# A contractor's viewpoint on the role of the engineer in FIDIC

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## How the role of the engineer has evolved

THE role of the engineer has been evolving in law and in the International Federation of Consulting Engineers (FIDIC) forms of contract. The role has evolved from a third party standing between the employer and the contractor, to that of agent of the employer with powers which differ according to the model of FIDIC contract adopted by the parties. The 2017 suite of FIDIC contracts increases the importance of the engineer through a robust administrative role in managing the contract. It clarifies the dual role by taking a clear position for its neutrality when deciding matters or making determinations. From a contractor's viewpoint, this fosters confidence in the engineer as the first tier in the process of avoiding disputes, before recourse to the dispute adjudication board (DAB).

The employer administers the contract through the services of a person, firm or company, that in FIDIC is defined as 'the engineer', i.e. the architect or the project manager in other forms of contract. The engineer is appointed and paid for by the employer, but its position spans from agency to complete independence. The engineer has no contractual link with the contractor, but its duties in respect of both parties are defined in the contract, while the consultancy contract between the engineer and the employer also provides important task definitions.

For the contractor, the engineer is a third party that acts either on behalf the employer, or impartially in certain positions, such as when fulfilling judicial tasks. *"Any challenge to the independence of the certifier is anathema to the construction contractor"*[1] that generally welcomes a clear division of function and responsibilities since it *"helps accountability and motivates people to play their part."*[2] Actually, the engineer has a duty of exercising due skill and care while carrying out its duties – as may be expected by the standards of the professional position. This duty is due to the employer, with whom it has a contractual link[3], but there is a caveat as the engineer owes such duty to the contractor in tort, since the contract interposes the employer between contractor and engineer. In law, this matter has been the subject of differing decisions.[4] The law of the contract may also affect the responsibility of the engineer. For example, under French jurisdiction (art. 1792, code civil), there is a 10 years' statutory joint liability of the contractor and the engineer, in its role of designer and supervisor, in front of major defects. However, this article will focus on case law under the jurisdiction of England and Wales, as well as to FIDIC whenever referring to standard forms of contract.

### The role of the engineer, at common law

Both standard contracts and common law slowly changed the position of the engineer from that of an 'autocrat' who made final and binding decisions in measuring, valuing, certifying and deciding disputes as fairly as it could, based on professional honour and intelligence, to that of an agent of the employer, administering the contract on its behalf. Thus the role of the engineer forked in this dual position and its judgement became subject to review at an upper level, such as in arbitration.[5]

An old English case, *Stevenson v Watson* (1879) 4 CPD 148 separated the ministerial duties from those requiring skill and judgment, which later developed in the dichotomy between that of the employer's agent and the impartial role while exercising its discretion, as debated in *Chambers v Goldthorpe* (1901) 1 KB 624 and *Costain v Bechtel* (2005) EWHC 1018 TCLR.

In *Chambers v Goldthorpe* it was held that the architect, when acting in a judicial capacity such as in valuing certificates, would be considered a quasi-arbitrator and therefore immune from responsibility for negligence. This judgment was in line with the belief of the times that the architect held a position of legal and moral superiority, based on the *"skill and integrity… of an upright professional man whose only object is the good of all the parties."*[6] An intention of fairness and impartiality transpires from that early statement.

In another English case, *Hickman & Co v Roberts* (1913) AC 229 HL it was held that the architect should exercise its own judgment rather than taking the employer's

[1] Megens, *Different Perspectives of Construction Risk – How should it be allocated?* 15 AMPLA Bull. 179, 1996, p 188

[2] Humphrey Lloyd, Some Philosophies of Risk Allocation in International Construction Contracts - *Essays in Honour of Ian Duncan Wallace*, Sweet & Maxwell, 1997

[3] It may be expressly stated, for example under clause 5 of the Model Service Agreement, 1991, 'reasonable skill, care and diligence', or implied at law, as under English jurisdiction

[4] *Pacific Associates v Baxter* (1989) 44 BLR 33 (CA) involved a FIDIC dredging contract where the contractor failed to have the architect as a defendant on a complaint of negligence certification, because the recourse to arbitration against the employer was available through the contract

[5] Rimmer, *The Conditions of Engineering Contracts*, Paper 5203, ICE, London 1939, p 23 - 24

[6] Telford, Life of Thomas Telford, p 189

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instructions in the certification of works. *Shui on Construction Limited v Shui Kay Company Limited* (1985) 4 Const LJ 305 (HK) affirmed that the architect is bound by *"two duties closely connected"* towards the employer and the contractor, and that the obligation to act fairly *"must in all cases be mutual."*

When performing as a supervisor or inspector, the engineer is acting as the employer's agent. In *Sutcliffe v Chippendale & Edmondson* (1971) 18 BLR 149, it was held that the supervisory duties are:

> *"…to follow the progress of the work and to take steps to see that those works comply with the general requirements of the contract in specification and quality... If he should fail to exercise his professional care and skill in this respect, he would be liable to his employer for any damage attributable to that failure."*

In *Royal Brompton Hospital NHS Trust v Frederick Alexander Hammond* (2002) EWHC 2037 (TCC), in the absence of a codified role, the project manager (i.e. the engineer in a New Engineering Contract (NEC)) was considered a *"coordinator and guardian of the client's interests"* apparently reversing the concept held in Shui and in Hickman.

In *Costain v Bechtel*, under a NEC contract, it was alleged that the engineer (i.e. the project manager) in the valuation of payments was acting unfairly as an agent of the employer. The question debated was whether it had a duty to be impartial. The judgment, apparently inconclusive, actually confirmed that whenever there are *"residual areas of discretion"* the engineer *"has to exercise his own independent judgment"* and that nothing *"militates against the existence of a duty to act impartially"* when evaluating a payment certificate.

In *Scheldebouw BV v St James Homes (Grosvenor Dock) Ltd* (2006) EWHC 89 (TCC) it was held that that the engineer, when called to act as decision maker, is not independent from the employer, but has *"the legal duty"* to act in an independent, impartial, fair and honest manner, and to endeavor to reach the *"right decision."* The court did not exclude that the employer may also be the certifier, but the possibility that all the contract positions may converge on the employer was considered so negative that it was called the 'Armaggedon scenario'. Yet this scenario is that potentially contemplated by the 1999 Silver Book (for example in sub-clause 3.1) where the employer may (or may not) appoint an employer's representative.

Finally, in *Sutcliffe Appellant v Thackrah and Others* (1974) AC 727 it was acknowledged that many of the engineer's functions are *"to be discharged on behalf of"* the employer but:

> *"In many matters he is bound to act on his client's instructions, whether he agrees with them or not; but in many other matters requiring professional skill he must form and act on his own opinion… Being employed by and paid by the owner he unquestionably has in diverse ways to look after the interests of the owner. In doing so he must be fair and he must be honest. He is not employed by the owner to be unfair to the contractor.... His duty is to act fairly when exercising his professional skill in considering whether work done satisfied the contract requirements... His duty to act fairly does not at all conflict with, but rather is part of, his duty to safeguard and look after the interests of the building owner who has employed him."*

### The role of the engineer under FIDIC before 2017

Under the 4th edition 1987 Red Book, the engineer was required to act impartially whenever exercising its discretion to give decisions, opinions or consent, expressing approvals or determining value (sub-clause 2.6). The engineer had authority as the driver of the contract and counterpart to the contractor. Dissatisfaction of both parties was to be addressed through engineer's decisions under clause 67, and became final and binding if not referred to and revised in arbitration. Notably, there was no intermediate tier of dispute resolution between the engineer's decision and arbitration.

In the 1999 Red Book, the engineer's impartiality gave way to the express provision that the engineer *"shall be deemed to act for the employer"* under sub-clause 3.2 when exercising its authority and duties. Nevertheless, the engineer makes evaluations under sub-clause 12.3, determining the amount of interim certificates fairly due to the contractor under sub-clause 14.6, and makes *"fair decisions"* under sub-clause 3.5.

In the 1999 Yellow Book, the employer 'shall' appoint the engineer, acting for the employer, and shall not impose further constraints on the engineer's authority other than obtaining its approval before exercising duties specified under the contract (such as variations). The engineer makes a *"fair determination"* under sub-clause 3.5.

Under the Red and Yellow Books, the engineer's determinations may be referred to the DAB that is appointed on a standing basis under the Red Book and ad-hoc under the Yellow Book.

In the 1999 Silver Book, the employer 'may' appoint an employer's representative *"to act on his behalf."* This subordinate role to the employer is emphasised in the definition given in sub-clause 1.1.2.4 that differs from that given in the Red and Silver Books, where there is an engineer rather than an employer's representative. Sub-clause 3.5 recites that determinations have to be taken by the employer *"fairly"* even on employer's claims submitted under sub-clause 2.5. However, since determinations made without the engineer are entirely at the discretion of the employer, the DAB is the only pre-arbitration reference, and it is regrettable that it is appointed on ad-hoc basis rather than on full term basis.

The 1999 Green Book (the short form of contract) is another contract without the engineer which, in this case, is justified by the relatively small capital value of the works. The employer's representative has the sole role of acting for the employer and disputes are referred directly to an adjudicator *"acting as an impartial expert, not as an arbitrator"* who shall give binding but not final decisions, as they may be reviewed in arbitration.

Under the 2006 Blue Book (dredging and reclamation contract), the engineer has a strong position due to the non-decisive role of the employer. In fact, the engineer alone has the power of issuing certificates, withholding payments, valuing variations and deciding on both defined risks and employer's claims. Sub-clause 3.1 states that the engineer and any assistants shall exercise their duties and authority *"in a fair manner and in accordance with the contract."* This form has no stand-alone procedure to refer contractor's claims to engineer's determinations, but disputes may be referred to a full-term DAB.

The 2008 Gold Book (design, build, operate) has an employer's representative that, in contrast with the Silver Book, 'shall' be mandatorily appointed by the employer, to act on its behalf. It makes *"fair determinations"* under sub-clause 3.5.

Under the 2010 Pink Book (multilateral development banks harmonised edition), the employer 'shall' appoint the engineer, who 'shall' be deemed to act for the employer (under sub-clause 3.1). Under sub-clause 3.5, the engineer shall make a fair determination after consulting with each party and administers the procedure

for claims under sub-clause 20.1. This contract provides for referring disputes to a full term DAB in case of dissatisfaction with the engineer's determinations.

### The role of the engineer under the 2017 FIDIC contracts

The new FIDIC suite, issued in December 2017, has a more decisive role for the engineer. Its position between the dual roles is made clear in the express provisions of the contract.

Under the 2017 Red Book, we note that the engineer is part of the 'employer's personnel' under sub-clause 1.1.33, that 'shall' be appointed by the employer (sub-clause 3.1) as a *"skilled professional"*[7] that *"shall be deemed to act for the employer"* (sub-clause 3.2). When making a determination under sub-clause 3.7, the engineer *"shall not be deemed to act for the employer,"* but *"neutrally between the parties"* and *"shall make a fair determination"* without requirement to obtain the employer's consent before exercising its authority in making determinations.

This provision that supports the neutrality of the engineer is strengthened by sub-clause 3.2 which states that the employer shall not impose further constraints to the engineer's authority. This is also a departure from the previous editions that makes a clear distinction between the roles of the engineer as an administrator exercising its duties while acting for the employer and the quasi-adjudicator acting fairly and neutrally between the parties when making a determination. Sub-clause 3.7 sets a time limit of 42 days to making determinations and states that no response is deemed to be a rejection, turning a claim into a dispute which is subject to a dispute avoidance and adjudication board (DAAB) decision under clause 21. This mechanism puts an end to delay tactics in responding claims, and stops undue challenges that there is no dispute.[8]

As regards to payments, under sub-clause 14.6, the contractor has to submit its statements to the engineer, who has the duty to issue interim payment certificates (IPC) *"stating the amount that the engineer fairly considers to be due."* The engineer has the authority of withholding those payments that it considers not to be due, which is another step to giving the engineer independent powers in evaluating the work. Yet contractors would prefer to read that IPCs are fairly 'determined' by the engineer, as the word 'considers' may not be sufficiently clear.

Another element of the engineer's authority under the 2017 edition is the procedure under sub-clause 4.12 (unforeseeable physical conditions) where the contractor is obliged to give notice to the engineer, who is then empowered to inspect the affected area and give instructions to deal with the physical conditions. This provision puts the helm of the project back in the engineer's hands when difficult circumstances arise, and the engineer has then the duty – and the authority – to agree or determine delays and costs caused by the unforeseeable event.

The engineer is the manager of the procedure for claims and disputes under clause 20, where it has the power to give the initial response to the notice of claims of either party in the contract, by accepting or failing a notice of claim (sub-clause 20.2.2) within a given time (14 days) and with reasons. It also may accept or reject a detailed claim from either party (sub-clause 20.2.4). Moreover, the engineer may monitor the contemporary records and instruct additional record keeping (sub-clause 20.2.3).

The foregoing explains the importance of the engineer as the administrator of disputes, even before facilitating an agreement or making a determination of any claim. On the other hand, the DAAB may be requested by the parties to give advice or assistance in those matters that are in disagreement. Whilst the contract provides for a suspension of such advisory services when the engineer is making determinations under sub-clause 3.7, it does not define how the engineer may interact with the DAAB at that stage (sub-clause 21.3).

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Under the 2017 Yellow Book, the engineer has the same position as in the Red Book, and clause 3 is the same for both. Also clause 20 on the management of the employer's and contractor's claims is the same for both standard contracts.

Under the 2017 Silver Book, the employer 'shall' appoint an employer's representative, overcoming the notion that such person 'may' be appointed as in the 1999 edition. The employer's representative is vested with *"the full authority of the employer"* (sub-clause 3.1) by a notice of delegation and *"when carrying out his/her duties under this sub-clause [3.5] the employer's representative shall not be deemed to act for the employer*" but shall make a 'fair determination' in accordance with the contract and within 42 days. The notion of fairness is the same for both 1999 and 2017 editions, while the time limit for making determinations is a welcome addition to the contract.

### Conclusions

From the contractor's perspective, the engineer should ideally be a competent professional acting independently between the parties. The engineer should be armed by the contract with the powers to make fair and timely determinations, and take prompt decisions where appropriate. The 2017 suite of FIDIC contracts increases the importance of the engineer with a stronger administrative role, with prescriptive and well defined procedural steps which specify the time limits. Clarity and time limits are an advantage to both parties, as the engineer and the employer cannot leave issues pending indefinitely. There is also the same procedure for both employer and contractor's claims.

The 2017 edition clarifies the doubts as to the dual role of the engineer by taking a clear position on its neutrality when making determinations that are unfettered by approvals of the employer. Moreover, the notion of giving a fair determination is upheld by FIDIC in all the books of the new suite. The neutrality of the engineer when making determinations is viewed favourably by contractors, because it breeds confidence in the engineer as the first tier in the process of avoiding and resolving disputes before recourse to the DAAB.

Whilst the figure of the engineer is evolving with time, most if not all of the current concerns of the contractor on the role and powers of the engineer have been addressed in the second edition. In view of the increased complexity of the new suite of contracts, only the test of time and practice will tell us whether these changes have really resolved the problems and improved contractors' satisfaction.

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[7] Under English law, this implies a professional standard of 'reasonable skill and care' (see *Eckersley v Binnie & Partners* (1988) 18 Con LR 1)

[8] An English judgment, *Fastrack Contractors v Morrison Construction and Impreglio UK* (2000) EWHC Technology 177, at 28 held that: *"A dispute only arises when a claim has been notified and rejected, that a rejection can occur when an opposing party refuses to answer the claim...."* See also *Halki Shipping Corporation v Sopex Oils Ltd* (1998) 1LLR 465