precedent'.¹¹³

The MDB version of the Red Book¹¹⁴ instituted a 28-day time limit for Employers' claims,¹¹⁵ to redress the balance, but omitted to convert it into a condition precedent, so that there is no loss of entitlement equivalent to Contractors' claims under Sub-Clause 20.1. When the 2017 claims procedure was implemented, it followed neither Gold Book nor MDB model, another example of earlier indications having a misleading effect. The power to disapply the time-bar was *not* given to the DAB/DAAB but instead assimilated into the Engineer's power to determine claims.

The new Clause 20.1 claims procedure is over three times as long as under the 1999 contracts. It applies to both Contractor and Employer, who are referred to as the 'Claiming Party'. Both are subject to a 28-day time-bar. The time limit aspect alone of the claims procedure is remarkably complex. The Engineer has 14 days from receipt of the Notice of Claim to notify the Parties of any failure to comply with the 28 day time limit.¹¹⁶ The Claiming Party must provide a fully detailed claim within 84 days of the date at which it became aware/should have become aware of the event or circumstance giving rise to the claim.¹¹⁷ If that 84-day time limit is not met in respect of the contractual or legal basis of the Claim, the Engineer

¹⁰⁴ Red Book 4th edition, Sub-Clause 53.4.

¹⁰⁵ Red Book 4th edition, Sub-Clause 53.1.

¹⁰⁶ Red Book 4th edition, Sub-Clause 44.2.

¹⁰⁷ Red Book 1999, Sub-Clause 20.1.

¹⁰⁸ Agne Sandberg, 'A Contractor's View on FIDIC Conditions of Contract for EPC/Turnkey Projects' (1999) 16 International Construction Law Review 1, page 51.

¹⁰⁹ Frank Kennedy, 'EIC Contractor's Guide to the FIDIC Conditions of Contract for EPC Turnkey Projects (The Silver Book)' (2000) 17 International Construction Law Review 4, page 504.

¹¹⁰ Red Book 1999, Sub-Clause 2.5.

¹¹¹ Kennedy, op cit.

¹¹² Gold Book 2008 Sub-Clause 20.1(a).

¹¹³ E Baker, B Mellors, S Chalmers and A Lavers, page 323.

¹¹⁴ Conditions of Contract for Building and Engineering Works Designed by the Employer MDB Harmonised Edition 2010.

¹¹⁵ Under MDB Version, Sub-Clause 2.5.

¹¹⁶ Red, Yellow and Silver Books, Sub-Clause 20.2.2.

¹¹⁷ Red, Yellow and Silver Books, Sub-Clause 20.2.4.

has 14 days to confirm that the Notice of Claim is invalid. In any event, the Engineer proceeds to agree or determine the Claim.¹¹⁸ The time limit for agreement of the Claim is 42 days from the date of receipt of the fully detailed Claim,¹¹⁹ unless both Parties advise that no agreement can be reached within this time limit¹²⁰ or none is in fact reached, whichever is the earlier, in which case the Engineer has an additional 42 days in which to determine the Claim.¹²¹ The net effect is that up to 168 days can elapse between the occurrence of the 'event of circumstance' and the Engineer's determination.

In fairness, FIDIC has tried to meet some of the more soundly-based complaints about inequality and harshness under the 1999 forms, but there must be a real danger that the great complexity of the procedure and its time limits will foster the impression that FIDIC produces claims-orientated contracts, which would be perceived as diverging from the needs of global construction contracting in the 21st century.

Dispute Avoidance and Resolution

The 2017 contracts contain 21 clauses instead of the 20 clauses of the 1999 Rainbow Suite. Clause 21 on Disputes and Arbitration contains an ostensibly new feature – the DAAB. This refers to the panel defined¹²² as the Dispute Avoidance/Adjudication Board. The insertion of the word 'Avoidance' is in keeping with the modern preference for emphasising prevention over cure. Consistent with that intention, FIDIC has decisively moved away from the ad hoc DAB model found in the 1999 Yellow and Silver Books, where the Board would only be constituted once notice of intention to refer a dispute was served. The preference now is for a 'standing DAAB' for all the 2017 contracts:

'FIDIC strongly recommends that the DAAB be appointed as a 'standing DAB' – that is a DAAB that is appointed at the start of the Contract who visits the Site on a regular basis and remains in place for the duration of the Contract to assist the parties:

(a) in the avoidance of Disputes and
(b) in the 'real-time' resolution of Disputes if and when they arise
to achieve a successful project.'¹²³

In this respect as least, it can be said that the Gold Book did point the way for the 2017 editions, in giving the (standing) DAB an explicit dispute avoidance function.¹²⁴ The content of the DAAB's Avoidance of Disputes function in the 2017 contracts¹²⁵ is fairly closely modelled on the Avoidance of Disputes provisions in the Gold Book,¹²⁶ so that the Parties can obtain the assistance of the DAAB to try to resolve issues or disagreements which might become disputes.

FIDIC has also made some more specific changes to the dispute resolution provisions in the 2017 editions. It has disposed of what has become known as the *Persero* issue. The name derived from a dispute in the Singapore courts which was the subject of at least four hearings, culminating in the Court of Appeal's decision in *PT Perusahaan Gas Negara TBK v CRW Joint Operation*.¹²⁷ The question raised was whether failure to comply with a binding (but non-final) DAB decision had to be referred back to the DAB and other stages of the Clause 20 process. The majority of the Singapore Court of Appeal held that, taking a practical approach to the dispute resolution provisions, such non-compliance could be referred directly to arbitration. The *Persero* issue exercised commentators¹²⁸ and dispute professionals over a number of years. The 2015 decision may have offered some clarification, but FIDIC has now moved to consign the saga to legal history, by expressly addressing¹²⁹ the question of Failure to Comply with DAAB's decision, so that

'In the event that a Party fails to comply with any decision of the DAAB, whether binding or final and binding, then the other Party may, without prejudice to any other rights it may have, refer the failure itself directly to arbitration.'

This decisive step is to be welcomed, irrespective of whether the doubts were still 'live' after *Persero*.

¹¹⁸ Red, Yellow and Silver Books, Sub-Clause 20.2.5.

¹¹⁹ Red, Yellow and Silver Books, Sub-Clause 3.7.3.

¹²⁰ Red, Yellow and Silver Books, Sub-Clause 3.7.1.

¹²¹ Red, Yellow and Silver Books, Sub-Clause 3.7.5.

¹²² Red Book, Sub-Clause 1.1.22; Yellow Book, Sub-Clause 1.1.22; Silver Book, Sub-Clause 1.1.19.

¹²³ Guidance for the Preparation of Particular Conditions Red Book 2017 page 47; Yellow Book 2017 page 50; Silver Book 2017 page 50.

¹²⁴ See E Baker, B Mellors, S Chalmers and A Lavers, pages 525–526.

¹²⁵ Red, Yellow and Silver Books, Sub-Clause 21.3.

¹²⁶ Gold Book, Sub-Clause 20.5.

¹²⁷ *PT Perusahaan Gas Negara (Persero) TBK v CRW Joint Operation* [2015] SGCA 30.

¹²⁸ See Christopher Seppala, 'Singapore contributes to a better understanding of the FIDIC disputes clause: the second *Persero* case' (2015) 32 International Construction Law Review 1, page 4.

¹²⁹ Red, Yellow and Silver Books, Sub-Clause 21.7.

The Amicable Settlement stage of the FIDIC dispute resolution mechanism was introduced by FIDIC in the Red Book in 1987. However, it had had a curious history before that, being introduced in the Yellow Book 2nd Edition in 1980 and then withdrawn.¹³⁰ In the 1999 suite, the Amicable Settlement stage was firmly established, with 56 days¹³¹ for the Parties to attempt to settle the dispute.

The 2017 version of the Amicable Settlement clause therefore constituted something of a surprise. More predictable was the emphasis in the Guidance for the Preparation of Particular Conditions¹³² on ADR, with recommendations to consider reference to senior executives, mediation or expert determination 'or other form of alternative dispute resolution that is not as formal, time-consuming and costly as arbitration' but the clause itself¹³³ has halved the Amicable Settlement period, reducing it from 56 to 28 days. Given the encouragement to undertake ADR, which would inevitably require some planning and preparation, this is curious, as is the apparent part-reversal of this position in the Guidance 'it is recommended that consideration be given by the Parties to agree to a longer time period than the period of 28 days stated in this Sub-Clause.'

Conclusion

The 5th edition of the FIDIC White Book Model Services Agreement is of considerable significance in the international market place for professional services in construction. The greatest challenge for the Task Group charged by the Contracts Committee with the review for the new edition was to balance the traditional common law standard of the professional person of reasonable care and skill with demands for greater protection from the paying party, the Client. In the result, FIDIC has largely defended the status quo, despite some stiffening of the Consultant's obligations, and other improvements in the direction of more explicit express provisions for variations and scope of services.

The launch of the Second Editions of the FIDIC Red, Yellow and Silver Books in London on the morning of 5th December was the most important event in international construction law since 1999.

FIDIC has tried to articulate in its 'Golden Principles' the ethos of its contract drafting. The concept may have been laudable, but the content of what may be (it is to be hoped) a first attempt has been at best mixed, embracing GP1, GP2 and GP4 which are obvious and GP3 and GP5 which are much less so.

The contracts themselves are comprehensive, indeed, lengthy documents, even without the extensive guidance notes provided. They are highly prescriptive and will require rigorous, pro-active administration from all participants: Employer, Contractor and Engineer.¹³⁴

They offer major changes in the main areas of Product, Risk Allocation, Time, Contract Administration and Claims and Dispute Avoidance/Resolution.

In terms of Product, the Yellow and Silver Books contain much strengthened fitness for purpose and insurance obligations. The introduction of Performance Liquidated Damages fills an obvious void in the 1999 suite and will be widely welcomed. FIDIC offers an alternative to its comprehensive limitation of liability regime which differs markedly from that in the General Conditions; this seems at odds with GP3.

FIDIC had intimated that the changes in the Gold Book would be a useful guide as to what could be expected in the new editions. In a number of important respects, the outcome has been quite different. This is true of the risk of loss provisions, which follow a traditional approach, rather than the radical Gold Book regime, as do the Exceptional Events provisions, which in content resemble the former Force Majeure clause.

The time-bar provisions have followed neither the Gold Book nor the MDB version of the Red Book, another possible candidate as a model for reform. The power to disapply the time-bar was *not* given to the DAAB as anticipated by the Gold Book. The DAAB's dispute avoidance function is one of the very few areas where the influence of the Gold Book can be detected.

In terms of Time, FIDIC has introduced major new features in Milestones and much more detailed programming provisions; the latter in particular should be received positively. Perhaps a little surprisingly, FIDIC has chosen not to pick up the challenge

130 See Ellis Baker, 'Is it all necessary? Who benefits? Provision for multi tier dispute resolution in international construction contracts' SCL Paper 154 (January 2009) <www.scl.org.uk>.

131 Red, Yellow and Silver Books 1999 editions, Sub-Clause 20.5.

132 Red Book 2017, pages 49–50; Yellow Book 2017, pages 52–54; Silver Book 2017, pages 52–54.

133 Red, Yellow and Silver Books 2017 editions, Sub-Clause 21.5.

134 Employer's Representative in the Silver Book.

of express provision for concurrent delay, preferring to leave it to a combination of party agreement by Particular Condition and national law.

In Contract Administration, the Red and Yellow Books see the advent of a new figure: the neutral Engineer: the meaning of 'neutral' will no doubt exercise commentators in different jurisdictions for some time to come. A similar task is created by the mandatory appointment under the new Silver Book of an Employer's Representative who does not represent the Employer in performing certain key functions. The time limit provisions, as noted above, do not follow the Gold Book and the power to apply/disapply them is assimilated with the general power of the Engineer/Employer's Representative in meeting a determination.

Greater emphasis is given to dispute avoidance, rather than dispute resolution, beyond the largely cosmetic conversion of DAB to DAAB. There is encouragement (as in the Gold Book) for using the DAAB informally to prevent 'issues' and disagreements becoming disputes. To this end, it is envisaged that DAABs should be 'standing' rather than 'ad hoc', though making this a Golden Principle can best be described as quixotic. The *Persero* issue should never again trouble courts or parties.

FIDIC's encouragement of ADR is both laudable and consistent with the direction of travel of the construction industry globally. Much more difficult to understand is the halving of the Amicable Settlement period during which that can be attempted, especially as this is partly contradicted by Guidance recommending its increase.

FIDIC is to be commended for producing a comprehensive and robust suite of contracts, with a number of significant improvements, and some apparent weaknesses. However, it is submitted that it is neither the former nor the latter which will be determinative of whether or not the new forms are used. The question as to whether they are too complicated, or suitable only for the largest projects, will be one which the market alone can decide.