

JUDGMENT : MR JUSTICE CHRISTOPHER CLARKE : Commercial Court. 26th November 2008

1. In July 2000 Imtech Marine & Offshore B.V. ("*Imtech*") agreed with Van der Giessen de Noord Shipbuilding Division N.V. ("*GN*") to carry out the engineering, supply, installation and commissioning of the electrical installation for Vessel 985, a Ro-Ro passenger vessel which GN was building for Brittany Ferries.
2. Imtech made a claim under the agreement against GN for the value of extra work carried out, an extension of time and for payment in respect of delay, disruption and acceleration and GN made a counterclaim against Imtech. The claim was referred to arbitration under the agreement to arbitrate contained in the contract. On 20th March 2008 the arbitrators issued their Third Partial Award ("*the Award*"). GN challenges the Award under section 68 of the Arbitration Act 1996 ("*the Act*") and also, if necessary, seeks permission to appeal on one question of law.
3. Somewhat unusually the arbitral tribunal consisted of only two arbitrators: Mr Meinard van Dunné, a Dutch lawyer, and Mr Paul Jensen, an English quantity surveyor. The hearing took place between 2nd and 26th October 2006 in Rotterdam. The hearing was highly complex. I am told that the pleadings alone comprised 17 volumes and the bundles for the hearing comprised over 80 lever arch files of documents. There were extensive opening and closing submissions and several weeks of factual and expert evidence.
4. The Award itself is comparatively short. In it the arbitrators said:
"The parties' submissions and the evidence and documents provided to support the parties' cases are extensive in the extreme and for us to address each and every point raised by the parties would be impracticable and therefore we have confined our reasons to the essentials only ..."
5. GN contends that such shortness was not in this case a virtue because it resulted in the Tribunal failing to address critical issues and defences and that that omission has caused substantial injustice to it.
6. Section 68 of the Act provides as follows:
*"68. 1) A party to arbitral proceedings may (upon notice to the other parties and to the tribunal) apply to the court challenging an award in the proceedings on the ground of serious irregularity affecting the tribunal, the proceedings or the award.
A party may lose the right to object (see section 73) and the right to apply is subject to the restrictions in section 70(2) and (3).
(2) Serious irregularity means an irregularity of one or more of the following kinds which the court considers has caused or will cause substantial injustice to the applicant—
(a) failure by the tribunal to comply with section 33 (general duty of tribunal);
(b) the tribunal exceeding its powers (otherwise than by exceeding its substantive jurisdiction: see section 67);
.....
(d) failure by the tribunal to deal with all the issues that were put to it;
(3) If there is shown to be serious irregularity affecting the tribunal, the proceedings or the award, the court may—
(a) remit the award to the tribunal, in whole or in part, for reconsideration,
(b) set the award aside in whole or in part, or
(c) declare the award to be of no effect, in whole or in part.
The court shall not exercise its power to set aside or to declare an award to be of no effect, in whole or in part, unless it is satisfied that it would be inappropriate to remit the matters in question to the tribunal for reconsideration.
(4) The leave of the court is required for any appeal from a decision of the court under this section."*
7. Section 33 of the Act provides:
*"(1) The tribunal shall—
(a) act fairly and impartially as between the parties, giving each party a reasonable opportunity of putting his case and dealing with that of his opponent;
(b) adopt procedures suitable to the circumstances of the particular case, avoiding unnecessary delay or expense, so as to provide a fair means for the resolution of the matters falling to be determined"*

The authorities

8. The authorities make clear that the power to set aside an award in whole or in part is to be used sparingly. It is not available simply because the Tribunal has made a mistake, whether of fact or law; or because the arbitrators did not deal with all the points made or arguments advanced or did not set out each step by which they reached their conclusion: *The "Petro Ranger"* [2001] 2 Lloyd's Rep 348. Nor are arbitrators required to forsake brevity in order to avoid a charge of failure of duty. That is so even though, as here, the parties made many different points in relation to each claim. The Court will, however, exercise its power if the Tribunal has behaved unfairly in a way that has caused substantial injustice.
9. *Pacol Ltd v Joint Stock Co Rossakhar* [2000] 1 Lloyd's Rep 108 was a case in which an arbitration was conducted by trade arbitrators on documents. The respondents had admitted that they were in default and the pleadings and correspondence between the parties had refined the issues to issues of quantum. Nevertheless the arbitrators dismissed the claim in its entirety.

10. Colman J said that it might be a matter for consideration in a future case whether an arbitrator had jurisdiction to do what the arbitrators had done. He thought that an arbitrator would not appear to be entitled to reopen an admission without a specific application by the party who had made it together with the provision to the other party of the opportunity to object.
11. In any event, he unhesitatingly concluded that there had been a serious irregularity within the meaning of section 68 (1) of the Act because the award had been made when the claimants never had a reasonable opportunity of addressing, either by way of submission or evidence, the possibility that the arbitrators might find against them on liability which had been admitted. He referred, *inter alia*, to *Russell on Arbitration*, 21st ed 5-060:
"To comply with its duty under section 33 (1) of the Arbitration Act 1996 to act fairly, the tribunal should give the parties an opportunity to deal with any issue which will be relied on by it as the basis of its findings. The parties are entitled to assume that the tribunal will base its decision solely on the evidence and argument presented by them prior to the making of the award and if the tribunal are minded to decide the dispute on some other point the tribunal must give notice to if the parties to enable them to address the point."
12. In *London Underground v Citylink Telecommunications* [2007] BLR 391 Ramsey J, enunciated a number of propositions, the third of which was that:
"It will generally be the duty of a tribunal to determine an arbitration on the basis of the cases which have been advanced by each party, and of which each has notice. To decide a case on the basis of a point which was not raised as an issue or argued, without giving the parties the opportunity to deal with it, will be a procedural irregularity."
13. In determining whether there has been substantial injustice *"the court is not required to decide for itself what would have happened in the arbitration had there been no irregularity. Provided that the point is one where the tribunal might well have reached a different view, the court should enquire no further – see in particular per Colman J in Vee Networks Ltd v Econet Wireless International Ltd [2004] EWHC 2909 (Comm) at para 90": per Tomlinson J in ABB AG v Hochtief Airport GmbH [2006] 2 Lloyd's Rep 1. See also London Underground at paras 43- 49.*
14. It is likely to be a serious irregularity under section 68 for the tribunal to fail to deal with all essential issues. But it may do so concisely. A failure to deal with an issue is not the same as a failure to set out the reasoning for rejecting a particular argument. Such a failure is remediable under section 70 (4): see Colman J in *Margulead Ltd v Exide Technologies* [2004] 2 All ER (Comm) 727 and in *World Trade Corporation Ltd v Czarnikow Sugar Ltd* [2004] 2 All ER (Comm) 813; and Morison J in *Fidelity Management SA v Myriad International Holdings BV* [2005] EWHC 1193 (Comm).
15. In the *London Underground* case Ramsay J cited Morison J's summary in *Fidelity Management derived from World Trade Corporation* as follows:
 - "1. Section 68(2)(d) is "designed to cover those issues the determination of which is essential to a decision on the claims or specific defences in the course of the reference.
 2. HHJ Humphrey Lloyd was correct in *Weldon Plant Ltd v The Commission for New Towns* [2001] 1 All ER (Comm) 264 to state that Section 68(2)(d) is not to be used as a means of launching a detailed enquiry into the manner in which the tribunal considered the various issues. It is concerned with a failure, that is to say where the arbitral tribunal has not dealt at all with the case of a party so that substantial injustice has resulted, eg where a claim has been overlooked or where the decision cannot be justified as a particular key issue has not been decided that is crucial to the result. It is not concerned with a failure to arrive at the right answer to an issue.
 3. Arbitrators do not have to deal with every argument on every point raised; they should deal with essential issues."

GN's challenges to the Award

16. GN's challenges to the Award arise under the following heads: (i) Rate of interest; (ii) Waiver/Estoppel; (iii) Scope of Work; (iv) Variations process; (v) Dampers & Fans; (vi) Input/Output ("I/O") points; (vii) Double-counted additional works.

The rate of interest

17. The Tribunal awarded Imtech simple interest at the rate of 10% on the total sum awarded from mid March 2003 to the date of the Award, being 5 years (paragraph 94 of the Award).
18. The history of the claim for interest and the submissions made about interest may be summarised as follows:
 - (1) By paragraph 68 of its Points of Claim of 30th September 2003 Imtech claimed "interest in respect of any sums awarded **as set out in Appendix B**"¹ on three bases:
 - (a) as damages for breach of the payment terms of the Contract; and/or
 - (b) under Dutch law at 8% from 1st January 2001, 7% from 1st January 2002, 5% from 1st August 2003 and 4% from 1st January 2004 on a compound basis under Articles 6:119 and 6:120 of the Dutch Civil Code ("the Code"); and/or
 - (c) under section 49 of the Act.Appendix B set out the Dutch statutory interest rates of 8%, 7% and 5% from the dates specified, and set out Articles 6.119 and 6.120 of the Code. The Appendix stated that a detailed calculation of statutory interest would be submitted in due course;
Article 6.119 of the Code provides:

¹ Bold added in this and other citations.

"1 Reparation owed for delay in the payment of a sum of money consists of legal interest on that sum over the period that the debtor has been **in default of payment**.

2 At the end of each year, the amount on which legal interest is calculated is increased by the interest owed over that year".

(2) The same claim was repeated in paragraph 240 of Imtech's Opening Submissions and put forward, in identical terms, in paragraph 237 of Imtech's Closing Submissions;

(3) In paragraph 674 of its Defence and Counterclaim GN contended that interest would not be payable under Article 6.119 of the Code until Imtech gave written notice of default to GN. GN then pleaded that interest would only be due from the date of the Points of Claim. It relied on Article 6.82 of the Code which provides that:

"1. Default commences when the debtor is put into default by a written notice granting him a reasonable period for the performance and the debtor fails to perform within this period.

2 If the debtor is in a temporary impossibility to perform or it is evident from his attitude that a warning would serve no purpose, he may be put into default by a written declaration to the effect that he is held liable for his non-performance".

(4) In paragraph 305 of its Reply Imtech stated that GN was in default during the course of the works by failing to recognise variations and issue variation orders, failing to award appropriate extensions of time and failing to pay to Imtech the additional sums to which it was entitled.

(5) In section P of its Closing Submissions in March 2007 GN submitted (in paragraph 903) that section 49 of the Act provides for the freedom of the parties to agree on "interests" ² and that the parties agreed to the applicability of Dutch law and thus to the applicability of Articles 6.119 and 6.120. In paragraph 904 it set out the rates under Article 6.119. It then repeated the defence that legal interest was only due if the payment debtor was in default of payment and averred that Imtech had never put GN in default by a written notice granting a reasonable period for performance as required by article 6.82. This pleading also claimed (para 910) that, contrary to what was said to be the position under the old Dutch Code, a claim for an amount of money plus interest did not amount to a notice in writing as required by section 6.82 (1) unless the request for arbitration or the pleadings granted a reasonable period for payment. Accordingly, it was submitted, interest could not be awarded prior to a proper notice.³

(6) In paragraphs 111-3 of its Closing Submissions in Reply Imtech claimed interest on any sums awarded from mid 2002, which was said to be the date by which the works should have been complete and was close to the date of two letters (of 12th June and 18th August 2002) claiming outstanding sums and interest on outstanding work. In paragraph 112 it stated:

"It is agreed that the parties have agreed that interest is recoverable on any sums awarded in accordance with Articles 6:119 and 6:120 of the DCC as set out in paragraph 903 of GN's Closing Submissions... The rates of interest set out in Paragraph 904 of GN's Closing Submissions are agreed. The applicable rate of interest from 1st January 2007 is 6%."

(7) In a letter dated 13th June 2007 GN claimed that it did not receive the letters of 12th June 2002 and 18th August 2002 relied on by Imtech. And that neither letter fulfilled the requirements of Article 6.82.

(8) In a later submission Imtech asserted that the letter of 12th June 2002 qualified as a notice of default and invited Loyens & Loeff to reconsider its position that the letter had not been received saying "Imtech has written evidence that GN was in fact aware of the AKD letter dated 12th June 2002 at that time. However the Code of Conduct of the Dutch Bar prohibits the submission of such evidence". It claimed that the letter of 16th August 2002 also qualified as a notice of default and that it had been attached to two further letters in October 2002 to one of which Loyens & Loeff had responded.

19. As appears from that summary, Imtech acknowledged that the parties agreed that interest was recoverable in accordance with the Code and what the rates under the Code were. Its case was that interest was recoverable in accordance with the Code at 8%, 7%, 5%, 4% or 6% depending on the period concerned, and that interest should be awarded from mid 2002. GN originally said that the Code meant that interest was due only from service of the Points of Claim and then that it meant that no interest was recoverable at all because GN was not in default. Neither party ended up suggesting that interest should be awarded otherwise than at the rates provided for by the Code or at 10%.

20. The 10% rate was not only higher than the rate in the Code rate. It was also significantly higher than the contemporaneous rates of interest in the Netherlands at any time since 2003; and higher than the Euribor rate, which has tended to be under 5% ⁴ and significantly higher than the normal rate applied in the English Commercial Court (i.e. base rate plus 1%).

21. Imtech suggested at one stage that the Tribunal's decision was a compromise between the positions adopted by the parties. It was not. In its Reply Imtech sought compound interest from 12 June 2002 using the rates it specified which amounts to €1,699,777.14.

² Sic. In fact the section provides that the parties are free to agree on the power of the tribunal as regards interest

³ The pleading coyly observed (para 911) "P.S. The Defence is not fully correct on the interest starting date and should be corrected in accordance with the above".

⁴ Euribor is short for Euro Interbank Offered Rate. The Euribor rates are based on the interest rates at which a panel of 57 European banks borrow funds from one another. In the calculation, the highest and lowest 15% of all the quotes collected are eliminated. The remaining rates will be averaged and rounded to three decimal places. Euribor is determined and published at about 11:00 am each day, Central European Time.

22. GN's initial position was that compound interest using the Dutch Code rates was appropriate but from 30 September 2003 (when the Points of Claim was served) which amounts to €1,145,805.34. GN's final position was that the Points of Claim were not sufficient notice and therefore no interest was payable.
23. It follows that a compromise would have been between zero and € 1,699,777.14. The Tribunal's award of interest, which was from mid March 2003, was € 2,556,948.50 (see paragraph 12 of the award).
24. Imtech draws attention to the fact that the Dutch Code has introduced, by Article 6:119a a new higher rate of compound interest applicable to business and commercial dealings in compliance with European Directive 2000/35/EG. The rate prescribed was 7% from 8th August 2002. It then changed to 10.35% on 1st December 2002. Thereafter it changed on every 1st January and 1st July. On 4 occasions the rate has exceeded 10% (1.12.02 – 10.35%; 1.1.07 – 10.58%; 1.7.07 – 11.07%; 1.1.08 – 11.20%).
25. However:
 - (a) Imtech did not invoke or refer to the revised rates; nor did the Tribunal refer to it;
 - (b) Article 6.119a only applies to contracts concluded in or after 2002 and is not, therefore, applicable to the present case; and
 - (c) Article 6:119a only applies to claims in debt and not damages and would not have applied to the amounts awarded under Heads of Claim 2 and 4 and its application to the amounts awarded under Head of Claim 1 is, GN submits, doubtful.

Imtech's submissions

26. Imtech submits that GN is hoist by its own petard. Imtech had always had a claim for interest under section 49 of the Act. It was content to have interest awarded in accordance with the Code. Originally the only issue between the parties was the date from which interest should start. In March 2007, 5 months after the hearing, GN chose to say that interest was not due under the Code at all. It thereby removed the common basis for the applicability of the Code. In those circumstances the Tribunal was entitled to award interest under the very broad discretion, both as to rate and period, conferred by section 49 which was undoubtedly applicable: *Lesotho Highlands Development Authority v Impregilo SpA and others* [2005] UKHL 43. GN had had, as the Tribunal was entitled to think, ample opportunity to put forward whatever submissions it chose in respect of an award of interest under that section.
27. Even if the exercise by the Tribunal of its powers under section 49 was erroneous there was no substantial irregularity within section 68. An erroneous exercise of power does not mean that the tribunal has "exceeded its powers" within section 68 (2) (b): see *Lesotho* at para 24. In any event the rate, although it may have been generous, was not excessive. It was not out of line with the amended Civil Code rates. Whilst the only rates put forward in the Points of Claim were Code rates, GN's change of position opened the way for the Tribunal to choose whatever rate it thought fit under section 49. The Tribunal could have held Imtech to the rates specified in Appendix 8 to the Points of Claim. But it chose not to. Neither the amended Code rates, nor Euribor nor the typical Commercial Court rates were directly applicable. To choose 10% was a reasonable, if broad brush approach, particularly in the light of the enormous slippage of time and the range of submissions made on interest. GN has not identified any facts wrongly taken into account or omitted nor can it be said that no reasonable tribunal could have chosen 10%.

Conclusion on interest

28. In my judgment, in awarding interest at 10% the Tribunal did not comply with its general duty of fairness. The Tribunal explained in paragraph 92 of its Award that it did not accept that Imtech was entitled to interest as damages for breach of contract and that GN had said that Imtech had not complied with the Dutch Civil Code and "*therefore, and in any event we award interest under section 49*". It did not, however, explain why it had chosen 10% as opposed to any other figure. 10% is a rate higher than any rate claimed in the pleadings or contended for by Imtech in its submissions. The Tribunal applied it without giving Imtech any opportunity to make submissions on the appropriateness of such a rate, in circumstances where the issue between the parties had boiled down to whether the provisions of the Code had been complied with so as to trigger an obligation to pay interest at the rates provided for by the Code, and, if so, when. It gave no indication that it proposed to ignore the Code rates when the parties had proceeded on the basis that the claimant's entitlement should be governed by the Code, and when Imtech's claim was for interest at the rates provided for in the Code.
29. The Tribunal's failure to comply with its obligations has caused substantial injustice to GN. The result is that Imtech has been awarded € 2,556,948.50, a sum nearly € 1,000,000 over what it sought and in excess of the interest rates under the Code, without GN being given any opportunity to object and when GN was entitled to expect that the range for interest would be between zero and about € 1.7 million.
30. If GN had been given the opportunity to object, the Tribunal might well have reached a different conclusion. They might have decided that Imtech should not recover any more than the rates that it had pleaded and claimed. They might have decided to allow Imtech to amend its claim and recover at a different rate. They might have had regard to Euribor or the rate customarily applied in the Commercial Court. They might have taken into account the new rates under the amended Code, although it was not in terms applicable. They might have thought that a single rate over a substantial period during which rates were changing was inapposite. Since the matter will have to be considered afresh it is not appropriate for me to consider the possibilities at any length. It is sufficient that the result is far from a foregone conclusion.

31. That conclusion renders it unnecessary to determine whether the Tribunal's decision to apply a 10% rate of interest was obviously wrong as a matter of law, alternatively at the very least open to serious doubt, such that permission should be granted to appeal the award under this head. It is material, however, to observe that, in the circumstances of the present case, if the award of interest is not to be at the Dutch Code rates, it is necessary for the Tribunal to indicate why they have chosen a different rate.

Waiver/Estoppel

32. GN claims that the Tribunal failed to deal at all with a defence of waiver and/or estoppel raised and relied upon by it. The defence arose in respect of Imtech's "Variation Claim 1: Heating Ventilation and Air Conditioning" ("HVAC"). This related to cabling and other work which Imtech was to carry out in relation to equipment which was designed, supplied and installed by a specialist contractor, Stork Bronswerk
33. Imtech claimed that the HVAC equipment list, Revisions 5, issued by Stork Bronswerk, amounted in essence to Imtech's contract scope of work; and that Imtech was entitled to claim additional payment in respect of the difference between Revision No. 5 and Revision No 36 (see para 21 of the Award).
34. In respect of € 747,132.00 of this claim, being the difference between the Revision 23 and Revision 5 amounts, GN contended that Imtech had waived its right to claim any monies owed and/or that Imtech was estopped from so doing because Imtech had agreed to process revision 23 and every revision below revision 23 without extra charge. In this regard, GN relied upon two key exhibits:
- (a) A letter from Imtech to GN dated 26 November 2001, which includes the following:
- "As we have indicated in the progress reports dated 2 November and 23 November 001 ...we are sending to you a claim regarding the HVAC installation.*
- Imtech has put a lot more effort in the engineering of the HVAC installation as usually required and is being of the opinion that the limit is reached. Beside that some information is still not available we also cannot accept changes anymore without jeopardise the delivery time of the vessel. [Sic].*
- The conclusion of the above is that Imtech will process revision 23 and will claim every revision upwards";* and
- (b) A letter from Imtech to GN dated 17 December 2001:
- "As we have indicated in the progress report dated 2 November and 22 November 2001 we are sending to you the next claim regarding the HVAC installation. As earlier stated Imtech will process revision 23 and will claim every revision upwards".*
35. GN had submitted that Imtech had waived its right to claim any monies owed for revisions 5 to 23 and/or that Imtech was estopped from so doing. Reliance is said to have been placed on the Dutch concepts of "afstand van recht" (Article 160 of Book 6 of the Dutch Civil Code) and "rechtsverwerking". These concepts are said to be analogous to the English concepts of waiver or estoppel, although they are also said to have less stringent requirements.
36. GN's pleadings and submissions covered this in the following way:
- (a) Paragraph 210 of GN's Statement of Defence and Counterclaim GN stated the following:
- "It is clear that Imtech in regard to revisions 1-23 declared an intent not to request VTCs and not to request additional payment. Imtech thus waived a right to do so, if any. Imtech should be estopped from raising claim in that respect".*
- (b) Paragraph 137 of GN's Reply Closing Submissions set out the following assertion of reliance and detriment (although it is said that this is not required in Dutch law):
- "In regard to revisions 0-23 Imtech did not make VTC requests until very much later than agreed. Imtech's communications to the effect that revisions 5 through 23 would be processed and that subsequent revisions would be claimed were understood by GN as a declaration and confirmation that Imtech would not try and claim VTCs in regard to revisions of the equipment list prior to revision 24. In reliance GN refrained from gathering and preserving evidence which later on was and is much more difficult. It is submitted that GN was justified in understanding Imtech's communication as an express waiver of claims in regard to revisions 5-23. GN's reliance and detriment is obvious. Under Dutch law neither are required for such express waiver/disclaimer to be effective".*
37. The Award did not deal with this defence. The Tribunal addressed the HVAC claim in three paragraphs. In the second and third of them the Tribunal said:
- "22. Stork Bronswerk designed the installation and issued an equipment list. This list was revised from time to time up to revision no. 36. The Claimant's evidence was that by revision no. 5 the equipment list equated to the Claimant's Contract scope of work and the Claimant has therefore claimed additional payment in respect of the difference between revision no. 5 and revision no. 36 in the sum of €1,562,031.00; this figure has since been agreed between the experts in the sum of €1,347,960.00.*
- 23. We find that the Claimant's obligation as regards the extent of electrical works to the installation was as defined in the Contract Documents referred to above, that revision 5 of the equipment list issued by Stork Bronswerk equated to the Contract scope and that the Claimant is entitled to payment for additional work being the difference between the 5th and 36th revision of the equipment list in the sum agreed by the experts of €1,347,960.00 and we so award.*
38. Imtech points out that the Dutch concepts of "afstand van recht" and "rechtsverwerking" were not pleaded by GN. They are not referred to in the pleadings, which are in English. No evidence was given of Dutch law. GN submits

that it clearly pleaded waiver and estoppel which are precise translations of the Dutch concepts. Further Imtech addressed this point in detail in its Opening Submissions (paragraphs 98-101), in which it contended (a) that the letter of 26th November 2001 did not indicate that Imtech would waive its right to claim for variations prior to Revision 24; (b) that the letters of 17th December 2001 did not constitute an agreement that there would be no claim for earlier revisions or an irrevocable giving up of any right to do so; and (c) that there had been no reliance or detriment suffered as a result of the letter and that GN had sought to pass the claim for variations on to Stork and Brittany Ferries. It did the same in its Closing Submissions (paragraphs 77-79).

39. Imtech also points out, correctly, that the waiver/estoppel defence was not mentioned in GN's Closing Submissions. But in paragraph 15 (3) of those Submissions GN said that, while it would not repeat everything that it said in its earlier pleadings, it fully maintained all that was stated in them.
40. Further in paragraph 137 of its Reply Closing Submissions GN stated that:
"(a) *Imtech's communications to the effect that revisions 5 through 23 would be processed and that subsequent revisions would be claimed were understood by GN as a declaration and confirmation that Imtech would not try and claim VTCs in regard to revisions of the equipment list prior to revision 24... It is submitted that GN was justified in understanding Imtech's communication as an express waiver of claims in regard to revisions 5-23*".
41. Miss Finola O'Farrell, QC, for Imtech, submitted that, if a party wants a decision on all his points, he should either litigate in which case there is likely to be a list of issues fixed at a case management conference; or, if he arbitrates, he must produce such a list and invite the arbitrators to give rulings on each of the issues identified. Here the parties have in the pleadings and submissions used certain headings for their respective claims and cross claims. Those headings were what the parties treated as the key issues. In accordance with the principles of party autonomy the parties were entitled to determine what issues the Tribunal should decide and the Tribunal has dealt with each of those issues
42. The question of waiver/estoppel was not, she submits, a key issue. GN did not highlight the waiver/estoppel point as significant. There was no evidence on it other than a reference to the pleaded letters. No one was cross examined on the point. In those circumstances the Tribunal could be forgiven for thinking that it was not a sufficiently serious point to require to be addressed separately.

Conclusion on waiver/estoppel

43. In my view there has been a serious irregularity in that the Tribunal, in not addressing the waiver/estoppel defence or its Dutch equivalent at all, has failed to deal with all of the issues that were put to it and has thereby acted in a way which was unfair. The distinction between an issue, on the one hand, and a point or a line of reasoning, on the other, may on occasion be difficult to draw. But I am satisfied that the Tribunal could not deal fairly with the present case without resolving, as part of its adjudication on Claim 1, Variation 1, the issue as to whether or not Imtech had, in either of the ways asserted, precluded itself from claiming for work done between Revision 5 and Revision 23. I do not accept that the issues put to the Tribunal can be limited to the headings used for the respective claims.
44. That failure has caused substantial injustice to GN, because it has resulted in GN having to pay out € 747,132.00 (plus 10% interest) to Imtech when, if the defence had been considered, it might have been regarded as made out, in which case that sum would not have been due. GN submits that it relied on Imtech's promise not to make a claim for this amount, as a result of which GN in turn did not apply to the Owners for a variation and was thus deprived of receiving any compensation from the Owners. If this be so there is an added injustice.

Scope of Work

45. The parties were in dispute as to the amount of electrical work that Imtech was obliged to carry out within the Contract Price ("Imtech's Scope of Supply").
46. Imtech's case - in paragraph 20 of its Points of Claim - was that Imtech's Scope of Supply was set out in "*Imtech's Technical Description and Scope of Supply Document and the Cross Reference List*". The former document is sometimes referred to as the Scope of Supply document or the Technical Description document. According to Imtech it took the vessel's specifications and drawings and translated them into systems and recorded this in the Cross Reference List and the Scope of Supply document.
47. GN, on the other hand, contended that Imtech's scope of supply was determined by the Brittany Ferries Building Specification and prevailed in the event that it came into conflict with the Scope of Supply/Technical Description documents: see paragraphs 22-24 of GN's Reply Closing Submissions. It alleged that Imtech was claiming for what was covered by the Building Specification.⁵
48. In its Closing Submissions Imtech expressed its case thus:
(a) Paragraph 13:
*"It is accepted that the works had to be carried out in compliance with the **Specification**. It is also accepted that if Imtech's Scope of Works documents wrongly omitted items or quantities that were part of Imtech's scope on a true construction of the Specification, Imtech was obliged to carry out such works within the original Contract Price...."*
(b) Paragraph 40:
*"The [BF] **Specification** dated June 2000 constituted the general specification for the Works but did not set out in detail the scope of Imtech's works. It is accepted that Imtech agreed that the Specification would prevail in the*

⁵ The Brittany Ferries Specification covered all of the work and not just the electrical components.

event that there was any conflict between the Imtech Scope of Work documents and the Specification (e.g. if Imtech incorrectly translated the description or quantities of any system) but Imtech did not warrant that the BF Specification was adequate and complete or complied with the material rules and regulations..."

49. GN cited these passages in its Reply to Imtech's Closing Submissions and submitted (at paragraph 26) that, in relation to its Heads of Claim 1 (Variations) and 2 (Additional Work) Imtech had not adduced any evidence to show that it had to perform works outside the requirements set by the Building Specification.
50. The Tribunal held as follows:
"15. It is clear and not disputed that the Claimant was obliged to carry out that work which came within the electrical scope of supply in accordance with the drawings and specification
16. The next and most important question is as to the amount of electrical work that IMI were obliged to carry out for the Contract price. The Claimant's case is that this was delineated by their "description and scope of supply document (A2/285) and their cross reference list (A2/319)". We agree for the following reasons..."
51. GN contends that the Tribunal's agreement with Imtech's pleaded case ignored (1), the fact that Imtech had abandoned the case it had pleaded in the Points of Claim; or (2), at the least, GN's contention that Imtech has expressly dropped this contention.
52. Imtech contends that it had not abandoned its pleaded case, and that GN has not cited paragraph 13 of Imtech's Closing Submissions in full. Paragraphs 12 and 13 of those Submissions read (in full):
"12. Imtech's case is that the Contract was a fixed price for a fixed scope of work. Under the Contract the scope of the work that Imtech was engaged by GN to carry out for the sum of NLG 18,500,000 was defined in:
(1) Imtech's Cross Reference List;
(2) Imtech's Technical Description and Scope of Supply Document; and
(3) Specific deliveries as set out in Imtech's letter dated 18th July 2000
13. It is accepted that the works had to be carried out in compliance with the **Specification**. It is also accepted that if Imtech's Scope of Works documents wrongly omitted items or quantities that were part of Imtech's scope on a true construction of the Specification, Imtech was obliged to carry out such works within the original Contract Price. However, Imtech places reliance on the fact that its Scope of Work documents were agreed Contractual Documents that were subject to detailed commercial negotiations with GN. Against that background, it is submitted that if Imtech discharges the burden of showing a variation to the works included in its Scope of Work documents, it is for GN to identify any errors in those documents (by reference to the other contract documents) that preclude Imtech from seeking additional payment under the Contract".
53. GN submits that a reading of the paragraph in full is of little assistance to Imtech. In the first part of paragraph 13 Imtech accepts that the works had to be carried out in compliance with the Specification and that if Imtech's Scope of Works documents wrongly omitted items or quantities that were part of its scope on a true construction of the Specification, Imtech was obliged to carry out such works within the original Contract Price. The second part of the same paragraph refers to the respective burdens of proof on the part of GN and Imtech; but does not detract from the point that the Specification set out Imtech's scope of works.
54. Imtech also refer to paragraphs 38 of its Closing Submissions and paragraph 13 of its Further Reply Submissions. These state:
"38 The Confirmation Order dated 20th July 2000 and the November Order both provided that the work to be undertaken by Imtech for the Contract Price was as set out in Imtech's quotations. The detailed scope of works on which Imtech's quotations were based (subject to specific additional deliverables) was set out in the Cross Reference List and the Technical Description Documents and the converging letters from Imtech expressly stated that the quotations were by reference to "our scope of supply". GN did not seek to amend the letters or the Scope of Supply documents but entered into the Contract on the basis of the same. Indeed, both parties considered these documents to be sufficiently important to update them in September 2000 and to include express reference to them in their Suppletion Order and the GN Specification"
"13. In paragraph 24 GN suggests that Imtech has changed its position on the Specification. This is not correct. Imtech's Points of Claim pleaded the Specification as a material contract document (Para 15: A1/11) and as a contract document that identified the scope of works (Para 16: A1/12). However, Imtech's case has always been, and remains, that the Specification was not the only document that described Imtech's scope of works. It was a high level, general description document that has to be read with the other Contract Documents. In particular, Imtech's Cross Reference list and Technical Description Document defined the scope of works described in the Specification"
55. GN submits that it was a serious irregularity for the Tribunal to have decided a key matter in the dispute contrary to what became Imtech's pleaded position and without even considering, at the least, the dispute over what was Imtech's case.
56. GN claims to have suffered substantial injustice by reason of this failure in that the amount of electrical work that Imtech was obliged to perform is critical to Imtech's claim under Head 1 (Variations), where the Tribunal awarded €2,243,023 and Head 2 (Additional Work) where the Tribunal awarded €1,631,244. The financial injustice which this irregularity has caused to GN may be as much as well over € 3 million
57. I am not persuaded that there has been a serious irregularity in respect of this head of claim. The gist of Imtech's case was that the Building Specification, the Cross Reference List and the Technical Description Document were all

Contractual Documents; that the Specification was in general terms; that the scope of supply had been reduced to something more specific so far as electrical works are concerned by the latter two documents and that those documents had not omitted anything which was in the Specification. This is, in essence, what the Tribunal has found. It was not incumbent on it to say more.

Variations process

GN's case

58. In relation to variations to the contracts ("VTCs") the parties agreed a procedure to be followed. As summarised in GN's defence the position was that:

"c Parties agreed a fixed lump sum price;

d. Parties agreed to procedures to be followed in respect of possible variations. Such procedures might result in an agreement as to variation in price, delivery time, technical performance etc. In the absence thereof no variations to the contract would apply. Particularly no variations in price or delivery time would apply.

e No variations in price or delivery time or otherwise would apply unless approved by Owners. The agreed procedures were aimed at enabling GN to follow the same procedures vis-à-vis Owners and thus seek Owners' approval

GN's Statement of Defence para 162

GN then set out a number of agreements, clauses and communications on which it relied, including Article 6 (see paragraph 62 below) of a contractual document headed "Requirements for Subcontractors and Suppliers" ("RSS") of 29th August 2001, which were said to support the pleaded position.

59. In paragraph 164 of its Statement of Defence GN contended that, to the extent that Imtech's requests for VTCs met the requirements of the agreement between the parties, GN passed the same on to owners for approval. A large number of VTCs were approved by Owners. A number were declined and so no VTC was issued. Some were not passed on to Owners because they did not relate to a variation of scope or were not sufficiently substantiated or were not made in time. GN contended that Imtech had no right to demand the issue of formal VTCs; that GN was under no obligation to issue the same; and that it had not failed to do so. Nor had it waived any right to rely on the contract provisions. It contended that Imtech had disregarded the proper procedures in respect of VTCs and that, as a result, it should not obtain any additional payment in respect of those variations.

60. In its Closing Submissions, GN said this:

(a) *"147. The contract included a VTC procedure as laid down in art. 6 of the RSS... GN has noted that Imtech disregarded this VTC procedure in relation to a number of variations claimed under Head of Claim 1 and the extra work claimed under Head of Claim 2."*

(b) *"149. ... [it was unacceptable that] an alleged increase of the contractual scope amounting to more than 3.5 million euros has been claimed without observing the agreed VTC procedure."*

Imtech's case

61. In its Points of Claim Imtech pleaded that it had issued requests for VTCs; that the yard had failed to issue VTC orders; that that failure amounted to a waiver of the need to comply with Article 6 of the RSS; or that the yard was estopped from relying on that Article; that GN's failure to issue VTC orders was a breach of Article 6 or certain implied terms; that the parties failed to operate the Article 6 procedure and that that procedure had broken down; that the yard's instructions or requests for additional works constituted express or implied promises to pay or separate agreements to pay; or that Imtech was entitled to reparation for unjust enrichment.

62. In its Closing Submissions Imtech referred to Article 6 of the RSS. Under Article 6.2. Imtech was permitted to make such modifications as should improve the vessel and/or equipment and/or installation subject to acceptance by GN prior to their being carried out. GN could at any time request in writing modifications to the works but would endeavour to keep such modifications to a minimum. Article 6.2 further provided that the parties would agree any cost time or other consequences prior to the execution of such modifications by Imtech. Imtech submitted that the RSS did not stipulate that a formal variation order was a condition precedent to payment for a valid variation. It also contended that in any event during the course of the work, as additional works were instructed and the scope of the works was increased as a result of detailed design Imtech notified GN that it considered that the change or increased work constituted a variation under the contract and issued requests for VTC Orders in accordance with Article 6. However GN regularly failed to issue any formal VTC Orders prior to the execution of the works (or at all) particularly where there was a dispute as to the existence or extent of any variation and its consequences.

63. Imtech further contended that Suppletion orders were issued by GN and agreed by Imtech during the works; that many of them expressly accepted that the Contract price should be varied to reflect the increased scope of work required but, although they reflected valid variations they were not issued until after the work was carried out. Imtech also contended that during the course of the works variations were instructed by GN, and carried out by Imtech, based on promises that GN would in due course issue formal orders for such works. Imtech claimed to be entitled to additional payments in respect of variations on the ground that a written order was not a condition precedent so that a failure to comply with the variation procedure would not preclude recovery, and that the parties failed to operate the variation procedure strictly during the works but adopted an informal approach to the VTC procedure until mid 2001. GN indicated that Imtech should get on with the works without waiting for formal VTCs. GN suffered no prejudice from the absence of VTCs. GN had not produced evidence to show that any of Imtech's variation claims had been submitted to BF and rejected.

64. In response to GN's complaint in this application Imtech stated "there was substantial evidence that the VTC procedure was not operated by the parties in strict accordance with the contractual provisions": see para 49 of the witness statement of Claire Cutmore. GN agrees that for practical reasons VTCs were, in some cases, first granted orally and later confirmed in writing; but submits that that is quite different from not operating the VTC procedure at all, as is the case with much of Head 1 and Head 2.
65. The Award did not deal with the variation process at all. It did not refer to the existence of a VTC procedure; nor to the question whether that procedure had been followed; nor to whether it made any difference whether it was followed or not and, in either case, why. It did not address any of the very extensive submissions on the topic.
66. Imtech submits that the issue about the VTC procedure was not a critical issue. I do not agree. In my judgement it was a serious irregularity on the part of the Tribunal and unfair to GN not to deal with the issue at all. It has caused substantial injustice. As to that, GN contends that the failure to follow the VTC procedure was a complete defence to Head 1 claims 1, 4, 7, 9 and 11 (in respect of which €1,525,950 was awarded) and to much of Head 2 (in respect of which €1,631,244 was awarded). On any view the failure of the Tribunal to address the issue has deprived GN of the benefit of a potential defence in respect of substantial sums.

Dampers and Fans

67. This issue arises in relation to Head 1, Variation 1 - the HVAC variation claim. This was a claim for additional works (the supply of cable and the costs of installation) caused by changes to the design of the HVAC system. The HVAC system incorporates dampers. These are remotely operated valves which close in the event of a fire and which are located between separate fire zones (fire dampers) and/or close to air intake fans (closing dampers). The dampers were supplied by Stork Bronswerk. It was Imtech's job to supply and fit the cabling for them.

GN's case

68. GN submits that under Head 1 (Variations) the Tribunal has in effect decided that Imtech should be paid for 100% of the cost of damper cabling and more than 50% of the cost of the fan cabling on the basis that it was additional work. This is because the Tribunal has decided that Imtech should recover the difference between Revision No 5 and Revision No 36 which difference had been agreed in the sum of € 1,347,960. Up until Revision No 23 the HVAC design and equipment lists did not include any fire dampers and only included 42 fans. The Tribunal has thus effectively reached the conclusion that Imtech's contractual scope of work included the cabling of an HVAC system containing no fire dampers and only 42 fans.
69. This conclusion, GN submits, is simply untenable, goes well beyond Imtech's pleaded case, and ignores what was common ground between the parties. It was agreed between the parties that an HVAC system without dampers was unthinkable and that the original contractual scope must be deemed to have included the cabling for 150 dampers.
70. Thus paragraph 184 (1) of Imtech's Reply states:
"Imtech's case is that 95 closing dampers and 55 fire dampers (150 in total) was a reasonable estimate based on the information available at the time of the Contract. 182 closing dampers were actually installed, 87 more than the 95 anticipated by the Contract."
71. The upshot is that GN had had to pay for cabling for 53 [95-42] closing dampers and 55 fire dampers [55-0] for which, in the light of the concession, it ought not to have been required to pay.

Imtech's case

72. In paragraph 63 of its closing Imtech set out its case as follows:
(a) The tender allowance for HVAC cabling should have been 29 kms;
(b) The as-installed quantity of HVAC cable was 105 kms;
(c) The additional HVAC cable claim, using Revision 5 to Revision 36 of the HVAC Equipment Lists was 63.7 kms;
(d) By Revision 5 some 41.3 kms (105 – 63.7) of cable must, therefore, have been required;
As is apparent Imtech was not claiming, under this Head of Claim, for all of the additional cabling, since 12.3 kms [41.3 – 29] was additional to the tender allowance but not claimed for.
73. At the time of Revision 5 Stork had not finished carrying out its design work with the result that Revision 5 did not show all the equipment and, hence, not all fans and dampers contained in the original scope of works were included. Imtech accepts that the HVAC design and equipment lists up to Revision No. 23 did not include any dampers and only included 42 fans. But it was not only dampers for which cabling was needed. There were numerous changes to the descriptions and locations of closing dampers, fire dampers, fans, AHU⁶ skids, humidifiers and power supply cables resulting from the revised equipment lists: see para 74 of Imtech's Closing Submission. Revision 5 included much equipment other than dampers, which required cabling in excess of that which should have been allowed for under the tender.
74. The way in which the claim worked was as follows (the figures are illustrative). The amount of cabling needed was dictated by the Equipment Lists produced by Stork. In the end the cable which Imtech had to install was 105 kms in length (see paragraph 72 (b) above). By Revision 5 Stork had not included any dampers but had included (say) not only the 20 air cooling units in the original tender but also an additional 10 such units. Imtech, instead of deciding to use 20 kms of cabling for the 20 original units and saving the other 9 kms for the fans and dampers that would be needed, used 20 kms for the 20 original units and then 9 kms (and more) for the additional 10

⁶ Air Handling Units

units. By this means Imtech had, by Revision 5, used all of its tender allowance for cabling. That was accepted by the Tribunal. Imtech's submission was that it was entitled to claim in respect of all the additional cabling needed for Revisions 5 – 37. Its claim was not put forward by calculating the additional cabling needed for each damper, fan or air cooling unit. It was made on the basis that Imtech was entitled to be paid for all the cabling from Revision 5 onwards because all the cabling in those Revisions represented cabling in excess of that for which Imtech ought to have made allowance in the tender. It was not, therefore, necessary for the Tribunal to address the question of what the equipment was in each Revisions as opposed to the quantity of cable overall which Imtech had to provide in excess of that which it should have provided for in the original tender. So far as quantum is concerned the experts were in agreement as to the cable amounts and their value contained in Revision 5 and following: see the Appendix to the Second Joint Statement.

75. In paragraph 23 of its Award the Tribunal decided "*that revision 5 of the equipment list issued by Stork Bronswerk equated to the Contract scope and that the Claimant is entitled to payment for additional work being the difference between the 5th and 36th revision of the equipment list in the sum agreed by the experts of € 1,347,960.*"
76. I do not regard the Tribunal as having been guilty of irregularity on the grounds submitted by GN. The Tribunal has found that Revision 5 equated to the scope of the contract works. That was not, in the light of the way in which Imtech put its case, an acceptance that no fans and only 42 dampers were required under the original contract. It was an acceptance that the quantity of cabling included in Revision 5 was the limit of what Imtech had been bound to provide under the original contract. Once the Tribunal had made that finding, it was not incumbent on it to examine the items for which cabling was needed in the revisions subsequent to Revision 5. The Tribunal decided that Imtech was entitled to be reimbursed for cable over and above what should have been allowed for in the tender and that that excess was represented by the difference between Revision 36 and Revision 5.

I/O Points

77. Input/Output points are part of the vessel's integrated control and alarm monitoring system for the engine room and ship's systems. They send input and output signals to sensors and activators. The points themselves were supplied by the supplier of the control and alarm monitoring system. Imtech, as the electrical supplier, had the task of cabling the I/O points.
78. It was common ground between the parties that 109 I/O points were fitted for the convenience of Imtech, in order to save cabling, at Imtech's own cost. As Imtech stated in paragraph 195 (2) of its Reply Submissions that: "*The installation of 109 I/O points for Imtech's convenience was normal practice*" It is commonplace that an electrical supplier will see if it can reduce cable length by installing cheaper I/O points. More points reduce the amount of cable needed.
79. GN submits that it is not normal practice that the electrical supplier (Imtech) should then present the costs associated with the cabling of these I/Os points to its principal (GN): see para 39 of its Closing Submissions.
80. In respect of the I/O points, the Tribunal said the following:
"24. *The Claimant was required by the General Specification to provide 'about' 2700 input output (I/O) points for the alarm and control monitoring system. The Claimant claims that the total number of I/O points installed was 3348 being an additional number of 648 points. The Respondent accepts liability for the additional points but not for the cabling to those points. We find that the Contract requirement was for 2700 I/O points that the number of I/O points was decided by the Respondent and therefore the Claimant is entitled to payment for the additional points. The Respondent has accepted liability for the points themselves but not the cabling thereto and therefore we award that the Claimant is entitled to payment for the cabling for the additional points.*
25. *The number of additional points has been agreed between the experts as 416. Turning to the rate the Claimant's expert has valued it at the rate agreed between the parties under another agreed variation (IMI 138) at €968 per I/O point giving a total amount of €402,688 and we accept this as a fair valuation.*
26. *Consequently we award that the Claimant is entitled to payment in the sum of €402,688.*
81. In expressing themselves in this way the Tribunal, GN submits, did not even acknowledge the defence raised by GN that out of the 416 I/Os for which cabling was claimed, Imtech had installed 109 I/Os not on the basis of the contractual scope and/or at GN's request but for its own convenience in order to save cable (which it had to install as part of its work).
82. Imtech's claim was for 416 single core input/output cables each of 40 metres in length. Its case was that it had reduced the cabling it needed by the addition of I/O points and thereby mitigated the number of *additional* cables it had to provide: see para 195 (3) of Imtech's Reply. As stated in the Award the final number of I/O points specified by GN in its List Rev C (and, therefore, required by GN) was 3,348 against an original specification of 2,700 of which – see paragraph 190 of Imtech's Reply – 232 were software I/O channels and 416 I/O points were hardwired and thus cabled. GN had accepted responsibility and paid for the 416 points but not for the cabling associated therewith.
83. In my judgment there has been no serious irregularity in relation to this claim. The Tribunal has addressed the issue of what entitlement Imtech has in respect of additional cabling for I/O points. Whether rightly or wrongly it has accepted that GN ordered additional points and was bound to pay for the cabling associated with them and was not persuaded that there should be any reduction because, if GN had not specified additional points, there would have been more cabling required for the original number of points.

Double-counted additional works

84. Under Imtech's Head of Claim 2 (Additional Works), the Tribunal found that additional cable was installed and that Imtech was entitled to some payment in respect of, *inter alia*, "the additional HVAC equipment" (para 59 of the Award) The Tribunal held as follows (para 59.3):
"it would be difficult if not impossible to value the Claimant's entitlement accurately and therefore having regard to the various authorities regarding circumstances where it is difficult or impossible to accurately value claims and doing the best we can with the various figures and evidence provided we assess the Claimant's entitlement under this head in the sum of €1,000,000.00."
85. GN submits that part of the €1,000,000 awarded relates to the cabling of the additional HVAC equipment, i.e. the same equipment for which an amount of €1,347,960 has been awarded under Imtech's Head of Claim 1 (Variation Claims): see paras 21-23 of the Award. Imtech contends that there was no overlap between the sums awarded under the cabling additional work claim and the HVAC variation claim.
86. Imtech's claim had been for the total cable installed less (i) the deemed tender allowance plus a 10% margin for tender risk; (ii) additional claims in respect of cabling paid for in variations; and (iii) additional claims in respect of cabling claimed for in the disputed variations: see para 153 of Imtech's Closing Submissions. The total claim under Variation 1 had been for 63.7 kms of cabling: see paragraph 72 above. No claim had been made under Variation 1 in respect of the further 12.3 km [105 – 92.7 {29 + 63.7}] in excess of the tender allowance. Variation 1 had dealt with the final amount of cable *installed* as compared to what should have been in the tender allowance. But it did not include a claim for cable that was *wasted* as a result of e.g. changes in the location of fans and dampers. That was the subject of Head of Claim 2: see paragraph 163 of Imtech's Closing.

The expert evidence

87. Imtech appointed as its expert Mr Anthony Farrow. GN appointed Mr Jeff Kommers. In their Third Joint Statement they observed that the quantum of Head of Claim 2 – Additional Works/Increased Scope of Supply – Additional Cables and Increased Cable Length was established from a comparison between the estimated cables as included in Imtech's tender and the as installed quantities, "*making appropriate adjustments for agreed and disputed variations*". The experts had available to them, and checked, a database which Imtech kept which showed all the cable used.
88. The statement continues:
"3. We have carried out a thorough analysis of the claim and agreed many of the quantities, norms and rates that apply to its valuation. In summary, the Farrow assessment is € 2,579,561, as detailed in Appendix 1 and the Kommers valuation is € 2,419,754 (or € 2,075,964 exclusive of ironwork) as detailed in Appendix 2.⁷
4. Although we are agreed on the approach to valuation and have agreed many quantities, norms and rates, there are a number of aspects where we have different views. These can be identified from the detail in Appendices 1 and 2 and we shall address the difference and our opinions on them in our individual reports.
5. We confirm that this statement does not deal with any aspect of liability, only quantum of the claims. We also note that our agreement on figures does not bind the Parties to them."
89. The claim was valued by the experts in the following manner:
(i) The "*as-built*" cable figures were taken from Imtech's cable database which contained figures for all cable used;
(ii) The "*tender allowance*" was deducted from this figure as this cable was deemed to be included in the Contract Sum;
(iii) The value of all agreed and disputed variations was also deducted on the footing that variation claims would either be recovered against GN or would be determined as items for which Imtech was not entitled to any payment. In particular a deduction was made for the additional cabling for the HVAC equipment that was the subject of Variation Claim No 1;
(iv) Mr Farrow deducted a further 10% of the tender allowance because Imtech accepted this percentage as a risk item to cover design developments, errors in calculation, etc
(v) The resulting figure was the extra cable which Imtech claimed was wasted;
(vi) The valuation of that was carried out initially in the Third, and then revised in the Fourth, Joint Statement. The experts did not agree the figures (although they were not far apart) but did agree the methodology.
90. The Award describes the claim as a claim for the difference in quantity of cable in respect of number, length and type between that actually used and that recovered through the tender allowance plus variations, and that the claim as valued by the Claimant's expert was € 2,532,227. It then refers to five different examples given by Imtech of the respects in which an increase in cabling was necessitated by (a) changes in design development being changes in design not valued in specific variation orders and (b) late information.
91. Example 1 relied on the alleged fact that not all changes to the location of equipment were picked up as variations. Variations covered changes to equipments shown on revised drawings (with associated equipment) but did not identify changes to the detailed cable routing which necessitated increased lengths of cable. The Tribunal held that the claim under this example failed because there was no given or apparent reason why all the location changes were not valued as variations and there was nothing to prove that changes to the position of equipment resulted in additional length of cable.

⁷ These are the figure in the Third Joint Statement. In the Fourth Joint Statement they were revised to: Farrow – € 2,532,227 and Kommers € 2,296,879 (or excluding Ironwork € 2, 053,935).

92. Example 2 was a claim that the locations of various items of equipment were not known at the time of the tender or the contract and that Imtech made an estimate of the required length. But the actual positions of the equipment were such that the length of the cable was greater than allowed for in the estimate. This claim failed on the ground that Imtech had taken the risk of the length of cable estimated by it proving inadequate.
93. Example 3 relied on the fact that information as to the location of equipment was late and that, in order to mitigate the resulting delay Imtech installed cables of sufficient length to reach the equipment wherever it was finally positioned and this led to wastage. The Tribunal accepted that there was considerable wastage as alleged and included this example in its valuation.
94. Example 4 was Imtech's claim that it was involved in additional work because of clashes between its work and the work of other sub-contractors which resulted from GN's failure to co-ordinate the design of its sub-contractors. The Tribunal found that there was such a failure which led to clashes and additional work for which GN was responsible.
95. Example 5 was a claim that GN repositioned equipment from time to time without notifying Imtech, which resulted in cable wastage. The Tribunal found that that claim failed.
96. Having set out the five examples the Award records:
*"The Claimant also alleges that the HVAC system included over 200 additional fans and dampers with over 1300 cables, we accept on the evidence that there was a considerable amount of additional equipment and in principle we find that the Claimant is entitled to payment for the **additional cables required because of this additional HVAC equipment**. We have included this example in our valuation below."*
97. The dispositive part of the Award under this heading was as follows:
*"We have not been given the reasons for the total increase in the cabling but only 5 isolated examples plus a claim that there were additional cables required for additional HVAC equipment. There is no indication as to what the other causes of additional cable were or as to what percentage of the additional cable was taken up by the examples given or as to the likely amount of additional cable involved in example 2 which we found was the responsibility of the Claimant and therefore we do not feel that we can fairly conclude that the additional cable used is all or principally the responsibility of the Respondent. We do, however find that the Claimant is entitled to some payment in respect of examples 3 (Late information) and 4 (Clashes) **and in respect of additional HVAC equipment** and we recognise that it would be difficult if not impossible to value the Claimant's entitlement accurately and therefore having regard to the various authorities regarding circumstances where it is difficult or impossible to accurately value claims and doing the best we can with the various figures and evidence provided we assess the Claimant's entitlement under this head in the sum of €1,000,000.00 and we so Award"*
98. It seems to me clear from the way in which the Tribunal has expressed itself that the figure of € 1,000,000 is the Tribunal's rough and ready assessment of Imtech's entitlement to payment in respect of (i) late information; (ii) clashes; and (iii) cables in respect of additional HVAC equipment. It made this assessment notwithstanding that Variation No 1 had already addressed the claim for cabling installed in respect of additional HVAC equipment. The Tribunal has not taken the figures agreed by the experts (from which the additional HVAC equipment has been deducted) and then taken a proportion of that. It has, on a basis which had no further explanation, taken a € 1,000,000 figure as covering the three items specified. In so doing it has ignored (a) the agreement of the parties that the cabling for the additional HVAC equipment was to be deducted from the claim and (b) the fact that it had already made an award in respect of it.
99. In those circumstances it has breached its duty of fairness by ignoring the agreed position of the parties that a claim under this head should not include the cabling for the HVAC equipment. In "double-counting" in this respect, the Tribunal has awarded Imtech more than it asked for, or could reasonably ask for. GN submits that the double-counting is probably a very significant part of the €1,000,000 awarded, on the basis that the Tribunal had previously awarded a larger amount under the HVAC claim (Claim 1, VTC 1). Whatever the size of the double-counting may be, it is unlikely to be minimal. I am satisfied that GN has been caused substantial injustice by having, on the face of the Award, to pay more than it should to Imtech for extra work.

Remedies

100. I am satisfied that the Tribunal's award in relation to four matters, namely (i) rate of interest; (ii) waiver/estoppel; (iii) variations process; (iv) double counted additional works is affected by serious irregularity in the respects identified above.
101. GN submits that the failures upon which they rely are such as to dent confidence in the arbitrators' ability to reach a fair decision and that I should simply set aside the award upon the footing that the matter should be considered by a new Tribunal. Alternatively I should set aside the offending parts and require the appointment of an umpire because (a) that is what section 21 of the Act requires; (b) because, without one, the arbitrators may be, or appear to be, under unnecessary pressure to reach agreement; and (c) because if the arbitrators do disagree much expense will have been wasted if an umpire has not sat with them on the re-hearing.

Was there a need for an umpire?

102. Article 10 of the agreement between the parties provided:

"Arbitration and applicable law

Any dispute or difference touching or concerning this Contract or arising there from shall be referred to arbitration in London to a single arbitrator to be appointed by agreement between the parties or, (failing agreement within 12

days after either party has given to the other a written request to concur in the appointment of a single arbitrator) to two arbitrators one to be appointed by each party and in the event that they disagree : to an umpire chosen by the two arbitrators so appointed. Any such reference shall be a submission to arbitration in accordance with the Arbitration Act 1996 or any statutory variation, modification or re-enactment thereof for the time being in force."

103. Section 21 of the Act provides:

"21 Umpire

- (1) Where the parties have agreed that there is to be an umpire, they are free to agree what the functions of the umpire are to be, and in particular—
 - (a) whether he is to attend the proceedings, and
 - (b) when he is to replace the other arbitrators as the tribunal with power to make decisions, orders and awards.
- (2) If or to the extent that there is no such agreement, the following provisions apply.
- (3) The umpire shall attend the proceedings and be supplied with the same documents and other materials as are supplied to the other arbitrators.
- (4) Decisions, orders and awards shall be made by the other arbitrators unless and until they cannot agree on a matter relating to the arbitration.
In that event they shall forthwith give notice in writing to the parties and the umpire, whereupon the umpire shall replace them as the tribunal with power to make decisions, orders and awards as if he were sole arbitrator.
- (5) If the arbitrators cannot agree but fail to give notice of that fact, or if any of them fails to join in the giving of notice, any party to the arbitral proceedings may (upon notice to the other parties and to the tribunal) apply to the court which may order that the umpire shall replace the other arbitrators as the tribunal with power to make decisions, orders and awards as if he were sole arbitrator.
- (6) The leave of the court is required for any appeal from a decision of the court under this section."

104. Mr Jeffrey Gruder, QC, for GN, submits that the parties have not agreed that an umpire shall only be selected after disagreement, and that, accordingly an umpire should have been chosen and should be chosen now, and (there being no provision to the contrary) the umpire must, pursuant to section 21 (3) be allowed to attend the proceedings and be supplied with all the materials, so that, in the event of disagreement he may enter upon the reference.

105. Miss O'Farrell submits that section 21 has no application. The parties have not agreed that there shall be an umpire; only that the arbitrators may choose one. In any event an umpire need only be chosen by the arbitrators in the event of a disagreement, which has not yet occurred. That submission is consistent with the old law in the now repealed section 8 (1) of the Arbitration Act 1950, which provided:

"(1) Unless a contrary intention is expressed therein, every arbitration agreement shall, where the reference is to two arbitrators, be deemed to include a provision that the two arbitrators may appoint an umpire at any time after they are themselves appointed, and shall do so forthwith if they cannot agree."

106. I prefer the former view. In most cases involving an umpire the parties agree that the umpire shall be appointed by the arbitrators. Section 21 cannot have been intended to apply only in the unusual case in which it is the parties who appoint the umpire. It must have been designed to deal with the questions, considered in *Fletamentos Maritimos v Effjohn International* [1995] 1 Lloyd's Rep 311, (a) whether the umpire, appointed either by the arbitrators (as in that case) or the parties, could sit with the arbitrators; and (b) when he should enter upon the reference; and to provide a default position in the absence of agreement on the subject. In my judgment the parties in the present case have "agreed that there is to be an umpire" within the meaning of section 21, even though the umpire is to be appointed by the arbitrators, and even though his authority to act is contingent on disagreement. Section 21. 1 (b) contemplates that there will have been such an agreement even though the umpire is not to replace the arbitrators with power to make decisions until there is a disagreement between the arbitrators.

107. In the present case the parties have agreed when the umpire is to replace the arbitrators. But they have agreed nothing about the attendance of the umpire at the proceedings. That lacuna is filled by section 21 (1) (a) with the result that the umpire is to attend the proceedings from the start. The parties have not agreed that the umpire shall only be chosen once there is a disagreement; only that he shall not enter upon the reference until the arbitrators disagree. The obligation to allow the umpire to attend the proceedings and to supply him with the same materials as the arbitrators necessarily means that the umpire has to be appointed before the proceedings start.

108. Matters are, however, rendered more complicated by the fact that on 23rd September 2003 Watson Burton for Imtech wrote to Mr Jensen, with a copy to Mr Dunné and Loyens & Loeff stating that it might be prudent for the arbitrators to choose an umpire. On 25th September 2003 Loyens & Loeff for GN replied saying:

"In our view the choice of umpire is at this moment premature as there is no indication yet that arbitrators might disagree. We suggest that the Tribunal should refrain from spending time to this until the issue of disagreement arises"

109. On the same day Mr Jensen replied to Watson Burton and Loyens & Loeff in a letter including the following:

"I am aware that the Arbitrator's (sic) are to choose an umpire in the event of any disagreement and I do not understand why you are raising this matter now and seemingly in relation to the jurisdiction issue. The submissions on jurisdiction are not yet complete but when they are complete then the two Arbitrators will consider whether there is likely to be any disagreement over this matter and if so we will inform the parties than an umpire will be necessary".

110. Thereafter the question of appointing an umpire appears to have passed from consideration. The parties must be taken to have waived any requirement for an umpire to be present at the hearing of the reference.

What next?

111. There remains for consideration whether I should remit the award to the tribunal for reconsideration or set it aside in part. The power to remit for reconsideration is a power to remit to the arbitral tribunal. That, as it seems to me, must mean the arbitral tribunal as in fact constituted, i.e. in the present case the two arbitrators. If, however, the Award is set aside in part, the position is somewhat different. The subject matter of those parts of the Award that are set aside will have to be considered afresh. Further, as it seems to me, any waiver in respect of the absence of an umpire cannot apply.
112. In determining what course to take I bear in mind a number of considerations. Firstly, section 68 (3) provides that the court shall not exercise its power to set aside an award unless it is satisfied that it would be inappropriate to remit the matters in question to the tribunal for reconsideration. Secondly, I regard it as desirable that there should be an umpire available to enter upon the reference in case of disagreement. That is, as I hold, the applicable default position. Moreover the additional expense involved in the appointment of an umpire is outweighed by the fact (a) that there should have been an umpire in the first place; (b) that it is desirable, in the light of what has happened, that the arbitrators should not appear to be under any pressure to avoid disagreement⁸; and (c) because, if there is disagreement, costs will have been wasted for want of an umpire in the first place.
113. Thirdly, it is necessary to consider the position if parts of the Award are set aside. If that is done the formal position would appear to be that the subject matter of those parts falls to be considered entirely afresh. It seems to me most undesirable that the appellants should be able to open up the entire subject matter of those parts, and to run, for instance, points that they have never taken before, or to adduce evidence that they did not choose to adduce before the arbitrators. On the contrary the matters remaining in dispute ought to be determined in the light of the evidence before the arbitrators.
114. I note that in *Ascot Commodities NV v Olam International Ltd* [2002] CLC 277,286 Toulson, J, who set aside the entirety of an award of the GAFTA Board of Appeal, saw no reason why the Board should not continue to deal with the matter, having received an indication from Counsel for the appellant that the appellant would not seek to widen the points which it took on the appeal. It seems to me that a similar undertaking is appropriate in this case.
115. If, therefore, GN are prepared to state, and, if necessary, undertake that it will not seek to widen the points which it took on this application, nor to adduce new evidence otherwise than in relation to the question of interest or as permitted by the arbitrators, or, if relevant, the umpire, I propose to set aside the following parts of the Award:
- (a) paragraphs 21 – 23 (HVAC Variation Claim No 1), including the award of € 1,347,960, to which the waiver/estoppel and variations process issues relate;
 - (b) paragraphs 55-59 (Additional Work/Increased Scope of Work), including the award of € 1,000,000; to which the variations process and double-counting issues relate;
 - (c) paragraphs 92-96, including the award of interest at 10% per annum from March 2003.
116. I make the qualification in respect of interest because, if Imtech seeks to recover interest otherwise than in accordance with the unamended Code, GN must be entitled to adduce evidence that bears upon the question of what rate is appropriate.
117. Because no suggestion of an undertaking or indication from GN was raised at the hearing I am prepared to hear further submissions on the question and, if no satisfactory undertaking or indication is proffered, to review the appropriateness of setting aside any part of the Award.
118. I am also minded to set aside:
- (d) paras 30-32, 39-40, 42-43 and 49-50, which relate to Head 1 claims 4,7, 9 and 11;
 - (e) paras 60-63, 65 and 66, which relate to the remainder of Head 2;
- on the footing that they are the paragraphs potentially affected by the variation process issue: see paragraph 66 above. That this was so was not disputed before me; but I am conscious that no argument or discussion was addressed to the point and I would be prepared to consider any submissions as to whether all these paragraphs are potentially affected before making any order.
119. Any fresh consideration of the subject matter of the parts of the Award set aside must proceed with an umpire who shall attend the proceedings and be supplied with the same documents and other materials as are supplied to the other arbitrators, including such of the material as is already before them as relates to those parts of the Award that I have set aside. If necessary, I shall make a declaration to that effect.
120. I invite Counsel, for whose assistance on both sides I am grateful, to consider the implications of this judgment, which was given to the parties in draft on 30 October 2008, and either to draw up an appropriate order or to restore the matter for further consideration if there are differences that cannot be resolved.

Jeffrey Gruder QC & Jeremy Brier (instructed by Curtis Davis Garrard) for the Claimant/Respondent in Arbitration
Finola O'Farrell QC (instructed by Watson Burton Newcastle) for the Defendant/Claimant in Arbitration

⁸ Such as might arise if there is no umpire and the arbitrators disagree, whereupon any umpire then appointed would need to start from scratch in relation to anything that he has to decide (because he will not have heard any of the submissions that led to the disagreement) and the parties will have to rehearse the arguments and any evidence again.