Chapter 21
Claim Management

21.1 Introduction

The term "Claim" is not a defined term in the FIDIC books, despite it being regularly used by FIDIC. However this is only half the truth. Pursuant to Sect. 194 German Civil Code "claim" means the right to require another person to do or to refrain from doing an act. According to Mr. Bunni a claim means an assertion of a right to money, property, or to a remedy (Bunni 2005, p. 293). Thus in a FIDIC contract the term claim means something in between the mere assertion for additional monies or for extension of Time for Completion and an actual entitlement to additional monies or for extension of Time for Completion. A claim arising out of or in connection with the Contract relates to a remedy which is not designated in the Contract. It may arise out of the proper law of the contract (for example a remedy for breach of contract). Also it may have its legal basis in the applicable tort law (for example in the event of misrepresentation) or it may arise out of the principles of unjust enrichment or out of quantum meruit. FIDIC does not deal with such claims. However it also does not limit or exclude reliance on extra contractual claims based in law.

The focus of FIDIC lies in two other fields. FIDIC forms of contract include a fair risk allocation. As a result of the risk apportionment claims have been designated in the Contract. Also FIDIC gives clear guidelines for the prosecution of claims arising out of, and in connection with the Contract (Fig. 21.1).

However, Contractors most notably will consider FIDIC claim procedures to be somewhat burdensome and sometimes unfair as they impose tough obligations upon the Contractor to give notice and subsequently provide particulars where something for which the Contractor is not responsible has caused, or is likely to cause, cost or delay. It is true to say that the Contractor's entitlement to an extension of Time for Completion or additional payment is conditional upon its compliance with the claim requirements, such a requirement being known as a "condition precedent". Thus non compliance with claim requirements leads to the lapse of the claim, even though the Employer is obviously aware of the fact that he has

A.-V. Jaeger and G.-S. Hök, *FIDIC-A Guide for Practitioners*,
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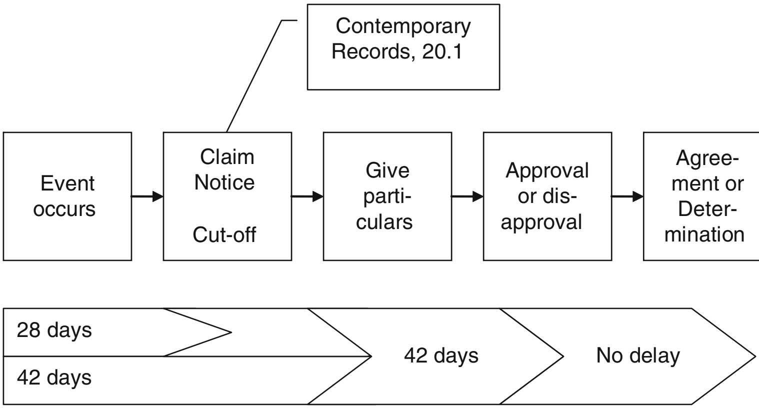

Fig. 21.1 Gold Book claim procedure I

caused disruption and additional cost. The traditional common law position as to notice requirements is that:[1]

> If the Builder, having a right to claim an extension of time fails to do so, it cannot claim that the act of prevention which would have entitled it to an extension of time for Practical Completion resulted in its inability to complete by that time. A party to a contract cannot rely upon preventing the contract of the other party where it failed to exercise a contractual right which would have negated the effect of that preventing conduct.

The legal basis for a more Contractor friendly position is the Australian decision in Gaymark v. Walter Construction Group,[2] where it was held that strict compliance with notice requirements "would result in an entirely unmeritorious award of liquidated damages for delays of its own making". The court continued to say, that "in the absence of such strict compliance there is no provision for an extension of time . . ." allowing for extension of Time for Completion. The court then concluded that this would constitute time at large, which meant that the entitlement of the Employer to delay damages was lapsed. In Multiplex v. Honeywell the court rejected these arguments.[3] HHJ Jackson obiter said:

> Contractual terms requiring a contractor to give prompt notice of delay serve a valuable purpose; such notice enables matters to be investigated while they are still current. Furthermore, such notice sometimes gives the employer the opportunity to withdraw

[1] Turner Corporation Ltd (Receiver and Manager Appointed) v. Austotel Pty Ltd (2 June 1994); (1997) 13 BCL 378 at 12 by Cole J.

[2] Gaymark Investments Pty Ltd v. Walter Construction Group Ltd [1999] NTSC 143; (2005) 21 Const LJ 71.

[3] Multiplex Constructions (UK) Ltd. v. Honeywell Control Systems Ltd [2007] EWHC 447 (TCC), confirmed by Steria Ltd v. Sigma Wireless Communications Ltd [2007] EWHC 3454 (TCC) (15 November 2007).

instructions when the financial consequences become apparent. If *Gaymark* is good law, then a contractor could disregard with impunity any provision making proper notice a condition precedent. At his option the contractor could set time at large.

Under FIDIC terms of contract it should be taken in account that the claim procedures are part of a balanced risk allocation. One reason for time bars and other procedural restrictions lies in the fact that a claim notice enables matters to be investigated while they are contemporary. A second reason is that it gives the Engineer the opportunity to withdraw or to give instructions when the financial and timely consequences of a claim event become apparent. Also a determination can be made without undue delay. This leads to certainty and avoids prolonged disputes at the end of the project.

Incidentally, similar restrictions may be found in the French General Conditions for works referred to as AF P 03-001, according to which the Contractor may be entitled to additional payment if he carries out additional work which is technically justified or work which is urgent, if he gives notice of it on the same day. This seems to be a valid clause under French law,[4] although the French Cour de Cassation has also held that the Conditions AFNOR do not override art. 1793 French Civil Code.[5] Also the German Sect. 2 no. 6 of the General Terms and Conditions for the Execution of Public Work Contracts (VOB/B) includes a provision which imposes on the Contractor the duty to give notice of any additional work which was not within the scope of the works before he starts working. German courts have held that the notice requirement constitutes a condition precedent of a claim.[6]

Before entering into a more detailed discussion of claims and claim procedures it is worth to explain the concept of working:

1. Claim management is partially legal work

- Lawyers are used to think in actions.
- A cause of action (also referred to as a claim) is divided into discrete elements, all of which must be alleged and proved to present a winning case:
  - A cause of action generally encompasses both the legal theory (e.g. a contract providing for payment or the legal wrong the plaintiff claims to have suffered or other forms of breach of contract by the Contractor) and the remedy (the relief a court is asked to grant, e.g. payment of the Contract Price or damages).

Example: The Contractor considers to be entitled to additional payment because he encountered adverse physical conditions. According to Sub-Clause 4.12 the cause of action consists of the following elements: (1) Unforeseeable physical conditions, (2) notice of it, (3) claim notice in accordance with Sub-Clause 20.1, (4) the Contractor incurred additional Cost. The remedy is: payment of Cost.

[4] Cour de Cassation, 15.11.1972, Bull.civ. III no. 611, file number 71-11.651.

[5] Cour de Cassation, 11.05.2006, file number 04-18.092.

[6] BGH [1996] BauR 542; OLG Düsseldorf [1989] BauR 483, 485.

2. Identify a cause of action

- A cause of action is the legal ground or claim with which a party can file a lawsuit to find remedy or satisfaction of his claim:
- In other words there must be a legal relationship in between the appellant and the defendant creating a cause of action, which implies the right to bring a legal action.
- The legal work consists in:
  - Identifying a remedy to be sought and the related cause of action.
  - Ascertaining the set of facts sufficient to justify the identified right to sue.
- Beware: It is often the case that the facts or circumstances that entitle a person to seek judicial relief may create multiple causes of action!
- Beware: Procedural rules, such as Sub-Clause 20.1, do not constitute a cause of action and belong to the elements, all of which must be alleged and proved to present a winning case!

Example: The Contractor considers to be entitled to additional payment because he encountered adverse physical conditions. He identifies two causes of action: Sub-Clause 4.12 and misrepresentation.

3. Step-by-step approach

- Identify the event which causes cost and/or delay (Identification of the problem)
- Search for a legal or contractual cause of action:
  - Take in consideration all of the relevant and probably relevant causes of actions
- Test: Ask whether the event or circumstances meet the requirements of each cause of action/or at least of one cause of action
- Identify those claims which may have a legal background as a result of the previous test
- Check complaints or objections (defences) of the other party and own misbehaviour:
  - Beware that all defences are allowed!

This means: If the Contractor incurs for example cost or suffers a delay as a result of unforeseeable physical conditions, he should firstly identify the relevant Sub-Clause, which is Sub-Clause 4.12. Sub-Clause 4.12 is relevant because it entitles the Contractor to extension of time and additional costs. The test is then, whether the Contractor encountered Unforeseeable physical conditions. All elements of Sub-Clause 4.12 must be met, which are:

- Physical conditions (climatic conditions are not covered)
- Relevant physical conditions must have been Unforeseeable (Unforeseeable is a defined term)
- Previous notice is required, which should have been given as soon as practicable

- Claim notice is required according to Sub-Clause 20.1 and 1.3
- Review of other physical conditions in similar parts of the Works is required
- Cost is a defined term (Sub-Clause 1.1.4.3)
- As to EOT Sub-Clause 8.4 must be taken in account

Example: Unforeseeable physical conditions

If all claim requirements or elements are met the Engineer shall make a fair determination in accordance with Sub-Clause 3.5. By doing so he will take due regard to all relevant circumstances including any arguments and objections of the Employer. The Employer may present various arguments and objections, such as but not limited to:

- The relevant activity does not lie on the critical path (no EOT).
- The relevant circumstances were subject of a previous determination.
- The claim notice was late.
- The preliminary notice was late.
- An experienced Contractor could have foreseen the encountered physical conditions.
- etc.

21.2 Procedural Rules

As has been confirmed by Judge Sanders in *Attorney General for the Falkland Islands v. Gordon Forbes Construction (Falklands) Ltd*, Falkland Islands Supreme Court 14 March 2003,[7] FIDIC contracts are aimed at the early resolution of any queries at the time when the claim arises, with the likelihood that plant, manpower and witnesses are still on site. Thus claims have to be pursued in a detailed procedure provided by the FIDIC contracts.

Sample: Early warning notice
To Engineer, if a future probable event or circumstance occurs
This letter is suitable for use with all FIDIC Books
Dear Sir,
We give notice of a future probable event or circumstance, which may adversely affect the work, increase the Contract price or delay the execution of the Works. We draw your attention to [*describe the circumstances or event*].
This notice is issued in accordance with Sub-Clause 8.3.
Yours faithfully

Sometimes the Contractor becomes aware of a probable future event or circumstance which may adversely affect the work, increase the Contract Price or delay

[7] [2003] BLR 280.

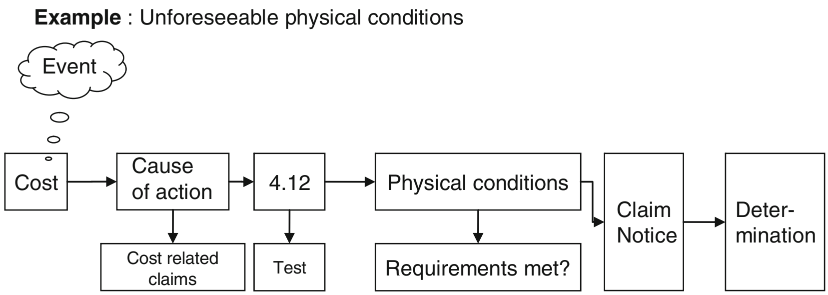

Fig. 21.2 Claims' procedure I

the execution of the Works. If so, he shall promptly give notice of such an event or circumstance. Such a notice is also known as a early warning.

If the Contractor considers himself to be entitled to a claim, the first step is for him to give notice (Sub-Clause 20.1) in accordance with Sub-Clause 1.3 (Fig. 21.2). This notice is important because:

- Everyone involved becomes aware that there is an event or circumstance where extra time or payment may be owed to the Contractor.
- Proper contemporary records must then be kept and agreed, to avoid future argument.
- Alternative measures may also be possible to reduce the effects.
- The matter may possibly be resolved at an early date.
- If the event or circumstance turns out to be of insignificant effect, then it is not necessary to follow up the notice with a formal claim.

As a rule claims related to extension of time and of additional payment under any clause of the contract or otherwise in connection with the contract must be notified within a delay of 28 days. Beware that Sub-Clause 19.2 provides a shorter period of 14 days in the event of Force Majeure circumstances. Within this delay a first notice shall be given. In any case the Contractor must provide to Employer's Engineer written notice of the claim for additional payment and time extension within 28 days after becoming aware of the occurrence of the event giving rise to claim (Sub-Clause 20.1). If the Contractor fails to comply with this notice requirement, his entitlement to the claim shall lapse.

The Claim notice must indicate basic details, in order to inform the Engineer about the scope of the claim and to enable him to give instructions, if necessary. The notice shall therefore meet the following requirements:

- It shall describe the event or circumstance in order to enable the Engineer to put the issue on record and to take measures, but also in order to enable the Engineer to investigate the matter while it is current.
- However, the notice need not state time or amount claimed or contractual basis of claim.

- It shall comply with Sub-Clause 1.3, i.e. in writing and properly delivered.
- It shall be included in the progress reports – Sub-Clause 4.21(f) – the report must list notices given.

There is no immediate response required from the Engineer (Employer) – but a simple acknowledgement is normal.

To the extent that a third party to the contract, the Engineer, has been nominated to determine claims, the parties to the contract shall notify him of any claims to which they consider themselves to be entitled to . He is then in charge of firstly approving or disapproving any claim and to determine it, if necessary. He shall do this with regard to all circumstances, which means that he will have to take into consideration all facts:

- Reported in the monthly reports
- Reported in contemporary records
- Reported in labour reports
- Stated in the claim notification
- Obtained at site visits and inspections
- Reported in early warning notifications concerning probable future events which may effect progress of the works and the contract price
- Reported in the Programme

In order to ensure that the parties and the Engineer may reach reasonable, informed, and skilful decisions, FIDIC contracts provide a sophisticated system for communications and documentation of relevant facts, events and circumstances. This system and the resulting duties as to documentation and reporting have to be recognised and respected at all times, because Judge Sanders also concluded in the Falkland case that it would be perverse if a contractor who had failed to comply with the terms of the contract should then be allowed to produce non-contemporary records to support a claim, particularly as these could not properly be investigated by the employer at a later date. The rights of the employer to inspect the records at the time the claim arose were fundamental to the FIDIC procedure. Failure to comply with the reporting duties leads to the foreclosure of claims.

By notice of a claim the claim determination procedure becomes initiated, which is described in Sub-Clause 3.5. According to Sub-Clause 3.5 and 20.1 the following shall happen:

- Contemporary records shall be kept which may be inspected by the Engineer
- A fully detailed claim must be submitted within 42 days of the event (or other agreed time)
- Provision for continuing claims and submittal of their details
- Within 42 days of receiving the claim with details the Engineer shall respond with approval, or with disapproval and detailed comments.
- The Engineer shall determine under *Sub-Clause 3.5* any time extension or additional payment to which the Contractor is entitled under the Contract.

- Each payment certificate shall include such amounts for any claim as have been reasonably substantiated.
- Any other specified requirements must also be satisfied (see Sub-Clause 19.2)

The Engineer may request any necessary further particulars, but shall nevertheless give his response on the principles of the claim within 42 days. Thus there is a time limit imposed on the Engineer to reply to a claim.

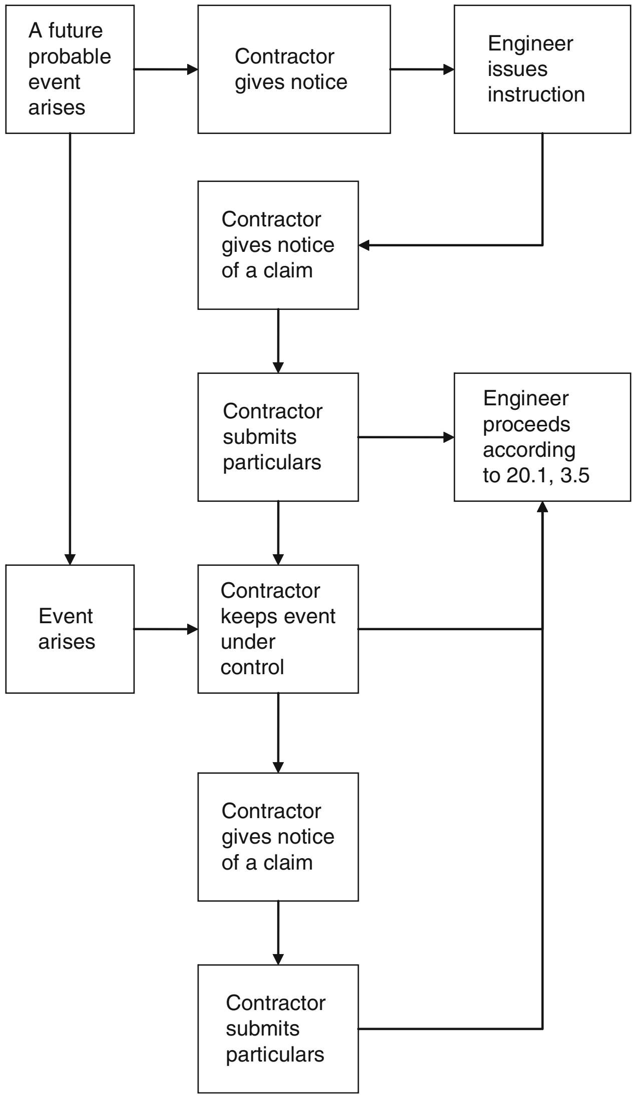

Fig. 21.3 Claims' procedure II

Once having approved or disapproved a claim the Engineer shall attempt to reach an amicable settlement. If he fails to reach an agreement he is obliged and entitled to determine the claim. Any determination issued by the Engineer will be binding on the parties until revised by DAB or arbitration. Any agreement or determination must be notified to the parties. It is suggested that any settlement which failed to become notified according to Sub-Clause 3.5 is not yet valid, even though the settlement was signed. Otherwise the danger arises that the Engineer will have no knowledge about the settlement. Moreover the notification requirement ensures that the day of validity of the settlement can be clearly identified. Each party shall give effect to each agreement or determination unless and until revised under Clause 20. Thus the date from which any agreement is binding must be clear (Fig. 21.3).

21.3 Claim Review and Preparation

Contractual claims arise where contractors consider that they are entitled to additional payments over and above those which are already included in the accepted contract amount or to extension of the already agreed time for completion. Claims should not be confused with the consequences of any Variation. Variations must be dealt with separately, although in principle Variations will also result in a determination subject to Sub-Clause 3.5 by the Engineer or Employer as the case may be.

Such kind of monetary claims are part of the Contract Price and therefore anticipated costs. However the entitlement to additional payment is usually subject to the condition that a formal claim is presented within the time limits provided by the contract. But despite this fact the parties have already agreed to additional payments at the date of the conclusion of the contract. Thus claims are nothing more than the crystallisation of an anticipated, not yet specified, part of the Contract Price.

In principle the agreed Time for Completion is open for extension claims, because nobody can anticipate what will happen during the whole course of the works. To the extent that the contract provides claims for time extension the parties have agreed in advance the possibility of extending time for completion. If an event occurs which entitles the contractor to submit a claim for time extension, his claim crystallises anticipated but not yet identified and specified additional time for completion.

In this sense claims are nothing more than a legal feature or mode by which the parties to a contract attempt to crystallise the final contract price and time for completion. However they have to be presented under the procedural rules provided by the contract, which makes it sometimes difficult to pursue the claim. The reason why claims have to be presented in a special way lies in the word crystallisation. Crystallisation means that the parties have to show the claim, to make it obvious that a claim exists. This does not yet explain why claims are often time barred. The reason for this lies in the necessity to bring evidence and the need of the employer to make the necessary financial arrangements. Thus claim management is nothing arbitrary or superfluous. It is the process within which claims must be crystallised.

Claim identification and initiation followed by claim preparation, submission and negotiation are critical issues, in particular because parties to a contract must usually comply with claim procedures and delays. In a construction contract of any complexity, the conditions are the hub or engine room of a contractual wheel or vessel comprising a myriad of documents and contractual provisions. The conditions give life to, and allow to be focused and co-ordinated, the contract documents and the obligations that those documents give rise to.[8] Claims may arise at all times until completion of the works and even later. Handling of claims may require management, technical and economic skills and experiences during the whole contract period. However academic research (Vidogah and Ndekugri 1998, pp. 363–372) has shown that:

- Claims management is still performed in an ad hoc manner.
- Contractors' management information systems are ill designed to support claims.
- The products of basic good management practice, such as diaries, timesheets, and programmes, often are inadequate in content even if available.
- Some aspects of claims are impossible to quantify with precision even with the best information available at reasonable cost.

It is thus fundamental to establish an effective and continuous claim management for the site, which must be enabled to identify, initiate, prepare, submit and negotiate claims of all kind and matter. Researching and preparing claims is a complex process based on information which must be collected, managed and if necessary shared with others. It is strongly recommended to start preparing claims registers and collating relevant information, documents, data and facts from day one of the project, which means from the day of the date of receipt of the tender invitation, because claim relevant events may even arise before the submission date which are no more relevant for the tender but which may affect cost and time for completion.

However, claim management is more than merely collating facts. All relevant information must be scrutinised, assessed, evaluated and technically checked. Relevant information may influence not only the progress and sequence of the works but also cost and profit. All decisions must be taken on a daily basis, which means that the programme and calculation have to be updated in a timely manner. This requires for all information obtained by the contract manager to be checked very quickly and reliably. At the end of this process a report on each event must be established which, if necessary will be also the document based on which a claim must be submitted to the other party. This process may involve engineers, technical experts, designers, lawyers, architects and quantity surveyors reviewing the facts as described above. This requires the formation of a management team and the

[8] Joinery Plus Ltd v. Laing Ltd [2003] EWHC 213 (TCC) (15 January 2003).

development of a systematic approach to the management issues in order to ensure that the team will be capable of building up a picture of the claim event supported by records, reports, expertises, measurements and calculations. The claim justification data developed from this process will substantiate the claim and assist the contractor, engineer and the employer in their efforts to understand and decide on the cause, effect and quantum of the claim.

Note the following aspects of this typical wording in FIDIC Books (see Booen 2001):

- "the Contractor shall give notice . . .": which is obligatory, but a failure to notify may be due to him not having suffered delay and not having incurred Cost.
- "the Contractor . . . shall be entitled . . .": which is not stated as being subject to anyone's opinion.
- "Subject to Sub-Clause 20.1 . . .": the second and the final paragraphs of which may affect the Contractor's entitlements.
- "An extension . . . if completion is . . . delayed . . .": so it should be calculated by reference to the delay in completion. Sub-Clause 10.1(i) defines the extent of work to be completed within the Time for Completion, which must include the matters described in sub-paragraphs (a) and (b) of Sub-Clause 8.2 but may exclude minor outstanding work and defects which will not substantially affect use for the intended purpose, as permitted in Sub-Clause 10.1(a).
- "Payment of any such Cost . . .": which is the Cost attributable to the event or circumstance, excluding Costs which are not attributable thereto.
- "Plus reasonable profit . . .": this phrase is included in Sub-Clauses which relate to failure by (or on behalf of) the Employer, and not to other risks.

Beware that claims exist either under the conditions of the contract or alternatively are based at law. There is no such thing as an extra-contractual claim. The Engineer (FIDIC), Supervisor (DC4), Project Manager (NEC3) or certifier has no power to grant "ex gratia" payments. Despite this, this type of claim is sometimes used and useful to draw the attention of the employer and/or the engineer to the fact that additional payments are required without any contractual background. Although this may be a waste of time, because the Engineer is not allowed to grant payments without any relevant claim basis, it introduces a bargaining factor for use in future negotiations concerning payment. Moreover it may at times be wise to grant an ex gratia payment in order to avoid time-consuming disputes and to support a contractor who otherwise may fail to complete the works for economical reasons. Ex gratia payments may be done without admission of liability.

It is a fundamental feature of FIDIC forms of contract that all claims as to additional payment and extension of Time for Completion are subject to determination by the Engineer (or the Employer). Under civil law this may lead to complicated discussions. In France it has been held that a clause according to which the involved architect was vested to settle disputes is null and void.[9] It is

[9] Cour de Cassation (commerciale), 09.03.1965, Bull.civ. IV no. 175.

therefore extremely important to understand the role of the Engineer as defined by Clause 3 FIDIC. Although a claim only crystallizes through a determination by the Engineer the claim itself already exists whether at law or by virtue of the contract. The Engineer's power is not at all conclusive and subject to further control by the DAB and arbitration.

Hence claim review and preparation involves a complex task which must be structured and managed. The claim manager or claim management team should have clear competences and follow a road map, including but not limited to:

First Step: Data collecting

- Gather and identify all contractual, legal and management requirements as to the documentation and necessary evidence of claims, such as:
  - Reporting requirements (Sub-Clause 20.1)
  - Communication requirements, e.g. notices (Sub-Clauses 1.3, 8.3)
  - Record filing requirements
  - Early warning proceedings (Sub-Clause 8.3)
  - Evidence rules
  - Programming requirements (Sub-Clause 8.3)
  - Assessment standards
  - Notification requirements and delays (Sub-Clause 20.1)
  - Cut off periods

Second step: Claim identification

- Thoroughly study the whole contract documentation (including Specifications, BoQ, Employer's Requirements) in order to identify all possible claims and its conditions, including Variation probabilities
- Carefully gather all complementary legal claims and their conditions
- Extract and record from documentation the data relevant to each claim situation
- Establish manuals for standard situations

Third step: Communication system

- Establish an early warning system as to facts which may adversely affect the work, increase the Contract Price or delay the execution of the works
- Beware that claims must usually be notified after the Contractor should have become aware of it
- Review on a daily basis actual progress compared with the programme
- Submit a revised programme if necessary having regard to all relevant circumstances, including critical path issues for probable future events

Fourth step: Claim assessment

- Establish a claim relevance check system (arguable case system), ensuring that all incoming data, information, documents, instructions, approvals, drawings, etc., will be checked as to their claim relevance (claim warning system)

- Establish internal communication systems and ensure that all members of the claim management team become involved, including decision makers
- Establish a review system for claim relevant information, data, instructions, etc., ensuring that the influence on time, cost and profit will be carefully and reliably estimated and that all necessary steps will be initiated to overcome the situation by other means than a claim. This will probably include technical and economic considerations and efforts to reduce the claim relevance of the given event or circumstance.
- Check any probable claim situation against the contractual and legal background

Fifth step: Managing claims

- Ensure that identified claims will be carefully managed and reported from the day of the date of receipt of the relevant information and the any notification delay will be surveyed from now on
- Keep contemporary records (Sub-Clause 20.1)
- Prepare cost analysis, including but not limited to a comparison of actual working hours against hours included in tender in relation to total project, identification of overtime hours, identification of plant, equipment, overhead and direct costs compared against tender estimates and determine cause of delay and related extra costs
- Review critical path and analyse changes on the critical path and the impact of the claim relevant information on the critical path, identify concurrent delay
- Determine and assess risk allocation and related responsibility and liability for delay and/or extra cost
- Prepare calculations including:
  - A comparison of delay damages and acceleration cost
  - An analysis of costs of disruption
  - Determination of costs of all changes
  - Determination of costs caused by prolongation of time for completion, including overheads, liquidated damages, etc.
  - Determination of loss of interest on capital used due to delay, disruption, additional work, late payment, etc.
  - Determination of eventual design costs
- Prepare claim documents, including but not limited to
  - Contract documents, Particular and General Conditions, Proposals, Requirements
  - Specifications
  - Drawings
  - Relevant communications
  - Photographs
  - Schedules
  - Previous Dispute Adjudication Board decisions

- Previous claim determinations and instructions
- Previous claim settlements
- Bills of quantities
- Calculations
- Cost analysis

Sixth step: Claim prosecution

- Notify each identified claim according to the requirements of the contract (Sub-Clause 20.1) with summary of the claim containing a brief description of the factual basis of the claim and (if possible) the amount sought, make sure that the claim can be identified and distinguished from parallel and previous claims; make sure that the claim has a cause of action
- Update the programme, if necessary
- Substantiate the claim according to the requirements of the contract with quantum calculation, entitlement analysis, a chronology of events and communication presented in a table format indicating:
  - When the event or circumstance giving rise to the claim became aware or should have become aware
  - When the claim work was reported
  - When the claim work was started
  - When the claim work was completed
  - Working hours
  - Which material has been used
  - Which personnel has been used

Seventh step: Claim procedure

- Wait for approval or disapproval of the claim (Sub-Clause 20.1)
- Start negotiations with endeavour to reach agreement (Sub-Clause 3.5)
- Wait for claim determination (Sub-Clause 3.5) or take appropriate steps if the Engineer remains silent, e.g. constitute a dispute
- Analyse any notified claim determination as to the impact on time, cost and profit
- Restart event assessment and claim analysis, if necessary
- Update Programme
- Keep delays for letter of dissatisfaction (Silver Book, Gold Book) or notice of intention to start Dispute Adjudication under control if necessary

Eighth step: Dispute Management

- Check availability of Dispute Adjudication Board
- Check all previous adjudication procedures and decisions
- Check all previous determinations
- Prepare eventual Dispute Adjudication
- Start Dispute Adjudication

  - Check availability of the DAB
  - If necessary initiate the DAB appointment
  - Prepare referral

- Check any DAB decision
- Take all necessary further steps for decision review (arbitration requirements)

Beware the comments given in *McAlpine Humberberoak v. McDermott*:[10]

- Theoretical calculation, formulae, and rules of thumb do not provide proof of anything.
- Hypothetical assumptions and calculations might be satisfactory for preliminary issues of principle, but hard facts, visible and proved, are needed to substantiate claims for reimbursement.
- Whether measured in time or money, damage must be proved by hard evidence.

German courts also require a strict duty of substantiation, such as when the complaint "printer documentation" was considered insufficient because the buyer "was held to specify the defect of the documentation so precisely that misunderstandings were impossible and so that the seller could clearly discern what was meant;" the alleged ambiguity of the term "printer" prevented the defect from being clearly specified.[11] As a rule a claim must be presented in such a way that the judge will be able to check whether there is a case to be heard. This means that the claimant shall present all of the facts and circumstances (the particulars) which form the basis of the claim in a clear and logical way. Otherwise the judge will reject the claim for lack of substantiation. He is not obliged to build up the claim from the documents which the claimant has submitted to the court.

It is worthy to note that according to Sub-Clause 20.1 Payment Certificates shall (only) "include such amounts for any claim as have been reasonably substantiated as due under the relevant provision of the Contract". However the Engineer should not directly rely on this provision because of its duty to make a fair determination. Instead he should first request any necessary further particulars as provided in Sub-Clause 20.1.

21.4 Claim Notice

Claims are usually subject to claim notices. It is common practise for a first set of contractual rules to provides the contractor's obligation to give notice. A second set of provisions states the consequences resulting from failure to so. Under most internationally used standard forms of contract the giving of notice is a condition precedent of an entitlement to a claim irrespective of the extent to which the

[10] (1992) 58 BLR 1.

[11] BGH [1997] NJW-RR 690, 691 sub II.2.(b)(bb).

contractor is under an obligation to inform the Engineer or the Employer of all relevant news.

Sample: Claim Notice

- To [Engineer]
- *This letter is only suitable for use with FIDIC Yellow Book*
- Notice number [*insert number*]
- Dear Sir
- This notice is issued in accordance with Sub-clause [*insert Sub-Clause*] and
  - as the case may be in accordance with Sub-Clause 20.1.
- We became aware of:
  - an error or defect of a technical nature in a document which was prepared for use in executing the Works (Sub-Clause 1.8)
  - an error in the Employer's Requirements (Sub-Clauses 1.9, 5.1)
  - Unforeseeable physical conditions (Sub-Clause 4.12)
- We hereby give notice of a claim under the Contract or in connection with the Contract. We draw your attention to [*describe the circumstances giving rise to the claim with dates and other details as necessary to identify the claim*]. We consider that these circumstances entitle us to a claim for:
  - damages/cost/quantum meruit [*delete as appropriate*] against you
  - cost
  - cost plus reasonable profit
  - extension of Time for Completion
- Yours faithfully
- Contractor

According to Sub-Clause 20.1 FIDIC the Contractor shall give a notice of a claim if he considers to be entitled to any extension of the Time for Completion and/or any additional payment. He shall do so as soon as practicable, and not later than 28 days after the Contractor became aware, or should have become aware, of the event or circumstance giving rise to the additional payment of extension of Time for Completion. By doing so he shall describe the event or circumstance giving rise to the claim. Again, subject to Sub-Clause 8.3 the Contractor shall promptly give notice to the Engineer of specific probable future events or circumstances which may adversely affect the work, increase the Contract price or delay the execution of the Works.

The Contractor is thus under an obligation to give notice of specific probable future events or circumstances to the extent specified in Sub-Clause 8.3. Failure to do so will constitute a breach of contract. Whether the Contractor is also obliged to give notice of all events and circumstances which in addition he considers entitles him to any extension of the Time for Completion and/or any additional payment is questionable. It could be argued that the notification of a claim is discretionary subject to timing requirements and consequences of non-compliance. If this would be correct, the Contractor would not be in breach of contract when he fails to give notice of an event or circumstance relative to which he might put a case. However the intention seems to be to put the Contractor under the general obligation to give notice of any event and circumstance which may adversely affect the work, increase the Contract price or delay the execution of the Works. Only this understanding is in line with Sub-Clause 8.3 according to which the Contractor shall report all events and circumstances and not only those which may have a probable future effect on the works. And only this understanding will ensure that the Engineer and/or the Employer will subsequently, continuously and in particular contemporarily be informed about all events and circumstances which may adversely affect the work, increase the Contract price or delay the execution of the Works. In order to ensure an effective contract management it would not be enough to include all events and circumstances in the monthly report.

In Sub-Clause 8.3 there is no clear message as to the set out of time running. The meaning of "prompt" remains unclear. It could probably best be explained by the wording "without undue delay" or "as soon as practicable". By contrast under Sub-Clause 20.1 not the event itself but the Contractor's awareness of the event triggers time running. One means of control in so far will be any prompt notice under Sub-Clause 8.3. However the difficulties in determining the exact moment when it can properly be said that the Contractor became aware or should have become aware of an event or circumstance are considerable.

As previously stated time runs from awareness of the event or circumstance. This wording is unambiguous. However, a notice shall only be given, *if* the Contractor considers himself to be entitled to any extension of Time for Completion and/or any additional payment. Thus Sub-Clause 20.1 requires a notice of the Contractor only if he considers the underlying event as an event which entitles him to an extension of Time for Completion and/or an additional payment. Consideration is essentially a result of deliberation or of attention and examination or moreover a matured opinion. Under Sub-Clause 20.1 the Contractor has to make up his mind in connection with legal and/or contractual matters. Hence the requirement of a notice is subject to a previous thought process. It is difficult to know at which point in time the process has begun and when it was completed. But it seems to be logical that the Contractor will not be able to make up his mind *before* he became aware of the underlying event. Thus the logical timeline is that the Contractor becomes aware of an event or circumstance and he then starts to make a consideration. If this is correct, there is a discrepancy in Sub-Clause 20.1 because according to sentence 1 of paragraph 1 of Sub-Clause 20.1 the duty to give notice depends on whether the Contractor considers himself to be entitled to a claim while according to sentence 2 of paragraph 1 of Sub-Clause 20.1 the Contractor shall give notice earlier than this, namely "as soon as practicable, and not later than 28 days after he became aware, or should have become aware, of the event or circumstance", the latter being in fact the basis of its consideration.

It is common sense that a document should have the meaning which it would convey to a reasonable man having all the background knowledge which would reasonably have been available to the parties. It follows from the clear wording in Sub-Clause 20.1 that the Contractor shall give notice to the Engineer, describing the event or circumstance giving rise to the claim. The following sentence starts with the words “The notice”. However it is suggested that it should be read as “This notice”. Accordingly Sub-Clause 201.1 should be understood in the way that the Contractor shall give a notice of a claim, describing the event or circumstance giving rise to it, as soon as practicable and not later than 28 days after the Contractor became aware, or should have become aware, of the claim (of the event or circumstance “giving rise to the claim”). If this would not be correct, the Contractor would be under the duty to give notice of any event or circumstance without any prior reflection in order to ensure not being late while he deliberates the matter. For the avoidance of doubt, the above mentioned construction of Sub-Clause 20.1 does not mean that late considerations would be justified or excused in any case. In fact it is suggested that the Contractor will be under the duty to make up his mind in a timely manner. In doing this he shall take into consideration when he became aware, or should have become aware, of the event or circumstance giving rise to the claim. Failure to comply with this office will lead to the foreclosure of the claim. Thus we would suggest that the Contractor is safe if he gives notice of an event or circumstance giving rise to a claim as soon as practicable and not later than 28 days after becoming aware of it, to the extent that he was able to make up his mind. Time runs therefore after awareness of the event, but not earlier than the time needed to consider the entitlement to a claim (Fig. 21.4).

Moreover the question may arise whether there is a difference between a notice of a probable future event and the notice under Sub-Clause 20.1. The problem becomes apparent if the Contractor knows very early that an event or circumstance will occur, in particular when the future probable event is inescapably caused by an event which already occurred unless the chain of cause and effect is interrupted by further future events. In other words it is arguable that the Contractor should give notice of a claim even though the event did not yet appear

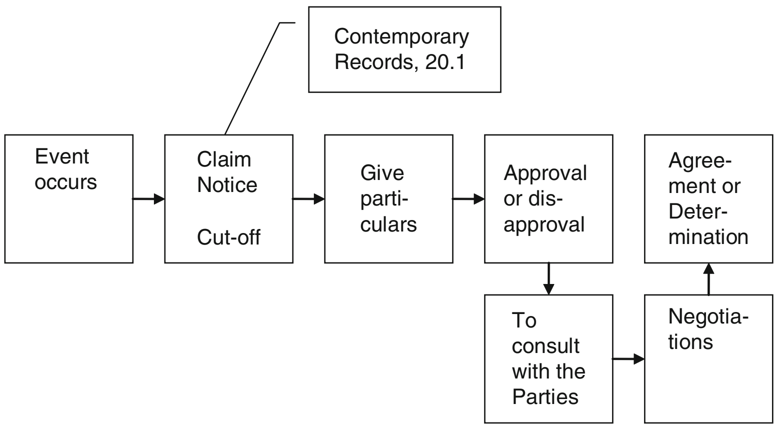

Fig. 21.4 Early warning and claim notice

if the degree of probability that the event will occur is seemingly very high. We would suggest that the wording of Sub-Clauses 20.1 and 8.3 is clear in so far. The Contractor shall give notice of a claim not later than 28 days after he became aware, or should have become aware, of the underlying event or circumstance. An event or circumstance which has not yet occurred but is likely to occur falls within the scope of Sub-Clause 8.3.

Finally the difficulty arises in determining when the Contractor *should have become aware* of an event or circumstance. The intention of the wording is reasonably clear but it is not without complications. It is intended that the Contractor shall ensure that he becomes aware of all relevant events and/or circumstances in a timely manner. Otherwise it would be arguable that there was no person on the site or that specialist contractual and legal advice was not available earlier than at the date when the Contractor actually became aware of it. The critical test is whether the Contractor has arranged effective precautions. Whether or not he has made appropriate arrangements depends certainly on the circumstances of the particular case. However a minimum standard of diligence and care should be required.

Apart from the above delineated construction issues, the question may arise of which company representative's knowledge is required to establish company knowledge. Is it only the state of mind or knowledge of the companies' directors which should be treated as company knowledge? Or is it arguable that the knowledge of the site manager, the claim manager or of other contractor's personnel on the site constitutes awareness of an event or circumstance? It is suggested that the answer to this question is clear. According to Sub-Clause 4.3 the Contractor shall appoint the Contractor's Representative and shall give him all authority necessary to act on the Contractor's behalf under the Contract. If the Contractor's Representative is to be temporarily absent from the Site during the execution of the Works, a suitable replacement person shall be appointed. To the extent that the Contractor's Representative has delegated any of his powers, functions and authority he shall give notice to the Engineer. Thus apart from the companies' directors the Contractor's Representative and his delegates are the persons who are addressed to become aware of any events or circumstances under the contract. But care should be taken. The wording of Sub-Clause 4.3 presupposes that the Contractor's Representative and/or his delegates are permanently available on the Site. If not, the Contractor will be deemed to have become aware of the event or circumstance earlier than he effectively becomes aware of it.

In a summary, FIDIC provisions can be broken down as follows:

- The Contractor is under a permanent obligation to give notice of probable future events or circumstances which may adversely affect the work, increase the Contract price or delay the execution of the Works
- The Contractor is under a permanent obligation to give notice of events or circumstances which may adversely affect the work, increase the Contract price or delay the execution of the Works
- If the Contractor considers himself to be entitled to any extension of Time for Completion and/or additional payment, he shall give notice of the event or

circumstance, describing the event or circumstance, as soon as practicable and not later than 28 days after he became aware, or should have become aware, of the event giving rise to the claim
- Time runs from the awareness of the event or circumstance to the extent that the Contractor was able to make up his mind
- Awareness means the awareness of the Contractor's Representative or his delegates

A copy of the notice should be given to the Employer (see Sub-Clause 1.3).

21.5 Documentation Requirements

It is critical to comply with the contract to the maximum extent possible. This means that all documentation requirements have to be followed by the contractor.

– General rule: *Document all deviations from the plan!*
– Keep contemporary records if required by the Contract (Sub-Clause 20.1 FIDIC)

  - Delays
  - Increased costs
  - Unforeseen conditions and events
  - Oral instructions
  - Number and location of the work-force

21.6 Presentation of Claims

Claims can be presented in a variety of ways and most contractors have their own particular forms for claim presentation. Despite this some general remarks may be helpful:

It may be wise to summarise the claim briefly at the beginning of the claim presentation in order to inform the Engineer and the Employer quickly about the relevance of the claim in order to save both of them having to read through a vast number of pages without appreciating the precise purpose of the notified claim until the end. It is therefore quite common to start with a short introduction giving an outline of the claim and to substantiate the claim later.

Any claim submission should not only be substantiated as to the factual background but also as to the legal background. It is common practice to state the relevant clauses in a logical context and to give further support on legal issues, if necessary. Otherwise the Engineer will have to investigate the contract, laws and civil codes in order to identify the claim basis. This will take time and may lead to errors. Thus a claim submission should state the subject matter of the claim in detail in order to bring the Engineer as close as possible to the Contractor's understanding of the claim.

Particulars of the claim should be accompanied by supporting data and records, such as site maps, photographs, site diaries, weather reports, instructions, programmes, drawings, correspondence, wage sheets, invoices, etc. It is useful to refer to clearly identifiable appendices.

The way in which financial analysis should be presented is not generally defined. It depends on the circumstances which structure of analysis is appropriate. Most financial analyses compare in a detailed manner the costs anticipated by the Contractor when tendering with the costs incurred when actually doing the work.

21.7 Claim Avoidance

As a rule claims are not welcome. Price and time certainty is something of high value for employers and financial institutions. It is therefore not astonishing that construction contracts comprise terms as follows:

> No alterations shall be made in the work, nor shall any charge be made by contractor for extra work, without the prior written approval of such by owner. If contractor claims that any instruction from the owner involves extra costs under the contract, or will delay the completion date of the work, contractor shall give owner immediate written notice of such and shall first obtain written approval by owner of such additional charge and new completion date prior to commencing such work.

However, such clauses may be waived. Waiver can generally be based on acts such as conduct by the owner or employer that indicated no written change order would be required or oral orders by the owner or employer (Sweet and Schneier 2004, sect. 21.04 H). Also a claimant may rely upon the principle that the law never compels a person to do something which is useless or unnecessary.[12] In the judgment of Lord Denning in Rickards v. Oppenheim[13] it was held:

> In order to constitute a waiver there must be conduct which leads the other party reasonably to believe that the strict legal rights will not be insisted upon. The whole essence of waiver is that there must be conduct which evinces an intention to affect the legal relations of the parties. If that cannot properly be inferred, there is no waiver.

The judge continued to say:

> If the defendant, as he did, led the plaintiff to believe that he would not insist on the stipulation as to time and that if they carried out the work, he would accept it, and they did it, he could not afterwards set up the stipulation as to time against them. Whether it be called waiver or forbearance on his part or an agreed variation or substituted performance does not matter. It is a kind of estoppel. By his conduct he evinced an intention to affect

[12] See Barrett Bros (Taxis) Ltd v. Davies Lickiss and Milestone Motor Policies at Lloyd's, Third Parties [1966] 1 WLR 1334 at 1338.

[13] [1950] 1 KB 616 at 626.

> their legal relations. He made in effect a promise not to insist upon his strict legal rights. That promise was intended to be acted upon and was in fact acted upon. He cannot afterwards go back on it.

US courts go even further to find that a contractor may recover payment even without fulfilment of the written notice requirement, where an Employer makes changes which are outside of the scope of the contract and amount to a breach of the contract (see Furst and Ramsley 2006, note 11-005). In the case of Nat Harrison Associates, Inc. v. Gulf States Utilities Company[14] the US court identified four situations where a requirement for written notice may be deemed waived by the owner. Those include:

(1) When the extra work was necessary and had not been foreseen;
(2) When the changes were of such magnitude that they could not be supposed to have been made without the knowledge of the owners;
(3) When the owner was aware of the additional work and raised no objection to it; and
(4) When there was a subsequent verbal agreement authorizing the work.

However, the best rule is to comply with the contract provisions and work with a change order in hand. The court may make the contractor wish he had complied with the claim notice requirements despite the inequity of the situation. Also the aforementioned opinion of the US courts seems to be far from that in England.

21.8 Extension of Time Claims

A considerable number of events can be a source of delay and disruption to the project and may be an "excusable delay" entitling the contractor to an extension of time for completion. Typically, a construction contract includes certain clauses dealing with possible delays that affect scheduling and completion of the project. These clauses discharge the contractor or subcontractor of responsibility for certain delays – often referred to as "excusable delays" in order to mitigate such harsh consequences beyond the control of the contractor. The first thing a contractor or subcontractor should do upon experiencing a delay is to provide notice according to the contract:

- Under FIDIC Red Book 1999 edition, a contractor encountering exceptionally adverse climatic conditions will have *28 days* to provide written notice (FIDIC Red Book, sub-clauses 8.4, 20.1) after becoming aware of the possibility of a weather delay claim.

[14] Nat Harrison Associates, Inc v. Gulf States Utilities Company 491 F.2d 578 (5th Cir. 1974). rehearing denied, 493 F.2d 1405 (5th Cir. 1974); see also Roff v. Southern Construction Corporation, La.App., 3 Cir., 163 So.2d 112, 115–116 (1964).

- Under a FIDIC Red Book 1999 edition, a contractor encountering any operation of forces of nature which is unforeseeable or against which an experienced contractor could not reasonably have been expected to have taken adequate preventive precautions will have *28 days* to provide written notice (FIDIC Red Book, sub-clauses 17.4, 17.3, 20.1) after becoming aware of an instruction to make good damage or loss to the Works caused by weather.
- Under a FIDIC Red Book 1999 edition, a contractor encountering any natural catastrophes such as hurricane or typhoon will have 14 days to provide written notice (FIDIC Red Book, sub-clauses 19.2) after becoming aware of such circumstance and further *28 days* if he suffers delay or incurs cost by reason of such event or circumstance after becoming aware of the possibility of a weather delay claim.
- Under AIA Document A201, a contractor encountering adverse weather conditions or flooding that are not foreseeable or atypical for the period of time will have *21 days* to provide written notice (AIA Section 4.3) after recognizing the possibility of a weather delay claim.

In order to assemble such a claim, the contractor must collect the applicable scheduling or programming documents for the project and comparative weather data from the National Weather Service or similar. Daily job logs, progress reports and contemporary records are important and must include weather information and should document the personnel, material, and equipment and progress of the work and how they are impacted by the (unforeseeable) event. Accordingly, an "as planned" and as build schedules can be assembled to illustrate the progress and delays on the progress. Most importantly, pictures and videos are extremely valuable in making this claim.

Beware that the benefit to the contractor of EOT is only to relieve the contractor of liability for damages for delay (usually referred to as delay or liquidated damages) for any period prior to the extended contract completion date. The benefit of an EOT for the employer is that it establishes a new contract completion date, and prevents time for completion of the works becoming at large (SCL 2002, p. 5). By consequence EOT clauses create a win-win situation between the parties to a construction contract. From a contractor's perspective EOT has the nature of a defence against delay damages and from the employer's perspective the clause prevents time for completion of the works becoming at large.[15] This has been recently confirmed by HHJ Davies in Steria:[16]

> ... In my judgment an extension of time provision confers benefits on both parties; in particular it enables a contractor to recover reasonable extensions of time whilst still maintaining the contractually agreed structure of a specified time for completion (together, in the majority of cases, with the contractual certainty of agreed liquidated damages, as opposed to uncertain unliquidated damages). So far as the application of the contra

[15] See ERDC Group Ltd v. Brunel University [2006] EWHC 687 (TCC) (29 March 2006).

[16] Steria Ltd v. Sigma Wireless Communications Ltd [2007] EWHC 3454 (TCC) (15 November 2007).

> proferentum rule is concerned, it seems to me that the correct question to ask is not whether the clause was put forward originally by Steria or by Sigma; the principle which applies here is that if there is genuine ambiguity as to whether or not notification is a condition precedent, then the notification should not be construed as being a condition precedent, since such a provision operates for the benefit of only one party, i.e. the employer, and operates to deprive the other party (the contractor) of rights which he would otherwise enjoy under the contract.

In order to reduce the number of disputes relating to delay, contractors are often obliged to submit a properly prepared programme showing the manner and sequence in which the contractor plans to carry out the works. According to Sub-Clause 8.3 the programme should be updated to record actual progress and any extensions of time granted. If this is done then the programme can be used as a tool for managing change and determining periods of time for which compensation may be due.

In the course of claim assessment by programming, experts and non-experts alike frequently use the term "critical path". It is fundamental to have a precise definition of what it and associated terms mean. What is known as the Critical Path Method is frequently used by the construction industry both in the United States, the United Kingdom and elsewhere in planning construction projects and in analysing the causes of delay. The critical path can be defined as "the sequence of activities through a project network from start to finish, the sum of whose durations determines the overall Project duration". It can only reliably be deduced from the mathematical sum of the durations on the contractor's programme to be completed in sequence before the completion date can be achieved. HHJ Toulmin makes the point that this is an important cautionary finding where witnesses are convinced, without the benefit of any such analysis, that they know where the critical path lies.[17] Thus Critical Path Method requires detailed and sophisticated analysis and in complex projects it is unlikely that a critical path can be identified inductively, i.e. by assertion.

As previously mentioned the programme should show the manner and sequence in which the contractor plans to carry out the works and the related periods of time for each activity. It is of course possible to affect the critical path by allocating some activities a longer time than is necessary, thus keeping them on the critical path. This protects other activities from being on the critical path. Such time assigned to an activity, which is longer than the shortest time that is reasonably necessary to undertake that activity, can be referred to as "float". The term "float" is often used in the alternative sense of the length of time before an activity becomes on or very close to the critical path.

Thus the relationship between the critical path and the events occurring during the completion period is an important consideration and should be addressed in all delay cases. It is fundamental that the critical path becomes redrawn at the point in time immediately preceding the relevant event in order to enable the parties and the

[17] Mirant Asia-Pacific Construction (Hong Kong) Ltd v. Ove Arup and Partners International Ltd & Anor [2007] EWHC 918 (TCC) (20 April 2007), at no. 122.

engineer to judge with a degree of accuracy its effect on the programme. Beware that the approaches to concurrent delay in the United States, Canada, New Zealand and England are different from each other (compare, Morgan 2005, p. 54 et seq.). Depending on the contract, float may be owner-owned or contractor-owned. The SCL Protocol quotes that "unless there is an express provision to the contrary in the contract, where there is remaining float in the programme at the time of an employer risk event, an EOT should only be granted to the extent that the employer delay is predicted to reduce to below zero the total float on the activity paths affected by the employer delay".

Although the FIDIC Rainbow Edition does not provide network techniques, they merely imply the use of it.[18] Firstly only delay on time for completion usually entitles the contractor to EOT. Secondly Sub-clause 8.3 provides detailed programming by the contractor, who "shall submit a detailed time programme to the Engineer". Each programme shall include:

(a) The order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage of design (if any), Contractor's Documents, procurement, manufacture of Plant, delivery to Site, construction, erection and testing
(b) Each of these stages for work by each nominated Subcontractor (as defined in Clause 5 [*Nominated Subcontractors*])
(c) The sequence and timing of inspections and tests specified in the Contract
(d) A supporting report which includes:
    (1) A general description of the methods which the Contractor intends to adopt, and of the major stages, in the execution of the Works
    (2) Details showing the Contractor's reasonable estimate of the number of each class of Contractor's Personnel and of each type of Contractor's Equipment, required on the Site for each major stage

Thus the information required is extensive and presupposes that the contractor has planned the work in detail. In particular the contractor has to show the anticipated timing of each stage of design (if any), Contractor's Documents, procurement, manufacture of Plant, delivery to Site, construction, erection and testing. Even though the FIDIC documents do not require the use of project management software the contractor shall obviously enable the engineer and the employer to identify the critical path.

In daily practice Windows analysis is the most widely accepted method of critical path analysis. The critical path analysis will identify at a given date which important aspects of the project are falling behind the programme, particularly if they are on or close to the critical path, what if any is the impact on other aspects of the programme and where additional resources need to be placed. It will also

[18] The FIDIC Orange Book 1995 appears to be unique in requiring expressly the use of network techniques.

demonstrate where activities are ahead of what is planned and enable a decision to be taken on whether planned activities need to be rescheduled.[19] It is finally also used as a tool for analysing, as at the given date, what has caused any delay that has occurred and what is the extent of that delay.[20]

21.9 Money Claims

The entitlement to any additional payment depends mainly on the risk allocation within the contract. Risks may result in cost and the entitlement to additional profit. However, it is an erroneous assumption that an extension of time is automatically linked to additional payment. In any case cost must be distinguished from profit. Both elements are usually defined by the contract. These definitions may have a significant impact on the performance of the contract when it comes to valuation of claims. Definitions can be as such:

> "Cost", "costs, losses and claims" and "the amount to be added to or deducted from the Contract Price" or the valuation of new prices within the Conditions of Contract, other than prices that can be valued from the Schedule of Prices or based on the Schedule of Prices shall be valued in accordance with the Schedule of Cost Components included in Schedule 11 of this Contract.[21]

Extra work of the kind contemplated by the contract will usually be paid for in the manner provided by the terms of the contract. If the contract does not provide any rates, according to English law, payment will be a reasonable sum.[22] According to German law remuneration for work is deemed to have been tacitly agreed if in the circumstances of the case it is to be expected that the work or service is to be performed only against remuneration. If the amount of remuneration is not specified and a tariff exists, the tariff rate of remuneration is deemed to have been agreed; if no tariff exists, the usual remuneration is deemed to have been agreed.

It is similar for work outside the contract. It depends on the contract whether any new rates have to be fixed by reference to rates shown in the tender or not. There is, subject to applicable law, no implied term which entitles the employer to ask for disclosure of the contractor's internal calculation. But of course the contract may expressly refer to rates included in the tender documents. However if the contractor has made an error in his pricing of the tender for a lump sum contract and there are no grounds for rectification, these rates cannot be rectified or disregarded on the

[19] Mirant Asia-Pacific Construction (Hong Kong) Ltd v. Ove Arup and Partners International Ltd & Anor [2007] EWHC 918 (TCC) (20 April 2007), at no. 129.

[20] Mirant Asia-Pacific Construction (Hong Kong) Ltd v. Ove Arup and Partners International Ltd & Anor [2007] EWHC 918 (TCC) (20 April 2007), at no. 130.

[21] Yorkshire Water Services Ltd v. Taylor Woodrow Construction Northern Ltd [2004] EWHC 1660 (TCC) (08 July 2004).

[22] See British Steel Corporation v. Cleveland Bridge and Engineering Co Ltd [1984] 1 All ER 504.

basis of there being an error,[23] unless the contract provides an express power to make an adjustment for pricing errors (Furst and Ramsley 2006, note 4-053).

In any case FIDIC books provide for a considerable number of cost claims, such as:

- Under FIDIC Red Book 1999 edition, a contractor prevented from access to or possession of the Site will have *28 days* to provide written notice (FIDIC Red Book, Sub-clauses 4.12, 20.1) after becoming aware of the event.
- Under FIDIC Red Book 1999 edition, a contractor encountering unforeseeable physical conditions will have *28 days* to provide written notice (FIDIC Red Book, Sub-clauses 4.12, 20.1) after becoming aware of the possibility of additional cost. However, a previous prompt written notice is required.
- Under FIDIC Red Book 1999 edition, a contractor encountering fossils will have *28 days* to provide written notice (FIDIC Red Book, Sub-clauses 4.24, 20.1) after becoming aware of the possibility of additional cost.
- Under FIDIC Red Book 1999 edition, a contractor incurring cost from complying with instructions concerning any tests will have *28 days* to provide written notice (FIDIC Red Book, Sub-clauses 7.4, 20.1) after becoming aware of the instruction.
- Under FIDIC Red Book 1999 edition, a contractor incurring cost as a result of changes in the Laws will have *28 days* to provide written notice (FIDIC Red Book, Sub-clauses 13.7, 20.1) after becoming aware of the change.
- Under FIDIC Red Book 1999 edition, a contractor incurring cost from rectifying loss or damage as a result of an Employer's Risk will have *28 days* to provide written notice (FIDIC Red Book, Sub-clauses 17.4, 20.1) after becoming aware of the cost. However, a previous prompt written notice is required.
- Under FIDIC Red Book 1999 edition, a contractor encountering a Force Majeure event will have *28 days* to provide written notice (FIDIC Red Book, Sub-clauses 19.4, 20.1) after becoming aware of the cost.

21.9.1 Cost

According to FIDIC Conditions the Contractor is entitled to additional costs including overhead (see Sub-Clause 1.1.4.3) but excluding profit for expenses encountering unforeseeable physical obstructions or conditions (Sub-Clause 4.12); encountering fossils or other specified objects of archaeological or geological interest (Sub-Clause 4.24); suspensions ordered by Engineer for reasons other than Contractor's default or because needed for proper execution of works or by reason of climatic conditions (Sub-clause 8.9), termination upon outbreak of war (Sub-Clause 19.6). In other cases the Contractor is entitled to additional costs plus reasonable profit resulting from tests required by Engineer but not provided for in

[23] Henry Boot Construction v. Alstom Combined Cycles [2000] BLR 247, CA.

the contract (7.4); uncovering work where no defect exists (Sub-Clause 11.8); termination or suspension upon Employer's default (Sub-Clauses 16.4, 19.6); Employer's failure to give Contractor possession (Sub-Clause 2.1); damage to works or Contractor's equipment or other expenses arising from specified Employer's risks (Sub-Clause 17.4); rise in costs of labour or materials (Sub-Clause 70.1) and subsequent legislation (Sub-Clause 13.7).

In most situations the Contractor will only be entitled to payment of any additional cost. Cost should be clearly distinguished from the price and rates:

- Purely cost related risks can be defined as those which can result in changes to the contractor's project cost, hence having an influence on his profit margin. Such risks include for example variation orders, cost escalation (related to wages, materials, etc.), changes in laws and regulations, tax rate increases, insurance premium increases, exchange rate fluctuations, embargos, shipping and transportation risks, etc.
- Physical risks comprise those events or occurrences which prevent or delay physical completion of the works. They include access to the site issues, site conditions, earthquakes, exceptional adverse climatic conditions, etc.
- Ability related risks are those events or occurrences that prevent or delay completion of the works other than physical obstructions, such as defective work, inadequate labour, strikes and lock-outs, war, riots, shortcomings as to materials and equipment, etc.

FIDIC contracts define the term "cost" as follows (Cl. 1.1.4.3):

> "Cost" means all expenditure reasonably incurred (or to be incurred) by the Contractor, whether on or off the Site, including overhead and similar charges, but does not include profit.

According to the New Dictionary of Civil Engineering "cost" means:

> Required expenditure on resources incurred in producing and selling an output, i.e. payment or expense to buy or obtain goods or services.

Changes and occurring events may cause direct and indirect financial consequences. The evaluation of such consequences is subject to a determination by the Engineer (Sub-Clause 3.5) who shall make a fair determination with regard to all relevant circumstances and in accordance with the Contract. Thus it is the Engineer who shall consider the meaning of Cost. Guidance for the support of the valuation process with regard to the consequences of events and changes is presumably the same as set down by the courts for the evaluation of damages or the determination of the price (see above).

Under Common and Civil law the guiding principle, when considering breaches of contract, is that recoverable damages shall not be too remote, though many differences appear in detail. Under Civil law the guiding principle, when considering the amount of the remuneration which the parties did not agree on, is that the remuneration shall be reasonable. Under Common law the *quantum meruit* may be recoverable, which is equal to "what it is worth". It has been established in

Thorn v. London Corp[24] that a contractor who is requested to undertake further work for which no price has been agreed will be titled to a reasonable amount, which being outside the Contract shall not be valued by reference to its terms. In so far the speech of Bowsher J in Laserbore v. Morison Biggs is worth to be cited:[25]

> I return to the approaches of the respective experts, the "reasonable rates" basis on the one hand and the "costs plus" basis on the other. I take the "reasonable rates" basis used by the plaintiffs' expert to be Saville J's "fair commercial rate for the services provided". In a competitive market, one would expect both approaches to result in much the same figure, particularly if one accepts that someone who competes by providing high quality rather than low cost should receive a higher remuneration on both tests. Tenders are usually built up on a costs plus basis and the acceptance or rejection of tenders sets what can be viewed as the market rate. But one problem for the plaintiffs is that they did not expect to have to prove their claim on a costs plus basis and they have not kept records sufficient to prove their claim in that way.
>
> I am in no doubt that the costs plus basis in the form in which it was applied by the defendants' quantum expert (though perhaps not in other forms) is wrong in principle even though in some instances it may produce the right result. One can test it by examples. If a company's directors are sufficiently canny to buy materials for stock at knockdown prices from a liquidator, must they pass on the benefit of their canniness to their customers? If a contractor provides two cranes of equal capacity and equal efficiency to do an equal amount of work, should one be charged at a lower rate than the other because one crane is only one year old but the other is three years old? If an expensive item of equipment has been depreciated to nothing in the company's accounts but by careful maintenance the company continues to use it, must the equipment be provided free of charge apart from running expenses (fuel and labour)? On the defendants' argument, the answer to those questions is, "Yes". I cannot accept that that begins to be right.

Definitions of the term "cost" are quite difficult to find. Economically Cost can be classified as direct costs (raw materials and direct labour) and indirect costs (or overheads). The definition in Sub-Clause 1.1.4.3 specifically excludes profit but includes overheads and similar charges. Usually cost means all expenditure properly incurred by the contractor, whether on or off the site, including overhead and similar charges. However it does neither specify the treatment of supplier discounts and other benefits that contractors might receive (Huse 2002, note 5-39) nor does it specify the treatment of other aforementioned benefits. Cost should therefore be understood as reasonable market rates for services provided. In addition the term Cost should be read together with Sub-Clause 17.6 according to which neither Party shall be liable for loss of profit, loss of any contract or for any other indirect and consequential loss or damage. It is suggested that it follows from Sub-Clause 17.6 that claims falling under the second limb of the principles stated in Hadley v. Baxendale[26] are excluded. Thus the term Cost will not include any consequential losses but only those items falling under the first limb of Hadley v. Baxendale. Whether the term expenditure covers all heads of claims, which in general fall under the first limb of Hadley v. Baxendale, remains open. But the wording of

[24] Thorn v. London Corporation (1876) L.R. 1 App. Cas. 120, HL.

[25] Laserbore Ltd v. Morrison Biggs Wall Ltd (1993) CILL 896.

[26] Hadley v. Baxendale (1854) 9 Ex. 341.

Sub-Clause 1.1.4.3 appears to include financial charges (as mentioned in the FIDIC Contracts Guide), overheads (as expressly mentioned in Sub-Clause 1.1.4.3) and presumably loss of productivity covering additional labour and machinery cost.

The question may arise whether the term “cost incurred” can be extended to include the recovery of future or anticipated cost, which has recently been denied by Justice Forbes.[27]

In principle all costs have to be shown to be incurred, moreover reasonably incurred. The FIDIC Contract’s Guide states that overhead charges may include reasonable financing cost incurred by reason of payment being received after expenditure. Some of the cost causes of action are linked to particular conditions. Sub-Clause 4.12 is inextricably linked to the preceding Sub-Clauses 4.10 and 4.11, which set out the Contractor’s responsibility to make its own surveys, inspections and interpretations of the submitted data. Hence, it is not the tender computation that is the starting point for any cost evaluation. Instead is the available data and the standard of care to be applied during surveys, inspections, etc.

21.9.2 Profit

The definition of “profit” or “reasonable profit” is certainly open to interpretation, because it is not a defined term. According to the New Dictionary of Civil Engineering “profit” means:

> Profit is either economic profit or accounting profit. Economic profit is the residual return after all costs have been met, not including return to land or capital. Accounting net profit means the profit [before or after tax] the residual after deducting all money costs.

Profit margin mark-ups are not necessarily those included in the original tender. It is presumed that reasonable profit should be foreseeable and capable of justification. Clear guidance as to this issue is difficult. The calculation of profit margin mark-ups is often subject to applicable law and court practice.

The FIDIC Guidance for the Preparation of Particular Conditions suggests an amendment to sub-clause 1.2 in order to elucidate the phrase “cost plus reasonable profit”. The FIDIC example states that reasonable profit would be one-twentieth or 5% of the cost.

Which heads of claims are covered by the term “profit” is subject to further discussion. Whether it includes all heads of claims falling under the second limb of Hadley v. Baxendale must carefully be considered. If read in the context of Sub-Clause 17.6 it would be difficult to argue that the term “profit” also covers items which fall under the second limb of Hadley v. Baxendale.

[27] Yorkshire Water Services Ltd v. Taylor Woodrow Construction Northern Ltd [2004] EWHC 1660 (TCC), at no. 65.

21.9.3 Loss of Productivity Claims

It is a widely spread erroneous assumption that an extension of the Time for Completion is automatically linked to additional payment (Thomas 2001, p. 93). On the other hand it is beyond doubt that an extended Time for Completion usually results in additional cost. Under all FIDIC forms the Contractor's obligation is tied into a programme. Sub-Clause 8.1 of the Red, Yellow and Silver Forms requires the Contractor to proceed with the Works with due expedition and without delay. Sub-Clause 8.3 of the Red, Yellow and Silver forms requires the Contractor to proceed in accordance with the programme, subject to his other obligations under the Contract. If it becomes obvious that actual progress falls behind the programme, the Contractor must submit a revised Programme.

Sub-Clause 8.6 of the Red, Yellow and Silver Forms gives the Engineer (Employer under the Silver Form) the power to instruct the Contractor to submit a revised Programme with revised methods to expedite progress and complete within the Time for Completion. The power arises if actual progress is too slow to complete within the agreed Time for Completion, or if the progress has fallen or will fall behind the Programme. There is no such power if the cause is one of the matters which entitles the Contractor to an extension of Time for Completion subject to Sub-Clause 8.4. However if Sub-Clause 8.6 applies the Contractor is required to adopt the revised methods which are stated to include increases in the working hours and/or increase in resources and/or goods. The revised methods are at the Contractor's cost and risk and he is liable for the Employer's additional costs incurred in addition to any delay damages.

Sub-Clause 8.4 being the main Sub-Clause for all extension of time issues does not provide for any additional payment in favour of the Contractor. Nor is there any particular clause allowing for an entitlement to loss of productivity. However it should be noted that under FIDIC contracts there are a number of particular claim clauses which combine EOT claims and cost claims. In such cases additional cost (such as overheads and other similar cost) are already covered by the FIDIC clauses.

21.9.4 Legal Claims

FIDIC does not prevent the parties from relying on the law. Thus additional legal claims may arise depending on the facts. There are various examples of such claims:

According to common law, in the event that an Employer is aware of a project condition but fails to disclose and/or misrepresents the existence of such a condition to the Contractor, damages may be claimed. Thus, where an Employer who possesses superior knowledge, which it fails to disclose and damages result, the Employer may be liable for those damages that result from the failure to disclose.

For example, in a situation where a contractor is delayed as a result of undisclosed physical obstructions which were known to the Employer, the Employer's failure to disclose may make them liable for resulting damages. However, where the Contractor knew or should have known about the undisclosed conditions, the Contractor's claim will be dismissed.

If according to Egyptian law (art. 658 para. 3 Civil Code) the economic balance between the obligations of both, the Employer and the Contractor collapses owing to general extraordinary incidents that were not taken into account when the Contract was signed, and a as result the basis on which was founded the estimation of the contractual agreement came to falter, the judge may pass a judgment ruling that either the remuneration be increased or the contract be rescinded.

Also a Contractor may consider that the Employer has, under the governing law, to pay the quantum meruit rather than to refer to the variation regime of the contract.

It is crucial to ascertain any probable legal claims in advance. Unfortunately in current practise legal causes of actions are quite often ignored until a dispute arises. This is too late, and this for multiple reasons. The first reason lies in Sub-Clause 20.1 according to which a claim shall be notified within 28 days. The second reason is lack of documentation and evidence. The legal cause of action may require to show evidence for facts which the Contractor considered to be irrelevant or moot. The third reason is that adjudicators and arbitrators are not completely free to consider arguments which are completely new and which in fact constitute a new dispute. Difficult questions concerning the scope of the dispute that was referred for adjudication may then arise.

21.10 Gold Book

The DBO does not change the claims' procedure completely, but adjusts some of the details of the existing claim procedure concerning Contractor's claims, in particular the following:

Firstly the clear time bar for the notification of claims has been slightly defused. Hereafter the Contractor may submit details for justification of late submission to the DAB for a ruling. If the DAB considers the circumstances to be such that the late submission was acceptable, the DAB has authority to over-ride the given 28-days-limit. It is however presumed that there is an implied standard of good faith, excluding excuses which are within the control of the Contractor. Thus justification of late notification might be given if the Contractor was unambiguously unable to notify the claim within the delay stated in Sub-Clause 20.1.

Secondly in future the Contractor will be obliged to substantiate his claim within the time for substantiation, which has been fixed to 42 days. Otherwise his claim will be deemed to have lapsed. Late submission of details may be remedied. The Contractor may justify late submission and submit the details to the DAB for a ruling. Here also justification requires the presentation of circumstances which are beyond control of the Contractor.

Thirdly it seems to be clear that failure to comply with Sub-Clause 20.1 lit. b (Contemporary Records) will have a negative impact on a claim. The Contractor's claim will stand and fall by the quality of the evidence and the time within which it is produced (Glover and Hughes 2006, note 20-008).

Fourthly, if the Parties are dissatisfied with any determination of the Employer's Representative they may issue a notice of dissatisfaction within 28 days of receiving the determination. Otherwise the determination becomes final and binding.

Fifthly if the Employer's Representative remains silent more than 42 days after a substantiated claim has been submitted, either party may consider that the claim has been rejected by him and either Party may refer the matter to the DAB (Sub-Clause 20.1 lit. d subparagraph 2).

Sixthly the DBO form distinguishes between claims which may arise until issue of the Commissioning Certificate and those which may arise during the Operation Service Period. Whilst Cost can be claimed at completion stage according to Sub-Clause 9.3 subject to Sub-Clause 20.1 no such reference to Sub-Clause 20.1 is made as to compensation claims covered by Sub-Clause 10.6 lit. b. However, in most case reference to Sub-Clause 20.1 has been kept, for example in Sub-Clause 10.4 or Sub-Clause 18.4 lit. b or Sub-Clause 10.7. It is also noteworthy that extension of Time for Completion is not recoverable during the Operation Service Period and that Sub-Clause 10.6 provides for a particular compensation claim to the extent that the Contractor may recover cost and losses including loss of revenue and loss of profit, terms which are not defined in the Contract. Anyway it is critical to also establish a daily claim management during the Operation Service Period.

Thus in principle the claim procedure has been maintained, albeit in a slightly adjusted format. It is obvious that the new claim procedures require strict compliance with the given time schedule in order to avoid inconveniences, and this until the end of the whole procedure. An overabundance of tactical considerations and prolonged procedures should be avoided (Fig. 21.5).

Nevertheless, the new wording gives rise to some additional remarks. It might be argued that it is no longer necessary for the Employer's Representative to proceed

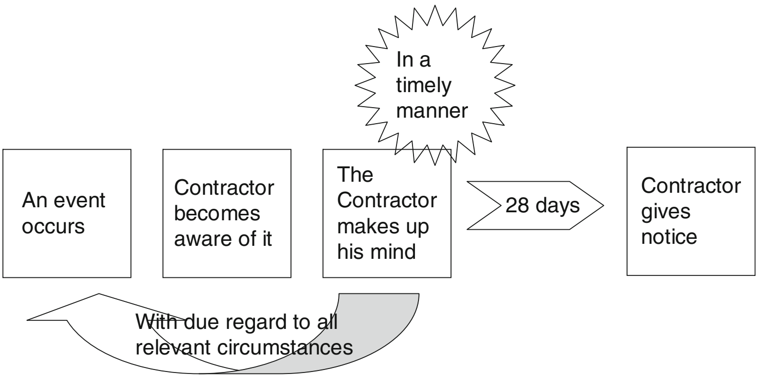

Fig. 21.5 Contractor's preliminary considerations

in accordance with Sub-Clause 3.5 if the Contractor fails to give full supporting particulars of his claim. The reason for this lies in Sub-Clause 20.1 lit. d. According to the wording of this Sub-Clause the Employer's Representative shall proceed in accordance with Sub-Clause 3.5 "within 42 days after receiving a fully detailed claim". Hence, there is no obligation to make a determination as to any claim which has not been substantiated. On first sight this might not lead to a problem, because it is clear from Sub-Clause 20.1 lit. c that in the event of failure to give full particulars the Notice shall be deemed to have lapsed. However there is an issue, if a dispute arises, as to whether a claim has been fully substantiated or not. In this event the Employer's Representative should issue a determination (rejection) in order to open the way to the DAB. If he remains silent the new Sub-Clause 20.1 lit. d subparagraph 2 applies. The Contractor may then consider that the claim has been rejected by the Employer's Representative and refer the matter to the DAB. In this case the

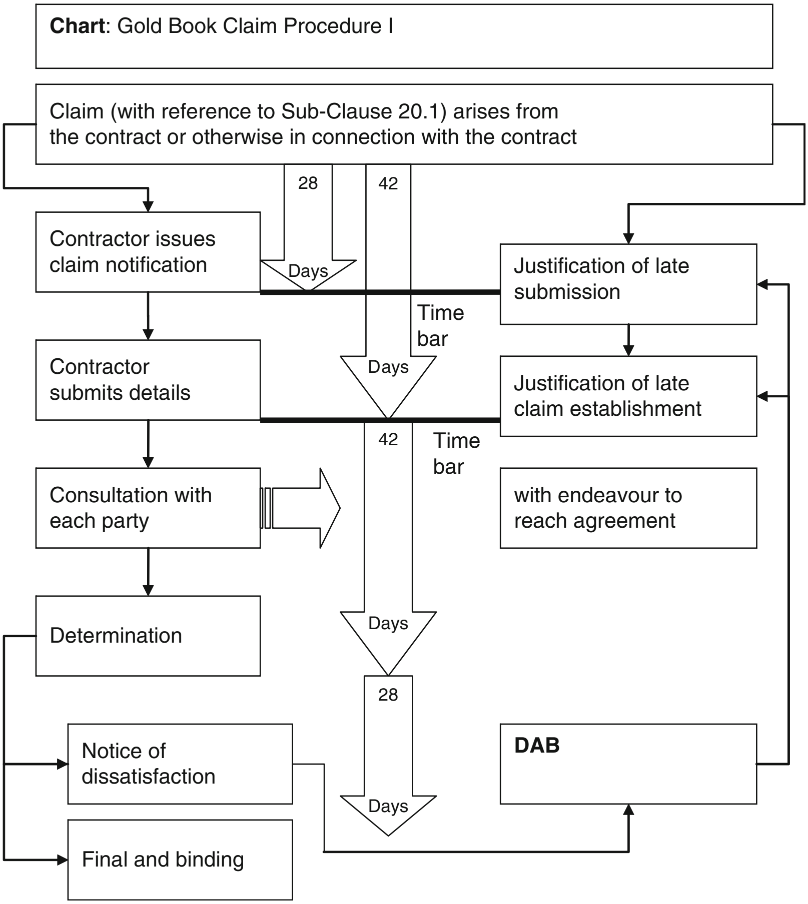

Fig. 21.6 Gold Book claim procedure II

next issue arises. According to the new Sub-Clause 20.1 lit. d paragraph 4 a Notice of dissatisfaction must be given, otherwise the determination will become final and binding. In the particular case that the Employer's Representative remains silent because he considers that the claim was not yet fully substantiated he may withhold its determination because Sub-Clause 20.1 lit. d only applies on the condition that the claim was fully detailed. However, if he was wrong and the claim was fully detailed Sub-Clause 20.1 lit. d applies. In this case the Contractor shall give within 28 days' a Notice of dissatisfaction in accordance with Sub-Clause 20.6. On the other hand Sub-Clause 20.6 presupposes a Notice of dissatisfaction. Hence, the Contractor is only allowed to refer a matter to the DAB if he has issued a Notice of dissatisfaction. It is therefore strongly recommended to issue a Notice of dissatisfaction within 28 days, if the Employers Representative does not respond in accordance with the determination procedure, even though the claim has not been sufficiently substantiated (Fig. 21.6).

Compared with the 1999 edition the claim procedure for claims of the Employer has not been touched, although the World Bank found it more balanced to insert a time bar for Employer's claims in its MDB Red Book harmonised edition. However Employer's claims are no longer dealt with in Sub-Clause 2.5 but in Sub-Clause 20.2. Moreover it should be emphasised that for the first time even Employers must comply with a cut-off period. In the event of dissatisfaction with a determination made by the Employer's Representative, the Employer must give a notice of dissatisfaction within 28 days after receiving the determination. Otherwise the determination shall be deemed to have been accepted.

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Chapter 22
Disputes

The settlement of disputes is covered by Clause 20. FIDIC has introduced a two-step or indeed three-step procedure for the purposes of dispute settlement (Fig. 22.1). At the outset any dispute has to be referred to the Dispute Adjudication Board (DAB). Sub-Clauses 20.5 then provides for a last attempt of dispute avoidance and amicable settlement. Finally the dispute may be referred to arbitration (Sub-Clause 20.6).

22.1 Introduction

Whenever possible, it is advisable to solve any differences or disputes by amicable settlement, since disputes are time-consuming and expensive. Most international contract forms therefore provide express stipulations through which the parties to them attempt to avoid disputes. Some of them even require endeavours to be made to reach an amicable settlement before any difference or dispute can be referred either to the courts or to arbitration. As both court and arbitration proceedings are expensive and time-consuming the business community has developed so called alternative dispute resolution (ADR) proceedings, which are either used exclusively or as compulsory interim proceedings, thus baring the referral to courts or arbitration until these preliminary proceedings have come to an end.

FIDIC has at a very early stage adopted the concept of alternative dispute resolution. Since 1995 the Orange Book provides Dispute Adjudication as a regular feature of dispute resolution. The concept was maintained when FIDIC published the 1999 Rainbow Edition. A more sophisticated set of rules has been adopted in the new Design, Build & Operate form of FIDIC, also referred to as the Gold Book or DBO form. Ever since then Dispute Adjudication is recognised as a useful and appropriate feature of dispute resolution. Naturally, other dispute resolution concepts exist, some of which are also used by FIDIC. For example the FIDIC White Book still refers to mediation.

Traditionally disputes were initially determined by the Engineer within 84 days of reference, then by arbitration under ICC Rules (Sub-Clauses 67.1, 67.3 FIDIC, 4th edition 1987). Arbitration had to be noticed within 70 days of Engineer's

A.-V. Jaeger and G.-S. Hök, *FIDIC-A Guide for Practitioners*,
DOI 10.1007/978-3-642-02100-8_22,

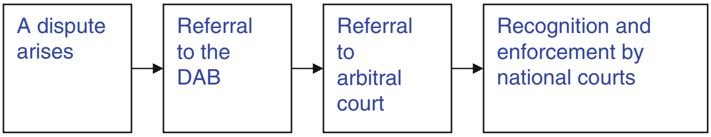

Fig. 22.1 Procedural steps

decision or after the period for such decision had expired (Sub-Clause 67.1). The 1999 series of the Books, following the Orange Book 1995, has changed this dispute resolution system. The Engineer is no longer a quasi-arbitrator and has been replaced in so far by a Dispute Adjudication Board (Sub-clauses 20.2, 20.4).

If any dispute arises the parties to the contract may refer it to the Dispute Adjudication Board. A nomination procedure for the appointment of the DAB members is ruled in Sub-clause 20.2. The DAB has full power to open up, review and revise any certificate, determination, instruction, opinion or valuation of the Engineer.

22.2 Dispute Resolution Methods

22.2.1 Introduction

Quite a sophisticated system of alternative dispute resolution has been developed over the last 25 years which covers all types of mediation, dispute reviewing and dispute adjudication.

22.2.2 Mediation

Mediation is in many ways a "new kid on the block" and has increased in popularity only in the last couple of decades. It is in truth not really a procedure by which a dispute becomes settled by the so called mediator. Mediation is aimed at leading the parties to an amicable settlement of their difference or dispute. Thus the role of a mediator is different from that of a judge or arbitrator. He tries to provide the necessary support for an amicable settlement without any procedural background and restrictions. The parties share relevant information and meet in both confidential discussions with the mediator and face to face with each other, as deemed appropriate. According to the CEDR (Centre for Effective Dispute Resolution) definition, mediation is a flexible process conducted confidentially in which a neutral person actively assists parties in working towards a negotiated agreement of a dispute or difference, with the parties in ultimate control of the decision to settle and the terms of resolution. Key features of mediation are:

- Mediation is voluntary.
- However, refusal to mediate can give rise to cost sanctions.

- Courts actively encourage parties to consider mediation.
- Mediation is confidential and "without prejudice" (nothing said in the mediation is subject to evidence legislation of the lex fori – admissible as evidence in subsequent legal proceedings).
- The mediator facilitates the process but the parties are and remain responsible for the outcome.
- Any settlement reached during mediation is binding once put into writing and signed by the parties subject to the governing law: According to German law (see Sect. 779 Civil Code) a settlement by means of which the parties' dispute or uncertainty about a legal relationship is eliminated is ineffective if the set of facts used as a basis according to the contract's contents does not correspond to reality and the dispute or uncertainty would not have occurred if the facts had been known.

Mediation is presumed to have a number of advantages over litigation and arbitration proceedings:

- *Avoids premature litigation* in case of simple misunderstandings.
- *A wide variety of settlement options* can be achieved in mediation over and above monetary settlements, including options which at court are not available (e.g. specific performance).
- *Confidential* – as any facts remain completely confidential.
- *Cost effective* – compared with litigation processes, mediation is a less expensive route to resolving disputes.
- *Excludes jurisdictional issues.*
- *Gives parties control* over the process and the outcome, which means that they are completely free to shape the mediation process.
- *Informal and flexible* – the process to suit parties' needs without any prejudice to further judicial proceedings.
- *Information sharing* – Relevant information is shared by each party and the mediator, prior to the mediation.
- *Mediation can protect and maintain business relationships* far more effectively than litigation.
- *Mediation can run alongside litigation*, or the parties may prefer to put the litigation process "on hold" while they mediate.
- *Quick* – most mediations are arranged within a few weeks (and can be arranged even more quickly) and the formal mediation session usually lasts for one or two days only.

This is the reason why for example the FIDIC White Book recommends CEDR mediation procedures for the settlement of disputes arising from a consultancy agreement. CEDR, founded as a non-profit organisation in 1990 with the support of The Confederation of British Industry (CBI) and a number of British businesses and law firms, to encourage the development and use of Alternative Dispute Resolution (ADR) and mediation in commercial disputes, is a London-based mediation and alternative dispute resolution body. CEDR Mediator Training Skills is widely thought to be the best in the world.

22.2.3 Dispute Review

Dispute Review Boards (DRBs) are also a very appropriate means for solving *disputes* in the course of the project development. Dispute review consists of a procedure wherein the dispute reviewer takes no decision but provides his opinion on the merits of the case. Usually he issues a non-binding recommendation, which the parties may use in order to reach an amicable settlement based on a clear legal position. Dispute review evolved from the former role of the engineer as decision-maker in the first instance under various standard forms of construction contracts, such as the old FIDIC Red Book 1987 (fourth Edition). For example, earlier editions of the FIDIC contracts provided that disputes were to be determined in the first instance by the Engineer under the contract. The Engineer's decision was binding upon the parties until it was reversed by arbitration. The European PRAG dc4 form still uses this feature.

Some think that dispute review is the superior way of resolving-and even avoiding-disputes. Meanwhile arbitral institutions have endorsed such procedures. For example, the American Arbitration Association (AAA) and the International Chamber of Commerce (ICC) have each issued procedural rules for dispute review boards. Also the Dispute Review Foundation (DRBF) promotes Dispute Review as a favourite means of dispute resolution. Dispute review boards can comprise a single person or a panel of three or even five members. Generally speaking, it is wise to keep the number of members to an odd number, so that it is possible to achieve a split or majority decision should the panel not reach unanimity. The members of a Review Board are (or should be) independent to the parties and are expected to be able and experienced to take the initiative in investigating and ascertaining the facts and law related to the dispute. Dispute Review Board members are also often required to possess expertise and skills in the type of project/industry in question.

However, Dispute Review Boards lack the advantage of rendering a decision which is binding on the parties. There is always an underlying possibility that negotiations do not lead to an amicable settlement and the parties have wasted a lot of time for no discernible result.

22.2.4 Dispute Adjudication

Dispute Adjudication is the most recent form of alternative dispute resolution but likely to be the most successful and satisfactory one at the same time, because it is very effective. Unlike dispute review dispute adjudication leads to a decision of the adjudicator on the merits of the case which becomes temporarily binding until revised by either an arbitral or a state court. Due to its success in some jurisdictions such as in England and Wales, in some jurisdictions of Australia and New Zealand and in Singapore, dispute adjudication legislation has been set in force. Usually dispute adjudication starts by a notice of reference to dispute adjudication, whose purpose is to warn the adverse party of the intention to start dispute adjudication and which is a precondition for the appointment of the adjudicator, if necessary (say, if the parties did not agree to a permanent adjudicator during the whole phase of contract execution). At a second stage the referral to adjudication follows, containing a written statement by which the claimant substantiates the merits of the case and defines its demand. The adjudicator will hear the case and provide the defending party with an opportunity to answer to the complaint. Depending on the adjudication agreement of the parties he may obtain evidence, require expert advice and visit the site. Once having heard the parties the adjudicator will render a decision which he shall notify to the parties. The decision usually becomes temporarily binding until revised by subsequent arbitration or court proceedings. The adjudicator's decision is neither an arbitral award capable of enforcement under the New York Convention, nor does it have the status of a court judgment. Instead, the decision is binding only as a matter of contract between the parties. Failure to comply with a temporarily binding adjudication decision constitutes breach of contract and the appropriate method of enforcing an adjudicator's decision is by way of an action for breach of contract unless ruled otherwise by national law. Depending on the applicable law the winning party may obtain a summary judgement or similar in order to enforce the adjudication decision. This is for example the case in England and Wales.

Examples of dispute adjudication clauses can be found in FIDIC Conditions, NEC forms of contract and MF/1 forms as well. It is today quite common to agree to dispute adjudication and parts of the industry even consider lack of a dispute adjudication clause to constitute a deal breaker.

22.2.5 Arbitration

At one time arbitration was seen as the only and unique alternative to the court system. Accordingly for a long period of time arbitration was the only means to escape from court proceedings. It has since become a common method of dispute settlement and national legislation usually accepts clauses by which the parties to a contract derogate court proceedings in favour of arbitration. If the parties to a contract have agreed to arbitration the national courts usually lack jurisdiction. By consequence a national court will reject any complaint brought before it.

If any dispute or difference arises, the parties have to refer it to the agreed arbitration. Arbitration does not mean that there is a worldwide accepted international arbitral court providing a number of arbitral judges waiting for work. Referring to arbitration usually means that the parties agree to an arbitration procedure according to a named procedure such as the ICC procedure rules or the UNCITRAL procedure rules. These sets of rules provide all necessary regulations as to the nomination of the arbitrators and the proceedings itself. Most often national law provides complementary provisions as to arbitration which must be taken into consideration by the arbitrators and the parties. In the event of a conflict of laws the arbitrator will apply the national rules of the so called lex fori, which means that the law of the country will apply in which the arbitrator has to do its work.

22.2.6 Summary

Choosing the right form of dispute resolution is a critical aspect when preparing international contracts. Jurisdiction of a court or arbitral court strongly influences questions of applicable law. Procedural law including regulations as to evidence and service of documents can have big influence on the result of any dispute. Time consuming proceedings should be avoided but the advantages of quality of dispute resolution should not be underestimated. It is thus a tremendous task to find the best solution for each contract. There is a broad freedom of choice and a widespread offer of all forms of dispute resolution. It can be presumed that recommendations as to the form of dispute resolution and clauses concerning jurisdiction issues which can be found in international standard forms are well considered and usually suitable for the disputes arising during the execution of the contract. However it is worthwhile researching different forms of dispute resolution and the advantages and disadvantages of any place of jurisdiction. Common pitfalls are:

- The choice of a forum in a country which does not adhere to any multilateral or bilateral convention on recognition and enforcement of foreign court decisions or arbitral awards (e.g. New York Convention on the recognition and enforcement of foreign arbitral awards 1958).
- The choice of a forum in a country which restricts choice-of-law-clauses.
- Accepting exclusive jurisdiction of a court, if the lex fori of the court provides a single language for the pleadings, which is different from the ruling contract language. In such a case all contract documents, communications, plans, etc., must be translated in the court language, which produces considerable interpretation risk.
- Accepting jurisdiction of a court without deep knowledge of its procedural usages and rules.
- Accepting a place of jurisdiction whose legislation requires the obtaining of special visas for lawyers and witnesses.

22.3 FIDIC Dispute Adjudication

22.3.1 Introduction

All FIDIC Books recommend Dispute Adjudication as a regular means of dispute resolution. All disputes must be referred to the Dispute Adjudication Board (DAB) before arbitration is admissible. Sub-clause 20.4 FIDIC Books provides that any dispute shall be referred to the DAB. Thus a dispute must already be constituted before it becomes referred to the DAB. The DAB must verify whether a dispute has already become apparent. If not the DAB shall reject the referral. In addition the DAB must examine whether it has jurisdiction to decide the dispute. As dispute adjudication is usually a purely contractual dispute resolution method, the test is, whether there is a contract and whether the dispute has arisen from the contract or in connection with the contract. As the Procedural Rules give power to the DAB to decide upon its jurisdiction, the DAB itself has to confirm its jurisdiction or to dismiss the dispute in the event of lack of jurisdiction. There is no jurisdiction if the DAB has already decided on the dispute. However a number of exceptions have been confirmed by English courts in this matter. If for example a decision concerning the evaluation of works has been made by the DAB and defects appear later on, the DAB might have jurisdiction to decide once again.

During the whole decision-making process the DAB is bound to the construction contract and the appended Procedural Rules for Dispute Adjudication. According to this contractual framework the DAB shall comply with rules of natural justice and fairness. Thus the DAB shall hear the parties, take evidence if necessary and inform the parties about its proper investigations and methods which are intended to be applied. It is inherent to the concept of dispute adjudication that in the event of failure to comply with the rules of jurisdiction and natural justice, such a DAB decision should not be enforced. It is submitted that the settlement of a dispute ex aequo et bono (*Latin* for "according to the right and good" or "from equity and conscience") rather than on the basis of law, results neither from the nature of the dispute, nor from lacunae in international law, but solely from the decision or agreement of the parties to reach such a solution.

The DAB shall make its decision within a pre-determined time frame. FIDIC suggests that the DAB shall render a decision within 84 days. Although it cannot be excluded for the DAB to take an erroneous decision within such a short period of time, it shall be binding on the parties until reviewed by an arbitral court. However as already mentioned failure to comply with the principles of natural justice and jurisdiction would prevent the decision to be enforced by an arbitral court.

Unfortunately the administrative work of a DAB is often underestimated. The chairman of a DAB must manage the whole work of the DAB. Immediately after the appointment of the DAB members the chairman must introduce a set of internal rules, through which the internal communication and work will become structured. If and when a dispute arises it is up to him to inform the other members of the board about the complaint. But he must also arrange and prepare the site visits and meetings with the parties and the engineer. Finally the whole DAB must decide upon further procedural rules if appropriate in order to ensure a fair and transparent procedure. It might be reasonable to set out delays for written submissions of the parties, the number of admissible experts and the manner in which witnesses shall be heard. It is also recommended that a DAB gives itself a code of conduct, by which for example the contact of the board members with the parties is structured and limited. It should be ensured that all members of the board are informed about contacts with the parties and that no private relations are maintained or initiated.

22.3.2 Function and Role of the DAB

Although in Common law countries the distinction between a person who has an expertise in valuation matters, exercising the role of an independent expert on the one hand, and a quasi judicial role, on the other hand, is well recognised, this question might be an issue in Civil law countries. As to into which category a particular individual falls, in any particular case, depends on what the parties who have invited him to carry out a task for them intended his function to be. This, in turn, is to be gleaned from the agreement between them, as the result of which the DAB assumed his task. Having regard to the language of Sub-Clauses 20.2 et seq. and the Dispute Adjudication Agreement the DAB acts in a judicial capacity. The purpose of the aforementioned Sub-Clauses, properly construed, is to provide the machinery for arriving at a fair decision which shall be derived from the submitted and ascertained facts in accordance with the contract and the applicable law when a dispute arises. The essential prerequisite of a judicial role is that by the time a matter is submitted to a DAB for a decision, there should be a formulated dispute between at least two parties which its decision is required to resolve. It is not enough that parties who may be affected by the decision have opposing interests – still less that the decision is on a matter which is not agreed between them. As such it is entitled to invite the parties to make submissions. In brief it can be said that there should be a dispute or a difference between the parties which has been formulated in some way or another. This dispute or difference shall be submitted by the parties to the DAB to resolve in such a manner that it is called upon to exercise a judicial function. The parties have been provided with an opportunity to present evidence and/or submissions in support of their respective claims in the dispute; and they have agreed to accept his decision.

However, the DAB's function is not merely that of deciding disputes. In any case a permanent DAB, as recommended in the Red Book and quite often also appropriate for a Yellow Book contract, shall also attempt to avoid disputes or to settle them at an early stage. FIDIC Books therefore allow the DAB to give opinions and recommendations, if both of the parties jointly require the DAB to do so. Quite often the main services of a permanent DAB consist in such kind of dispute avoidance services.

22.3.3 Appointment

According to Sub-clause 20.2 there are different procedures available for the appointment of DAB members. The parties may agree on the members or they can leave it open until a dispute arises. In such cases the FIDIC Books refer to the FIDIC's President's list as a nominating body (see Sub-clause 20.3 and the Appendix to Tender). But the parties are also free to choose a different nominating body. However, it is worthwhile to underline that the appointment should be distinguished from the commitment of the DAB. The DAB will only become active if a Dispute Adjudication Agreement will be executed.

22.3.4 Dispute Adjudication Agreement

Once the members of the DAB have been appointed the parties to the contract shall execute a tripartite agreement with each of the members of the DAB. A DAB is only ready for work if the parties to a FIDIC Book contract have signed with each member of the DAB a tripartite Dispute Adjudication Agreement, which is included in the Books, and if the Employer and the Contractor have given notice to each member of the DAB accordingly. Failure to give notice within six months after entering in the Dispute Adjudication Agreement makes the Agreement void and invalid (Fig. 22.2).

The tripartite agreement shall comprise the Dispute Adjudication Agreement, the General Conditions of Dispute Adjudication Agreement and the Procedural Rules. All of these documents are included in the FIDIC Books.

It is critical to know, that only by means of the tripartite agreement the parties agree on the so called Procedural Rules which are intended to be binding on the DAB. However, the General Conditions of each of the Books do not directly refer to the Procedural Rules but only to the General Conditions of Dispute Adjudication Agreement contained in the Appendix to the General Conditions. Sub-Clause 4 lit. e) of the General Conditions of Dispute Adjudication Agreement then refers to the Procedural Rules, which the members of the DAB warrant to comply with.

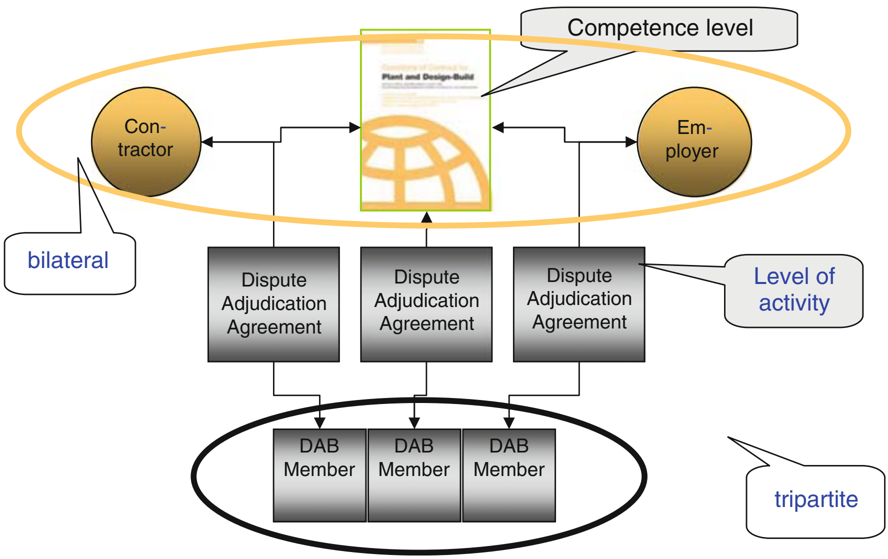

Fig. 22.2 Dispute adjudication structures

The Dispute Adjudication Agreement provides a whole and comprehensive set of rules for Dispute Adjudication and establishes a contractual relationship between the members of the DAB and the parties to the contract. Most of the issues are already pre-determined, except for the remuneration of each of the members. The remuneration is left open for negotiation.

22.3.5 Dispute Avoidance

FIDIC's overriding intention is to avoid disputes whenever possible. This attempt is illustrated by numerous provisions within the General Conditions. Thus for example the Engineer shall consult with each of the parties in an endeavour to reach an agreement (see Sub-Clause 3.5). When there is a permanent DAB in place the Procedural Rules provide for periodical site visits of the DAB and it is envisaged that issues should be discussed at early stage. It is suggested that once a dispute has arisen and the DAB is in place the DAB shall proceed in an endeavour to reach agreement, although this is not yet expressly stated in the Dispute Adjudication Agreement or in the General Conditions. If the DAB fails to reach an amicable settlement and a decision has been rendered Sub-Clause 20.5 provides for a further attempt to settle the dispute amicably.

Under the Gold Book reference can be made to Sub-Clause 20.5 according to which a joint referral to the DAB for assistance is possible.

22.3.6 Referral of a Dispute

If a dispute arises between the parties in connection with, or arising out of, the Contract or the execution of the Works either Party may refer the dispute in writing to the DAB. Such reference shall state that it is given under Sub-Clause 20.4. Although the Books do not provide much guidance for the drafting of such a referral there is a clear idea how to do this. The referring party shall contend the underlying facts in detail, give complete and detailed information about the dispute, previous determinations and DAB decisions, show evidence for all disputed facts and explain its legal arguments. Care must be taken for the referral to cover only those issues which have been indicated previously in the notice of intention to refer a dispute to Dispute Adjudication. Subsequent unilateral changes of the dispute are not permitted.

22.3.7 Jurisdiction

The first thing a DAB will do is to verify its jurisdiction. Jurisdictional issues are often complicated and once arisen will lead into intense discussions. The first issue can be the objection that no dispute exists. The second issue may lie in a wrongful appointment of DAB members. The third issue can be that there is no contract or that the dispute falls beyond the scope of the contract. The latter may appear if claims arise from an instruction which in fact required an amendment to the contract which the parties failed to agree on. Sometimes it will also be critical to determine whether a defence will fall within the jurisdiction of the DAB. One of the most important jurisdictional issues is whether any omissions of the Engineer will constitute a dispute and in particular the exact point in time when this event is considered to have arisen. It is worthy to note that the Employer will be in breach of contract if the Engineer refrains from proceeding in accordance with Sub-Clauses 20.1 and 3.5. However this knowledge will not solve the problem arising form the inactivity of the Engineer. It has been held that a dispute will be constituted if a claim has been made which has subsequently been rejected (ICC International Court of Arbitration Bulletin 74). In *Fastrack Contractors Ltd v. Morrison Construction Ltd*,[1] HHJ Thornton QC, at paragraphs 27–29 has stated:

> A "dispute" can only arise once the subject matter of the claim, issue or other matter has been brought to the attention of the opposing party and that party has had an opportunity of considering and admitting, modifying or rejecting the claim or assertion. In order to constitute a dispute, a claim must have been made which has been rejected

It is therefore suggested that a dispute will be constituted once the Contractor has informed the Employer about the fact that the Engineer remained silent for more of 42 days and that due to this fact he considers that a dispute concerning the issue as detailed in the notice will be constituted.

Jurisdictional issues shall be decided by the DAB itself (FIDIC Procedural Rules at rule 8 lit. b). It has "kompetenz-kompetenz", which is a German word, meaning the ability of an arbitral tribunal to rule on the question of whether it has jurisdiction. The principle of kompetenz-kompetenz is well established in international arbitration, and is accepted in many national laws, such as in England by section 30 of the Arbitration Act 1996.

Jurisdictional issues should be carefully examined and reasoned. English courts sometimes attempt to refuse to rule on the enforcement of DAB decisions for the reason of lack of jurisdiction.

Most adjudications relate to payment and extension of time claims. However, a FIDIC DAB is empowered to open up, review and revise any certificate, decision, determination, instruction, opinion or valuation of the Engineer (Rule 8 Procedural Rules). If a dispute arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works, including any dispute as to any certificate, determination, instruction, opinion or valuation of the Engineer, either Party may refer the matter in writing to the DAB for its decision (Sub-Clause 20.4). Thus the right to refer a dispute to the DAB is not limited to claims. It is clearly

[1] [2000] BLR 168.

not necessary for a complaint to have been considered by the Engineer under Sub-Clause 3.5 in order to create a dispute, unless it refers to a matter about which notice must be given under the Contract (Totterdill 2006, p. 301).

22.3.8 Procedure

Sub-Clause 20.4 and the Procedural Rules lay down the procedure for the DAB. In a summary the procedural steps are as follows (Figs. 22.3 and 22.4):

- The referral to the DAB includes all relevant information concerning the dispute.
- The DAB will issue directions concerning the procedure and a time schedule.
- Both parties will make available to the DAB any further or complementary information or facilities which it may require.
- The DAB may decide to conduct a hearing to obtain evidence and/or to consider submissions on the dispute from the Parties.

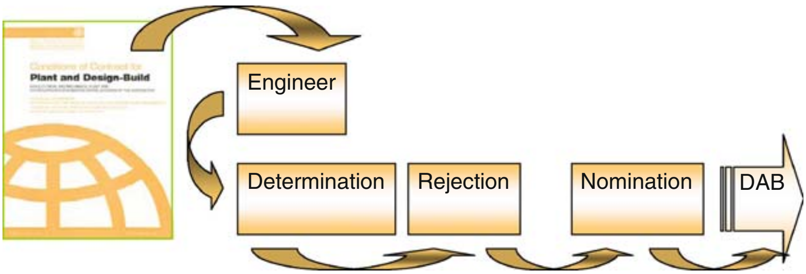

Fig. 22.3 Determination–nomination–decision

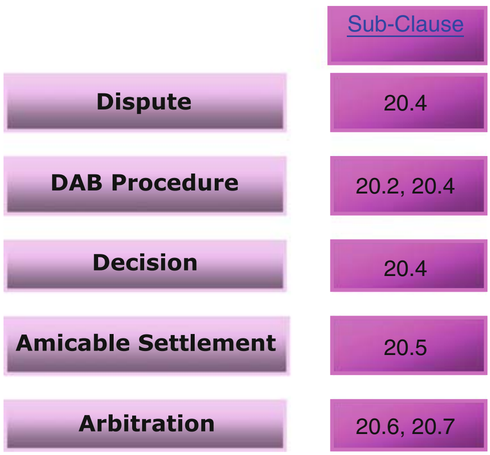

Fig. 22.4 Dispute resolution stages

- The DAB shall give its decision within 84 days or any other agreed period, from the date of the dispute reference is received by the chairman of DAB.
- If either Party is dissatisfied with the decision of the DAB or if the DAB fails to give its decision within the aforementioned period, it can issue a notice of dissatisfaction within 28 days. If the Parties fail to do so, the decision becomes final and binding.

A DAB seems to be a quasi arbitral panel. It does not have the full powers of an arbitral court and the principle of *res judicata* (meaning the preservation of its effects in further disputes) will not apply to its decision. However a DAB should follow the principles of natural justice and therefore recognise the maxim of *audi alteram partem*: "let the other side be heard". Proceedings should be conducted so they are fair to all parties. There is however broad contractual freedom to shape the procedure making it convenient to the parties. The Procedural Rules which are included in all FIDIC Books do mirror the principles mentioned above and should be strictly followed. They authorise and empower the DAB to set out its own procedural rules to the extent that they do not contradict with the Procedural Rules as incorporated by the Dispute Adjudication Agreement. Thus in practice the DAB will set out its own procedural rules and plan the procedure. At the outset the DAB will meet in order to ensure its ability to work. It is useful to have clear guidelines of working and to set out such guidelines for all of three members. The DAB members will for example agree on matters as how to proceed if one of its members speaks the local language and whether these skills will be used, how, and to what extent. In bigger cases it may be useful to share the work and to meet before the audience in order to bring together the results of the work. The DAB may also set out rules and instructions to be followed by the Parties during the proceedings. It may for example prove to be helpful to set out cut-off periods for the presentation of facts as otherwise the Parties may attempt to present new facts at a late stage which may cause significant problems in ensuring that the maxim *audi alteram partem* is adhered to. It may also be wise to give exclusive authority to the DAB Chairman to require further information and comments from the Parties. Otherwise the possibility is left open for the DAB members to issue sany manner of request without having previously discussed it with the other members of the DAB.

In summary the DAB will hear both of the parties and obtain evidence if necessary. The DAB is permitted to use inquisitorial measures in order to collect all necessary information. Having heard the parties the DAB will meet in private and prepare its decision which must be notified to the parties. The decision will be in writing, with supporting reasons.

Burden of proof issues should be solved in accordance with the applicable law. In practice adjudicators will apply the principle of balance of probabilities. This means that one party's case need only be more probable than the other. The corollary of this is the rare occurrence when the evidence is evenly balanced. In that case, victory goes to the defendant as the burden of proof is with the plaintiff, who initiates the proceedings.

22.3.9 Applicable Law

An apparently widely ignored subject matter of Dispute Adjudication is the issue of the applicable law (see Hök 2008 p. 323 et seq.). Dispute Adjudication on the international level is in principle a purely contractual feature. Although the parties to a FIDIC contract usually agree to the governing law, the issue of the determination of the applicable conflict of laws principles remains open to discussion. Actually the DAB has power to settle disputes "in connection with, or arising out of, the Contract or the execution of the Works". This means that the DAB has to ascertain the applicable law prior to making a decision, in particular if the cause of action is not contractual but based on tort or on other fields of the law. It is suggested that the DAB may then rely on the conflict of laws regime of the seat of arbitration. As Dispute Adjudication is purely contractual and the DAB is deemed not to be acting as an arbitrator it does not have its proper lex fori. By contrast a temporarily or finally binding DAB decision must be dealt as a matter of legal fact, being binding on the parties according to Sub-Clause 20.4. In other words, according to Sub-Clause 20.4 the parties to the contract have promised to each other to give effect to the DAB decision, which is a contractual obligation governed by the proper law of the contract, whether the DAB decision is based on the proper law of the contract or on tort law. Moreover, if the decision is dealt as contract shaping act by a third party, the DAB, the proper law of the contract governs the effect of the decision. In any case the DAB is under the permanent duty to ascertain the applicable law because its power to settle disputes exists only according to the law and does not allow the DAB to consider *ex aequo et bono*. If a prevailing party intends to enforce a DAB decision it is submitted that the arbitral court has to apply the proper law of the contract. However as to any procedural requirements the arbitral court will rely on its proper lex fori. Thus the lex fori of the said arbitral court will define the standards of control, such as the requirements of natural justice and the elements of jurisdiction.

22.3.10 Reaching a Decision

Reaching a decision means to decide upon the dispute in question. This means that the DAB is required to decide the law. Thus a DAB will have as a first step to examine whether the case is justified by contractual and/or legal provisions. It is beyond doubt that the parties will have to support this attempt. Whether the parties are in fact under the duty to enable the DAB to make a legally reasoned decision or not is open to discussion. As I would say that the law is obvious and usually accessible the DAB must rely on its power to ascertain the matters required for a decision (see rule 8 of the procedural Rules) and is thus under the duty to ascertain the law. This would be in line with Sub-Clause 20.4 where it is clearly stated that the DAB shall decide upon disputes in connection with, or arising out of, the Contract, which means that all legal issues must be decided as well, because as a rule a contract is based on law.[2]

In principle the DAB will have to consider whether the facts as presented to and investigated by the DAB will justify the contested claim or issue according to the applicable law and contractual provisions. If the facts remain disputed the DAB must obtain evidence to the extent necessary. It will have to take in consideration that Sub-Clause 20.1 partially excludes the presentation of witness evidence, namely in so far as contemporary records should have been kept. As civil law and common law lawyers usually adopt a different approach as to the manner in which witnesses should be heard, it is strongly recommended to clearly determine in advance whether cross examination, which is the interrogation of a witness called by one's opponent, which is preceded by direct examination (in England, Australia and Canada known as examination-in-chief) and may be followed by a redirect (re-examination in England, Australia, and Canada) is permitted. Usually the DAB will consider evidence according to the principle of the balance of probability. The applicable substantial law will however determine which of the parties bears the so called burden of proof.

Finally the DAB will render its decision, which has to be reasoned according to Sub-Clause 20.4. The reasons shall show that the DAB has followed the procedural rules which are binding on the parties and has presented its arguments in a logical way. The parties should be able to understand the guiding principles of the decision and the weighting of the respective arguments.

22.4 Issues

Those FIDIC users who have identified the advantages of and the opportunities afforded by Dispute Adjudication will usually follow strictly the guidelines for Dispute Adjudication which is inherent to all FIDIC contracts. But there is still a considerable number of FIDIC users who have not yet identified these advantages and opportunities. As a consequence in daily practice there are many attempts to circumvent Dispute Adjudication, which can be summarised as follows:

- The Employer deletes the DAB clauses, which first of all is regrettable but often also leads to considerable problems if and when this is done in a manner which is inconsistent with the remaining clauses.
- Either the Employer or the Contractor decline to nominate the members of the DAB, which will be an unapt and ineffective attempt to circumvent the DAB because of Sub-clause 20.2
- Either the Employer or the Contractor refuse to undersign the tripartite Dispute Adjudication Agreement, which is a more effective attempt at dispute resolution avoidance, because in principle the General Conditions and the Procedural Rules

[2] See Musawi v. RE International and others [2007] EWHC 2981 (Ch).

do not provide any help in this event. One could argue that Sub-clause 20.3 applies. But this Sub-clause only deals with the appointment of the DAB members and does not provide any guidance as to the situation where one of the parties refuses to sign the tripartite agreement. One could also argue that Sub-clause 20.8 applies. However this Sub-clause applies whenever there is no DAB in place, whether by reason of the expiry of the DAB's appointment or otherwise. In fact there usually is a DAB in place according to Sub-clauses 20.2 and 20.3 either by reason of a joint appointment or by nomination through FIDIC. However, if the parties fail to sign the tripartite Dispute Adjudication Agreements the DAB will not commence its work. A second critical point is that the Dispute Adjudication Agreement includes a number of procedural rules which are not binding on the parties should they fail to sign the agreement. Only the Dispute Adjudication Agreement, including the General Conditions of Dispute Adjudication Agreement, refers to the Procedural Rules (for Dispute Adjudication). The latter are not at all mentioned in the General Conditions of Contract, or more precisely are only mentioned by reference to General Conditions of Dispute Adjudication Agreement contained in Appendix to the General Conditions (see Sub-clause 20.2). It has been argued that the situation will be overcome by virtue of the FIDIC contract the parties have entered into (Owen and Totterdill 2008, p. 38 et seq.). But this seems not to be true. The mere fact that the parties entered into a FIDIC contract and agreed all of its terms does not render signing a tripartite Dispute Adjudication Agreement needless. This requirement arises clearly from Sub-clause 20.2. As Dispute Adjudication is a purely contractual dispute resolution method, there is a need to agree on the Procedural Rules, which are not included in the main contract. Failure to do so will lead to the objection that there has been a procedure without the consent of the other party. The mere fact that this party has originally agreed to accept Dispute Adjudication as such will not be a sufficient basis. It is therefore suggested that in the event of failure to sign the tripartite Dispute Adjudication Agreement the only way out is to refer a dispute to arbitration in accordance with Sub-clause 20.8 in order to request a decision that replaces the missing consent to the tripartite Dispute Adjudication Agreement of the defaulting party. However this is a solution which is based on German law, where it is possible to sue for the issue of a declaration of intention according to Sect. 894 German Civil Code, where it is said that in the event that a debtor is by judgment compelled to make a declaration of intention, the declaration will be deemed as given as soon as the judgment became final. Whether this solution is arguable under common law is open to discussion. In principle it seems that there is no similar adequate remedy under common law. If not, the only way out is to directly refer the substantial dispute to arbitration and sue for the additional cost caused by party who failed to sign the tripartite Dispute Adjudication Agreement. We would not agree with the opinion that there is no specific need for a tripartite Dispute Agreement. Although it is right that subject to Sub-clause 20.2 the referring Party is already bound to incorporate by reference the General Conditions of Dispute Adjudication Agreement contained in the Appendix to the General

> Conditions there is still a need to agree to the remuneration of all of the three board members. As the failing Party will finally be bound to pay one-half of this remuneration it should be allowed to contest the amount agreed by the referring party unless it has signed itself the tripartite agreement, because estoppel and good faith arguments (see Sect. 242 German Civil Code) will not help in this regard.

It could therefore be a good idea to directly incorporate the Procedural Rules in the Contract either by reference in Sub-clause 1.5 or by reference to the Procedural Rules in Sub-Clause 20.2. The wording could be as follows:

> Disputes shall be adjudicated by a DAB in accordance with Sub-clause 20.4. The Parties shall jointly appoint a DAB by the date stated in the Appendix to Tender *and sign the tripartite Dispute Adjudication Agreements contained in the Appendix to these General Conditions.*

It seems also to be a good recommendation to insert an additional clause in Sub-clause 20.3 as follows.

> In the event of failure by one of the Parties to sign the Dispute Adjudication Agreement the appointed DAB shall nevertheless act on the basis of the Dispute Adjudication Agreement contained in the Appendix to these General Conditions. The Party who has signed the Dispute Adjudication Agreement has to ensure payment of the members of DAB subject to Sub-Clause 20.2.

Finally a Sub-clause will be useful by which the nominating body will be empowered to finally determine the remuneration of the DAB members:

> In the event of failure of one Party to sign the Dispute Adjudication Agreement the appointing entity or official named in the particular Conditions shall, upon request of either Party determine a reasonable remuneration of the DAB members.

The reasons for objecting DAB's are manifold. In some Eastern European countries the cost of DAB's are contested and not been considered to be reasonable. Others consider that a DAB procedure is useless because only an arbitral award will be recognised as a real decision which can be accepted as evidence with regard to public budget law. Moreover some Employers fear that they will be bound to a DAB decision even though it seems to be obvious that it is erroneous. Again, others consider that the strict time schedule for the DAB leads to so called ambushing, which will mean that the Contractor, having prepared his claim with care, will present it for example one day before Christmas in order to overtake and to fleece the Employer who will presumably not be able to prepare his defence on Christmas and thus be in an extremely uncomfortable situation.

22.5 Dispute Adjudication in Civil Law Countries

FIDIC Dispute Adjudication is an internationally recognised means of dispute resolution, which is practised worldwide. However for example in Germany ADR is in principle scarcely used and dispute adjudication remains largely unknown.

Most disputes arising from construction contracts are still brought before state courts, and more seldom before arbitral tribunals. The German legislator although encouraging conciliation has not yet introduced a legal framework into the German legal system allowing for and supporting modern methods of dispute resolution apart from arbitration. Only conciliation as a procedural feature of dispute resolution is partially ruled by law (Sect. 15a EGZPO, Sect. 797a, 794 Civil Procedure Code). In addition the feature of expert determination is widely used.

Parties willing to practise Dispute Adjudication thus encounter several problems. The most important ones are the following:

- Enforceability of dispute adjudication agreements
- Jurisdiction (Dismissal of complaints at court)
- Binding effects of DAB decisions on the parties

22.5.1 Enforceability of Dispute Adjudication Agreements

Naturally, German law recognises the principle of contractual freedom. Thus the parties to a contract are free to enter into a Dispute Adjudication Agreement. Whether they are allowed to do so by incorporation of trade terms or only by bespoke terms is one of the first issues. According to Sect. 307 paragraph 1 German Civil Code provisions in standard business terms are invalid if, contrary to the requirement of good faith, they place the contractual partner of the user at an unreasonable disadvantage. An unreasonable disadvantage may also result from the fact that the provision is not clear and comprehensible.

German courts have continuously held that arbitration clauses and expert determination clauses may be invalid subject to Sect. 307 German Civil Code. In particular expert determination clauses in construction contract standard forms are invalid.[3] The reasoning for this is that the courts believe that such a clause allocates an unreasonable risk to the client, that he may suffer disadvantages from an incorrect expert determination (see Palandt and Heinrichs 2009, note 144).

There is no doubt that dispute adjudication is a speedy mechanism for settling disputes in construction contracts on a provisional interim basis, requiring the decisions of adjudicators to be enforced pending the final determination of disputes by arbitration, litigation or agreement. The timetable for an adjudication are very tight. Many would say unreasonably tight, and likely to result in injustice.[4] Thus it could be suggested that under German law dispute adjudication clauses are in principle invalid and not enforceable. As Sect. 307 German Civil Code applies even to commercial contracts, Sub-Clauses 20.2 et seq. FIDIC would be invalid in

[3] [115] BGHZ 331; OLG Düsseldorf [2000] NJW-RR 279.

[4] Macob Civil Engineering Ltd v. Morrison Construction Ltd [1999] EWHC Technology 254 (12 February 1999).

all types of construction contracts apart from their inclusion in a bespoke contract. However, this result would not embrace the nature and shape of FIDIC dispute adjudication. According to Sub-Clauses 20.2 et seq. the DAB settles disputes on a provisional interim basis. The decisions of the DAB remain open to review by arbitration. By contrast, an expert determination subject to German law is usually final and binding unless it is manifestly inequitable according to Sect. 319 German Civil Code. This is fundamentally different from a DAB decision. It is therefore suggested, that Sub-Clauses 20.2 et seq. FIDIC are in principle valid, although they are contained in standard business terms.

22.5.2 Jurisdiction

The next issue is whether a German court will have to dismiss any complaint filed with it in a matter that is subject to a dispute adjudication clause. According to Sect. 1032 paragraph 1 German Civil Procedure Code German courts shall dismiss any complaint brought before them that is subject to an arbitration agreement. However, no such similar rule exists for dispute adjudication. Mr Chern (2008, p. 44), by referring to a decision of the Federal Court from 1998,[5] points out that the German courts have ruled that dispute board type procedures are enforceable. Actually the Federal Court has held that if a contract contains a conciliation clause a claim brought before the court prior to such conciliation attempt is inadmissible. However, the Federal Court decision applies only to conciliation clauses and not to expert determination clauses. In the event of an expert determination clause the courts have either granted a stay order or dismissed the claim as at present not due.[6]

22.5.3 Binding Effects of DAB Decisions on the Parties

According to Sub-Clause 20.4 the DAB decision shall be binding on the parties unless reviewed by arbitration. It becomes finally binding if neither party notifies a declaration of dissatisfaction within 28 days after receipt of the decision. In the event that the parties have deleted Sub-Clauses 20.6 et seq. the question arises whether the winning party may enforce the DAB decision at court. Unfortunately this will be a difficult issue to determine. German law does not contain the instrument of summary proceedings and summary judgments. Thus the courts will have to consider the nature of a DAB decision in order to get advice from the law on how to handle the DAB decision.

[5] BGH [1999] NJW 647.

[6] KG [2005] IBR 719; see Hök (2007, p.426).

If it has the nature of an expert determination subject to Sect. 317 et seq. Civil Code it will be treated as an amendment to the contract from which the dispute arose.[7] The claimant shall then establish a fully detailed complaint showing that he is entitled to the claim which has been decided by the DAB. According to Sect. 319 Civil Code the court has the power to verify whether the determination is manifestly inequitable. In this event the inequitable determination is replaced by judgment. It should be noted that the same applies if the third party (the DAB) cannot reach the determination or does not want to or if it delays it.

However, one of the main features of an adjudication is that there is a dispute between two or more persons who agree that they will refer their dispute to the adjudication of some selected person (the DAB) whose decision upon the matter they agree to accept. The DAB has disputes submitted to it for decision. The evidence and the contentions including any defences of the parties are put before them for its examination and consideration. Both, the contentions and the evidence put before the DAB identify the issue which is not pre-determined. The DAB therefore exercises a judicial function.

Thus, there is some doubt whether under German law a DAB decision can be considered to have the nature of an expert determination in the sense of Sections 317 et seq. of the German Civil Code. It is true that the DAB is required to act impartially and that an expert should act fairly und impartially. However, the circumstance that an expert must act fairly and impartially does not make him comparable to a DAB. Instead, for a DAB to become active a formulated dispute between at least two parties must exist. There shall be an opportunity to present evidence and/or submissions in support of the respective rights and claims in the dispute. There are submissions to the DAB either of a specific dispute or of present points of difference or of defined differences that may in the future arise and there is agreement that its decision will be binding on the parties. None of this is true about the expert who is merely carrying out its ordinary business activity. There is no dispute before him. The parties do not submit evidence as contentious to him. He merely makes his own investigations and comes to a decision. The DAB is, however, permitted to take the initiative in ascertaining the facts and the law as to the referred dispute. It may, therefore, conduct an entirely inquisitorial process, or alternatively it may, invite additional submissions and representations from the parties. In addition it may gather evidence, hear witnesses and make site visits. It may also rely on its own skills and knowledge as well as on expert and witness statements. Finally FIDIC has introduced an intervening provisional stage in the dispute resolution process. Crucially, it has made it clear that decisions of a DAB are binding and are to be complied with until the dispute is finally resolved. By contrast an expert who acts according to Sections 317 et seq. Civil Code is usually not under an obligation to consider the submissions of the parties, to ascertain the law and to hear witnesses. On the other hand his determination is usually final and binding. He is not bound to the contentions of the parties and to procedural rules.

[7] OLG Frankfurt [1999] NJW-RR 379.

Thus Sect. 317 et seq. Civil Code does not mirror completely the role and the powers of a DAB.

Again, according to Sub-Clause 20.4 the DAB shall not be dealt as an arbitrator or arbitral tribunal. However, if the DAB decision is neither an expert determination nor an arbitral award, the question remains as to what is the true nature of the DAB decision. It is suggested that it is something in between both of them, which is a fundamentally new concept for German law.

22.6 New Features

As in September 2008 FIDIC has published the new Design Build and Operate Form, also referred to as the Gold Book, some new features will enhance the discussion. FIDIC took advantage of this event to slightly change the procedural framework.

The success of Dispute Adjudication is undeniable. To some extent lack of it has already become a deal breaker (see Koentges 2006, p. 311). It is therefore not surprising, that FIDIC clings to Dispute Adjudication (Fig. 22.5).

However some particularities have to be stated and emphasised.

Firstly the term of "Dispute" has been defined in Sub-Clause 1.1.31. The aim was to make clear that a Dispute may exist even if the Employer's Representative remained inactive. At first sight the definition might be a bit too narrow thus limiting the access to the DAB more than necessary. In fact, it might even be argued that a Dispute presupposes a "claim" in the sense of any entitlement to extension of Time for Completion or additional payment, which has been rejected and that other kinds of disputes are therefore excluded from the scope of the wording. However the term "claim" is not defined although used as a heading or marginal word in Sub-Clause 20.1. It is submitted that it means an assertion of a right to money, property or to a remedy (Bunni 2005, FIDIC forms, p. 293), because headings and other marginal words shall not be taken into consideration as provided in Sub-Clause 1.4. Also Sub-Clause 1.1.31 should be read in conjunction with Sub-Clause 20.6. It then becomes noticeable that other kinds of disputes other than those arising from a claim in its narrow sense may be referred to the DAB as well.

Secondly during the design build period the DBO DAB will be a permanent DAB which shall be appointed by the date stated in the Contract Data, whilst during the Operation Service Period a one member DAB shall be appointed. Thus the permanent DAB will be installed only until the issue of the Commissioning Certificate or at the latest until the DAB has given its decision to a dispute and the appointment of the permanent DAB expires at the date of issue of the Commissioning Certificate unless otherwise agreed in the Contract Data. However some of the claims to which the Contractor is entitled during the Operation Service Period have to be notified in accordance with Sub-Clause 20.1, which may lead to disputes and the need for rulings by a DAB according to Sub-Clause 20.1. This is the reason why Sub-Clause 20.9 provides a special Operation Service DAB.

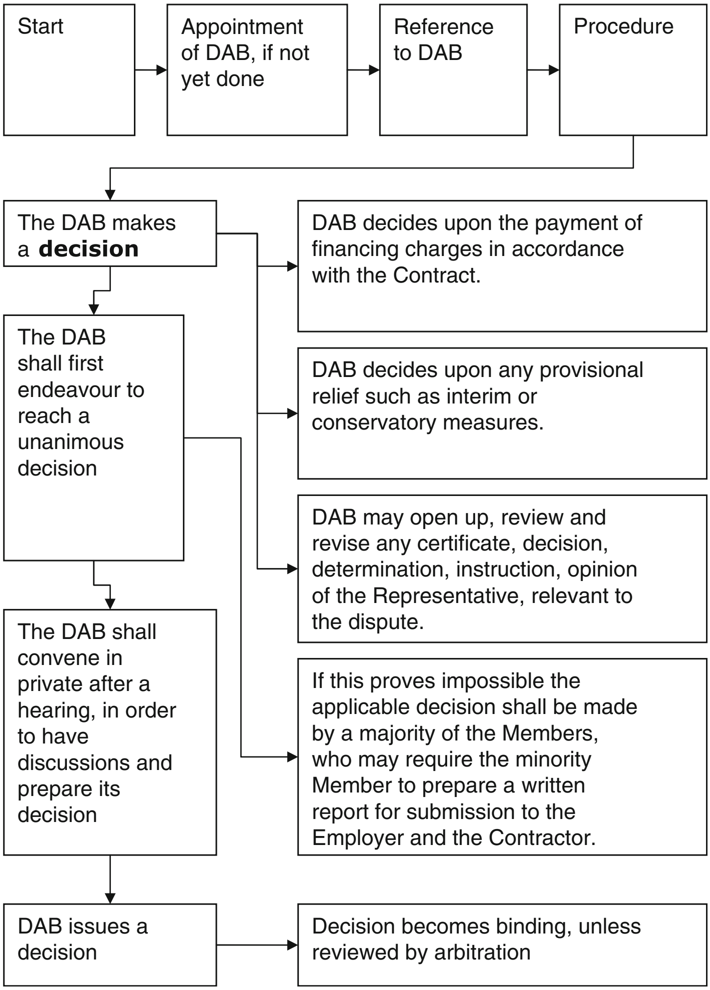

Fig. 22.5 FIDIC DBO adjudication-overview

Thirdly Sub-Clause 20.5 encourages the parties to avoid disputes. The Parties may jointly refer matters to the DAB to seek informal assistance by the DAB, a possibility which is not new but which has been set out more clearly.

Fourthly the scope of services of the DAB has been enlarged. For the future the DAB is involved in preliminary questions of claim determination in the way that the Contractor may seek for an overruling decision in the event of late claim notification or late submission of details. Finally any dispute shall be effectively treated. Thus the parties will be obliged to refer a dispute to the DAB within the time limits stated in Cl. 20.6. Hence by contrast to the 1999 edition in the future the parties are no longer allowed to collect disputed claims and to start multiple proceedings at the very end of the project. As aforementioned Cl. 20.5 encourages the parties to avoid disputes by jointly informal reference of matters to the DAB. Such informal assistance may take place at any time and may lead to non binding advice. In the event that the parties expect the DAB to give a decision, it shall be binding on both parties, who shall promptly comply with it. Failure to comply with a DAB decision may lead to direct arbitration. In so far it is new that FIDIC has filled up the gap which presumably exists in the 1999 edition as to those decisions which are not yet finally binding (Bunni 2005, p. 272).

Further an interesting new approach can be found in Sub-Clause 20.6. Employers in particular have sometimes criticised that decisions that lead to payments have to be rewarded despite the fact that they are wrong. Actually such kind of decision is subject to control by arbitration but there is always a risk that the beneficiary of such provisional payment will become insolvent. English courts have for several times granted the paying party a stay of execution where the successful claimant is in liquidation or where evidence is produced showing serious concerns that the claimant will not be able to refund sums claimed if the adjudicator's decision is later overturned in arbitration.[8] In other jurisdictions court decisions against which appeal is allowed, will only be declared as provisionally enforceable on giving of security to be determined as to the amount.[9] FIDIC has recognised this reasonable concern and allows from now on the paying party to require the payee to provide a security in respect of such payment, if either party issues a notice of dissatisfaction concerning the DAB decision.

Remark: It is recommended to add that the security should be in a form attached to the contract in order to avoid disputes about the terms of the security. It might be reasonable as well to add the following: In the event that the payee is unable to give security or is able to do so only by suffering substantial hardship or harm, the DAB may declare the decision on motion as provisionally enforceable without giving security.

Furthermore a supposed gap has been closed. As the Rainbow Edition 1999 did not provide any delay for giving a determination the question arose whether the Contractor could refer a dispute to the DAB or not, if the Engineer remained silent. According to the DBO wording the Employer's Representative is now held to issue any determination within a given time limit of 42 days. Failure to do so will lead to the following scenario. After expiry of the delay for determination the Contractor may issue a notice of dissatisfaction, which he should do within the 28 days' delay, which runs from the day of expiry of the determination delay. By consequence a dispute will be constituted which opens the way to the DAB. For precaution an express rule has been added stating that if the Employer's Representative fails to determine within the given time limits, either Party may conclude that the claim is rejected and that it may refer a dispute to the DAB (Fig. 22.6).

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[8] Herschel Engineering Ltd v. Breen Properties Ltd [2000] BLR 272; Bouygues (UK) Ltd v. Dahl-Jensen (UK) Ltd [2000] BLR 522, CA.

[9] See Section 709 German Civil Procedure Code and the exceptions in Section 708 German Civil Procedure Code, specially concerning default judgments or judgments given in a trial by record (which is a special procedure limiting the means of evidence to documents).

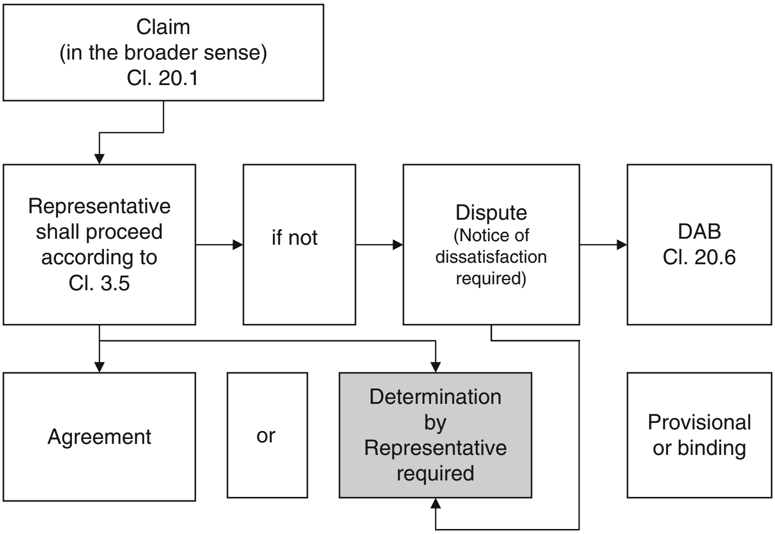

Fig. 22.6 Determination procedure

Finally it will no longer be possible to use tactics. If a dispute has been constituted it must be referred to the DAB within 28 days of issuing the Notice of dissatisfaction. If the dissatisfied Party does not refer the dispute to the DAB within the said period of time, the Notice of dissatisfaction shall be deemed to have lapsed and the determination becomes final and binding (Sub-Clause 20.6).

It can be summarised that the new procedural rules are in line with the basic idea that all claims and disputes shall be settled when staff and equipment are still on the site. The aim is still to avoid prolonged disputes. However the new rules will require more diligence and care than was previously the case. It is beyond doubt that contract administration has once again become more sophisticated.

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