



Neutral Citation Number: [2019] EWCA Civ 1840

Case No: A3/2018/2801 AND 2802

IN THE COURT OF APPEAL (CIVIL DIVISION)
ON APPEAL FROM THE HIGH COURT
(Chancery Division, Business and Property)
The Honourable Mr Justice Marcus Smith
[2018] EWHC 2616 (Ch) and [2018] EWHC 2913 (Ch)

Royal Courts of Justice
Strand, London, WC2A 2LL

Date: 31/10/2019

Before:

LORD JUSTICE PATTEN
LORD JUSTICE HENDERSON
and
LADY JUSTICE ASPLIN

Between:

BritNed Development Limited	<u>Appellant</u>
- and -	
ABB AB and ABB Limited	<u>Respondents</u>

And between:

ABB AB and ABB Limited	<u>Appellants</u>
-and-	
BritNed Development Limited	<u>Respondent</u>

Mr Robert O'Donoghue QC and Mr Hugo Leith (instructed by **Squire Patton Boggs (UK) LLP**) for the **Appellant** in appeal 2801 and **Respondent** to appeal 2802)

Mr Mark Hoskins QC, Ms Sarah Ford QC, Ms Jennifer MacLeod and Jon Lawrence (instructed by **Freshfields Bruckhaus Deringer LLP**) for the **Respondents** to appeal 2801 and **Appellants** in appeal 2802

Hearing dates: 15th-17th July 2019

Approved Judgment

Lord Justice Henderson and Lady Justice Asplin:

Introduction

1. These appeals are concerned with the principles to be applied in the assessment of damages awarded to a victim of a cartel following a finding of a breach of competition law and the effect of the application of those principles in this case.
2. The appeals arise out of a claim in tort for damages for breach of statutory duty in respect of a restriction of competition contrary to Article 101 of the Treaty on the Functioning of the European Union (“TFEU”) and Article 53 of the Agreement on the European Economic Area (the “EEA Agreement”), brought by BritNed Development Limited (“BritNed”) against ABB AB and ABB Ltd (together referred to as “ABB”).
3. BritNed is a corporate vehicle which is jointly owned by National Grid and TenneT, which are respectively the operators of the UK and Dutch electricity grids. BritNed owns and operates the BritNed “Interconnector”, a 1,000-megawatt (“MW”) capacity electricity submarine cable system connecting the Dutch and UK electricity grids. It was constructed between 2009 and 2010. ABB supplied the cable element of the BritNed Interconnector. It did not supply the other significant element of the system, namely the converters at each end of the submarine cable, although it tendered for it.
4. In a decision (“the Decision”) dated 2 April 2014 in Case AT.39610 – *Power Cables*, the European Commission found that ABB and other undertakings from Europe, Japan and Korea had participated in a global cartel concerning high voltage submarine and underground power cable projects. The cartel operated from 1999 to 2009.
5. BritNed claimed that, by reason of the cartel and its operation, it had suffered loss and damage which it categorised under three heads: (i) Overcharge. The price it paid for the cable element of the BritNed Interconnector was higher than it otherwise would have been as a result of the operation of the cartel; (ii) Lost Profit. Absent the cartel, it would have acquired a cable of a higher capacity (1,320MW rather than 1,000MW) which would have generated additional revenues and higher profits than the 1,000MW cable which was actually purchased; and (iii) Compound Interest. As a result of the Overcharge, BritNed incurred higher capital costs in commissioning the Interconnector than would otherwise have been the case under competitive conditions.
6. After a trial lasting more than four weeks, during which the judge (Marcus Smith J) heard complex expert and factual evidence, he delivered a very detailed judgment of more than two hundred pages and over 550 paragraphs, dated 9 October 2018 (“the main judgment”), and a supplementary judgment dated 1 November 2018 (“the supplementary judgment”). By his order dated 1 November 2018, he ordered ABB to pay BritNed €15,030,221 by way of damages, and accrued simple interest on those damages from 21 May 2007, in respect of its “Overcharge Claim”. However, he dismissed the “Lost Profit Claim” and the “Compound Interest Claim”.

7. The judge further concluded, at [550(3)] of the main judgment, that ABB's contention that BritNed's damages should be reduced by reason of what was referred to as the Regulatory Cap Issue failed. That issue was of some complexity, and we will not attempt to explain it at this stage. It is enough to say that, as part of his analysis of the issue, the judge considered that it would be necessary for BritNed to provide an undertaking, formulated at [540], to treat the damages it was awarded as if they were subject to the Regulatory Cap. Only in that way, he thought, could the risk of over-compensation to BritNed be avoided.
8. BritNed declined to give the undertaking, however, and the judge therefore returned to the issue in the supplementary judgment. Having reconsidered the matter, he decided that the award of damages must be reduced by 10% to reflect the risk of over-compensation and the need (as he saw it) to give ABB the benefit of any doubts in his calculation of damages generally: see the supplementary judgment at [15].
9. The neutral citations for the main judgment and the supplementary judgment are [2018] EWHC 2616 (Ch) and [2018] EWHC 2913 (Ch) respectively.
10. The judge gave both parties general permission to appeal in relation to the Overcharge Claim, the Lost Profit Claim and the Regulatory Cap Issue.
11. In simple terms, by its appeal, BritNed seeks: an increase in the damages awarded in respect of the Overcharge Claim; to overturn the judge's decision to dismiss the Lost Profit Claim; and to challenge the judge's approach to the Regulatory Cap Issue in the supplementary judgment as a result of which he reduced the damages awarded to BritNed by 10%. By a respondent's notice, ABB seeks to uphold the judge's decision in relation to the Lost Profits Claim and the Regulatory Cap Issue and the subsequent reduction in BritNed's damages (albeit for other reasons) and to uphold his decision in relation to the Overcharge Claim, save in respect of an award he made in relation to so-called "cartel savings", which is the subject of ABB's own cross-appeal. BritNed has in turn filed a respondent's notice in the cross-appeal.
12. Before addressing the grounds of appeal and the matters raised in the two respondent's notices, we will begin by considering the correct approach to the assessment of the claimant's loss in a follow-on claim for damages for anti-competitive conduct which infringes Article 101(1) TFEU. (There is no need for us to give separate consideration to Article 53 of the EEA Agreement, because the relevant principles are the same).

The correct approach to the assessment of "cartel damages"

13. To our surprise, we were told that this is the first case in which damages have been awarded by an English court or tribunal after a trial for anti-competitive cartel conduct which infringes Article 101(1) TFEU. We will refer to such damages as "cartel damages" for short. Article 101(1) provides as follows:

"The following shall be prohibited as incompatible with the internal market: all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of

competition within the internal market, and in particular those which:

- (a) directly or indirectly fix purchase or selling prices or any other trading conditions;
- (b) limit or control production, markets, technical development, or investment;
- (c) share markets or sources of supply;
- (d) apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;
- (e) make the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.”

14. At the risk of stating the obvious, it is therefore apparent that the core purpose of Article 101(1) is to prohibit specified forms of conduct by undertakings which (a) may affect trade between Member States, and (b) have “*as their object or effect the prevention, restriction or distortion of competition within the internal market*” (our emphasis).
15. In granting unrestricted permission to appeal to both parties in relation to the Overcharge Claim, the Lost Profit Claim and the Regulatory Cap Issue, the judge expressly recognised in his supplementary judgment (at [25] to [27]) that, although the Overcharge Claim was “very fact heavy”, the approach which he had taken was “one that ought to be reviewed by a higher court”, and that there were “compelling reasons for the appeal to be heard”. In view of the close relationship between the Overcharge Claim and the Lost Profit Claim, he considered that it also made sense for the permission to extend to the latter claim; while the Regulatory Cap Issue, as well as being related to the Overcharge Claim, raised “novel and difficult issues regarding the compensatory nature of damages and collateral benefits”.
16. As a matter of EU law, ABB submitted to us that the jurisprudence of the Court of Justice of the European Union (to which we will refer, together with its predecessor the European Court of Justice, as “the CJEU”), establishes the following principles:
 - (a) Article 101(1) creates directly effective rights for individuals that national courts must safeguard;
 - (b) in order to ensure the full effectiveness of Article 101(1), any person is entitled to claim compensation for the harm suffered where there is a causal relationship between that harm and an agreement or practice prohibited under the Article;
 - (c) in the absence of EU rules governing the matter, it is for the domestic legal system of each Member State to lay down the detailed rules governing the exercise of the right to claim such compensation, provided that the EU law principles of equivalence and effectiveness are observed;

(d) under the principle of equivalence, the procedural rules applicable to actions for safeguarding rights which individuals derive from the direct effect of EU law must not be less favourable than those governing similar domestic actions, while under the principle of effectiveness, the applicable rules must not make it in practice impossible or excessively difficult to exercise rights conferred by EU law; and

(e) EU law does not prevent national courts from taking steps to ensure that the protection of the rights guaranteed by EU law does not entail the unjust enrichment of those who enjoy them.

17. We agree that those principles do indeed form part of the existing, settled case-law of the CJEU. It is unnecessary to trace them back further than the judgment of the Grand Chamber, on a reference for a preliminary ruling by this court, in Case C-453/99, Courage Limited v Crehan, EU:C:2001:465, [2002] QB 507, at paragraphs 25 to 27 and 29 to 30. As the CJEU explained, after confirming that an individual can rely on a breach of what is now Article 101(1) before a national court even where he is a party to an anti-competitive contract within the scope of the Article:

“25. As regards the possibility of seeking compensation for loss caused by a contract or by conduct liable to restrict or distort competition, it should be remembered from the outset that, in accordance with settled case-law, the national courts whose task it is to apply the provisions of Community law in areas within their jurisdiction must ensure that those rules take full effect and must protect the rights which they confer on individuals...

26. The full effectiveness of [*Article 101*] of the Treaty and, in particular, the practical effect of the prohibition laid down in [*Article 101(1)*] would be put at risk if it were not open to any individual to claim damages for loss caused to him by a contract or by conduct liable to restrict or distort competition.

27. Indeed, the existence of such a right strengthens the working of the Community competition rules and discourages agreements or practices, which are frequently covert, which are liable to restrict or distort competition. From that point of view, actions for damages before the national courts can make a significant contribution to the maintenance of effective competition in the Community.”

18. In Joined Cases C-295 to 298/04, Vincenzo Manfredi v Lloyd Adriatico Assicurazioni SpA, EU:C:2006:461, [2007] Bus LR 188, the Third Chamber of the Court repeated the principles stated in Courage Limited v Crehan, and said in paragraph 61 of its judgment:

“It follows that any individual can claim compensation for the harm suffered where there is a causal relationship between that

harm and an agreement or practice prohibited under [Article 101].”

19. The nature of the necessary causal link was further explored by the Fifth Chamber of the CJEU in 2014 on a reference for a preliminary ruling from Austria, which established that cartel damages could in principle include loss resulting from the higher price charged by an undertaking as a result of a prohibited cartel to which it was not a party (so-called “umbrella damages”): see Case C-557/12, Kone AG and Others v ÖBB-Infrastruktur AG, EU:C:2014:1317. For present purposes, it is enough to note that the judgment of the Court at paragraphs 20 to 26 repeated in similar language the guiding principles derived in particular from Courage v Crehan and Manfredi. Thus, for example, paragraph 21 reiterated that:

“The full effectiveness of Article 101 TFEU and, in particular, the practical effect of the prohibition laid down in paragraph 1 of that provision would be put at risk if it were not open to any individual to claim damages for loss caused to him by a contract or by conduct liable to restrict or distort competition...”
20. As a matter of domestic English law, it has been clear since the decision of the majority of the House of Lords in Garden Cottage Foods Limited v Milk Marketing Board [1984] 1 AC 130 that breaches of what are now Articles 101 and 102 TFEU are to be categorised as a breach of statutory duty, giving rise to a civil cause of action for damages at the suit of a private individual who has sustained loss or damage by reason of the breach: see the speech of Lord Diplock, at 141D-G.
21. The question whether a claimant for cartel damages may be entitled under English law to recover more than compensatory damages, including in particular exemplary damages, restitution in respect of unjust enrichment, and/or an account of profit, was considered by this court, affirming the judgment of Lewison J (as he then was), in Devenish Nutrition Limited v Sanofi-Aventis SA [2008] EWCA Civ 1086, [2009] Ch 390. It was held that none of these alternative or additional measures of damage was available as a matter of English law, and that while EU law would not prevent the recognition in domestic law of a restitutionary remedy for breach of statutory duty, such recognition was not required by the EU law principle of effectiveness. The leading judgment in this court was delivered by Arden LJ, and shorter judgments were also given by Longmore LJ (dissenting on one issue) and Tuckey LJ.
22. The issue on which this court was divided concerned the question whether a restitutionary award of damages could in principle be made on a claim for a non-proprietary tort. The majority (Arden and Tuckey LJJ) held that the court was bound by its previous decision in Stoke-on-Trent City Council v W & J Wass Limited [1988] 1 WLR 1406 to answer this question in the negative, whereas Longmore LJ considered that, read in the light of the decision of the House of Lords in Attorney General v Blake [2001] 1 AC 268, the principle derived from Wass should not necessarily be confined to tortious claims for breach of a proprietary right: see his judgment at [145]. Nevertheless, even on the assumption that restitutionary damages or an account of profits could in principle be recoverable, all members of the court were agreed that the claim lacked the exceptional circumstances which would be a prerequisite to the making of such an award. The case concerned follow-on proceedings brought by claimants in five separate actions, after a decision by the European Commission that

the defendants had entered into worldwide cartels in respect of certain vitamins in breach of what is now Article 101(1).

23. In this context, it is important to note that this court did not regard possible difficulties of proof in establishing the claimants' loss as an exceptional circumstance which might justify the award of an account of profits. Arden LJ explained the point in this way, at [110]:

“Devenish also alleges that the effect of the breaches of article 81EC has been to inhibit the development of its business so as to make it unable to compete with members of the cartel. This has been referred to as “the margin squeeze” claim... In theory, the situation might not be far removed from the position of the Crown in *Blake's* case if the defendants, in carrying on the cartels, have destroyed or made it in practice impossible to find the evidence which would show the effect or extent of the cartels. However, that is not the way the case appears to be put. What appears to be said on this aspect of the case is that there are considerable difficulties of proof... The court is accustomed to dealing with those difficulties “by the exercise of a sound imagination and the practice of the broad axe”: see *Watson Laidlaw & Co Limited v Pott Cassels & Williamson* 31 RPC 104, pp 117-118, per Lord Shaw. Accordingly, the fact that damages will be very difficult to prove is not in my judgment enough to justify a gains-based remedy, and the margin squeeze claim, which was not developed in oral argument in any great detail, cannot therefore lead to such a remedy.”

See too the judgments of Longmore LJ at [148] and Tuckey LJ at [159].

24. The relevant passage from the speech of Lord Shaw in the Watson Laidlaw case was quoted by Lewison J in his judgment, which is reported together with that of the Court of Appeal, at [27], and in our view it bears repetition. Lord Shaw said this:

“In the case of damages in general, there is one principle which does underlie the assessment. It is what may be called that of restoration. The idea is to restore the person who has sustained injury and loss to the condition in which he would have been had he not so sustained it. In the cases of financial loss, injury to trade, and the like, caused either by breach of contract or by tort, the loss is capable of correct appreciation in stated figures. In a second class of cases, restoration being in point of fact difficult – as in the case of loss of reputation – or impossible – as in the case of loss of life, faculty, or limb – the task of restoration under the name of compensation calls into play inference, conjecture, and the like. And this is necessarily accompanied with those deficiencies which attach to the conversion into money of certain elements which are very real, which go to make up the happiness and usefulness of life, but which were never so converted or measured. The restoration by way of compensation is therefore accomplished to a large extent by the exercise of a sound

imagination and the practice of the broad axe. It is in such cases, whether the result has been attained by the verdict of a jury or the finding of a single judge, that the greatest weight attaches to the decision of the court of first instance. The reasons for this are not far to seek... In all these cases, however, the attempt which justice makes is to get back to the status quo ante in fact, or to reach imaginatively by the process of compensation a result in which the same principle is followed.”

25. With regard to the EU law aspects of the case, Arden LJ explained at [123] to [133] why EU law does not prevent a restitutionary award of damages, and at [134] to [135] why the availability of such an award in domestic law is not required by the principle of effectiveness. As Arden LJ said, at [135]:

“Even so, it is clear that the remedy under national law need be no more than “adequate in relation to the damage sustained” ... It is also clear from cases such as *Manfredi’s* case [2007] Bus LR 188 that purely compensatory damages are sufficient for the purposes of safeguarding the rights of private persons under article 81 EC. The doctrine of effectiveness is therefore directed to ensuring sufficient remedies rather than the fullest possible remedies. An action for compensatory damages fulfils the requirements of sufficiency.”

Longmore LJ agreed with Arden LJ on all the EU law issues raised: see his judgment at [150]. Tuckey LJ also relied on similar reasons to reach the same conclusion: see [154] to [155].

26. We have spent some time examining the decision in Devenish, which is of course binding on this court, because it doubtless explains why BritNed’s pleaded particulars of loss and damage are confined to losses allegedly caused to BritNed by ABB’s unlawful participation in the cartel. In the re-amended particulars of claim, BritNed’s cause of action and basic loss is pleaded in this way:

“6. The Defendants’ unlawful conduct and infringement of Article 101 TFEU and Article 53 of the EEA Agreement constitutes an actionable breach of statutory duty which is directly enforceable in the UK, pursuant to Article 16 of Regulation 1/2003.

7. As a result of the activities carried out by the Defendants through their participation in the Cartel from 1 April 2000 to 17 October 2008, the Claimant:

(a) paid a price under the Agreement that was unlawfully inflated above the price which would have prevailed had there been no Cartel;

...”

Sub-paragraphs 7(b) and (c) then set out the basis of BritNed’s claims for compound interest (which is no longer pursued) and for loss of profits (which remains in issue).

The way in which the judge approached the assessment of BritNed’s loss

27. Against this background, we can now turn to section B of the judge’s main judgment in which he set out the legal principles and approach by which he would be guided. We will begin with the first sub-section, headed “Elements of the tort”, which runs from [10] to a much-subdivided [12].
28. The judge started by correctly directing himself that, in English law, “competition law infringements are vindicated as statutory torts”, and that in order to establish a claim, it is necessary to show (i) an infringement of competition law, and (ii) actionable harm or damage caused by that infringement. He added, at the end of [10], that proof of actionable damage “inevitably involves demonstrating a causal link between the infringement and the damage, generally using the “but for” test of causation”.
29. In relation to the measure of loss, the judge pointed out at [12(5)] that, since in tort cases the measure is the amount of damages that will place the claimant in the situation he would have been in, had the tort not been committed, the inquiry involves an assessment of what would have happened in a hypothetical or counterfactual case. He continued:

“(6) During this quantification exercise, English law moves away from the balance of probabilities. An assessment or quantification of damages involves the taking into account of all manner of risks and possibilities. Of course, “loss of a chance” analysis may be appropriate when quantifying a claimant’s loss, but that is by no means the only tool or even the most useful tool that is available to the court. Fundamentally, the process is evidence driven, and it is difficult to be very prescriptive. As Popplewell J noted in *Asda Stores Limited v Mastercard Inc*, [2017] EWHC 93 (Comm) at [306], “the court takes a pragmatic approach”.

(7) The *Asda* decision helpfully sets out the approach that courts take to questions of quantification. It was suggested by BritNed that this articulation of the law did not apply in the present case, on grounds that *Asda* was an “effects” case, and this case is not. It was suggested that – because of the information asymmetry that existed between BritNed and ABB, some other approach should be taken. I do not accept this contention. I consider that *Asda* is doing no more than articulate principles relevant to the quantification of loss generally, albeit with an emphasis on the quantification of loss in competition cases. Indeed, it will be noted that Popplewell J’s articulation of the relevant principles emphasises that a lack of information should not prevent a quantification. In short, I consider Popplewell J’s articulation of the principles a helpful one for the purposes of this case.”

30. The judge then set out the principles which he drew from Popplewell J’s judgment in the Asda case at [306] and [307], including the following:

“(8)... (a) Only as much certainty and particularity is insisted on in proof of damage as is reasonable, having regard to the circumstances and to the nature of the acts by which the damage is done.

(b) The fact that it is not possible for a claimant to prove the exact sum of its loss is not a bar to recovery. In this case, the assessment of damages will involve an element of estimation and assumption. Restoration by way of compensatory damages is often accomplished by “sound imagination” and a “broad axe” or a “broad brush”. The Court will not allow an unreasonable insistence on precision to defeat the justice of compensating a claimant for infringement of its rights.

...

(9) In [307] of *Asda*, Popplewell J said this:

“... where the court is compelled to use a broad brush in the absence of precision in the evidence of the harm suffered by a claimant, it should err on the side of under-compensation so as (a) to reflect the uncertainty as to the loss actually suffered and (b) to give the defendant the benefit of any doubts in the calculation”.

The claimant’s compensation cannot simply be “plucked from the air”. It must be grounded in the evidence before the court. The court must, when quantifying loss, be astute to identify those points where the evidence falls short, and where the court becomes reliant upon estimates or assumption. Such estimates or assumptions will need to take account of the fact that the probabilities in the counter-factual world may not mean that these estimates or assumptions will inevitably hold good. I do not take this *dictum* to mean that every calculation made in the course of assessment of damages must be reduced to avoid the risk of over-compensation.”

31. We will need to return to these passages in the judgment, and to the assistance that the judge found in Popplewell J’s judgment in the Asda case, in the context of BritNed’s first and fourth grounds of appeal, which allege that the judge “erred fundamentally in his approach to assessing a competitive price” and that he also erred “on the side of under-compensation”, thereby infringing the EU law principles of effectiveness and equivalence. Before doing so, however, it is convenient to refer to the next subsection of the judgment, running from [13] to [18], in which the judge dealt with what he called “a preliminary pleading point” on the definition of “overcharge”.

32. In his discussion of this point, the judge referred to paragraph 7(a) of the particulars of claim, which we have quoted at [26] above, and said there was a dispute as to how the unlawful inflation of the price paid by BritNed for the cable element of the Interconnector, i.e. the overcharge, was to be assessed. ABB contended that the overcharge was the difference between the price actually agreed and the price that would have been agreed *between ABB and BritNed* had there been no cartel. On the other hand, BritNed contended that the overcharge was the difference between the price actually agreed and the price that would have resulted had there been no cartel, *whether the party contracting with BritNed would have been ABB or some other supplier*.
33. In support of the former contention, ABB argued that both parties' experts (Mr Biro for BritNed, and Dr Jenkins for ABB), in considering the competitive price in the absence of the cartel, had used ABB's data from before and after the cartel period. ABB submitted that it was not open to BritNed to advance the further possibility that a third party other than ABB would have won the project at a price lower than ABB's counterfactual price. Such a possibility had not been considered by the experts, and ABB had not had the opportunity to address it, by way of disclosure or factual evidence.
34. The judge said he had no doubt that BritNed's pleaded case defined the overcharge in the way for which BritNed contended, i.e. as the difference between the price actually agreed and the price that would have resulted in the absence of a cartel, whoever the party contracting with BritNed would have been in the counterfactual world. We consider that this conclusion was clearly correct, both in principle and as a matter of construction of paragraph 7(a) of the particulars of claim. As the judge rightly said, at [17(2)]:

“The counterfactual scenario which must, therefore, be considered, is one where ABB was not “allocated” the BritNed project [*pursuant to the cartel*]. That obviously implies competitive tenders from others, which (i) might render ABB more competitive, but which (ii) might result in a competitor putting forward a more competitive price than ABB and thereby winning the contract.”

35. The judge then said, at [17(4)]:

“It is true that both parties have focused on ABB's costs and how – in a competitive market – ABB's price might have changed. That I consider to be a reflection of the evidence available to the parties, rather than a consequence of BritNed's pleading. ABB has provided, on disclosure, a great deal of evidence regarding the other projects it was involved in and the costs associated with these projects. This has been considered – as I described – by the experts. There has been no corresponding disclosure from ABB's competitors, and none could reasonably have been expected by either party. Inevitably, the experts and the parties have done what they can on the evidence available to them; but that does not mean that the counterfactual inquiry is limited to a consideration of what price ABB would have offered. Such an approach is tantamount to treating the Cartel as if it still operated,

at least to the extent of preventing competitive bids from suppliers other than ABB.”

36. This passage brings out the important point that, even though the correct measure of damage is in principle the difference between the price actually paid and the price which would have prevailed in the absence of a cartel, whoever and wherever in the world the successful bidder might have been, it is in practice likely to be very difficult, if not impossible, to construct a counterfactual bid by anybody other than ABB, even though ABB was itself a former cartel member. As the judge explained in a footnote, referring to other cartel members, they were not parties to the action, and third party disclosure against them would have been “highly intrusive given the level of detail that would be required to carry out a robust assessment of the price that would have been offered by other cartelists in the counter-factual scenario”. The same must obviously also be true, to an even greater extent, of other potential bidders who were *never* members of the cartel.
37. No doubt for these reasons, we were informed during the hearing that no application for third party disclosure was made by either side in the present case. It follows from this that the experts, and the court, had to do the best they could with the available evidence, which was largely derived from the disclosure given by BritNed and ABB, supplemented by matters of public record. This does not mean, however, that the correct conceptual measure of loss is unimportant. On the contrary, it is only because the judge rightly recognised that the measure of loss was not necessarily confined to the difference between the price actually paid and what he called “the ABB counterfactual price”, that he was able to go on to consider other possible heads of damage such as “baked-in inefficiencies” and “cartel savings”, each of which we will explain in due course.
38. For now, it is enough to record that in [18] the judge identified the overcharge which he needed to assess in terms which Mr O’Donoghue QC for BritNed expressly agreed to be correct:

“Accordingly, the overcharge that I am seeking to assess is the difference between (i) the price agreed between ABB and BritNed and (ii) the price that would have been agreed – whether with ABB or by another provider – had the Cartel not operated.”

The judge then added:

“That said, for the reasons given in paragraph 17(4) above, the sort of price that a third-party provider would offer is extremely difficult to determine, given the (lack of) evidence. Inevitably, that has a bearing on my approach to the assessment of the overcharge.”

39. In the remainder of section B of the judgment, the judge gave his reasons for rejecting submissions by BritNed (a) that the principle of effectiveness requires a rebuttable

presumption of harm caused to BritNed by the cartel, and (b) that the participation of ABB's power division in at least three previous cartels was a relevant factor in assessing BritNed's loss.

40. The first submission was prompted by the fact that Article 17(2) of Directive 2014/104/EU ("the Damages Directive") now requires Member States to establish a presumption of harm in cartel damages cases. This requirement has been implemented in English law by paragraph 13 of schedule 8A to the Competition Act 1998, which provides that:

"For the purposes of competition proceedings, it is to be presumed, unless the contrary is proved, that a cartel causes loss or damage."

It was common ground that, for temporal reasons, neither the Damages Directive nor the amendment to the Competition Act 1998 applies to the present case; but the submission was that the principle of effectiveness achieves the same result.

41. In rejecting this submission, the judge pointed out that, if it were well-founded, it is hard to see why the presumption needed to be given legislative force. The judge also considered that such a presumption would be unlikely to help him in assessing damages, especially in view of the "broad brush" approach already taken by English law. As he said, at [23(5)]:

"Obviously, I take the point about informational gaps, and the potential asymmetry in information that will exist between a cartel member and an outsider. This issue, however, is fully factored into the approach English courts take to the quantification of loss and damage. I fail to see how a bare presumption of harm – particularly one, which does not involve a presumed quantification of harm – takes matters any further at all."

42. We agree that the judge was right to start without any presumption of loss or damage, for the reasons which he gave. We also agree with him that, on the facts of the present case, it is hard to see how such a presumption could have assisted BritNed, given the need for its loss to be quantified and the generous approach adopted by English law to difficulties of proof in such a context.
43. As to ABB's prior misconduct, the judge agreed with ABB that "this was a jury point to be disregarded". We also agree. Since ABB's participation in the present cartel is admitted, there was no need to rely on "similar fact" evidence showing ABB's propensity to participate in cartels. Nor could such a propensity help in quantifying the loss caused to BritNed: see the judgment at [25].

The recent judgment of the CJEU in the "Skanska" case

44. In their written and oral submissions, counsel for BritNed placed considerable reliance on the recent decision of the Second Chamber of the CJEU in Case C-724/17, Vantaan

kaupunki v Skanska Industrial Solutions Oy, and Others (“Skanska”), judgment in which was delivered on 14 March 2019 on a reference for a preliminary ruling by the Supreme Court of Finland. The basic issue which the Court had to determine was whether Article 101 imposes liability for cartel damages on a corporate successor to the business of an original member of the cartel which has been dissolved or otherwise ceased to exist. Under domestic Finnish law, the governing principle is that “only the legal entity that caused the damage is liable”: see the judgment of the Court at paragraph 15. As an aspect of this general question, a key issue was whether Article 101 required the same principles to be applied to claims for cartel damages as (on the basis of existing authority) the Commission already applied when imposing fines for breaches of Articles 101 and 102. According to that established jurisprudence, the concept of an “undertaking”, within the meaning of Article 101, covers any entity engaged in an economic activity, regardless of its legal status and the way in which it is financed; the concept must be understood as designating an economic unit, even if in law that unit consists of several natural or legal persons; and when an undertaking is restructured in such a way that the entity that committed the infringement ceases to exist, this does not necessarily create a new undertaking free of liability for the conduct of its predecessor: see the judgment at paragraphs 36 to 40.

45. The Court’s answer to the questions referred, as stated in paragraph 51 of the judgment and the *dispositif*, was that:

“Article 101 TFEU must be interpreted as meaning that, in a case such as that in the main proceedings, in which all the shares in the companies which participated in a cartel prohibited by that article were acquired by other companies which have dissolved the former companies and continued their commercial activities, the acquiring companies may be held liable for the damage caused by the cartel in question.”

46. In reaching this conclusion, the main steps in the Court’s reasoning were as follows:

(1) the basic principles stated in Kone at paragraphs 20, 21, 22 and 24 (and the case law cited in those paragraphs) were repeated (paragraphs 24 to 27);

(2) determination of the entity which is required to provide compensation for damage caused by an infringement of Article 101 is directly governed by EU law, and is not a matter for the legal system of each Member State to determine for itself in accordance with the principles of equivalence and effectiveness (paragraphs 28, 33 and 34);

(3) the concept of an “undertaking” is used to designate the perpetrator of an infringement of Article 101, and since such liability is personal in nature, “the undertaking which infringes those rules must answer for the damage caused by the infringement” (paragraphs 29 to 31);

(4) in the context of imposition of fines by the Commission, the concept of an “undertaking” must be understood in accordance with the established jurisprudence to which we have referred (paragraphs 36 to 40); and

(5) the same principles are applicable to an action for damages (paragraphs 41 and 42).

47. The Court then gave its reasons for step (5) above:

“43. As stated in paragraph 25 of this judgment, the right to claim compensation for damage caused by an agreement or conduct prohibited by Article 101 TFEU ensures the full effectiveness of that article and, in particular, the effectiveness of the prohibition laid down in paragraph 1 thereof.

44. That right strengthens the working of the EU competition rules, since it discourages agreements or practices, frequently covert, which are liable to restrict or distort competition, thereby making a significant contribution to the maintenance of effective competition in the European Union...

45. As the Advocate General stated essentially, in point 80 of his Opinion, actions for damages for infringement of EU competition rules are an integral part of the system for enforcement of those rules, which are intended to punish anticompetitive behaviour on the part of undertakings and to deter them from engaging in such conduct.

46. Therefore, if the undertakings responsible for damage caused by an infringement of the EU competition rules could escape penalties by simply changing their identity through restructurings, sales or other legal or organisational changes, the objective of suppressing conduct that infringes the competition rules and preventing its occurrence by means of deterrent penalties would be jeopardised (see, by analogy, judgment of 11 December 2007, *ETI and Others*, C-280/06, EU:C:2007:775, paragraph 41 and the case-law cited).

47. It follows that the concept of “undertaking”, within the meaning of Article 101 TFEU, which constitutes an autonomous concept of EU law, cannot have a different scope with regard to the imposition of fines by the Commission under Article 23(2) of Regulation No 1/2003 as compared with actions for damages for infringement of EU competition rules.”

48. Counsel for BritNed fasten, in particular, on paragraph 45 of the judgment (quoted above) as showing that the CJEU has now endorsed the proposition that claims for cartel damages have a punitive, as well as a deterrent, purpose. In our view, however, this submission involves a misreading of paragraph 45. All the Court was saying, as reference to paragraph 80 of the opinion of Advocate General Wahl confirms, is that EU competition rules, regarded as a whole, provide for the imposition of “both public sanctions and private law damages” on the undertaking that permitted the infringement. As the Advocate General then said (*ibid*):

“Considering that public and private enforcement are complementary and constitute composite parts of a whole, a solution whereby the interpretation of “undertaking” would be different depending on the mechanism employed to enforce EU competition law would simply be untenable.”

In other words, the focus of his reasoning, and that of the Court in paragraph 45, was on the point that it would make no sense to give the concept of an “undertaking” a different meaning, depending on whether the remedies in question were fines imposed by the Commission or private actions for damages.

49. It is in our view entirely clear from the Court’s express endorsement of the principles in Kone, particularly in paragraphs 25, 26 and 44 of its judgment, that the Court was not intending to modify or extend its long-standing learning that the full effectiveness of Article 101 requires the availability of an action for compensatory damages to any person who has suffered harm caused by the relevant anti-competitive conduct. It is true that some earlier passages in the Advocate General’s Opinion could arguably be read as placing a greater emphasis than hitherto on the need to ensure “the full effectiveness” of Article 101, but even if he did intend in some respects to go further than the existing case law, we can find no indication that the Court accepted the invitation to do so. Furthermore, there is no support anywhere in his Opinion for the proposition that actions for damages are intended to have a punitive, as well as a deterrent, function. On the contrary, the Advocate General ended his discussion of general principles by saying, in paragraph 50:

“In the final analysis, therefore, the compensatory function of an action for damages for an infringement of competition law remains in my view subordinate to that of its deterrent function.”

50. In the light of this discussion, we would reject BritNed’s submission (reflected in paragraph 18 of its supplemental skeleton argument dated 16 May 2019) that the CJEU has in Skanska recognised “the punitive rationale behind compensation”. In our view, the CJEU has done no such thing.

BritNed’s first and fourth grounds of appeal: did the judge err in his general approach to assessing a competitive price, and/or did he err on the side of under-compensation?

51. Against this background, we can now turn to BritNed’s first and fourth grounds of appeal. As we have already noted, BritNed avers that the judge “erred fundamentally in his approach to assessing a competitive price”, and that he erred “on the side of under-compensation”, thus infringing the EU principles of effectiveness and equivalence. Our focus at this stage is on section B of the main judgment, where (as we have explained) the judge set out the principles which would guide him in assessing BritNed’s damages.
52. In his oral submissions, Mr O’Donoghue confirmed that BritNed was not seeking punitive damages, but he argued that the need to provide “full compensation” must now be assessed and given effect in light of the principles stated by the CJEU in Skanska. As we have explained, however, we do not consider that Skanska involves any

significant extension of the CJEU's standard jurisprudence on the subject of cartel damages, apart from the specific and important point which it decided on the liability of successor entities. We are therefore unable to agree that the judge's approach needs to be reconsidered or recalibrated in the light of Skanska, which was decided some five months after he had handed down the main judgment on 9 October 2018.

53. Mr O'Donoghue also referred us to an official communication from the European Commission on quantifying harm in actions for damages based on breaches of Article 101 or 102 TFEU, published on 13 June 2013 (OJ 2013/C 167/07). Under the heading "Compensation for victims of competition law infringements: the challenge of quantifying the harm suffered", this document said, at paragraph 3:

"A major difficulty encountered by courts, tribunals and parties in damages actions is how to quantify the harm suffered. Quantification is based on comparing the actual position of claimants with the position they would find themselves in had the infringement not occurred. In any hypothetical assessment of how market conditions and the interactions of market participants would have evolved without the infringement, complex and specific economic and competition law issues often arise. Courts and parties are increasingly confronted with these matters and with considering the methods and techniques available to address them."

54. In section 2.2 of the document, headed "National law and its interaction with the principles of EU law", the Commission gave this helpful further guidance:

"8. On the question of quantifying harm, to the extent that such exercise is not governed by EU law, the legal rules of the Member States determine the appropriate standard of proof and the required degree of precision in showing the amount of harm suffered. National rules will also assign the burden of proof and of the respective responsibilities of the parties to make factual submissions to the court. National law may provide for the burden of proof to shift once the claimant has proved a certain set of factors, and may provide for simplified rules of calculation and presumptions of a rebuttable or irrefutable nature. National law further determines to what extent and how courts are empowered to quantify the harm suffered on the basis of approximate best estimates or to make use of equitable considerations. All these national rules and procedures governing the quantification of harm should be laid down and applied in individual cases in a way that allows parties injured by competition law infringements to obtain full compensation for the harm suffered without any disproportionate difficulties; in no circumstances may they be less effective than in similar actions based on domestic law.

9. One consequence of the principle of effectiveness is that applicable legal rules and their interpretation should reflect the difficulties and limits inherent to quantifying harm in

competition cases. The quantification of such harm requires comparing the actual position of the injured party with the position this party would have been in without the infringement. This is something that cannot be observed in reality; it is impossible to know with certainty how market conditions and the interactions between market participants would have evolved in the absence of the infringements. All that is possible is an estimate of the scenario likely to have existed without the infringement. Quantification of harm in competition cases has always, by its very nature, been characterised by considerable limits to the degree of certainty and precision that can be expected. Sometimes only approximate estimates are possible.”

55. The judge did not (we think) refer to this guidance explicitly anywhere in his judgment, but as a very experienced competition lawyer he must have had it well in mind. Indeed, in his discussion of the Damages Directive at [19] to [23] he referred to, and set out, Recital (47) of the Directive which encapsulates many of the points previously made by the Commission. See too [12(8)(d)], where the judge said he had found value (as did Popplewell J in Asda) in the “Practical Guide on Quantifying Harm” also published by the Commission in 2013. Furthermore, the judge was bound, as are we, by the decision of this court in Devenish, which holds that the domestic remedy of compensatory damages, vindicated through an action for breach of statutory duty, satisfies the EU principle of effectiveness.
56. At various points in his submissions, Mr O’Donoghue suggested that the emphasis in the European case law on the need for full compensation, and its deterrent purpose, should encourage us to reconsider the requirements of English domestic law relating to the recovery of cartel damages which are mandated by the EU principles of equivalence and effectiveness. He submitted that the closest domestic analogies are to be found in actions for fraud or deceit, where English law has shown itself willing to make presumptions against wrongdoers, and to relax the normal rules on causation or remoteness of damages in order to achieve a just outcome and reflect the pernicious nature of the wrongdoing. He referred us to the famous case of Armory v Delamirie (1721) 1 Strange 505, where a chimney sweeper’s boy found a jewel and was tricked into handing it over to an apprentice of the defendant goldsmith. On an action in trover brought by the finder, the court ruled “that unless the defendant did produce the jewel, and show it not to be of the finest water, they should presume the strongest against him, and make the value of the best jewels the measure of their damages”.
57. We were not much assisted by these submissions. So far as effectiveness is concerned, it needs to be remembered that the EU principle will only be engaged if the relevant rules of English law would “make it in practice impossible or excessively difficult to exercise rights conferred by EU law”. That test deliberately sets the bar high, in a context where it is left to the domestic legal system of each Member State to lay down its own detailed rules governing the exercise of the right to claim cartel damages. Quite apart from the binding effect of Devenish, we do not think it can plausibly be argued that English law breaches the principle by enabling compensatory damages to be recovered through an action for breach of statutory duty. Nor do the rules for the assessment of such damages offend the principle, because the “broad axe” or “broad

brush” approach developed by the English courts allows ample scope for recognition of the difficulties of proof adverted to by the Commission in its 2013 guidance.

58. As to the principle of equivalence, if BritNed wished to mount an argument that the procedural rules of English law applicable to quantification of damages for breach of statutory duty infringed the principle, it would have been necessary to plead and then make good a detailed comparison between the rules applicable to quantification of cartel damages through an action of breach of statutory duty, on the one hand, and the rules applicable to allegedly similar actions for fraud or deceit, on the other hand. No such material was placed before us, nor did Mr O’Donoghue seek to develop any sustained submissions on the question, or to refer us to any of the modern case law dealing with the quantification of damages for fraud or deceit. In those circumstances, we are satisfied that it would be wrong for us to express any views on the question. It was simply not presented to us in a manner suitable for determination, and without full argument there would be obvious dangers in our expressing even a provisional or preliminary view. We merely observe that the burden of proof would be on BritNed to establish any breach of the principle, and in the absence of any such challenge the judge was in our view both entitled and obliged to proceed on the footing that the procedural rules of English law applicable to BritNed’s claim satisfied the principle of equivalence.
59. We now turn to the allegation that the judge erred on the side of under-compensation. This ground of appeal would not get off the ground if it were not for the judge’s citation of what Popplewell J said in Asda at [307], which for convenience we will repeat:

“...where the court is compelled to use a broad brush in the absence of precision in the evidence of the harm suffered by a claimant, it should err on the side of under-compensation so as (a) to reflect the uncertainty as to the loss actually suffered and (b) to give the defendant the benefit of any doubts in the calculation”.

The judge had previously said, at [12(7)], that Asda “helpfully sets out the approach that courts take to questions of quantification”. This may help to explain why BritNed appears to have taken the judge’s quotation of what Popplewell J said at [307] as an uncritical endorsement of it. It is, however, essential to read the quotation with the judge’s commentary which immediately follows it, ending with the statement:

“I do not take this dictum to mean that every calculation made in the course of assessment of damages must be reduced to avoid the risk of over-compensation.”

60. It follows that the judge did not give Popplewell J’s statement unqualified approval. What he obviously meant, as the whole of the passage which we have quoted at [30] above shows, is that where the court is compelled to use a broad brush, it must still base its quantification on the evidence before the court, and where reliance is placed upon estimates or assumptions, it cannot be assumed that they will inevitably hold good. In other words, caution is needed when using estimates or assumptions, and although their use is fully justified when there is good reason for the absence of more precise evidence, allowance must also be made for the element of uncertainty which is inherent in them.

So understood, the judge's observations were in our view unobjectionable, and on a fair reading of the passage as a whole we do not think that he was intending to draw anything more than that from Popplewell J's statement.

61. The judge also referred, in a footnote, to the two cases on which Popplewell J's statement was based, each of which was concerned with the assessment of a reasonable notional royalty payment as damages for an infringement of copyright. The first of those cases was the decision of Rimer J in SPE International Limited v Professional Preparation Contractors (UK) Limited [2002] EWHC 881 (Ch); the second was the decision of this court in Blayney v Clogau St David's Gold Mines Ltd [2002] EWCA Civ 1007, [2003] F.S.R. 360, where the leading judgment was delivered by Sir Andrew Morritt V-C with whom Rix and Jonathan Parker LJ agreed.
62. In the Blayney case, this court approved as "correct", at [34], the approach of Rimer J in the SPE International case, where after referring to the speech of Lord Shaw in the Watson Laidlaw case (to which we have already referred), and the gaps in the evidence before him, Rimer J had said, at [87]:

"I can see no reason why I cannot and should not assess [*compensation*] by reference to a notional royalty payable under a notional licence agreement. The evidence leaves me short of information enabling me to make a precise calculation, and I can inevitably only adopt a somewhat rough and ready one. That may work to SPE's disadvantage, since I also consider that I should err on the side of under-compensation. But inadequate compensation is better than none. In the circumstances of this case, I propose to take a broad axe and assess a sum of damages by reference to a notional royalty which will (a) reflect the uncertainty of the extent of the use of the infringing machines made by PPC, and (b) will also give the PPC the benefit of any doubts in the calculation."
63. In the previous paragraph of his judgment, also quoted by this court in Blayney at [32], Rimer J had commented:

"Compensation by reference to a notional fee for the unauthorised use would, in my view, ordinarily be regarded as a fair and proper basis on which to provide compensation. For the court to refuse any compensation at all simply because there was no evidence that machines of that sort had ever been licensed out for a royalty would appear to me to involve a denial of justice."
64. It is apparent to us from these passages that neither Rimer J nor Sir Andrew Morritt V-C was intending to lay down any general rule, but rather to explain how a notional royalty rate could reasonably be assessed on a rough and ready basis, where it was necessary to do so in order to provide compensation for interference with a proprietary right. Given the very different context of those cases, we respectfully doubt whether it was appropriate for Popplewell J to draw on them as authority for a general proposition that, where the court is compelled to use the broad brush, it should err on the side of

under-compensation. While there may be cases in which such an approach is appropriate, it is certainly not a general principle; and it is notable that when the Asda case went to the Court of Appeal, this court did not endorse Popplewell J's approach, albeit for reasons which did not involve consideration of what the "broad axe" principle requires: see [2018] EWCA Civ 1536, [2018] 5 C.M.L.R 9, at [314] to [319].

65. Furthermore, it is in our view unfortunate that the judge in the present case should have found assistance in what Popplewell J said in Asda at [307], when the anti-competitive conduct in that case was not remotely comparable to the concerted and dishonest worldwide cartel in which ABB participated. Any suggestion, in a case of the present type, that the court should "err on the side of under-compensation" is liable to give entirely the wrong impression, quite apart from the obvious point that the aim of the court should always be to give the right amount of compensation, without erring in either direction. All that said, however, we remain of the view that, when paragraph [12(9)] of the judgment is read as a whole, it does not betray any fundamental error of approach which vitiated the judge's performance of his task. The most that can be said, in our view, is that in considering the judge's approach to, and assessment of, the evidence before him, we should be alert to the possibility that he may have been unduly prone to give ABB the benefit of the doubt, or to err on the side of under-compensation, when (of necessity) wielding the broad axe or broad brush. (We observe, in passing, that the two metaphors appear to have become interchangeable in the authorities, although the images they conjure up are very different. For our part, we prefer to guide ourselves by reference to Lord Shaw's time-hallowed "exercise of a sound imagination and the practice of the broad axe", while reminding ourselves of the dangers of using any vivid metaphor to express a legal doctrine).
66. For all these reasons, we would dismiss BritNed's first and fourth grounds of appeal.

BritNed's second and third grounds of appeal: did the judge err in his assessment of the overcharge?

(1) Introduction

67. We now come to the broad central question whether the judge erred in his assessment of the amount of the overcharge. This question involves a number of sub-issues, which fall within the general scope of BritNed's second and third grounds of appeal which read as follows:

"(2) The Judge failed to consider the best evidence of the extent of ABB's lack of competitiveness (and BritNed's consequent loss) based on his mistaken finding that such evidence was not before him.

(3) The Judge wrongly accepted ABB's economic analysis by not considering whether its factual assumptions were correct and by making findings that were unsupported by evidence and at odds with the parties' common position."

68. No further elaboration is to be found in the grounds of appeal, but towards the end of his oral submissions in opening BritNed's appeal Mr O'Donoghue helpfully provided us with a single page "Aide Memoire" which was designed to encapsulate BritNed's main submissions on this central part of the case. The key points which we extract from this document are in summary as follows:

(1) ABB's very poor record in winning bids for comparable projects in the post-cartel period strongly suggests that in the "counterfactual" world, unaffected by the cartel, ABB would not have won the BritNed tender, because its rivals would have produced a cheaper and more competitive bid.

(2) The judge should therefore have considered whether, in the counterfactual, ABB would have won the BritNed tender at all, and should have concluded that it would not, because it was uncompetitive compared to its rivals. In failing to perform this exercise, the judge wrongly thought he had insufficient evidence at his disposal to reach a conclusion, he wrongly gave ABB the benefit of the doubt, and he failed to recognise that he did have the winning prices for most comparable post-cartel projects, which was alone sufficient to show that ABB was significantly uncompetitive on price.

(3) The judge's assessment of the counterfactual was also flawed, because (a) he looked only at the position of ABB, and (b) he relied on Mr Biro's analysis of ABB's post-cartel margins, in each case without assessing the effect of other more competitive suppliers offering a cheaper proposal.

(4) Quantum should then be assessed on the correct counterfactual hypothesis. The analysis by Dr Jenkins on behalf of BritNed of the post-cartel lost bids shows that in order to be competitive on projects like BritNed, ABB would on average have had to reduce its gross margin to 8%. ABB's actual margin on the BritNed contract was 18.6% which implies an overcharge of 11.52%. The legitimacy of Dr Jenkins' approach is shown by the fact that ABB carried out internally the same exercise of correcting its margins down to the competitive level in order to understand why it had lost bids, including on the part of the BritNed project which it lost.

(5) Because Dr Jenkins' evidence, properly understood, provides a sound basis for assessing the amount of overcharge, this court can substitute its own assessment for that of the judge, without the need for the matter to be remitted to him.

(2) The judge's approach and reasoning

69. Before dealing with these submissions, we must first explain, as briefly as we can but in enough detail to make this judgment intelligible, how the judge dealt with the evidence (both factual and expert) before him, and how he reached his main conclusions on the assessment of the overcharge.

(a) factual evidence

70. BritNed called two factual witnesses, Mr Matthew Rose and Mr Michael Jackson. Mr Rose was the managing director of BritNed, and the judge found him to have been

centrally involved in the BritNed project between July 2005 and October 2007. The judge regarded him as an impressive witness. Mr Jackson was a provider of consultancy services, through his company, and was engaged as an independent contractor to lead BritNed's negotiation team. The judge found him to be an honest witness.

71. ABB called five witnesses of fact, of whom only one (Mr Hans-Åke Jönsson) knew of the cartel and ABB's participation in it. Mr Jönsson worked for ABB between 1982 and 2009, when he left the company as a consequence of his involvement in the cartel. At the relevant time, he was the general manager of ABB's high voltage cables business, and the manager of ABB's cables factory in Karlskrona, Sweden. The judge did not consider Mr Jönsson to be a dishonest witness, but found that throughout his evidence he sought to minimise the effect of the cartel and of ABB's (and his) role in it so far as he possibly could: see [44]. His evidence therefore needed to be treated "with a relatively high degree of caution": [46].
72. The judge expressly found, in relation to the other four ABB witnesses of fact, that they had no knowledge of the cartel: see [29]. The most senior of these was Mr Peter Leupp, who at the relevant time was the head of ABB's Power Systems division based in Switzerland. ABB's cables business formed part of this division. The judge found that Mr Leupp was "in a high-level position within ABB", and that he would have relied on others to brief him on the details of the BritNed project. Those briefing Mr Leupp would have included Mr Jönsson, although Mr Jönsson did not report to him directly, but to an intermediate manager: [49]. The judge found Mr Leupp to be a "precise, clear and articulate witness", whose evidence was reliable: [51].
73. Mr Magnus Larsson-Hoffstein was a project manager, who was centrally involved in the BritNed tender process at an intermediate level: he had a team of people under him, working on the tender, but there were several people above him within the organisation (including Mr Jönsson) to whom he reported directly or indirectly: [57]. The judge found him to be "a transparently honest witness, who provided [*him*] with clear insight into the way in which ABB put together tenders and conducted its negotiations": [59].

(b) documentary evidence

74. The judge had well in mind that the documentary evidence emanating from ABB was deliberately sparse, because the practice of those engaged in the cartel for ABB (including Mr Jönsson) had been to keep as few records as possible. The judge quoted an extract from Mr Jönsson's cross-examination by Mr O'Donoghue which brought out this point very clearly. The judge also found that meetings between the cartelists took place under the cover of legitimate business occasions, such as international cable-makers' conferences: [65].

(c) expert evidence

75. The judge heard evidence over six days from Dr Jenkins and Mr Biro, each of whom had produced two reports. There was also a joint statement by them dated 12 December 2017 ("the Joint Statement"). Each expert was cross-examined for just over two days. The judge found them both to be "extremely impressive witnesses": [75].
76. Dr Jenkins is a professional economist who specialises in the field of competition economics. She is a co-author of a textbook on the application of economics to

competition issues, now in its second edition, published in 2016 by Oxford University Press. She has experience in a wide range of sectors and industries, including in particular the energy sector.

77. Mr Biro is a founding member and director of Frontier Economics Limited, a consultancy which specialises in economic analysis.

(d) the nature of the operation of the cartel

78. The judge provided a helpful overview of the general nature and operation of the cartel, derived from findings in the recitals to the Decision, from which we quote the following extract:

“81. The Cartel had its genesis in a perceived excess of capacity amongst cable suppliers. Although there were calls to reduce existing excess capacity, the Cartel sought to deal with this problem by maintaining price levels and allocating bids.

82. Essentially, the Cartel operated on a territorial basis, using a “home territory” principle. Thus, Japanese and Korean producers would not compete for power cable projects in the European home territory and Europeans would not compete for power cable projects in the Japanese and Korean home territories.

83. Within these territories, there was further territorial allocation. The Baltic and North Sea area was allocated to ABB and (to some extent) Nexans. The Mediterranean area was divided between Prysmian and Nexans. But there were *ad hoc* exceptions to this territorial approach and friction was generated when multiple parties sought the same contract.

...

85. The Cartel had, within its allocations, “compensation” mechanisms to ensure “fairness”. Thus, if one member of the Cartel forwent a particular opportunity to bid (either by not bidding at all or by putting in an uncompetitive bid), that member would in due course receive “compensation” (generally in the form of being the favoured bidder in another project) ...

86. This, of course, involved keeping track of allocations and monitoring who got what.

87. In order to allocate projects to particular cartelists, it was, of course, necessary to exchange information regarding bids, so that the cartelists who were not to succeed could (if they were going to bid) ensure that their bids were appropriately unattractive.

88. The Cartel involved a great many meetings, although not necessarily all the cartelists attended all of the meetings...

89. Although the Cartel had clear objectives, there were internal conflicts, rivalries and cheating (in the sense that a cartel bid competitively for a project not allocated to it by the Cartel).”

79. Under the sub-heading “ABB and the Cartel”, the judge recorded at [90] that ABB was not in the cartel from the beginning but started to participate in it between April and June 2000. Other members of the cartel considered ABB’s participation important.
80. According to Recital (563) of the Decision, the level of participation of ABB in the cartel was “lower than that of the core players”, but “its deep involvement in many of the Cartel activities as set out in Recital (493) and its participation in many contacts and meetings do not qualify ABB as a *fringe player*.”

(e) the characteristics of submarine cables

81. In the next section of his judgment, running from [97] to [110], the judge makes a number of technical points about the nature of submarine cable projects. The first of these points is the very significant difference between submarine and underground cable projects, as explained in the largely unchallenged evidence of one of ABB’s witnesses, Mr Röstlund. In summary, the cable structure is different according to whether the cable is for underground or submarine use; submarine cables are manufactured on a bespoke basis, whereas underground cables tend to be bought “off the shelf”; submarine cables are more complex to manufacture than underground cables; the installation requirements for the two types of cables are also different; and the supply chain is different. On the last of these points, Mr Röstlund’s evidence was that submarine cable projects at higher voltage levels are almost always supplied as so-called “turnkey” projects, in which the cable manufacturer takes responsibility for the end-to-end delivery of the whole project. That is not the case for underground cable projects. Finally, the competitive environment is also different for the two types of projects: since underground cables are much easier to manufacture, the number of firms actively competing to supply them is significantly larger. The judge accepted Mr Röstlund’s evidence about the differences between submarine and underground cable projects: see [102].
82. The BritNed cable was a high voltage direct current (“HVDC”) cable, which meant that there needed to be converter stations at each end of the cable, so as to convert the current from and back to the alternating current used in the domestic grids. Given the length of the BritNed cable (260 kilometres), and the 1000 MW power rating, it was inevitable that an HVDC cable would be used, the primary reason for this being that DC cables have far lower transmission losses when compared to AC cables. The level of transmission losses is also affected by the diameter of the copper core of a cable. The thicker the cable, the lower the level of transmission losses, but the cost of the cable is correspondingly greater.

(f) the history of the BritNed tender

83. In section F of his judgment, running from [111] to [170], the judge described the history of the BritNed tender, from its genesis as a joint venture between National Grid and TenneT with the purpose of linking the UK and Dutch electricity grids so that providers in one jurisdiction could meet demand in the other. The Interconnector project was a separate business from the regulated businesses of National Grid and TenneT,

and for various reasons was an inherently risky investment. This meant that the business case for the project had to meet specified financial criteria, and had to demonstrate an internal rate of return of a specified (and confidential) level. Tender prices were sought for three lots: Lot 1, representing the procurement, construction and commissioning of the two converter stations; Lot 2, representing the procurement, installation and commissioning of the HVDC cable system; and Lot 3, being the combination of Lots 1 and 2. Suppliers were also asked to tender for three transmission capacity options: 700MW (later changed to 650MW), 1000MW and 1320MW. Mr Rose was in overall charge of the Interconnector procurement for BritNed, and he was responsible for bringing in Mr Jackson to lead the negotiations.

84. Initial expressions of interest and tenders were received from: (a) two non-cartel companies (Siemens and Areva) in respect of Lot 1 alone; (b) two cartel companies (Nexans and Prysmian) in respect of Lot 2 alone; (c) ABB in respect of Lots 1, 2 and 3; and (d) a consortium of Prysmian and Siemens in respect of Lot 3 alone. No expressions of interest were received from any Asian manufacturers.
85. Within ABB, the tender team was divided between the cables element and the converter element. Mr Jönsson was in charge of the cable side, but he reported to Mr Leupp and delegated to Mr Larsson-Hoffstein, neither of whom knew of the cartel. ABB's tender for the cables element of the project was prepared on a "costs plus" basis, with a margin added to the costs, risks and contingencies directly attributable to the supply. Mr Larsson-Hoffstein was responsible for putting together the initial pricing proposal for this part of the project. It is convenient to quote here the important findings which the judge later made in relation to Mr Larsson-Hoffstein's performance of this task:

"259. I consider that the direct costs recorded in the [*product pricing models*] represent an honestly and competently compiled statement of those costs, and that they were not inflated by the direct influence of Mr Jönsson or (for that matter) anyone else within ABB. I reach this conclusion essentially because I considered Mr Larsson-Hoffstein to be not only a transparently honest witness, but also an extremely competent compiler of the costs of the Cable element of the ABB tender. I do not consider that he would have allowed that process to be distorted and if he had been required to include within the Cable element of the tender a cost that he did not consider to be justified, he would have told the court. Mr Larsson-Hoffstein was not cross-examined, in any detail, on exactly how he had compiled the BritNed tender. The bulk of his evidence was given in response to questions from me, set out in paragraph 132 above.

260. I find that Mr Larsson-Hoffstein's pricing of the direct costs of the BritNed Interconnector Cable bid were unaffected by the Cartel. They were properly calculated, competitive, costs. I also consider that any margin added by Mr Larsson-Hoffstein to represent risks relating to the project specifically (i.e. to the direct costs being underestimates or to contingencies regarding direct costs) were properly added and were not inflated."

86. At a relatively early stage, Areva and Prysmian dropped out of the tender process, while Nexans submitted tenders for Lot 2 which were deliberately priced higher than ABB's bids. Nexans also failed to meet BritNed's required deadline for completion of the project. Thus the only contenders left realistically in the running were Siemens and ABB in respect of Lot 1, and ABB alone in respect of Lots 2 and 3 (without a consortium partner with cable expertise, Siemens was unable to bid for the combined package). According to the evidence of Mr Rose, which the judge accepted as an accurate statement of BritNed's position in June/July 2006:

“This, in addition to Nexans' non-compliant tender submission, was a significant disappointment, given that it removed any competition for the cable element of the Project from the very outset and inevitably limited our scope for manoeuvre thereafter, in particular the ability to maintain any competitive pressure on ABB.”

87. At this stage, BritNed decided to proceed with the 1000MW capacity option. Best and final offers were received from ABB and Siemens in March 2007. BritNed was dissatisfied with ABB's offers, one aspect of which was that ABB quoted a lower price for the cable element as part of Lot 3 than it did for Lot 2. It was therefore clear that ABB was willing to offer better value if it could obtain the entire job, rather than the cable element alone. This differential was carried over into ABB's last and final offer on 28 March 2007, in which it offered a reduction of €10 million on the cable element of Lot 3, should it be chosen to provide the combined package.
88. Final price negotiations on the cable element then took place in April 2007. At a meeting on 18 April, ABB agreed to provide the cable in Lot 2 for the same price as it had offered for Lot 3. BritNed regarded this concession as “incomprehensible”, but the judge commented in [166]:

“Knowing what they did, those on BritNed's side of the negotiations obviously regarded this as an inexplicable error on the part of ABB. But, of course, ABB did not or did not necessarily know what BritNed knew. Instead of a mistake, the reduction in the Lot 2 price might reflect a concern on the part of ABB that it was not guaranteed to win even Lot 2. This was a decision made not by Mr Jönsson, but by Mr Leupp.”

89. Eventually, BritNed decided to proceed with Siemens on Lot 1 and with ABB on Lot 2. A letter of intent was agreed with ABB on 27 April 2007, in which the total price of the cable contract was provisionally agreed at €263 million (exclusive of VAT). The prices which remained provisional concerned the cost of metals, contractors all risks (“CAR”) insurance and currency. This remained the position in the final contract between ABB and BritNed dated 21 May 2007, with a total contract price of €263,072,231. It was agreed that the cost of the provisional items would be adjusted in due course to reflect their actual cost. These changes were reflected in a deed of settlement, dated 15 December 2011, which increased the contract price to €280,749,582.72.

(g) competitive pressures during the negotiation process

90. In section G of his judgment, running from [171] to [284], the judge sought “to articulate the competitive pressures operating on ABB and BritNed” during the process of the negotiations between them. In particular, he considered the extent to which BritNed was affected by the cartel; the extent to which BritNed was able to deal with the effects of the cartel; and the extent to which ABB was able to exploit those effects. The judge’s focus at this stage was on the negotiation process, so he deliberately left until later the other possible effects of the cartel which he termed “baked-in inefficiencies” and “cartel savings”.
91. The first cartel effect considered by the judge was the limited response from bidders. Interest in the Interconnector project was thin, and the judge found that a major reason for this was the existence of the cartel. In particular, he found that this explained the absence of any bids from Asian suppliers, and the absence of any real interest from Prysmian and Nexans: [173]. Because the response to the invitation to tender was thin, BritNed “recognised that it would be less able to play-off one supplier against another” and “was significantly hampered in its ability to negotiate”: [174] and [175].
92. Despite these handicaps, however, BritNed was able to exert some commercial pressure on bidders. The judge identified the significant factors that BritNed was able to deploy, including (for example) ensuring that Siemens continued to bid for the converter element of the project, stressing the risk that the project would not go ahead if the price were too high, stressing ABB’s lack of its own cable laying vessel, and exploiting the fact that ABB appeared to need the work.
93. The judge then explored the advantages that ABB derived from its participation in the cartel. In this connection, the judge emphasised at [214] that it would be an error to regard ABB as “monolithic” and that two of the major participants in the framing of the BritNed bid, namely Mr Leupp and Mr Larsson-Hoffstein, did not know about the cartel or ABB’s participation in it. On the other hand, Mr Jönsson clearly was aware of the cartel and its potential effect on the competitive process, and the judge was prepared to make the same assumption in relation to Mr Pääjärvi, who was in charge of the converter element of the bid (and did not give evidence at the trial). As the judge explained at [225], it was “very difficult to get any sense of how the various individuals worked together during the course of the BritNed tender”, but he accepted that “knowledge of the Cartel was embedded within ABB, and it is important not to lose sight of this fact”.
94. The judge then considered what knowledge Mr Jönsson (and others “in the know” at ABB) would have had about the likely absence of competition from Asia, and the level of competition from European suppliers of cables. He concluded that they would have appreciated that ABB would have a “clear run” in relation to Lot 2, but that ABB would face a risk of real competition in relation to Lot 1 (as the participation of Siemens in the tender process confirmed): [247] and [248]. As to how this knowledge might have been deployed within ABB, the judge accepted that any participant in a cartel would wish to benefit from it, but pointed out, at [250], that such benefit might consist of obtaining work properly tendered for, as opposed to obtaining work at an inflated tender price, particularly since the cartel originated as a response to under-capacity. It was not therefore a necessary consequence of the cartel that tender prices would be inflated by

direct or indirect influence on the bid (leaving aside questions of baked-in inefficiency and cartel savings): [251].

95. The judge then considered the possibility of cartel-inspired direct influence on the level of ABB's bid for the cable element, but rejected any possibility of deliberate inflation of direct costs, essentially because of the favourable view he formed of Mr Larsson-Hoffstein's evidence: see [85] above. The judge also rejected specific contentions that the tender costs of copper and CAR insurance had been inflated: [264]. As to the level of ABB's common costs (i.e. its selling, general and administrative, or "SGA" costs), the judge felt that he could not exclude this possibility on the basis of the factual evidence, but deferred further consideration of it until section I of his judgment, after he had described the analysis of the two experts: [272] and [284(3)(b) and (c)].

(h) the experts' analysis

96. The judge's description of the rival approaches of the two experts, and his analysis and comparison of them, runs from [285] to [421].
97. Dr Jenkins' general approach was founded on her expectation that the cartel would lead to higher prices, when compared with the competitive counterfactual. She therefore compared the price of projects during the cartel period with the price of projects after the cartel. For this purpose, she had to assemble a dataset of "during" and "after" projects that was sufficiently large and homogenous to enable meaningful statistical analysis. In view of the differences between underground and submarine cable projects, it was also necessary for Dr Jenkins' model to take account of those differences by a process of "normalisation". Having assembled what she considered to be a reliable dataset, it was then possible for Dr Jenkins to conduct a regression analysis in order to estimate the effect of the cartel on the prices of cable projects, using standard statistical techniques for this purpose.
98. The judge explains Dr Jenkins' methodology in considerable and helpful detail, but since he concluded that her approach was unreliable, and there is no appeal against his conclusions on that issue, we need not examine it further. It is enough to note that her dataset comprised a total of 92 successful ABB tenders, for both underground and submarine projects, and from both the cartel and the post-cartel periods. Dr Jenkins did not include any unsuccessful bids by ABB in her analysis. Her conclusion, as recorded by the judge at [320], was that "a reasonable and reliable estimate of the overcharge suffered by BritNed as a result of the cartel in HV cable projects is 25.4%".
99. The approach of Mr Biro was summarised by the judge as follows:

"321. Mr Biro used what he called three complementary methodological approaches to assess what the price of the BritNed project would have been, but for the Cartel:

- (1) A price comparison analysis controlling for ABB's actual costs of supply.
- (2) An econometric analysis of the relationship between prices and ABB's actual costs of supply.

(3) A price comparison analysis which does not directly control for ABB's actual costs of supply, but instead uses proxy measures based on the technical characteristics of the projects.

322. The differences between Dr Jenkins' approach and Mr Biro's approach are considered in greater detail below, but one difference stands out immediately. Whereas Dr Jenkins sought to ascertain the overcharge generally caused by the Cartel by comparing cartelised and post-Cartel projects (including underground as well as submarine projects), Mr Biro compared the price of the BritNed Interconnector project alone with the prices of other submarine (not underground) power cable projects in the post-Cartel period."

100. Of Mr Biro's three complementary approaches, it is enough to say that his first price comparison analysis was the primary one, and he found nothing in his second or third approaches which caused him to modify the conclusions derived by him from the first. The essence of the first approach lay in comparing the gross margin that ABB expected to achieve on the BritNed project with the margins that ABB sought to earn on comparable submarine power cable projects for which it tendered after the cartel. If the result of this "margin analysis" showed that the margin on the BritNed project was not systematically higher than the margins on comparable post-cartel projects, then Mr Biro would conclude that the price of the BritNed project was no higher than would have been expected in a competitive environment, and would therefore provide no evidence of an overcharge.
101. In order to perform this exercise, Mr Biro (like Dr Jenkins) needed to identify a pool of comparable projects. Unlike Dr Jenkins, however, he did not consider that underground cable projects were suitable comparators. Nor did he consider it necessary to confine his pool of post-cartel projects to those in which ABB was the successful bidder. In calculating the gross margins which he used for the purposes of his analysis, however, Mr Biro did not simply adopt the gross margins reported by ABB, but to ensure consistency used a measure of his own devising across all relevant projects. He also excluded from his calculations of gross margin any cost item he did not consider to be directly attributable to the specific project in question.
102. The outcome of Mr Biro's margin analysis is summarised in a table set out in the judgment at [331]. In short, the margin on ABB's winning bid for the BritNed project was 18.6%, while the average margin on all the post-cartel submarine projects analysed by Mr Biro was 21.1%. There were fifty three such projects, sub-divided into five categories. The first of those categories (post-cartel submarine interconnectors HVDC mass-insulation ("MI") turnkey projects) comprised ten projects, of which ABB lost nine and was successful in only one, with an average margin of 17.6%. At the judge's request, Mr Biro also added to his analysis fourteen submarine projects dating from the cartel period, apart from the BritNed project. All of those projects were won by ABB, at an average margin of 26.7%.
103. The judge summarised Mr Biro's conclusion at [333]:

“Mr Biro’s conclusion was that the margin in the case of BritNed was comparable – and, if anything, lower – than the margin for post-Cartel projects. In short, Mr Biro did not identify any material Cartel effect.”

104. The judge began his critical assessment of the approaches of the two experts by examining the reliability of the data produced by ABB, in the light of certain criticisms made by Dr Jenkins. He found no reason to depart from his previous conclusion that ABB’s direct costs were reliable and could properly be relied upon for expert analysis: [360]. He was also satisfied that Mr Biro’s analysis dealt adequately with possible concerns about common costs, because Mr Biro’s gross margin comprised the difference between direct costs and total cost. The gross margin could therefore be a reliable indicator of a cartel effect, given the essential reliability of direct costs: [361] to [364].
105. The judge then commented on “baked-in inefficiencies”, by which he meant structural inefficiencies which are a product of the natural inefficiency of cartels, of which the cartelists may not even be aware. Such inefficiencies were referred to at trial as “baked-in inefficiencies”, and the judge adopted that terminology. Mr Biro’s evidence was that he had found “no reason to believe” that ABB’s reported costs exceeded those which would have prevailed in the absence of the cartel, but the judge considered this “a peculiarly weak formulation” and concluded that Mr Biro’s analysis would not pick up baked-in inefficiencies reflected in ABB’s direct costs: [367]. In the post-cartel period, such inefficiencies should in principle be removed by competition, and the judge was willing to infer that this happened where ABB made a successful post-cartel tender. On the other hand, an unsuccessful post-cartel tender might be unsuccessful for a variety of reasons, one of which might be baked-in inefficiencies: [368].
106. The judge also dealt briefly with “cartel savings”, by which he meant savings to the cartelists arising out of the fact that the cartelists do not have to incur the full costs of competition: [369]. As the judge pointed out at [370], such savings might arise in many ways, for example by incurring fewer costs on a tender that was intended to fail than would have been incurred on a competitive tender.
107. The judge then returned to the important point that Mr Biro’s dataset of projects included bids lost by ABB in the post-cartel period. The judge commented on this as follows:

“372. ... Mr Biro considered that losing bids provided valuable economic data regarding what ABB believed to be a competitive price. He considered that there was no economic reason to believe that margins associated with losing bids should have been systematically higher than those associated with winning bids in the post-Cartel period.

373. I accept that this may be true as regards margins that ABB hoped to earn. However, I consider that whilst it is appropriate to consider these losing bids, because there is some probative value in them, the fact that ABB lost these bids cannot be

disregarded. Inferentially, these bids were losing bids because they were inferior – including inferior as to price – to the winning bids. Of course, having no information about the winning bids, all that can be done is to note the fact that – for some reason – these losing bids were uncompetitive. One reason might be the existence of baked-in inefficiencies.”

108. The judge also commented on the additional data which he had asked Mr Biro to provide in relation to successful cartel-period submarine projects tendered for by ABB. As we have noted, the gross margin for those projects was 26.7%. This was some 5.6% higher than the average gross margin for post-cartel submarine projects, at 21.1%. This was indicative of increased gross margins during the cartel period, but as the judge pointed out 26.7% was also significantly higher than ABB’s gross margin on the BritNed project itself of 18.6%: [374].
109. The judge then considered the relative reliability of the experts’ approaches. For present purposes, it is enough to quote the judge’s conclusions at [416] and [417]:

“(1) The reliability of Mr Biro’s model

...

416. In conclusion, Mr Biro’s margin analysis represents a reliable tool for assessing the overcharge. The analysis cannot be followed blindly, and I do not propose to follow it blindly, having well in mind its limitations. But I regard the margin analysis as helpful evidence that I must take into account in my overall assessment of the extent of the overcharge, which I consider in Section I below. So far as Mr Biro’s two complementary analyses are concerned, I see them as just that: confirmatory of the margin analysis, but essentially no more helpful than that ...

(2) The reliability of Dr Jenkins’ model

417. On the other hand, Dr Jenkins’ regression analysis is insufficiently reliable to be used in any way at all. In my judgment, Dr Jenkins has defined too complex a regression, with the result that the outcomes of her model are so unspecific that they simply cannot be relied upon:

(1) The proxies for cost are, in my judgment, insufficiently aligned with the actual – highly individual – costs of submarine projects.

(2) That problem is exacerbated by the inclusion of underground projects, which are essentially different from submarine projects.

(3) The unreliability of the model is further exacerbated by the time trend and order backlog variables.

I regard these issues with Dr Jenkins’ model as sufficiently fundamental to its reliability as to justify an entire disregard of that model for the purposes of assessing whether there was an overcharge.”

110. The judge appreciated the significance of this conclusion, and said he had not reached it lightly: [418]. As a cross-check, he then discussed three matters which in his view supported his conclusion, in [418(1) to (3)].
111. The judge ended this section of his judgment by explaining why, if both models had been equally reliable, he would still have preferred Mr Biro’s:

“420. ... The reason... is very simple, and can be shortly stated. Submarine cable projects are bespoke and unique, both in their specification and in the manner in which they are negotiated... It is clear that the BritNed negotiating team conducted negotiations in a skilful and hard-nosed manner, which may well have had an effect on ABB’s margins. That may not be the case with other projects. Equally, the client in the case of other projects may not (unlike BritNed) have the option of simply not proceeding with the project.

421. In short, given the bespoke and unique nature of these projects, I find that an overcharge calculated by a model that is explicitly averaging across multiple projects to be an inappropriate one. I much prefer, all things being equal, an approach that focusses on the specific project in relation to which compensation is sought.”

(i) the judge’s assessment of the overcharge

112. The judge dealt with this issue in section I in his judgment, running from [422] to [465]. He began by holding that BritNed’s cause of action was made out, because the necessary causal relationship was established between the cartel and the contract between BritNed and ABB for the supply of the Interconnector. The judge expressly found, at [428(2)], that “[b]ut for the Cartel, BritNed would...have been presented with a different commercial environment, with different tenderers tendering on different terms.” He continued:

“429. Those facts are sufficient for me to hold that the cause of action is made out. Of course, this says nothing about the quantum of BritNed’s loss. The process of quantification may show substantial damages (as BritNed contends) or it may show nominal damages (as ABB contends). It is to this process of quantification that I now turn.”

113. In his introduction to the quantification of the overcharge, the judge accepted BritNed's submission that the cartel represented "an extremely serious breach of competition law", so far as the general effects of the cartel in the market were concerned: [431]. He continued, rightly in our view:

"But that is not the issue before me. I am concerned with the much narrower issue of the overcharge to BritNed arising out of a single, specific transaction: the contract for the supply of the BritNed Interconnector. Sections D to H above have brought the focus to this specific transaction. Whilst, obviously, the general operation of the Cartel is highly material (see Section D), it represents the starting point and not the end point of the quantification process."

114. The judge also summarised his view of the totality of the evidence:

"435. In light of the totality of the evidence, I have concluded that some persons within ABB knew of the Cartel and knew that ABB would face limited competition when tendering for the BritNed Interconnector, that knowledge did not translate into a direct influence on direct costs. I have found that the direct costs in relation to ABB's bid for the BritNed Interconnector were honestly and competently compiled with a view to putting forward a competitive bid.

436. However, I have also concluded that:

(1) Within ABB, Mr Jönsson and Mr Pääjärvi were in a position to influence upwards the level of common costs that ABB allocated to the BritNed tender. Of course, whether they were in fact able to do so depends not simply on their position within ABB, but on the nature of the negotiations ABB had with BritNed itself. Although I have found that the Cartel caused competition for the Interconnector to be materially diminished, nevertheless BritNed was able to bring some competitive pressure to bear on ABB. The question is whether that was sufficient to enable BritNed to obtain a competitive price and avoid an overcharge.

(2) There was an indirect influence over BritNed's "hunger" to be competitive, in that this hunger was abated by a sense within ABB that – so far as the BritNed tender was concerned – ABB faced less competition than it might otherwise have done. Again, the question arises whether BritNed was able to bring competitive pressure to bear on ABB.

(3) There was a potential for baked-in inefficiencies and cartel savings."

115. The judge then considered the potential for an overcharge in each of the three areas which he had identified, beginning with the question whether there was “a directly influenced overcharge in ABB’s common costs”. The judge discussed this question at [438] to [444], concluding that “the common costs for the BritNed project did not contain an overcharge due to the direct influence of persons aware of the Cartel and involved in the BritNed tender”: [444].
116. In reaching this conclusion, the judge found that the absence of competition hampered BritNed’s ability to put ABB under commercial pressure, but that BritNed’s negotiating position was nevertheless “not without its strengths”. In particular, “the very skilful deployment of Siemens as a competitor to ABB put ABB under very real commercial pressure” and provided “an excellent illustration of BritNed’s ability to get a good deal”: [441]. The judge also emphasised the role of Mr Leupp, concluding that his decision to give away a €10 million discount in relation to Lot 2 could not be explained away as a mistake, but rather reflected the fact that he “misappreciated (quite understandably) the competitive situation and felt that ABB was not only at risk of losing Lot 1 and so Lot 3, but also Lot 2”: [441(5)]. The judge quoted from Mr Leupp’s written evidence that:

“It was undoubtedly a painful decision to give this discount in relation to Lot 2 given the smaller scope of that Lot compared to Lot 3, and a real stretch for ABB, but I considered it to be just about worthwhile in order to at least win Lot 2 rather than walk away from the negotiations with nothing.”

The judge then commented:

“From the mouth of Mr Jönsson, I would not have accepted this evidence. Mr Leupp is a different proposition. I found him to be a witness of truth, who was unaware of the Cartel and so could easily have misappreciated the competitive situation. That is exactly what I find he did. Mr Leupp’s version of events was tested in cross-examination and was maintained by him.”

117. The judge continued:

“442. The conclusion that I draw is that when making decisions regarding pricing for the BritNed bid – including the allocation of common costs – Mr Jönsson and Mr Leupp saw things quite differently, and Mr Jönsson did not explain to Mr Leupp why he (Mr Leupp) might be misreading the situation. As a result, because Mr Leupp was in overall control of ABB’s bid for the BritNed tender, ABB acted in a way unusual for a cartel: it acted competitively, simply because that was the mind-set of the individual in charge.”

118. The judge next turned to “baked-in inefficiencies”, which he discussed at [445] to [453]. The judge felt able to do this, despite the absence of any expert evidence directed to the issue, and the fact that this was not a head of loss for which BritNed had specifically contended. He said he was prepared to take account of inefficiencies in ABB’s design, which might result in a competitor being able to do the same job for less, where such inefficiencies emerged from the evidence, even if there was no expert to speak to it: [447]. Whether the judge was entitled to proceed in this way has not been challenged before us. The steps in the judge’s reasoning were briefly as follows:
- (a) there was some evidence (detailed in [448]) that on some projects ABB’s technical solutions involved the use of more copper than another supplier would use, i.e. ABB’s cable was thicker;
 - (b) the effect of the cartel was to insulate ABB from inefficiencies in its own product, and in a properly competitive environment ABB would have faced competition from suppliers using less copper;
 - (c) in those circumstances, ABB would either have lost the contract to one of its rivals, or would have had to absorb the additional costs of its own less efficient solution; and
 - (d) there was accordingly an overcharge to BritNed arising from this baked-in inefficiency.
119. The judge then assessed the level of this overcharge on a broad brush basis as the cost of the additional copper which ABB would have absorbed in order to retain the bid. Drawing on a suggestion by Dr Jenkins, the judge considered the appropriate measure to be a 15% saving in the copper content of the cable, to which he assigned a monetary value of €7,516,639: see the calculation in [453].
120. The judge then turned to cartel savings, which we will have to explain in more detail in the context of ABB’s cross-appeal. He concluded that 1.9% of the overcharge was attributable to the cartel savings he had identified, resulting in an overcharge of €5,492,929: [458].
121. Finally, the judge rejected the suggestion that indirect influence by Mr Jönsson and others with knowledge of the cartel might support a finding of an overcharge for that reason: [459] to [463].
122. Accordingly, the judge’s overall finding, in [464], was that the contract price was inflated by an overcharge in the total amount of €13,009,568, comprising the sum of the amount which he had found to be attributable to the excessive copper content of the cabling and the cartel saving in ABB’s common costs.

(3) The overcharge: discussion and conclusions

123. As will now be apparent, we have found it necessary to review the parts of the main judgment dealing with the assessment of the overcharge at considerable length, but we make no apology for doing so. In order to ascertain the extent of the loss caused to BritNed by the cartel, as reflected in the price which it paid for the cable element of the Interconnector project, it was necessary for the judge to conduct a wide-ranging and

multi-factorial evaluation of all the evidence deployed before him during a four week trial. It would be wrong in principle, and unfair to the judge, to pick out isolated features of his approach and reasoning, without placing them within the broader context of the full picture which he so painstakingly constructed. It is also essential for us to keep firmly in mind the well-known principles of appellate restraint in relation to questions of fact, including the evaluation of primary facts and the inferences to be drawn from them, which have been emphatically restated in a plethora of recent cases of the highest authority. Those principles apply just as much to cases in the field of competition law as they do in other areas of civil litigation. They also apply to the assessment of expert opinion evidence no less than they do to findings based on the evidence of witnesses of fact.

124. There was no disagreement before us about those principles, so we need not rehearse them at length. As has now become customary, we were referred to the observations of Lewison LJ in Fage UK Limited v Chobani UK Limited [2014] EWCA Civ 5, [2014] E.T.M.R 26, at [114] to [115], where he referred to the reasons for this approach as including:

“(i) The expertise of a trial judge is in determining what facts are relevant to the legal issues to be decided, and what those facts are if they are disputed.

(ii) The trial is not a dress rehearsal. It is the first and last night of the show.

(iii) Duplication of the trial judge's role on appeal is a disproportionate use of the limited resources of an appellate court, and will seldom lead to a different outcome in an individual case.

(iv) In making his decisions the trial judge will have regard to the whole of the sea of evidence presented to him, whereas an appellate court will only be island hopping.

(v) The atmosphere of the courtroom cannot, in any event, be recreated by reference to documents (including transcripts of evidence).

(vi) Thus even if it were possible to duplicate the role of the trial judge, it cannot in practice be done.”

125. Equally familiar are the observations of Lord Reed JSC in Henderson v Foxworth Investments Limited [2014] UKSC 41, [2014] 1 WLR 2600, at [58] to [69], which include the following:

“62. Given that the Extra Division correctly identified that an appellate court can interfere where it is satisfied that the trial judge has gone “plainly wrong”, and considered that that criterion was met in the present case, there may be some value

in considering the meaning of that phrase. There is a risk that it may be misunderstood. The adverb “plainly” does not refer to the degree of confidence felt by the appellate court that it would not have reached the same conclusion as the trial judge. It does not matter, with whatever degree of certainty, that the appellate court considers that it would have reached a different conclusion. What matters is whether the decision under appeal is one that no reasonable judge could have reached.

...

67. It follows that, in the absence of some other identifiable error, such as (without attempting an exhaustive account) a material error of law, or the making of a critical finding of fact which has no basis in the evidence, or a demonstrable misunderstanding of relevant evidence, or a demonstrable failure to consider relevant evidence, an appellate court will interfere with the findings of fact made by a trial judge only if it is satisfied that his decision cannot reasonably be explained or justified.”

126. In our view, the short, and conclusive, answer to BritNed’s appeal on the assessment of the overcharge is that there are no grounds for an appellate court to interfere with the judge’s approach to the issue (leaving aside the question of cartel savings, to which we will have to return), or with his findings of primary fact, or with his evaluation of the totality of the evidence, including the expert evidence. The judge concluded that, on the unusual facts of this case, there was no demonstrable overcharge in the price agreed for Lot 2. In our judgment, this conclusion is one which was fairly open to the judge, and was not plainly wrong in the sense that no reasonable judge could have reached it. The conclusion is therefore unassailable.
127. We must now explain in more detail why we have concluded that the judge’s approach and reasoning on the overcharge issue were legitimately open to him. We begin with BritNed’s central complaint that the judge erred in his analysis of the counterfactual by not asking himself whether ABB would have won the tender at all, and by thus failing to conclude that ABB would not have won the tender because it was uncompetitive on price.
128. In their most recent written submissions, counsel for BritNed submit that the counterfactual winning price, in a freely competitive market, cannot as a matter of logic and principle be determined on the basis of ABB’s internal processes and costings during the cartel, or indeed after it ended, or on the negotiating strategies adopted by the parties during the tender process. The judge therefore started his analysis from the wrong premise, and his findings and analysis of the overcharge, to the extent they are based on ABB’s actual costs, pricing and negotiation during the tender, are redundant and uninformative. The judge, says BritNed, “was looking in the wrong place for the answer to the question of the counterfactual price”. His starting point ought to have been that the project allocation mechanism of the cartel had the inherent effect of reducing ABB’s appetite to offer lower prices. Further, the impact of this mechanism in the present case was particularly stark, because the project was expressly allocated

to ABB under the cartel, and (as the judge found) no other cable supplier submitted a competitive bid (that submitted by Nexans being deliberately uncompetitive). ABB therefore had a clean run, in that objectively it faced no real competition from any other cable supplier.

129. Against this background, submits BritNed, the judge was wrong to attach any significance to the commercial pressure that BritNed was able to exert on ABB, because it throws no light on what the position would have been in a fully competitive environment. Similarly, it is a fallacy to suggest that pressure applied to a monopoly supplier in a cartel can be taken as a proxy for, or equivalent to, the full competitive process in the absence of any cartel. The judge rightly accepted, at [173] and [175], that the competitive pressure on ABB in the counterfactual would have been greater than under the cartel, but this recognition was not reflected in the approach which he actually adopted.
130. We are unable to accept these submissions. The judge clearly had in mind the distinction between the situation in the actual and the counterfactual worlds, having correctly directed himself at [18] that the measure of the overcharge was “the difference between (i) the price agreed between ABB and BritNed and (ii) the price that would have been agreed – whether with ABB or by another provider – had the Cartel not operated”. In order to make this comparison, it is first necessary to know what the actual price was, and how it was arrived at. In that context, it was clearly open to the judge to make findings about the commercial pressure that BritNed was in fact able to exert on ABB. The judge also expressly recognised that competitive pressure in the counterfactual world would have been greater – indeed, the proposition is virtually self-evident – but that does not answer the question whether, on the particular facts of the present case, the price eventually agreed between ABB and BritNed for Lot 2 was in fact greater than it would have been in a fully competitive environment.
131. As the judge’s detailed description of the tender and negotiating process makes clear, the scope for the price actually agreed to have been affected by the cartel was greatly reduced, if not eliminated, by the fact that both Mr Leupp (who was in charge of the cable side of the tender process) and Mr Larsson-Hoffstein (who was primarily responsible for the direct costs reflected in the bid) were innocent parties who had no knowledge of the cartel, and who had every reason to prosecute the bid in a normal commercial manner. The judge was clearly entitled to find that they were both reliable witnesses of truth. He was also right to point out that the effect of an allocation-based cartel need not always be that a tender is made at an uncompetitive price. In some cases, the pernicious effects of the cartel will be mainly reflected in the agreed allocation of work between the cartelists, with consequential savings from which they all benefit, but without also being reflected in an uncompetitive price being charged for individual projects. Everything will always depend on a detailed examination of the particular facts, and the need for a claimant in the position of BritNed to demonstrate, on the balance of probabilities, that the price which it actually paid was too high.
132. In theory, an assessment of the counterfactual bid for the cable element of the project would have involved consideration of possible bids by suppliers other than ABB or other cartel members, including suppliers in Japan and elsewhere in Asia. But the judge had to work with the evidence which he had, while rightly recognising that it fell short of what would ideally be required. As we have already pointed out, no application was made for third party disclosure from any suppliers other than ABB, whether members

of the cartel or not. In the absence of such evidence, the judge was simply in no position to construct hypothetical bids from third parties. What he did have, however, was detailed evidence about bids for cable-related projects made by ABB, both during and after the cartel period, and whether successful or unsuccessful. This was the body of evidence which the two experts analysed, and from which they drew their differing conclusions. In this context, we agree with ABB that it is important to understand what Mr Biro and the judge have done. The purpose of Mr Biro's margin analysis was to compare the actual BritNed bid, during the cartel period, with ABB's post-cartel bids, in order to help decide whether the cartel caused an overcharge on the BritNed project. In other words, as counsel for ABB put it in their written submissions, "[t]he post-Cartel bids provide the competitive counterfactual by which to assess the level of the actual BritNed bid." The assessment and evaluation of this expert evidence was quintessentially a matter for the judge, and unless he erred in principle there are no possible grounds for us to interfere with his conclusions.

133. So far as the evidence of Dr Jenkins is concerned, the judge found that he could not safely place any reliance upon it for the detailed reasons which he gave. We repeat that no challenge has been made by BritNed to the judge's wholesale rejection of the positive case advanced by its own expert witness. As to the evidence of Mr Biro, the judge submitted it to a careful and critical scrutiny, and found it to be essentially reliable. What, then, are the alleged errors of principle which BritNed submits are to be found in Mr Biro's evidence or the judge's treatment of it?
134. According to Dr Jenkins, Mr Biro was wrong to include bids lost by ABB in his dataset of projects. Furthermore, says BritNed, the judge wrongly thought that more information was needed about the losing bids (see the judgment at [373]), when for most of the losing projects the winning price was in fact available from other material in the public domain. In our view, however, there is nothing in these objections. As to the inclusion of losing bids in the dataset, the judge was clearly entitled to accept that they had some probative value for the reasons given by Mr Biro (in short, they showed what ABB believed to be a competitive price, and in the post-cartel period there is no economic reason why margins associated with losing bids should have been systematically higher than those associated with winning bids). Moreover, the judge did not accept this evidence uncritically, because he went on to say that the fact that ABB lost the bids could not be disregarded. It was in this context that the judge said, at [373]:

"Inferentially, these bids were losing bids because they were inferior - including inferior as to price - to the winning bids. Of course, having no information about the winning bids, all that can be done is to note the fact that - for some reason - these losing bids were uncompetitive."

135. In our view, these two sentences cannot begin to support the weight which BritNed would attribute to them, and still less do they betray any error of principle in the judge's approach. Without full details and disclosure in relation to the winning bids, little if anything can safely be deduced from mere knowledge of the amount of the winning bid, or of other information about those bids which happens to be in the public domain, and we do not think that the judge's comments were intended to go any further than that. It certainly cannot be concluded, without much fuller information about the

winning bids, and the history of the relevant negotiations, that the winning prices would show that ABB was significantly uncompetitive on price, rather than for other reasons. Nor is it clear to us, even assuming that the alleged error of principle could somehow be established, where it would get BritNed in its attack on Mr Biro's analysis. His view that lost bids could helpfully be included in the dataset of projects subjected to his margin analysis remains a valid one, whatever the precise amount of the winning bids may have been.

136. We are equally unable to accept BritNed's submission that, if ABB wished to show that, despite its very poor post-cartel record for Mr Biro's first category of submarine interconnector HVDC turnkey projects (losing nine out of ten), it would actually have won the BritNed project in the counterfactual world, it was for ABB to explain this with evidence to show that it would have prevailed over its rivals' bids. It is said that, rather than requiring ABB to produce this evidence, the judge gave ABB the benefit of the doubt and worked on the assumption that ABB would have won.
137. This submission seems to us to show a complete misunderstanding of what Mr Biro's evidence was designed to achieve. Mr Biro's purpose in including the losing bids in his dataset was to look at the gross margins which ABB sought to achieve on tenders in a competitive environment, averaging 17.6% in the category of ten projects most closely comparable with the BritNed project, and to compare that level of return with the 18.6% margin achieved during the cartel period on the BritNed project itself.
138. A further criticism made by BritNed is that the judge was wrong to place reliance on Mr Biro's analysis of ABB's post-cartel margins, because Mr Biro himself accepted that his margin analysis did not address the counterfactual winning bid of a rival supplier. The submission is founded on a passage from Mr Biro's cross-examination reproduced in paragraph 233 of BritNed's written closing submissions at trial, as follows:

“Q. A premise of your analysis is that ABB in the counterfactual would have won the BritNed project. What evidence do you have that that would be correct in the counterfactual?”

A. So what I have done is I have compared ABB margins during the cartel versus BritNed margin. That is what I have done. You are right that if absent the cartel somebody with a materially different cost base and a materially different competitive offering, much more competitive offering were to have won the BritNed project, then that is something that is not captured in my analysis. It is something that you just can't – you can't empirically do at all. I don't see that as an omission in anything I have done. But you are right, as you were arguing earlier, in those circumstances that would be an omission from my analysis.”

139. It is again impossible, in our view, to treat this isolated exchange, plucked from the totality of the evidence, as sufficient to suggest, let alone establish, any error in the judge's reliance on Mr Biro's margin analysis. To do so would be to succumb to the

very error against which appellate courts have so often been warned. In any event, we do not think that in this answer Mr Biro was addressing anything other than the counterfactual of the BritNed project itself. He was not addressing the counterfactual position for later, post-cartel projects.

140. In the light of our conclusions so far, it is not strictly necessary for us to go on to consider BritNed's submissions about the quantification of its claim in the allegedly correct counterfactual. We think that the judge was fully entitled to accept Mr Biro's approach and to conclude that there was no direct overcharge. Nevertheless, we will briefly explain how BritNed sought to put its case on quantum, on the assumption that the judge's general approach could be shown to be erroneous. The argument, as finally presented to us, depends on a section of Dr Jenkins' report in response to that of Mr Biro headed "Critique of Mr Biro's margins comparison" (paragraphs 3.1 to 3.22).
141. In this section of her second report, Dr Jenkins took as her starting point her previously expressed view (in section 2A of the same report) that Mr Biro's simple margins comparison was not a reliable basis for determining an overcharge in the present case. She now sought to "highlight three issues with Mr Biro's preferred margins analysis, and show that, even on the basis of the rudimentary visual comparison he prefers, there is evidence of an overcharge once these issues are corrected": see paragraph 3.2. The adjustments which Dr Jenkins considered to be necessary related to (a) the underlying cost for BritNed's CAR insurance, (b) the treatment of interest income and costs, and (c) replacement, where possible, of the price of ABB's losing bids with the price of the winning bids derived from publicly available information.
142. For present purposes, it is the third of these adjustments which matters. Where Dr Jenkins was able to find information on the contract award price of winning bids by suppliers other than ABB, for projects which Mr Biro considered to be directly comparable to BritNed, the losing bids of ABB were (unsurprisingly) higher than the winning bids. Dr Jenkins then adjusted ABB's lost bids to reflect the price of the winning bid, but for lack of detailed information about the winning bids, she was perforce obliged to use ABB's own reported costs as an indicator of the competitive cost. In this way, she reduced the gross margin of Mr Biro's lost bid comparators to a notionally competitive level. By this methodology, she found that in order to be competitive on comparable projects ABB would on average have had to reduce its gross margin to 8%: see paragraph 3.20. Since ABB's actual margin on the BritNed contract was 18.6%, this would imply (by application of a formula which we do not understand to be controversial) an overcharge of 11.52%. (The figure for the implied overcharge in Dr Jenkins' paragraph 3.20 is 20.1%, but that was based on her increase of the BritNed margin from 18.6% to 26.4%, to reflect the first two of the adjustments to Mr Biro's analysis for which she contended. BritNed did not, however, invite us to depart from Mr Biro's gross margin of 18.6%, and we therefore express no view on whether Dr Jenkins' first two adjustments were sound).
143. Even if we had been persuaded that there was an error of principle in the judge's assessment of the counterfactual, we do not think that this court could have safely proceeded to assess the quantum of BritNed's claim on the strength of this section of Dr Jenkins' second report. In the first place, its purpose was to highlight alleged flaws in Mr Biro's preferred approach, rather than to put forward an alternative basis of calculation that Dr Jenkins herself endorsed. Indeed, her final conclusion in paragraph 3.22 was framed in purely negative terms:

“Overall, the results show that there is no basis for Mr Biro’s conclusion that there is no evidence of an overcharge. The adjustments indicate that (i) there is evidence of an overcharge, and/or (ii) there is an issue with Mr Biro’s methodology that undermines its use (i.e. lost bids are not suitable comparators), such that no conclusion can be drawn on the basis of these rudimentary visual comparisons.”

144. Secondly, and in any event, we do not consider that reliance can safely be placed on the mere amounts of the winning bids, or other information about those bids in the public domain, without detailed information about the process of negotiation which led to their acceptance. For example, a bid may have been deliberately pitched at an uncompetitively low level in order to gain market share. Finally, we have considerable reservations about the legitimacy of Dr Jenkins’ “hybrid” methodology, whereby she had to use ABB’s own costs as a proxy for those of the winning bidders. Accordingly, if we had been of the view that the judge did err in principle in his approach to an assessment of the overcharge, we would reluctantly have seen no alternative to remitting the case to him for further consideration of the issue.
145. In the event, however, for all the reasons which we have given, we are satisfied that the judge did not err in his assessment of the overcharge, and that BritNed’s second and third grounds of appeal (as summarised in the Aide Memoire) must therefore be dismissed.

(4) Ground 3: a further issue

146. BritNed’s second and third grounds of appeal are framed in very general terms: see [67] above. For that reason, we have concentrated on what we understood to be the distillation of those grounds in the Aide Memoire. There is, however, one further issue which we need to consider. Although not included in the Aide Memoire, it does fall within the scope of ground 3, and was the subject of fairly brief written and oral submissions on both sides. Our omission to deal with it in the first draft of this judgment was courteously pointed out by counsel for BritNed when that draft was circulated in the usual way in early October 2019.
147. The issue lies within a narrow compass. It concerns ABB’s pricing policy, and the influence on it of ABB’s appetite to win work, depending on the amount of free capacity available to ABB from time to time, both during and after the cartel period. The issue was identified in section 27 of the experts’ Joint Report, as follows:

“If demand conditions and ABB’s appetite to win new projects are important factors that affected ABB’s pricing and varied over time, then it is important to control for them in an analysis of the cartel overcharge.”

148. On behalf of BritNed, Dr Jenkins agreed with this proposition. She said it was important to control for factors that had changed over time and might have affected ABB’s

pricing, particularly if the factors were systematically different during and after the cartel. If ABB's appetite to win projects was greater during the cartel than after it, a failure to control for this "would be expected to lead to downward bias in the assessment of the overcharge." Dr Jenkins then explained how she had attempted to control for this factor in her reports, using ABB's order backlog as a measure. In her first report, she had used the backlog for ABB's Power Technologies Division as her yardstick. She then reconsidered this, in the light of new factual evidence adduced by ABB which was designed to show that from 2000 to 2015 ABB's levels of factory capacity and utilisation had remained broadly unchanged, although there had been a big increase in demand for power cable projects over the period. In Dr Jenkins' view, a change in demand over time was also a factor which would have affected ABB's appetite for work, and it should therefore be controlled for. Her final position was that the best available measure was to be found in the order backlog for ABB's global Power Systems Division.

149. For his part, Mr Biro agreed in principle that such factors could have an important effect on ABB's pricing, but he considered that in practice there was no reliable method of controlling for them. As he explained in the Joint Report:

"The factual witness evidence indicates that the fit of a project within a manufacturer's pipeline, and its available capacity in relation to the particular type of cable, were some of the factors which will likely have had a bearing on ABB's targeted project margins. These factors are, however, difficult to measure and do not lend themselves to quantitative adjustments. In my first report, I was unable to identify a proxy measure for ABB's appetite to win new projects that was sufficiently reliable to merit its inclusion within my comparator analysis."

150. Referring to the further evidence adduced by ABB, Mr Biro went on to say (ibid):

"On the basis of this evidence, the capacity utilisation of ABB's power cables factory cannot reliably be captured by a quantifiable measure which can be included within an empirical overcharge analysis. The heterogeneous nature of high-voltage submarine power cables projects means that the level of utilisation of ABB's power cables factory at any point in time will have depended on the particular mix of project types to be produced, the specific machines required to produce the cables and their productions schedules – none of which can be inferred from any simple metric that could be employed in a regression model in order to estimate power cables prices.

Moreover, the witness evidence confirms that – contrary to Dr Jenkins's assumption – ABB's capacity utilisation was not systematically lower during the cartel period than in the post-cartel period. There is therefore no reason to assume that, absent the cartel, project prices and margins would have been

systematically lower during the cartel period than in the post-cartel period due [to] the presence of under-utilised capacity.”

151. Mr Biro also gave a number of reasons for disagreeing with Dr Jenkins’ opinion that the order backlog for ABB’s Power Technologies or Power Systems divisions could be used as a reliable measure of ABB’s appetite to win new projects: see section 28 of the Joint Report.
152. The judge dealt with this issue at [402] to [413] of the main judgment, concluding at [413] that he regarded “the order backlog variable as liable to introduce dangerous levels of uncertainty into Dr Jenkins’ model” (the underlining is the judge’s).
153. The judge relied on a number of factors in reaching this conclusion. First, he considered that Mr Biro was focusing on the correct question of what would have happened in relation to the BritNed project if the cartel had never operated. As the judge reasoned, at [406(2)]:

“This, however, highlights a difficulty in using Cartel-period metrics to assess what would have happened had the Cartel never operated. I have no doubt that – had the Cartel not served as the basis for the allocation of projects to members of the Cartel – ABB (and the other cartelists) would have made different decisions regarding its business (e.g. as regarding reducing or augmenting capacity), which would have affected their levels of order backlog. Equally, the order backlog as it existed during the Cartel, did not arise in a competitive environment. I therefore see considerable difficulties in terms of reliability in Dr Jenkins’ use of any variable based on ABB’s order book during the Cartel period.”

154. Secondly, the judge recorded Dr Jenkins’ acceptance that there were two factual matters which underpinned her variable, namely (a) the demand conditions, and ABB’s appetite to win projects, and (b) the extent to which these conditions varied over time: [408]. He then quoted a passage from Dr Jenkins’ cross-examination, in which the evidence of ABB’s factual witness on this point (Mr Ekman) was put to her, and she explained why she disagreed with it. The judge then commented, at [410]:

“The problem is that the significance of the order backlog arises out of the assertion of Dr Jenkins, in circumstances where the point she makes is not accepted either by the relevant factual witness (whose evidence I believe) nor by the other expert.”

155. Thirdly, the measure did not reflect the way in which the BritNed negotiation had actually been conducted, which led the judge to observe that “even as a proxy, the measure seems an extremely doubtful one”: see [411], where he again emphasised how much depends on the specific features of the project in question, whereas “order backlog (which references projects in general) is a much broader measure”.

156. Finally, the judge found assistance in Mr Biro’s evidence that, in the post-cartel period, there was no correlation between gross margins and order backlog. As the judge commented at the end of [412], after quoting a further lengthy passage from Dr Jenkins’ cross-examination:

“Such a correlation must be evidenced for the order backlog variable properly to be input into a model... The fact that, when the order backlog variable is removed from the regression, the overcharge is significantly affected and becomes statistically insignificant suggests that the cartel effect can only be established to a level of statistical significance when the order backlog variable is used. That, as it seems to me, is intrinsically unlikely.”

157. In our judgment, the judge was clearly entitled to reach this conclusion, and it is not one with which this court should interfere. In their first skeleton argument in support of the appeal, counsel for BritNed criticise the judge for not making a finding on the disputed issue whether, during the post-cartel period, ABB increased its factory capacity to keep pace with the general increase in demand in the market. They further criticise the judge for making an oblique finding that there had been no material differences in demand over the relevant period, when it was common ground that demand had materially increased since the BritNed tender. The finding in question is contained in a different section of the judgment, where the judge was dealing with “cartel savings”. In that context, the judge, at [457(4)], quoted an extract from Mr Ekman’s cross-examination on the subject of future production planning, which ended with Mr Ekman agreeing that the ideal position for a business would be to have a steady load of large projects, one after the other, and predictability as to when orders will come in.

158. The judge continued:

“(5) This was a very revealing exchange. It shows that even if I had reliable data comparing ABB’s Cartel-period demand and capacity and ABB’s post-Cartel-period demand and capacity, these would not be comparable figures. This is because the flow of work into ABB during the Cartel period is “allocated”, whereas in the post-Cartel period the work comes in as a result of competitive forces.

(6) That has an immediate effect on capacity utilisation: in the Cartel period, a supplier will know far earlier and with far greater certainty what work will come in, and what work will not. In the post-Cartel period, the cartelist will not know, because the cartelist will actually be competing.

(7) This goes to two points:

(a) First, it underlines the correctness of Mr Biro’s view that whilst differences in demand over time may cause

changes in price, these differences are fundamentally very difficult to model, and could not be modelled before me (even if they existed, which I do not consider was established).

(b) ...”

159. The alleged “oblique finding”, of which BritNed complains, is found in the parenthesis at the end of the passage which we have just quoted. BritNed submits that the finding was clearly wrong, because it was common ground that demand had increased after the cartel period, so it was not a fact which needed to be established. Furthermore, because of the judge’s mistaken finding on this point, BritNed submits that he left unanswered the critical question whether ABB had expanded its capacity to keep pace with the increased demand.
160. In our view, there is no real substance to this complaint. The underlying point made by Mr Biro, which the judge clearly accepted for the reasons given in the earlier section of his judgment at [402] to [413], was that it was impossible to identify a reliable proxy measure for a relationship between demand/capacity and price. On that basis, it was a factor which had to be left out of the analysis, because (in the absence of any reliable metric) it had no probative value. Accordingly, it was unnecessary for the judge to make any findings on the underlying factual issues, and he cannot be criticised for his failure to do so. We are inclined to agree that the judge seems to have made a slip in his throwaway comment at the end of [457(7)(a)], because he overlooked the agreed fact that there was indeed a significant increase in demand during the post-cartel period. But nothing turns on this, given the judge’s acceptance of Mr Biro’s evidence that changes in demand could not reliably be taken into account in relation to the overcharge issue.
161. Still less are we prepared to accept that the judge’s omission to make findings on this factual issue somehow infected Mr Biro’s analysis, with the consequence that the assessment of the overcharge needs to be remitted to the judge. As we have explained, the judge gave careful consideration to the “order backlog variable” at [402] to [413] of the main judgment, and his reasons for preferring the approach of Mr Biro were in our view clearly open to him. It was certainly not a conclusion that no reasonable judge could have reached, and because it turned on the practical impossibility of modelling for changes in demand and capacity in the highly bespoke world of submarine cable projects, it must follow that detailed findings of fact on such changes would simply have been irrelevant.
162. For these reasons, we are satisfied that this sub-issue raised by the third ground of appeal must fail.

The remaining issues

163. It remains for us to deal with four discrete matters. They are: (1) the judge’s choice of the contract value of €263m odd, arrived at in 2007, in order to calculate the overcharge in monetary terms; (2) the rejection of the Lost Profits Claim; (3) his treatment of the Regulatory Cap Issue and its effect on damages; and (4) his award of damages in respect of cartel savings.

(1) The choice of the 2007 contract value

164. In order to determine the extent of the overcharge in monetary terms, the judge applied the percentage overcharge to the total contract price as at May 2007 and a figure for “interest revenue”, using a formula which was common ground between the parties: see [453]. BritNed contends that the judge was in error in using the May 2007 figure of €263,072,231 rather than €280,749,582.72 which was the contract price as varied by the deed of settlement dated 15 December 2011.
165. First, Mr O’Donoghue says that reliance on the earlier and lower figure was contrary to the common position of the parties. He points to the fact that the experts had agreed in the Joint Statement that the figure of €280m odd was the “appropriate value of commerce for the BritNed project”, and he submits that this was the basis upon which the experts had been cross-examined and upon which the trial had proceeded. He says, therefore, that there was no issue between the parties as to the relevant contract price, and accordingly it was not open to the judge to take the point and substitute his own figure for that of the experts. In his written submissions, he also relied upon Al-Medenni v Mars UK Ltd [2005] EWCA Civ 1041, per Dyson LJ at [21], in this regard. As a corollary, he submits that there was no evidence indicating that the use of the lower figure was appropriate. He also makes the allied point that the rejection of the €280m figure and the use of €263m odd was not put to the parties, and that a party is entitled to know the case against it.
166. It is common ground that the judge’s use of the lower figure only became apparent when the draft judgment was received. It was queried at that stage. Those instructed on behalf of BritNed wrote to the judge and drew attention to the fact that it was common ground that the €263m odd figure had always been provisional and was to be adjusted for metal prices when they were known. They therefore submitted that, given the court’s finding that the lower figure was the correct starting point, it would follow that that price should be adjusted to take account of actual metal prices. Accordingly, it was suggested that the amended contract price of €271,338,627 (which included finalised metal prices) should be used. That price was arrived at on 1 July 2010. The judge responded saying that he considered that the €263m price should be used for the reasons given in the judgment.
167. The judge had explained his decision to use the price concluded in May 2007 as the basis for the calculation of the overcharge at [453(1)] and in footnote 559 to [458] in almost identical terms. At [453(1)] he said that it seemed appropriate to use the May 2007 price, rather than the re-negotiated price, because: “. . . It seems to me to be highly unlikely that this re-negotiated price would have been affected by the Cartel. The overcharge that I have found to exist would have been baked-in at the earlier stage . . .” It is clear that when arriving at that conclusion, the judge had been fully aware that some of the prices in the ABB tender were provisional. He had explained, at [168], that even after the tender had been agreed, prices in relation to metals, CAR insurance and currency remained provisional, and that this remained the position in the final contract.
168. It also appears that the €280m figure was the product of a global settlement. We were informed in oral submissions, and ABB explained in writing by reference to the Joint Statement, that by the 2011 Deed of Settlement, which gave rise to the €280m contract sum, BritNed agreed to pay all outstanding amounts from the original contract value plus an additional amount of €11.5m covering all contract change proposals, and it was

also agreed that ABB could keep what was left over from the provisional sum for insurance in the original contract.

Discussion and conclusion

169. It seems to us that this issue is directly connected to the question of whether the judge approached the construction of the counterfactual in the correct way. His reason for choosing the May 2007 contract price of €263m odd rather than the re-negotiated price was that the latter would not have been affected by the cartel. We have already concluded that the judge took a course which was open to him in the circumstances of this case, when seeking to construct the counterfactual, and that he was entitled to approach the expert evidence in the way he did. As a result, we have also decided that he did not err in seeking to determine what the position would have been absent the cartel by reviewing the elements of the ABB bid and determining whether they were inflated or infected by the workings of the cartel. It follows, therefore, that the judge's approach to the contract price was equally open to him. He had regard to the price which he had found was subject to inflation as a result of the baked-in inefficiencies caused by the cartel, but he disregarded the subsequent increase which he concluded was not tainted in that way. His approach to the contract price, therefore, was consistent with his treatment of the counterfactual and the way in which he reached his conclusions about the effects of the cartel. Accordingly, it cannot be said to be plainly wrong.
170. In any event, we would reject Mr O'Donoghue's argument that the €280m figure had been common ground, with the result that there was no issue between the parties as to the correct contract value and the point was therefore not open to the judge. It is true that the experts had used the €280m figure for the purposes of their modelling, but although the trial proceeded on the basis of that contract price, the experts' approaches to the counterfactual and the alleged overcharge were the subject of cross-examination and submissions. Having heard the extensive evidence and submissions, the judge rejected Dr Jenkins' model in its entirety and Mr Biro's was subject to numerous adjustments.
171. It seems to us that, as the judge explained, the use of the lower contract value is a function of his approach to the expert evidence when constructing the counterfactual and of his conclusions about the distorting effect of baked-in inefficiencies, about none of which does BritNed complain. His use of the €263m figure is therefore consistent with the approach which we have concluded he was entitled to take when constructing the counterfactual and, ultimately, in assessing the extent, if any, of an overcharge.
172. Furthermore, the circumstances of the present case are far removed from those which were considered in the Al-Medenni case. That case was concerned with a claim in respect of personal injuries suffered at work. During the hearing the judge raised his own theory in relation to how the accident may have come about. The theory was not part of the pleaded case, did not form the basis for the witness evidence, and was not explored with the witnesses in cross-examination. Nevertheless, the judge adopted his own theory in the judgment and found the defendant employer liable. The Court of Appeal held that the judge was not entitled to find for the claimant employee on the basis of the unpleaded theory and allowed the appeal. In the present case, however, there is no question of the judge having taken up an unpleaded theory of his own (except in relation to baked-in inefficiencies, as to which there is no appeal). The experts were cross-examined extensively in relation to their approach to the overcharge and the

issues canvassed went to the heart of the pleaded claim. The use of the lower contract value was part of the judge's approach to that overcharge and, in particular, to his reasoning in relation to baked-in inefficiencies, and as such was advantageous to BritNed.

173. Mr O'Donoghue's second point also does not assist him. Although it appears that the use of the €263m contract value had not been canvassed expressly in submissions, it was, as we have already mentioned, a part of the judge's overall reasoning in relation to the overcharge which was central to both the evidence and the submissions. Furthermore, the issue was raised in correspondence once the draft judgment was received. Interestingly, in that correspondence, the underlying premise which the judge adopted was not challenged. It was not suggested that the appropriate figure was the one which had been used by the experts, perhaps because it had included a substantial sum for contract changes, nor was it suggested that BritNed was prejudiced in any way by the use of the lower figure.
174. We conclude, therefore, that Mr O'Donoghue's alleged errors of law are not made out and BritNed's appeal on this ground should be dismissed.

(2) The Lost Profits Claim

175. We now turn to the judge's rejection of the Lost Profits Claim. BritNed alleged that it had incurred a further loss of profit by virtue of the effect that the cartelised bid price had on its decision to use a 1,000MW capacity Interconnector (Base Case 2) rather than a 1,320MW capacity Interconnector (Base Case 3). It was said that, in a competitive counterfactual situation, a higher capacity, and hence more profitable, Interconnector may have been more attractive than the 1,000MW cable which was purchased, and that the choice of the lower capacity Interconnector resulted in a loss of profits flowing from the lost opportunity to auction additional units of capacity.
176. BritNed contends that, having erred in assessing its Overcharge Claim, the judge also erred in dismissing its claim for lost profits, which he found to be "entwined" with and "substantially driven" by his conclusions on the Overcharge Claim: see the main judgment at [468] and [507]. Mr O'Donoghue submits, therefore, that if the appeal in relation to the judge's decision on the Overcharge Claim were to be allowed because the judge's approach to the counterfactual was wrong and the overcharge was, in fact, higher than he found, his conclusion on the Lost Profits Claim should also be set aside and reconsidered. Mr O'Donoghue also says that the judge failed to address the point made at paragraphs 446 to 448 of BritNed's closing submissions at trial, that the selection of a higher capacity Interconnector would have averted the regulatory conditions and the complication of the Regulatory Cap, and that this issue ought also to be addressed.
177. Since we have already decided that BritNed's appeal in relation to the Overcharge Claim should be dismissed, there is no reason why the judge's decision on the Lost Profits Claim ought, in principle, to be re-visited. However, given the complexity of the submissions on this issue and the importance of each head of claim, it is appropriate, nevertheless, to set out our reasoning in relation to the Lost Profits Claim.
178. The judge dealt with the Lost Profits Claim in considerable detail in section J of the main judgment. In order to understand his conclusions, it is necessary to appreciate the

structure of and basis for his reasoning. First, at [469], he explained why he rejected the submissions of both parties that he should consider whether BritNed would have decided to purchase the higher capacity Interconnector on the balance of probabilities. He considered that the question of what BritNed would or would not have done absent the effects of the cartel, and as part of that analysis, how the pricing of the 1,320MW Interconnector would have changed, was part of the exercise of quantification of damages having taken into account all risks and probabilities. He also reiterated that the assessment could only be carried out in the light of his findings in relation to the overcharge: see [469(1) and (2)]. He went on to summarise the task and his approach to it in the following way, at [469(3)]:

“Having reached conclusions as to how – in the counterfactual, no-Cartel, world – these two options would have presented to BritNed, I must decide what BritNed would have done. For me, at this point, to revert to a balance of probabilities test is impossible to justify rationally: I cannot determine what BritNed would have done without a detailed assessment of anterior possibilities.”

179. The judge then embarked upon a detailed consideration of the factual evidence relating to BritNed’s decision making in relation to capacity at [470] to [496]. In summary, he concluded that: (a) the 1,000MW capacity cable was BritNed’s “default” when carrying out its calculations [474]; (b) in relation to non-price factors, the 1,320MW capacity cable was “unproven technology” and was the maximum capacity possible at the time ([476] and [480]); (c) the difference between the 1,000MW and 1,320MW capacities would not have been enormous in terms of marginal revenue/MW generated, but was a factor which BritNed had in mind [479]; and (d) the 1,000MW option had the ability to flex its capacity up to 1,320MW for short periods ([481]). He concluded that none of the non-price factors was determinative, but that they all pointed in favour of the 1,000MW (Base Case 2) option.
180. In relation to the choice which BritNed actually made, the judge noted, amongst other things: an internal email of 25 May 2006 suggesting that it would be advisable to drop the 1,320MW option ([487]); a presentation to the BritNed board in June 2006 which recommended that the 1,000MW option be proceeded with and noted that the 1,320MW option was the most expensive per MW but “significantly more expensive on overall capex compared to the other two options” ([493]); and that the board decided to proceed with only the 1,000MW option ([496]).
181. The judge then went on to consider the counterfactual assessment. At [497] to [501], he considered and rejected both elements of Dr Jenkins’ approach. First, he rejected her adjustment to the Base Case 2, 1,000MW bid put forward by ABB to take account of the overcharge which she had found to exist, for the same reasons that he had rejected her assessment of the overcharge itself. Secondly, he rejected her scaling up of the Base Case 2 bid to a Base Case 3, 1,320MW bid by using the relative prices between the two bases in the Nexans bid. He concluded, at [500(2)], that whatever view he had reached about her first stage, he would not have considered it appropriate to scale up her Base Case 2 price by reference to a third party bid and in effect to “mix-and-match”: see [500(2)(a) and (b)].

182. Lastly, the judge considered at what price ABB would have tendered for the Base Case 3 option absent the cartel. He noted that he had already concluded that the ABB bid was “subject to “pockets” of overcharge” in respect of baked-in inefficiencies and cartel savings, and that Base Case 3 would have been affected in the same way by the cartel savings, “but this would not have altered the relative merits, in terms of price, between ABB’s bid for Base Case 2 and its bid for Base Case 3”: see [502] and [503]. Furthermore, he concluded that the baked-in inefficiency in relation to the use of copper which he had found in relation to the Base Case 2, 1,000MW capacity, was not present in ABB’s Base Case 3 bid: [504].
183. In the circumstances, the judge concluded that as far as BritNed’s choice between Base Cases 2 and 3 was concerned, the bidding process in the counterfactual world would have proceeded much as it did in fact, and he found that BritNed would have chosen the capacity that it actually chose, i.e. the 1,000MW, Base Case 2. Accordingly, he concluded that BritNed would have made exactly the same choice as to cable capacity as it, in fact, did; that Base Case 3 would have been dropped, as it was, in June 2006; and that BritNed had not sustained any loss in relation to the Lost Profit Claim: see [505] to [507]. Finally, the judge stated that:

“508. If I am wrong in failing to apply the balance of probabilities test to the question of what BritNed would have done in the counterfactual situation, I should state that I consider that BritNed falls far short of showing on the balance of probabilities that it would have opted for Base Case 3.”

Discussion and conclusions

184. In his oral submissions, Mr O’Donoghue concentrated on the judge’s approach in paragraphs [502], [504], [505] and [507]. He submitted that this approach was based upon ABB’s pricing and bid, and (here as elsewhere) he criticised the judge for not taking into account the potential for other more competitive bids in the counterfactual.
185. We have already decided that the judge was entitled to adopt the approach to the counterfactual, and to the overcharge in general, which he did. We have also decided that BritNed’s first four grounds of appeal should be dismissed. On that basis, it follows that there is very little left in relation to the appeal under this head. The judge made detailed factual findings, having heard the oral evidence, none of which are appealed. He also dealt with the expert evidence as to the counterfactual in a manner which we have found was open to him. As a result, he came to a mixed factual and evaluative judgment with which we are in no position to interfere. The judge found that, had the cartel not existed, the relative advantages of Base Case 2 in comparison with Base Case 3 would not have changed, and BritNed would not have made a different decision. In the counterfactual, just as in the real world, BritNed would have opted for Base Case 2. In our view, those findings are unassailable.
186. In those circumstances, nothing turns upon whether the judge was right to refuse to apply the balance of probabilities when determining what BritNed would have done in the counterfactual situation, and it is unnecessary to consider the question. Having heard all of the evidence, the judge decided that, in any event, BritNed fell “far short”

of proving on the balance of probabilities that it would have chosen Base Case 3. That was a conclusion he was entitled to reach on the evidence before him.

187. Lastly, in relation to this head of claim, we do not consider that the failure to make express mention of BritNed’s argument in relation to the effect of choosing Base Case 3 (1,320MW) over the cable with lesser capacity amounts to an error of law. The judge’s findings of fact make it very clear that BritNed favoured the 1,000MW cable for a variety of reasons.

(3) The Regulatory Cap

188. As we have already mentioned, the judge concluded at [550(3)] that ABB’s contention that BritNed’s damages should be reduced by reason of what was referred to as the Regulatory Cap Issue failed. He had previously concluded at [541] (subject to [540]) that “even if, in the future, BritNed breaches the IRR Cap [i.e. *the Regulatory Cap*] and earns Excess Profits [i.e. *profits in excess of the Regulatory Cap*] that it would not have done but for the overcharge, it is still entitled to recover the full amount of the overcharge.”
189. The judge had proceeded, however, upon the assumption that any damages awarded to BritNed would be taken into account when calculating BritNed’s internal rate of return (“IRR”) for the purposes of the Cap: see [539]. Although the judge did not say so expressly, his reasoning appears to have been that if damages were ultimately taken into account then any over-compensation to BritNed would eventually be corrected by the regulators. Rather than seek to determine the true effect of the Amended Exemption Order (to which we refer below) in the absence of the regulators, the judge decided that the better course would be for BritNed to undertake, whatever the true effect in law of the Amended Exemption Order might be, to calculate what the Regulatory Cap would be on the assumption that damages were included, and if and to the extent that any “Excess Profits” referable to the damages were not in fact payable according to the terms of the Amended Exemption Order, then either to use such monies voluntarily in accordance with the Amended Exemption Order or to return them to ABB. The precise terms of the undertaking envisaged by the judge are set out at [540]. BritNed, however, declined to give the undertaking. Accordingly, the judge considered that his conclusion that BritNed was entitled to recover the full amount of the Overcharge had to be revisited in the supplementary judgment. Having reconsidered the matter, the judge decided that the award of damages must be reduced by 10% to reflect the risk of over-compensation and the need to give ABB the benefit of any doubts in his calculation of damages generally: see the supplementary judgment at [15(3)]. BritNed now appeals against that reduction in the damages, whilst ABB seeks to uphold it for additional reasons.
190. Before turning to the way in which the judge approached the matter and the submissions in more detail, it is important to understand the nature of the Regulatory Cap itself and the way in which it was deployed as a defence. The judge set out the relevant directives, regulations and articles and the details surrounding BritNed’s application for an exemption at [512] to [523]. Reference should be made to those paragraphs for the full details of the regulatory regime and the exemption. What follows is a summary overview.

191. The Regulatory Cap is a reference to a cap imposed as a result of the combination of: (a) Regulation (EC) No. 1228/2003 which is concerned with the conditions for access to the network for cross-border exchanges in electricity; (b) Directive 2003/54/EC concerning common rules for the internal market; (c) the domestic provisions by which articles 20 and 23 of Directive 2003/54/EC were implemented in UK and Dutch law; and (d) a 25 year exemption from article 6(6) of Regulation (EC) No. 1228/2003 which was granted to BritNed by the UK Office of Gas and Electricity Markets (“Ofgem”) and the Dutch Minister of Economic Affairs in June and July 2007 and was subsequently modified in November 2007 (the “Amended Exemption Order”).
192. The modification was a result of the request of the European Commission that a condition be included in the exemption (the “Exemption Condition”) in the following terms (recorded in the judgment at [522]):

“(a) BritNed has to present to the national regulators within ten years after start of operations (as defined in the exemption decisions) a report that contains all the details necessary to scrutinise the total costs and revenues of the project and the rate of return on the investment with 2007 as the base year allowing for comparison with data provided for the exemption request.

(b) If, calculated on the basis of the first 10 years, the estimated internal rate of return for the entire project is more than one percentage point above the internal rate of return estimated when filing the exemption request, BritNed shall have two options:

It shall either increase the interconnector capacity to such an extent that the initially estimated rate of return is met. The additional capacity would not automatically be covered by the scope of the present exemption; or

(ii) Alternatively, BritNed shall accept the profits (discounted to 2007) figures exceeding the initially estimated rate of return by more than one percentage point are capped and used, at equal parts, to finance the regulated asset base in the UK and in the Netherlands.”

It is common ground that one of the purposes of the regulatory regime was to enhance competition in the cross-border exchanges in electricity.

193. ABB had argued that as a result of the Amended Exemption Order any overcharge arising as a result of the cartel would have the effect of increasing the level of the Regulatory Cap. It was argued that because the costs of the BritNed project would be higher by reason of any overcharge, the IRR would be adversely affected and so would increase the level at which profits became excess profits. Accordingly, depending upon the extent to which BritNed exceeded the Regulatory Cap, the overcharge would cause BritNed no loss (or, to put the matter another way, the loss would be avoided) because

BritNed would be no worse off by reason of the overcharge. Any additional costs as a result of the overcharge would be offset by the corresponding benefit that greater revenues could be retained by BritNed before the Regulatory Cap applied and excess profits must be used to fund either additional capacity or the transmission networks in the UK and the Netherlands. It was submitted that as damages are intended to be compensatory and loss should be net loss, having netted off any benefits attributable to the event which caused the loss, it followed that the overcharge had caused no loss: [525] and [526].

194. The judge's reasoning in relation to this aspect of the case is complex, so in order to understand his conclusions and the submissions which have been made it is necessary to set it out in some detail. Before turning to ABB's argument, the judge stated the applicable legal principles at [531]. They were, in summary: (i) the aim of an award of damages in a tortious claim is to put the claimant in the same position, as far as possible, as if the tort had not been committed; (ii) the purpose of damages is compensatory. Where the event giving rise to a loss simultaneously both causes loss and confers a benefit, the general rule is that netting off should occur and the claimant is only entitled to recover the net loss; (iii) the exception is where the benefit is "collateral" in the sense that it arises independently from the circumstances giving rise to the loss, in which case the benefit is disregarded for the purposes of assessing a claimant's net loss; and (iv) if the loss is affected by future events, they must be factored in to the assessment of damages and this may require an assessment of probabilities.
195. He went on to note that BritNed's cause of action was complete in May 2007 and the overcharge was incurred at that stage and that it was not until some months later that the Regulatory Cap was imposed. He also recognised that the future effect of the Regulatory Cap was "surrounded in factual uncertainty" and identified two particular uncertainties, namely whether the regulatory regime would remain unchanged and whether, if it did, BritNed would actually breach the Regulatory Cap and make excess profits.
196. He went on to consider whether, as a matter of law, there would be a benefit to BritNed which ought to be taken into account, and in doing so assumed, without deciding, that BritNed would earn profits in excess of the Cap. The judge concluded, at [537], that the contention that no loss was suffered (or any loss was avoided) failed for three reasons: (i) the circumstances were analogous to those in The Albazero [1977] 1 AC 774. He described the rule in that case as applying to a situation in which one person has a right of action against another, but has suffered no loss, in circumstances where another person has suffered the loss, but has no claim; (ii) a court does not inquire into the use to which a successful claimant will put its damages. The fact that BritNed may be required to pay money to certain uses or persons in the future ought not to feature in the assessment of damages; and (iii) the Regulatory Cap represented a collateral benefit which should be disregarded when assessing loss. The judge relied upon two reasons why it should be disregarded: first, it would give rise to "potentially perverse and uneconomic incentives", and secondly, it would enable a cartel to retain the overcharge it had made by its conduct.
197. The judge then reiterated that his reasoning at [537] had been based upon an assumption that any damages awarded would be taken into account for the purposes of the Regulatory Cap, but expressed the view that it would not be right to determine the meaning of the Amended Exemption Order in the absence of the regulators. He

concluded that the better course would therefore be for BritNed to give the undertaking to which we have referred: see [538] to [540]. He went on to state that had he determined the Regulatory Cap issue in ABB's favour, he would have made a deduction of 10% from BritNed's damages in order to reflect the risk of the Regulatory Cap being breached as a result of the award of damages.

198. The judge's reasoning in the supplemental judgment, after BritNed had declined to give the undertaking, was as follows. He repeated the importance to his reasoning of the assumption that any damages awarded to BritNed would be subject to the Regulatory Cap. He then said that if the Cap is exceeded, or taking damages into account, would be exceeded, any failure to include damages when calculating the Cap would result in over-compensation: see [10] and [11] of the supplementary judgment. He went on at [15(3)(a)] to explain, by reference to the main judgment at [542], that in his view an element of over-compensation would still arise even if the Regulatory Cap applied in the way for which ABB contended, but in those circumstances he would have made only a nominal deduction from BritNed's damages. He continued:

“ . . .

(c) Given the uncertainties referred to in paragraph 542(2) of the Judgment, and the fact that the damages I am minded to award are small compared to the overall costs and revenues (see paragraph 542(3) of the Judgment), the adjustment to the award should not be large. But it cannot be nominal. The question I considered in paragraph 542 was the alternative question assuming ABB's contentions (contrary to my findings in the Judgment) were right. The present question arises out of an explicit assumption that I made in rejecting ABB's contentions. If that assumption is wrongly founded – as clearly it may be – the risk of over-compensation to BritNed is patent, and the rule described in paragraph 12(9) of the Judgment is engaged. I remind myself: where a court is compelled to use a broad brush in the absence of precision in the evidence of the harm suffered by a claimant, it should err on the side of under-compensation, so as to (i) reflect the uncertainty as to the loss actually suffered and (ii) to give the defendant the benefit of any doubts in the calculation.

(d) In my assessment of quantum, I have been using a broad brush and I have sought to ensure that BritNed is fully compensated according to law, but not over-compensated. The assumption in paragraph 538 of the Judgment was a material part of that approach. In light of the present position, that assumption may very well not hold good. In these circumstances, once-again wielding a broad brush, I consider that the award of €13,009,568 must be reduced by 10% to reflect the risk of over-compensation and the need to give ABB the benefit of any doubts in my calculation of damages generally.

For these reasons, the damages described in paragraph 550(1) of the Judgment are reduced by 10% (€1,300,956.80) from €13,009,568 to €11,708,611.20.”

Discussion and conclusions

199. Mr O’Donoghue, on behalf of BritNed, makes numerous criticisms of the judge’s reasoning. First, he submits that the effect of the Regulatory Cap is collateral and should not be taken into consideration when assessing damages. He says that allowing a carteliser to rely on the Regulatory Cap as a defence, and as a result allowing a carteliser to be “refunded” the overcharge, would be contrary to the intent of both the EU legislature and Parliament, given that the objective of the EU and domestic legislation on cross-border exchanges of electricity is to promote competition in the markets. He also submits that to allow a carteliser to benefit in this way would be contrary to the policy encapsulated in Article 101 TFEU and the jurisprudence in relation to cartel damages, including the emphasis in the Skanska case on the deterrence of anti-competitive cartel behaviour in the private damages sphere.
200. In support of his submission that benefits may be left out of account where to do otherwise would be contrary to legislative intent or public policy, Mr O’Donoghue took us to Parry v Cleaver [1970] AC 1, where the House of Lords had to consider whether a disablement pension should be taken into account when assessing damages for financial loss in a personal injuries action. He drew attention to the passages in Lord Reid’s speech at 13H and 14C-D where he stated that the common law has treated the question of whether a matter should be taken into account “as one depending on justice, reasonableness and public policy”, and that “it may be thought that Parliament did not intend [*public benevolence in the form of benefits*] to be for the benefit of the wrongdoer.”
201. By way of further support, Mr O’Donoghue relied upon a passage in Lord Sumption’s judgment in Tiuta International Ltd v De Villiers Surveyors Ltd [2017] UKSC 77, [2017] 1 WLR 4627, at [12] where the categories of benefit which may be treated as collateral were, to some extent, left open:

“This court has recently had to deal with collateral benefits in a context not far removed from the present one. The general rule is that where the claimant has received some benefit attributable to the events which caused his loss, it must be taken into account in assessing damages, unless it is collateral. In *Swynson Ltd v Lowick Rose llp* [2017] 2 WLR 1161, para 11, it was held that as a general rule “collateral benefits are those whose receipt arose independently of the circumstances giving rise to the loss.” Leaving aside purely benevolent benefits, the paradigm cases are benefits under distinct agreements for which the claimant has given consideration independent of the relevant legal relationship with the defendant, for example insurance receipts or disability benefits under contributory pension schemes. *These are not necessarily the only circumstances in which a benefit arising from a breach of duty will be treated as collateral, for*

there may be analogous cases which do not exactly fit into the traditional categories. But they are a valuable guide to the kind of benefits that may properly be left out of account on this basis.”

(emphasis added).

202. Tiuta was a case in which part of a second loan facility, advanced on the basis of a negligent valuation, was used to discharge the indebtedness under an earlier loan facility. The valuers contended that the most for which they could be liable by way of damages was the new money advanced under the second facility, and not the monies which were used to discharge the whole of the indebtedness under the first facility. It was argued that if, as had to be assumed, the advances under the second facility would not have been made but for the negligent valuation, the advances under the first facility would have remained outstanding and would have remained unpaid. That part of the loss would therefore have been suffered in any event, irrespective of the care, or lack of it, which went into the second valuation. On that ground, the valuers applied for a summary order dismissing that part of the claim which arose out of the re-financing element of the advances under the second facility.
203. Lord Sumption JSC held, at [13], that the discharge of the existing indebtedness out of the advance made under the second facility was “plainly not a collateral benefit”. He went on as follows:
- “ . . . In the first place, it did not confer a benefit on the lenders and so no question arises of either taking it into account or leaving it out of account. Lord Nicholls’s “basic comparison” requires one to look at the whole of the transaction which was caused by the negligent valuation. In this case, that means that one must have regard to the fact that the refinancing element of the second facility both (i) increased the lender’s exposure and ultimate loss under the second facility by £2,560,268.45, and (ii) reduced its loss under the first facility by the same amount. Its net effect on the lender’s exposure and ultimate loss was therefore neutral. Only the new money advanced under the second facility made a difference. . . . The concept of collateral benefits is concerned with collateral matters. It cannot be deployed so as to deem the very transaction which gave rise to the loss to be other than it was.”
204. On behalf of ABB, Ms Ford QC submits that the position is analogous here. She says that the Regulatory Cap does not give rise to a collateral benefit, but is an immediate consequence of the overcharge; and just as the increase in the lender’s exposure by reason of the re-financing element of the advance under the second loan facility had to be balanced against the reduction of its loss under the first loan in the Tiuta case, so in this case, the overcharge has to be balanced against its effect in increasing the level of profits which BritNed would be able to retain. Accordingly, there was no loss in this case and the judge was wrong to reject her no loss argument in the way he did at [537] of the main judgment.

205. Although Ms Ford described her argument as one of no loss, and did so before the judge, in our view it may be better described as one of the avoidance of loss or netting off. It may also be more accurate to describe her submission as being that loss was avoided to the extent that BritNed received a corresponding benefit under the Regulatory Cap.
206. In our judgment, Mr O’Donoghue’s arguments in relation to collateral benefit cannot succeed. First, we do not consider the analogy with collateral benefits to be a good one. In a case of this kind the question is whether the court should have regard to the Regulatory Cap when determining the extent of the loss suffered as a result of the unlawful conduct. If the Regulatory Cap applies, its effect upon damages is more analogous to taxation borne by BritNed than to any benefit conferred upon BritNed. Nor, in our view, can allowing a carteliser to retain the overcharge in those circumstances properly be characterised as a benefit to it. As Earl Jowitt put it in British Transport Corporation v Gourley [1956] AC 185, at 202: “it is a fallacy to consider the problem as though a benefit were being conferred upon a wrongdoer by allowing him to abate the damages for which he would otherwise be liable.” Rather, the correct enquiry was to ask what loss the claimant has suffered.
207. Secondly, we agree with Ms Ford that the effect of the Regulatory Cap is an immediate consequence of the overcharge and it therefore can, prima facie, be taken into account when assessing the overall loss which has been suffered. It follows that, even if it were appropriate to characterise the effect of the Regulatory Cap as a benefit, we consider that it would not be a collateral benefit. It seems to us that although Lord Sumption left open the categories of benefit which will be treated as collateral in the Tiuta case, he made it clear that the traditional categories of such benefits are a valuable guide to the kind of benefits which may be left out of account. It is difficult to see how the effect of the Regulatory Cap could be considered analogous to the classic exceptions such as “purely benevolent benefit” and “benefits under distinct agreements for which the claimant has given consideration independent of the relevant legal relationship with the defendant”.
208. Lastly, and in any event, we agree with Ms Ford that there is no tension between the EU competition rules (and Article 101 TFEU in particular) and the regulatory regime by which the Regulatory Cap is imposed. The focus of that regime is on preventing BritNed from charging excessive prices and making excessive profits. It seems to us, therefore, that, if anything, it would be inconsistent with that regime to allow BritNed to retain excess profits. There is certainly nothing inimical to it in requiring BritNed to prove its loss and avoiding over-compensation. Furthermore, as we have already explained, we do not consider that the Skanska decision requires a more strict, punitive approach to be adopted. There is nothing in the EU jurisprudence which suggests that damages in a follow-on case should be other than compensatory. Accordingly, we conclude that there is no proper basis for Mr O’Donoghue’s argument that the effect of the Regulatory Cap should, as a matter of public policy, be regarded as collateral.
209. Mr O’Donoghue’s second broad criticism is that the judge made the 10% deduction from the damages awarded without making the necessary factual findings to underpin his decision. At best, he made various assumptions in order to avoid having to decide a number of issues. In particular, submits Mr O’Donoghue, the judge failed to decide:
- a) whether BritNed’s earnings would in fact exceed the Regulatory Cap;

b) if so, what BritNed could do with its profits above the Cap; and

c) whether the regulatory framework would remain the same in 2036 (particularly given the possibility – to put it no higher – of a “no deal” Brexit on 31 October 2019).

210. First, in this regard, we agree with Ms Ford that what BritNed may have done with excess profits above the Regulatory Cap could not be determinative of any of the issues which the judge had to decide. Whether it would use excess profits to reduce electricity prices or by way of re-investment would make no difference to the assessment of damages.

211. Secondly, it is clear from [533] of the main judgment that the judge had well in mind the other two uncertainties to which Mr O’Donoghue refers. They were, in short, whether the regulatory regime would remain unchanged until 2036 and, assuming it did, whether the Regulatory Cap would then be breached so as to generate excess profits. He mentioned them again in a passage at [542(2)] as follows:

“ . . . assessing future costs and revenue flows is a matter of enormous uncertainty, given the time frames involved, even assuming a constant regulatory regime. It is very difficult – even applying the broadest of brushes – to reach a conclusion as to whether and if so to what extent the IRR Cap would be exceeded.”

212. Once it became clear that BritNed was unwilling to give the undertaking, the judge went on to assess the risk of over-compensation, taking into account the degree of likelihood that the regulatory regime would remain relevantly unchanged in the future and that the Regulatory Cap would be exceeded. His considerations at [15] of the supplementary judgment would otherwise make no sense. In fact, when making his assessment at [15(3)(c)], he made explicit reference to “. . . the uncertainties referred to in paragraph 542(2) . . .” of the main judgment itself. It seems to us, therefore, that having decided that the Regulatory Cap was relevant, the judge then took into account the two remaining uncertainties and made a deduction when assessing damages in order to reflect his view of the likelihood of those events occurring: *cp. Golden Strait Corpn v Nippon Yusen Kubishika Kaisha* [2007] UKHL 12, [2007] 2 AC 353. In our judgment, the assessment which the judge made, having heard all of the evidence and submissions, was one which was open to him.

213. We do not consider that Mr O’Donoghue’s third criticism of the judge’s approach would make any difference either to the judge’s decision or to our conclusion. Mr O’Donoghue submits that the judge should not have placed the burden of proof on this issue on BritNed, as he says he did at [15(3)(c)] of the supplementary judgment. On the contrary, Mr O’Donoghue says that the burden should have been on ABB: *Sainsbury’s Supermarkets Ltd v Mastercard Inc* [2018] EWCA Civ 1536, 5 C.M.L.R. 9, at [324]. We agree with Ms Ford, however, that *Mastercard* was a “passing-on” case, which the experts agreed the present case is not. It is not on all fours, therefore, with the situation with which the judge was concerned. Furthermore, it is not clear to us that the judge did, in fact, place the burden on BritNed at all.

214. In the light of our conclusions, it is not strictly necessary for us to address Ms Ford's criticisms of the judge's apparent rejection of her argument that, as a result of the Regulatory Cap, no loss would be suffered. As we have already explained, it seems to us that the judge's conclusions at [537] were reached on the assumption that any damages award would be subject to the Regulatory Cap and therefore that any over-compensation would be rectified by the regulators. Nevertheless, because the judge departed from those conclusions in the supplementary judgment, we address them here.
215. First, we agree with Ms Ford that the analogy which the judge drew with the rule in The Albazero [1977] 1 AC 774 at [537(1)] is a false one. The principle of transferred loss with which that case was concerned is a limited exception to the general rule that a party can recover only loss which he has himself suffered. It applies where the known object of a transaction is to benefit a third party or a class of persons to which a third party belongs. The present case is clearly not one of that type.
216. Secondly, we consider that the judge's conclusions at [537(2)] were not determinative of the question he had to answer. Although it is correct that the court does not inquire into the use to which a successful claimant will put the damages which have been awarded, that has no bearing on the logically prior question whether loss was in fact suffered at all. It is that prior question with which the judge was engaged.
217. Lastly, we have already addressed, and rejected, the judge's conclusions at [537(3)] to the effect that the Regulatory Cap is collateral and should not be taken into account on public policy grounds.
218. To conclude, therefore, we agree with Ms Ford that the potential effect of the Regulatory Cap is analogous to the circumstances in the Tiuta case, with the consequence that the overcharge has to be balanced against its effect in increasing the level of profits which BritNed would be able to retain before the Regulatory Cap was triggered. Further, we consider on balance that, in the absence of the undertaking, the judge was right to assess damages taking into account the inherent uncertainties and the risk of over-compensation, and was entitled to make the deduction he did to take account of future possibilities.
219. We do not disguise, however, that we reach this conclusion with some hesitation and with no feeling of intellectual satisfaction. If the judge will forgive us for saying so, his approach to this issue was rather peculiar and it led him into something of a muddle. In the first place, we find it hard to understand why he thought it appropriate to start with an assumption that any damages awarded to BritNed would be taken into account when calculating the Cap, and why he was reluctant to grapple with the point at all in the absence of the regulators. In principle, we think the better course would have been for him to form a provisional view as best he could on the limited material available to him, while recognising that it could not bind the regulators, and to treat his conclusion as one of the future uncertainties that needed to be taken into account in assessing the amount of BritNed's loss. As it is, because of the assumption made by the judge, there is no indication in the judgment of the rival arguments on what must presumably at heart be a question of construction of the Amended Exemption Order, and no way for this court to form any view on it at all.
220. Secondly, we think it was unwise for the judge to come up with the solution of an undertaking to be given by BritNed, whatever the answer to the question of construction

might be, because (a) the court had no power to require BritNed to give such an undertaking, as the judge later rightly recognised; (b) the solution had not (so far as we are aware) been the subject of argument, or even canvassed informally by either side; (c) it would rest on an entirely hypothetical foundation; and (d) it might foreseeably give rise to very real difficulties of interpretation and enforcement.

221. Thirdly, when in the supplementary judgment the judge returned to where we think he should have started, and he sought to assess an appropriate discount to reflect the risk of over-compensation arising from the possible future operation of the Cap, we think it particularly unfortunate that he should have referred to the “rule” of erring on the side of under-compensation where the court is compelled to use a broad brush, and the “need” to give ABB the benefit of any doubt in the calculation of damages: see [15(3)(d)]. As we have explained, there is in our view no such rule and no such need.
222. Despite these reservations, however, we would be reluctant to remit the matter to the judge on this issue alone, and taking a broad view we think that his ultimate reduction of the award of damages by 10% was pitched at around the right level and should therefore be allowed to stand.

(4) Cartel savings

223. Lastly, ABB appeals the judge’s award of compensatory damages based upon what he called “cartel savings”. It is said that it was an error of law to award damages where there was no loss and that the development of the concept of cartel savings and its application to BritNed’s claim was wrong in law.
224. Mr Hoskins QC, on behalf of ABB, submits: first, that a saving by a cartelist cannot form the basis of a loss to the victim of the cartel, giving rise to damages as a remedy; and secondly, that even if such savings by the cartelist could sound in damages, the judge found expressly that there were no cartel savings on the BritNed project because they were “competed down”: see the main judgment at [457(7)(b), (9)(b) and (d)(i)]. Mr Hoskins also points out that BritNed’s claim was for compensatory damages in relation to losses as a result of the increase in price caused by the cartel. It was not a claim for an account of profits, or the restitution of a benefit, nor could it be: see the Devenish case, which we have already discussed. The award of damages in respect of the savings made by the cartelist would however be equivalent in effect to such an account or restitution.
225. BritNed, on the other hand, seeks to uphold the judge’s decision in relation to cartel savings on additional grounds. It is said that the judge ignored the most obvious and important saving brought about by the cartel, being the elimination of or reduction in the uncertainty which exists where there is full competition in which firms compete for capacity and, therefore, on price. Mr O’Donoghue submits once again under this head that the judge’s analysis was only from ABB’s perspective and that he failed to take into account the whole of the counterfactual in which others would have competed for the work which, in turn, would have had the effect of reducing the price even further. He also submits that, in any event, savings to the cartelist can be recovered as a head of damage in a “follow-on” claim and relies upon the Skanska decision as authority for that proposition.

226. The judge’s treatment of cartel savings is less complex than the other elements of his judgment with which BritNed’s appeal is concerned. It is, nevertheless, important to appreciate how and in what context the judge’s consideration of cartel savings developed. As we have already explained, it arose as part of the consideration of the Overcharge Claim in section I of his judgment. In relation to the Overcharge, the judge adopted a distinction between “direct costs” and “common costs” at [253], which reads:

“For the purposes of analysis, it is necessary to differentiate between those costs which ABB considered to be directly attributable to the supply of a specific project (or part of a specific project – like the Cable element of the BritNed Interconnector) and all other costs incurred by ABB in the course of its business. This, as will be seen, represents a distinction drawn by Mr Biro as part of his analysis. I shall refer to the former type of costs as ‘direct costs’ and the second type as ‘common costs’ ...”

227. As we have seen, the Judge’s general approach to assessing the Overcharge was, for the most part, to consider separately whether the direct or common costs had been inflated in one or more of the ways he had identified at (for example) [214] to [215].

228. The judge considered “cartel savings” first, in the section of his judgment which was concerned with the competitive pressures which BritNed sought to deploy in the negotiations with ABB in relation to the BritNed project. In that context he considered the advantage which ABB derived from its participation in the cartel. Having decided that Mr Leupp and Mr Larsson-Hoffstein did not know about the cartel or ABB’s participation in it and that he did not accept that they would consciously have caused ABB to put forward an uncompetitive price, he was left with three possibilities which he described at [214(3)(a) - (c)]. The third possibility was that there was neither direct nor indirect influence over the bid price put forward by ABB, because those who were involved with the cartel were unable either themselves to inflate the price put forward to BritNed or to influence others to do so. The judge concluded, nevertheless, that such a situation did not exclude the possibility of an overcharge in relation to the cable which, in theory, could arise by means of either “baked-in inefficiencies” or “cartel savings.”: [215].

229. The judge then explained the nature of “cartel savings” in the following way:

“215(2) *By way of cartel savings.* The absence of or reduction in competition is, of course, a disbenefit to consumers, in that it may result in overcharges. One benefit to cartelists is the saving that they may incur as a result of not having to compete. To a supplier, competition is expensive, because it means incurring the costs of engaging with competing suppliers, with no assurance that a firm order will be placed. The advantage of a cartel is that such costs may be avoided or reduced. I shall refer to such savings as “cartel savings”.

230. He returned to the topic in the context of his critical assessment of the approaches of the two expert witnesses, whilst considering the reliability of the ABB data. Having considered Dr Jenkins' criticisms of the data, the reliability of direct costs and of common costs, and the effect of baked-in inefficiencies on direct costs, he turned to cartel savings and said:

“369. Cartel savings are closely related to baked-in inefficiencies. I am, however, reluctant to use the term “inefficiency” because – so far as the cartel is concerned – cartel savings are not inefficiencies at all. They are savings to the cartel, arising out of the fact that the cartel does not have to incur the full costs of competition.

370. These savings might arise in many ways. In this case, for example, a cartel who had not been allocated a particular project, might treat the tender process much less seriously (indeed, might not tender at all), and so incur fewer costs. Equally, the advantage of knowing which projects have been “allocated” to which cartels will make a significant difference in terms of planning future work capacity.

371. Cartel savings can either be part of the direct costs or part of the common costs. To the extent that they form part of common costs, they are controlled for in Mr Biro's analysis. To the extent they form part of the direct costs, they are not.”

231. Finally, the judge dealt with cartel savings when making his assessment of the Overcharge Claim. He re-stated at [454] that they are “closely related to baked-in inefficiencies” and reiterated that “for certain types of overcharge – the use of the term “inefficiency” is potentially misleading; and that the term “savings” is to be preferred.” He went on to state that it was the “allocation of demand [*under the cartel*] which enabled higher prices than normal to be charged, even in periods when overall demand in the market was slack” and that “although the Cartel was highly inefficient in terms of depriving the market of competition, between cartels it brought efficiencies.”: [457(3) and (4)]. He continued, at [457(7)]:

“(b) . . . the efficiencies that accrue to a cartel as a result of not having to compete are one reason the cartels make a greater margin through the Cartel than in the competitive world. In other words, one factor comprising the difference of 5.6% between Cartel period margin and post-Cartel period margin is this, entirely illegitimate, saving in cost due to the control and management, by the Cartel, of supply to the market. This, unlike the baked-in inefficiency I have considered, arises through the operation of the Cartel generally and affects the Cartel's

common costs. Essentially, it represents the saving to the cartelists of not having to compete.”

232. The judge then reasoned as follows:

“(8) In closing, BritNed emphasised the effect of the Cartel’s control over supply, although the point was put in terms of an increase in prices to customers, rather than a saving of costs to the cartelists. In terms of overcharge, there is no difference between the two, and I do not consider that it would be right to exclude BritNed from recovering an overcharge simply because I do not agree with BritNed’s description of that overcharge.

(9) I find that ABB – and the other cartelists – derived cartel savings from their control of the allocation and supply of cable business in the market. My approach to assessing the monetary benefits of not competing is as follows:

(a) Clearly, the cartel saving derived by all of the cartelists was a general one, not related to any particular project. This saving would not feature in the direct costs: it would form a general reduction in the common costs of the cartelists, such that their profit was larger. That would be as true of ABB as of any other cartelist.

(b) So far as ABB was concerned, the effect of the Cartel (as between all post-Cartel projects and the successfully won Cartel projects) was 5.6% in terms of gross margin. I accept that this effect was not perceived in the case of the BritNed Interconnector, where this difference was – essentially because of BritNed’s ability to negotiate and the fact that not all of ABB’s officers were cartelists – competed down.

(c) But this does not mean that the cartel savings I find existed should not be taken into account in every ABB project during the Cartel period. The cartel savings were common to ABB’s entire business, and a portion of them must be attributed to the BritNed project.

(d) In the case of common costs, this is a question of allocation:

(i) Generally – and with the exception of BritNed – the effect of the Cartel perceived across the 14 successful cartelised bids comprising the data that is before me amounts to 5.6%. That overcharge occurred in relation to a sample where each and every bid was successful.

(ii) The question is, how much of this overcharge can be attributed to the cartel savings that I have identified (as opposed to other forms of overcharge).

...

(iv) The 5.6% margin attributable to the Cartel would have been spread across a larger number of projects, because the losing projects would not have generated any margin, only the cost of tendering and of allocating factory space (in case the bid won). Spreading the margin in this way, suggests that 1.9% of the overcharge is attributable to the cartel savings I have identified.

(e) I appreciate that this is a broad-brush allocation, but it is based on a cartel overcharge that I find existed and represents a fair and not excessive allocation of the savings that ABB made to its common costs. These savings were competed away – in the case of the BritNed Interconnector – by ABB: but all that means is that ABB chose to allocate some common costs to other projects. That does not mean that BritNed is not entitled to a share of these cartel savings.”

233. Having applied 1.9% to the original contract price plus interest revenue he found that there was an overcharge under this head of €5,492,929. He went on in [458] to conclude as follows:

“... this overcharge does not arise in relation to and should not be calculated by reference to a comparison of cartel margin and competitive margin. The “cost savings” overcharge is one attributable to the general operation of the Cartel, having an effect on ABB’s common costs. It is necessary to attribute a portion of this saving to an individual project, and I have done so. But that is a process involving altogether different considerations than in the case of the baked-in inefficiency considered above.”

Discussion and conclusions

234. BritNed pleaded that it had paid a price which was unlawfully inflated as a result of the cartel activity and claimed compensatory damages relating to the losses by way of overcharge. This is consistent with the principles which we have already discussed at [27] to [43] above.
235. It seems to us that unless those principles are wrong, or relevantly infringe the EU law principles of equivalence and effectiveness, the award of damages on the basis of savings made by the cartel, rather than loss to the victim of the cartel as a result of

having paid a price which was inflated by the conduct of the cartel, is based upon an error of law and must be set aside.

236. The judge's approach to cartel savings was from the perspective of the cartelist. The very name is indicative of the nature of the principle which he was seeking to articulate. He was describing a benefit to the cartelist. He was not concerned with a loss. At best he described cartel savings as a "dis-benefit". It was only at [457(8)] that an attempt was made to reconcile an increase in prices to customers with a saving of costs to the cartelists. The judge merely asserted that there was no difference between the two. In our judgment that cannot be correct, both as a matter of principle and on the facts as they were before the judge.
237. First, as we have already explained, we do not consider that any new principles in relation to the nature and scope of cartel damages were introduced into EU law by the Skanska decision. Nor do we consider that the conventional approach in English law to the assessment of damages for breach of statutory duty has been shown by BritNed to infringe the EU law principles of equivalence and effectiveness in any relevant respect: see [56] to [58] above.
238. Secondly, in this case there was no evidence before the judge about the way in which cartel savings might correlate with price, in order to enable the judge to translate a benefit to ABB into a loss to BritNed for which it should be compensated. It was not open to the judge merely to assert that there was no difference between the two, as he did at [457(8)], or to assume that the entirety of a saving would have been reflected in an unlawful increase in price, and furthermore that it would be reflected in the price of the BritNed project.
239. Lastly, and in any event, even if it were in principle possible to award damages on the basis of savings to the cartelist rather than loss to the victim of the cartel, as Mr Hoskins points out, at [457(9)(e)] of the judgment the judge expressly found that in this case any cartel savings had, in fact, been competed away. In other words, the cartel savings had no effect on the price of the BritNed project. In our judgment, there can be no basis for an award of damages in respect of a head which did not arise in the particular case at all, but was a general benefit to the cartelist in its business ventures as a whole. Such an approach to damages would go even further than Mr O'Donoghue's submissions in relation to the Skanska decision. It would require Skanska to be interpreted as if damages were intended not only to be restitutionary and punitive, as well as compensatory and deterrent, but also were not required to bear any particular causal relation to the transaction in question.
240. We should also add that, even if it were appropriate for BritNed to raise further arguments in relation to an overcharge on price by way of its respondent's notice in ABB's appeal on cartel savings, we do not see how such arguments could succeed. Mr O'Donoghue is wrong to say that the judge failed to take into account the elimination or reduction in uncertainty which exists where there is full competition in which firms compete for capacity and, therefore, on price. First, this elimination or reduction in uncertainty owing to the absence of competitors was captured, at least in part, by the judge's indirect influence analysis. In particular, at [459] to [463], the judge considered that there had been no additional overcharge because of a sense of "complacency" within ABB which would have been unsustainable "in a competitive environment."

241. Secondly, the benefit to ABB in not facing competition for the work was also considered more generally by the judge as part of his baked-in inefficiencies analysis. This is evident from the judge’s definition of those inefficiencies at [215(1)], which reads as follows:

“215(1) *By way of baked-in inefficiency.* It could, for example, be the case that ABB was an inefficient producer of cables and therefore tendered a higher (non-competitive) price for the Cable element which ABB actually considered to be competitive. *The effect of the Cartel would be to cause ABB’s price to be accepted because of an absence of competition from other, more efficient, suppliers.* Such inflation of price arises out of the natural inefficiency of cartels, whereby an uncompetitive supplier receives business it would otherwise not receive simply because of the absence of competition caused by the cartel. Such inefficiencies are structural within the business of the cartel, who may not even be aware of such inefficiencies. During the trial, inefficiencies of this sort were referred to as “baked-in inefficiencies”, and that is a term that I use in this Judgment.”

(Emphasis supplied)

242. Although the judge defined those inefficiencies broadly, the fundamental difficulty which he faced was that neither party sought to adduce expert evidence regarding the existence – or otherwise – of such inefficiencies: see [367(3)]. In the event, the judge found that the best he could “safely” do was to assess the sum that ABB would have had to absorb in order to retain the bid in a competitive environment as being the cost of the additional copper: [451(3) – (4)]. As the judge rightly recognised at [451(5)], it was not for him to go further in the absence of any other reliable evidence on how the existence of competitors would have impacted on ABB’s price.
243. It seems to us, therefore, that in the light of those unassailable findings, there is no scope for Mr O’Donoghue’s argument that the judge failed to take into account the elimination or reduction in uncertainty which exists where there is full competition. The judge conducted a detailed assessment of the factual and expert evidence and determined the extent to which the price paid in relation to the BritNed project had been inflated by reason of the cartel. Although the judge accepted in principle that the cartelists were able to allocate demand among themselves, thereby operating with a lower maximal capacity than in a competitive market – “although there was little evidence on this” – he ultimately concluded that on the evidence before him it was impossible to model the relationship between demand/capacity and price, and that the expert evidence did not establish that the price on the BritNed project had been otherwise inflated. In our view, that is an end of the matter.
244. Lastly, we also disagree with Mr O’Donoghue that the burden would fall upon ABB, as the cartel, to prove that the price would have been no different absent the cartel, or to put the matter the other way, that harm should be presumed. The burden of proof lies on the claimant to establish that he has suffered loss and the quantum of that loss, albeit that he may benefit from the application of the “broad axe” principle if there are difficulties in proving quantum.

245. For all the reasons set out above, we would therefore dismiss BritNed's appeal in relation to the use of the 2007 contract value, the Lost Profits Claim and the effect of the Regulatory Cap, but allow ABB's cross-appeal in relation to cartel savings.

Overall conclusion

246. It follows that BritNed's appeal will be dismissed on all grounds, but ABB's cross-appeal in relation to cartel savings will be allowed.

Patten LJ:

247. I agree.