1

SYSTEM SUPPLY CONTRACTS

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1.1 INTRODUCTION

1.1.1 System supply contracts

1.1.1.1 *What is a 'system supply contract'?*

Expressions like 'system supply contracts' and 'computer contracts' cover a multitude of commercial transactions, ranging from the purchase of a single CD-ROM from a high street retailer through to multi-million pound systems or communications outsourcing projects. The traditional approach to examining such contracts drew a distinction between hardware and software agreements, but this distinction is becoming increasingly irrelevant. For the purposes of this chapter, then, a system supply contract is one under which the customer is to purchase or otherwise obtain the use of one or more of the following:

(a) hardware;
(b) software;
(c) other equipment (such as cabling or power supply); and
(d) services (such as consultancy, installation, support, and maintenance).

1.1.1.2 *Contract structures*

System supply contracts can be structured in numerous ways. One common structure is known as the 'turnkey' arrangement, whereby the supplier undertakes to supply all the elements of the system under one contract, or as prime contractor at the top of a chain of connected subcontracts. More complex structures are also possible, whereby the supplier acts effectively as a broker between the customer and third party suppliers. These traditional models are starting to be challenged by the growth of 'cloud computing', which enables customers to obtain the use of IT platforms or software 'as a service', without a major investment in proprietary infrastructure. Regardless of the exact contracting structure, however, there are essential features common to all kinds of system supply contract.

1.1.2 The contract process

1.1.2.1 *Function of a written contract*

In most commercial transactions, the terms of these contracts will be recorded in writing, and understanding the reasons for having a written contract can help the parties to negotiate it effectively. The function of a written contract is to record the terms governing the supply of goods and services. In the absence of a clear, express understanding between the parties, the law implies certain terms into the contract (discussed in more detail in section 1.2.1 below) which may run counter to the parties' actual intentions, so a written agreement gives certainty to the transaction.

1.1.2.2 *Significance of the negotiation process*

There is also an important function to the negotiation process that leads up to signature of a written agreement. This process should help to ensure that the parties understand each other's expectations about the deal in question, and to draw out differences in those expectations that can then be resolved before they lead to problems. Many IT projects fail precisely because the parties do not exercise sufficient care to ensure that the supplier's and the customer's expectations match. Ensuring that these do match is, in the opinion of this author, the key role of the legal adviser in the contract process.

1.1.2.3 *Use of standard terms*

It is a feature of doing business in the IT sector that most suppliers prefer to deal on their own set of standard terms. These are usually negotiable to some degree, depending on the customer's bargaining power. Probably the only negotiable term in a contract for a single PC is the price, whereas a buyer who is paying several million pounds per annum as part of a major outsourcing deal will be able to negotiate most of the terms. The danger of uncritically accepting the standard terms of even the most respectable supplier can be illustrated by *Mackenzie Patten v British*

Olivetti,[1] one of the earliest IT contract disputes to be heard by the English courts. In that case, a law firm bought an Olivetti computer system to run its accounts. They discussed their needs with the salesperson, and signed up on Olivetti's standard terms. These dealt only with the system's technical performance, but did not address certain other important issues. The system proved unsuitable for the firm's purposes; it was slow, difficult to use, and could not expand to cope with new business. None of these matters was dealt with in the contract. In the event, the court found that Olivetti was bound by the salesperson's claims that the system would be suitable for their needs, but by that stage the firm had expended time and money in the litigation, and then of course had to find a replacement system.

Put another way, 'standard' forms are only suitable for 'standard' transactions. No matter how comprehensive the standard contract, it will usually fail to cover some essential point envisaged by the particular parties to any particular deal.

1.1.2.4 *Negotiating for the long term*

There is a further reason for negotiating a detailed contract for any significant deal: unlike many sale of goods contracts, the delivery of a computer system (or the commencement of service provision) is only the beginning of the relationship, not its culmination. Further work will be necessary to install the system and get it working properly, to obtain upgrades, and to monitor service levels. So although the aim of the negotiator is to get the best possible deal for the client, this should not mean gaining at the expense of the other side. The aim is to produce a mutually satisfactory contract which will provide a comprehensive basis for the continuing relationship between them.

1.1.2.5 *Types of contractual provision*

Any well-drawn contract will have provisions relating to three broad categories of expectation:

(a) Contract mechanics: for example, who delivers what, and when?

(b) Commercial highlights: for example, what is the price, who owns resulting intellectual property rights, and what warranties are given in respect of the system?

(c) Problem management: what happens if the project goes wrong, and what remedies are available?

The objective is to ensure that no essential terms are missing from the contract. Some of these are discussed in section 1.3 of this chapter, and others relevant to the particular circumstances should come out of the negotiations themselves. However, before looking at specific contractual provisions, this chapter will discuss some of the principal legal aspects of system supply agreements.

[1] (1984) 1 CL&P 92, 95.

1.1.3 Terminology

As a general point on terminology, there are a number of expressions that may correctly be used to denote the different parties to any system supply contract. In the context of the software licensing elements, it is common to refer to 'licensor' and 'licensee'. Hardware sale agreements usually refer to 'buyers' and 'sellers'. Consultancy or software development contracts will tend to refer to 'consultant' and 'client'. However, as a system supply contract may comprise any combination of these various elements, the author refers generally in this chapter to 'supplier' and 'customer' unless there is a sound reason for using the narrower expressions (such as in the discussion of Sale of Goods legislation which specifically refers to buyers and sellers).

1.2 PRINCIPAL LEGAL ISSUES APPLICABLE TO SYSTEM SUPPLY CONTRACTS

1.2.1 Implied terms

1.2.1.1 *Background to the statutory implied terms*

Certain terms may be implied into contracts (both consumer and business contracts) as a matter of statute law or common law. The main statutory implied terms arise under the Sale of Goods Act 1979 ('SGA 1979') and under the Supply of Goods and Services Act 1982 ('SGSA 1982'), both as amended by the Sale and Supply of Goods Act 1994 ('SSGA 1994'). These terms are generally characterized as either conditions or warranties, the distinction being that breach of a condition entitles the innocent party to terminate the contract outright, whereas breach of a warranty entitles him to sue for damages only (but he remains committed to perform his side of the deal). The principal terms are discussed in sections 1.2.1.2 to 1.2.1.14 below.

1.2.1.2 *SGA 1979, section 12(1): the right to sell*

The SGA 1979, section 12(1), implies a term[2] into all contracts of sale that the seller has the right to sell the goods. If the seller fails to transfer ownership, then he will be in breach of this term, and the buyer can reject the goods and recover the price, plus damages if they can be proved.[3]

[2] In England, Wales and Northern Ireland, this term is a condition by virtue of s 12(5A), added by SSGA 1994.

[3] This is not affected by any use of the goods by the buyer. The essence of a sale of goods contract is the transfer of ownership from seller to buyer, and a failure to effect this means that there is a total failure of consideration (*Rowland v Divall* (1923) 2 KB 500).

1.2.1.3 *Implications of SGA 1979, section 12(1), for hardware sales*

In order to satisfy section 12(1), the buyer must receive full and unfettered rights of ownership (unless the contrary has been agreed under section 12(3)). This means that the seller will be in breach of the condition if the goods are subject to rights belonging to a third party. The most obvious rights which exist independent of ownership are intellectual property rights (IPRs), so hardware producers risk running into difficulty if the product infringes someone else's IPR. In that eventuality, a patentee or copyright owner might prevent the buyer using any infringing equipment (or software loaded on legitimate equipment), so an innocent buyer could be prevented from using the hardware he has purchased. This is a clear breach of section 12(1) on the seller's part, even if the IPR owner chooses not to exercise his rights.

1.2.1.4 *SGA 1979, section 12(2): quiet possession*

The seller will be in breach of section 12(1) if the third party's rights existed at the time of sale. However, some IPRs (eg, patents and trade marks) only come into existence on registration, so it is possible that such rights might only arise *after* the sale was made. In that case, the seller is not in breach of section 12(1), but is in breach of the warranty[4] in section 12(2)(b) that the buyer will have quiet possession of the goods.[5] This is in effect a promise by the seller that no person will in the future acquire rights over the goods and enforce them against the buyer. The warranty is broken only when the third party enforces its rights, at which point the buyer becomes entitled to claim damages from the seller (but not to reject the goods). However, if the third party prevents the buyer from using the goods, the buyer's damages will be assessed as the cost of buying a replacement, in effect returning the price.

1.2.1.5 *SGA 1979, section 13: correspondence with description*

The SGA 1979, section 13, provides for an implied condition that goods will correspond with their description,[6] and the question often arises whether claims made by salespeople or contained in the manufacturer's publicity material amount to a description for these purposes. The traditional test is to ask whether the words used are a term of the contract or a mere representation: this is answered by examining whether the seller intended to promise, as part of the contract, that the words were true. In practice, however, it is impossible to ascertain the seller's real intention

[4] In England, Wales, and Northern Ireland, this term is a warranty by virtue of s 12(5A), added by SSGA 1994.

[5] For a clear illustration of the distinction see *Microbeads AG v Vinhurst Road Markings Ltd* [1975] 1 WLR 218.

[6] In the context of an IT contract, the description of the goods will generally be the user requirements specification, which might be the supplier's standard specification, or a bespoke one specifically developed for the particular supply.

(indeed, the seller may have had none) and what the courts appear to be asking themselves is whether the buyer actually obtained that which he was led to believe he was buying. The test would thus be whether a reasonable person in the buyer's position would have been led to believe that the seller was promising a true description of the goods. As a general rule, only if the buyer examines the goods thoroughly before he buys will the court decide that descriptive words which had no influence on his decision to buy are not part of the description of the goods for the purposes of section 13.

1.2.1.6 *SGA 1979, section 14: quality and fitness for purpose*

The SGA 1979, section 14, provides for an implied condition that goods will be of satisfactory quality (s 14(2)) and reasonably fit for their purpose (s 14(3)). However, obligations of quality raise particular problems in relation to IT systems as it is often difficult to define a system's purposes with sufficient precision, let alone decide if it is reasonably fit. In this respect, the description of the goods can again be very important—in some cases, it is almost the sole determinant of the quality the buyer is entitled to expect.

1.2.1.7 *Satisfactory quality*

'Satisfactory quality' is defined in section 14(2A) and (2B) (inserted into SGA 1979 by SSGA 1994):

(2A) For the purposes of this Act, goods are of satisfactory quality if they meet the standard that a reasonable person would regard as satisfactory, taking account of any description of the goods, the price (if relevant) and all the other relevant circumstances.

(2B) For the purposes of this Act, the quality of goods includes their state and condition and the following (among others) are in appropriate cases aspects of the quality of goods:

(a) fitness for all the purposes for which goods of the kind in question are commonly supplied;

(b) appearance and finish;

(c) freedom from minor defects;

(d) safety; and

(e) durability.

It will be clear from the above definition that no hard and fast rule can ever be drawn as to whether goods fulfil the obligation of satisfactory quality. Instead, the courts will examine the circumstances of the contract in an attempt to decide whether a reasonable buyer would have been satisfied with the quality of the goods.

1.2.1.8 *Exceptions to section 14(2)*

The obligation set out in section 14(2) does not extend to defects that the seller specifically reveals, nor to those defects that should have been discovered by the

inspection (if any) that was *actually made* by the buyer.[7] It should also be noted that it is not only the goods sold that must be satisfactory—any goods *supplied* under the contract (eg, manuals or magnetic media) must also be of satisfactory quality, even if they remain the seller's property and are to be returned to him.

1.2.1.9 *Implications of section 14(2) for system supply agreements*

The problem of ascertaining whether a system fulfils section 14(2) is likely to turn almost exclusively on the question whether the system is fit for all its common purposes. In this context, freedom from minor defects is probably an aspect of that fitness, unless the defects are merely cosmetic (eg, dents in computer cases). The court's task is to determine what purposes systems *of the kind in question* are commonly supplied for. This is a very difficult matter, particularly in relation to hardware, the functioning of which is determined by the software which runs upon it. Similarly, in relation to software, programs invariably contain programming errors or 'bugs', and it is likely that a court will take note of this in determining whether a program is of satisfactory quality. Indeed, in *Saphena Computing Ltd v Allied Collection Agencies Ltd*[8] the recorder acknowledged precisely this when he observed that 'even programs that are reasonably fit for their purpose may contain bugs'. So the real question to be determined is what functions the seller might reasonably foresee the buyer as requiring. Predictably, no clear answers can be given, and for this reason it is common in substantial computer contracts to agree a detailed specification, listing the functions to be performed and objective criteria for testing that performance, and then to exclude the terms implied by section 14(2) and (3). (Note that different considerations apply to the purchase of commodity items such as PCs and peripherals as individual transactions, where the contract value is too low to permit the negotiation of detailed specifications. In many such cases, it may become necessary to rely on section 14(2).)

1.2.1.10 *Fitness for the buyer's particular purpose*

If the seller sells in the course of a business and the buyer expressly or impliedly makes known a particular purpose or purposes for which he intends to use the hardware, section 14(3) implies a condition[9] that it will be reasonably fit for those purposes. This condition is imposed because the buyer relies on the seller to use his expertise to select goods suitable for the buyer's needs. If the buyer produces the user requirements specification himself, this would normally suggest that he is not relying on the seller's skill and judgement to select appropriate equipment, and that section 14(3) accordingly has no relevance. However, the seller will still be liable under that subsection in respect of matters not covered by the specification,

[7] Sale of Goods Act 1979, s 14(2C), as amended by the Sale and Supply of Goods Act 1994.

[8] [1995] FSR 616.

[9] In England, Wales, and Northern Ireland, this term is a condition by virtue of s 14(6), substituted by the Sale and Supply of Goods Act 1994.

as illustrated by *Cammell Laird & Co Ltd v Manganese Bronze & Brass Co Ltd*.[10] In that case, the buyer entered into a contract for the supply of a ship's propeller, to be manufactured to the buyer's specification and used on a named ship. The propeller proved unsuitable for the ship because its pitch was incorrect, a matter not provided for in the specification. The court held that as this had been left to the seller's discretion it clearly showed reliance on the buyer's part. The court also made it clear that if the defect had been in the buyer's specification the seller would not have been in breach of the condition.

In the context of IT systems, standard hardware and software are not of course designed for any particular user, and will be unlikely to meet all the requirements of any user. However, where customized hardware or bespoke software is supplied, the user may more reasonably expect to receive a warranty that it will comply with his requirements: indeed, it is far from unusual for the buyer to expect the seller to check the specification, particularly where it has been arrived at in consultation between them. In such cases, the buyer will claim to have relied on the seller's skill and judgement.

1.2.1.11 *Exceptions to section 14(3)*

The condition is not implied where it is unreasonable for the buyer to rely on the seller's expertise. This might be the case where the seller makes it clear that he cannot say whether the hardware will be suitable (eg, where it is purchased for research purposes) or where the buyer fails to give him the information he needs to exercise his judgement properly.[11]

1.2.1.12 *SGSA 1982, section 13: reasonable care and skill*

The implied terms discussed above all apply to contracts for goods. The SGSA 1982, section 13, implies a different term into contracts for services, to the effect that the services will be provided with 'reasonable care and skill'.

1.2.1.13 *Implications of SGSA 1982, section 13, for system supply contracts*

Although the SGSA 1982, section 13, may have little significance for contracts for hardware alone, the implied term is of course important to the supply of related services—for example, hardware maintenance, software development and support, consultancy, and training. There is also a possibility that the supply of software per se may be viewed by the courts as a supply of services, for the reasons set out below.

[10] [1934] AC 402. Followed in *Ashington Piggeries v Christopher Hill Ltd* [1972] AC 441.
[11] See *Griffiths v Peter Conway Ltd* [1939] 1 All ER 685.

1.2.1.14 *Classification of software as goods or services*

Four cases illustrate the development of judicial thinking on the classification of software as goods or services, and the statutory implied terms that apply as a result:

(a) *Eurodynamics:* In *Eurodynamics Systems plc v General Automation Ltd*,[12] Steyn J refused to decide whether software was goods, or whether the terms implied by the SGA 1979 applied to the software licence in question, as he was able to decide the case without reaching a view on these issues.

(b) *Saphena:* By contrast, in *Saphena Computing Ltd v Allied Collection Agencies Ltd*[13] the recorder decided that 'it was an implied term of each contract for the supply of software that the software would be reasonably fit for any purpose which had been communicated to the plaintiff [claimant]'. This decision is unsatisfactory, however, since the recorder did not explain the basis on which he found that the term was implied. He did find, however, that the software had been supplied on terms that the software might not be lent, sold, or hired to any third party without the licensor's consent, which might suggest a hiring rather than a sale, though this is by no means conclusive. On appeal Staughton LJ stated:

> . . . it was, we are told, common ground that the law governing these contracts was precisely the same whether they were contracts for the sale of goods or the supply of services. It is therefore unnecessary to consider into which category they might come.

On the face of it that is an extraordinary statement since the law relating to goods is quite different from the law relating to services: the only term implied into a contract for services is that reasonable skill and care will be used, not that the result will be fit for any particular purpose or meet any standard of quality.

(c) *St Albans:* A clearer statement that the SGA 1979 applies to the supply of software appears in the obiter dictum of Scott Baker J in *St Albans City and District Council v International Computers Ltd*.[14] The judge concluded that although the disks or tapes on which a program is recorded certainly are goods, the program of itself is not.

(d) *Holman v Sherwood:* In the most recent reported decision on the point, *Horace Holman Group Ltd v Sherwood International Group Ltd*,[15] the court found that the computer program that a supplier had contracted to provide did not constitute 'goods' for the purposes of section 6 of UCTA 1977 (discussed below).

[12] 6 September 1988 (unreported).
[13] [1995] FSR 616.
[14] [1996] 4 All ER 481 (CA).
[15] (2002) 146 SJLB 35.

Against this line of cases, the Scottish decision of *Beta Computers (Europe) Ltd v Adobe Systems (Europe) Ltd*,[16] holding that a supply of 'shrink-wrapped' software was not a sale of goods, should also be noted, although the decision is only of persuasive authority in England.

To what extent are these decisions helpful in determining whether the supply of software amounts to the provision of 'goods' or of 'services'? The view of this author is that a more subtle distinction is required, and that the classification (and hence the legal rules that apply to the supply) should really depend on the circumstances in which the software is procured: the purchase of, say, a standard computer game should be regarded as a sale of goods irrespective of the medium by which the software is delivered; whereas a bespoke system written specially by the supplier for a particular customer necessarily entails the supply of services. (Whether the terms implied by section 13 of SGSA 1982 provide adequate protection for the customer in this latter case is an argument beyond the scope of this chapter.)

1.2.1.15 *Relevance of 'goods' and 'services' in cloud computing*

In the context of cloud computing, the only term that is likely to be implied into a contract is that the supplier will use reasonable skill and care under the SGSA 1982, section 13. A detailed account of the nature and merits of cloud computing is beyond the scope of this chapter, but its essence is the delivery of IT functionality 'as a service'. Cloud computing encompasses a wide range of offerings such as 'Software as a Service' (in which the use of application software is delivered as a hosted or managed service over the internet, the pioneering instance of this being the customer relationship management service provided by salesforce.com) and 'Infrastructure as a Service' (where the supplier makes available remote access to IT infrastructure like servers, storage, and local network resources as a commoditized utility, to allow the customer to run its own software on it). Given that cloud contracts are essentially contracts for services, the implied terms relating to goods are unlikely to apply.

1.2.1.16 *Additional implied terms in consumer contracts*

The terms discussed above apply to any contract for the sale of goods or provision of services, whether business-to-business or business-to-consumer. However, the law also provides for an additional layer of protection in consumer contracts, and although a detailed discussion of consumer law is beyond the scope of this chapter, readers should also be aware of the Sale and Supply of Goods to Consumers Regulations 2002 (SI 2002/3045). These Regulations implement Directive 1999/44/EC on certain aspects of the sale of consumer goods and associated guarantees, amending existing legislation on the sale and supply of goods and unfair terms in order to provide additional remedies to consumers in certain circumstances. The principal changes include the introduction of a new Part 5A into the 1979 Act, to the

[16] [1996] FSR 367.

effect that where goods fail to conform to the contract of sale at the time of delivery, then the buyer first has the right to require the seller to repair or replace the goods within a reasonable time and without causing significant inconvenience to the buyer. If repair or replacement is impossible or disproportionate, or if the seller fails to repair or replace the goods within a reasonable time and without significant inconvenience to the buyer, then the buyer may require the seller to reduce the purchase price of the goods by an appropriate amount, or rescind the contract. (A similar right is introduced into SGSA 1982.)

1.2.1.17 *Common law implied terms*

It should be remembered that apart from terms implied by statute, terms may also be implied from the facts and circumstances of the particular contract. Here the courts use the 'officious bystander' and 'business efficacy' tests to determine whether the implication of a term is proper, as illustrated by *Greaves & Co (Contractors) Ltd v Baynham Meikle & Partners*.[17] In a contract for the provision of engineering consultancy services, there was an implied term that the design which was the subject of the contract should be fit for certain specific purposes. Similarly, in a software contract that is a mere contract for services (eg, programming), it may be possible to imply a term that the software supplied should comply with particular criteria, over and above the statutory term that the work be carried out with reasonable skill and care.

1.2.2 Limitations and exclusions of liability

1.2.2.1 *Introduction*

It is common for system supply contracts to contain provisions excluding or limiting the supplier's liability, and in particular it is common to exclude all liability for loss consequential on a breakdown or malfunction of the equipment. Such provisions need to be carefully drafted if they are to be effective, and some exclusions are not permitted by law. There are two levels of legal control over exclusion clauses—the common law, and statutory control under the Unfair Contract Terms Act 1977 ('UCTA 1977') and the Unfair Terms in Consumer Contracts Regulations 1999 (SI 1999/2083), which implements the EC Directive on Unfair Terms in Consumer Contracts 1993. These two pieces of legislation contain inconsistent and overlapping provisions, using different language and concepts to produce similar but not identical effects, and the Law Commission has noted that the statutory controls on unfair terms would benefit considerably from consolidation and simplification—see section 1.2.2.14 below.

[17] [1975] 1 WLR 1095.

1.2.2.2 *Common law rules: incorporation of terms*[18]

In order for an exclusion clause to protect the supplier, it must be contractually binding on the customer. This is most easily effected if it is contained in a written contract signed by the buyer. Many contracts for goods of low value, however, are made by exchange of letters, each referring to the other's standard terms, and it may be a difficult matter to decide whether the clause in question is part of the contract.[19]

1.2.2.3 *Common law rules: construction and the 'contra proferentem' rule*

Even if it is duly incorporated, an exclusion clause will only protect the seller if, as a matter of construction, it covers the breach that has occurred. The rules of construction are complicated but in general the more serious the breach of contract, the more clearly worded the clause must be if it is to exclude liability for that breach: it is interpreted against the party seeking to rely on it (the *contra proferentem* rule). A good illustration of this principle at work can be found in *Pegler v Wang*,[20] in which the clause in question purported to exclude liability for 'consequential loss in connection with or arising out of the supply, functioning or use of the system'. The court interpreted this language as not excluding liability for consequential loss arising from the *failure* to supply or the *delay* in supplying the system.

Similarly, in *Tektrol v International Insurance of Hanover*,[21] the Court of Appeal considered an insurance policy that excluded liability for losses 'caused deliberately by rioters, strikers, locked-out workers, persons taking part in labour disturbances or civil commotions or malicious persons'. The claimant had unknowingly downloaded a global computer virus which deleted the source codes for its process-control systems, and had unfortunately suffered a burglary shortly afterwards as a result of which its back-up copies (both electronic and hard copy) were also lost. The Court of Appeal held that the exclusion was worded in such a way that the actions falling within the scope of the exclusion had to be actions directed against the claimant's business and premises specifically. For more general malicious actions to be covered—such as a global computer virus—they would have to be addressed in a separate provision that distinguished between the various types of interference. Liability was accordingly not excluded for either the virus or the burglary.

More recently, in *Internet Broadcasting Corp (trading as NetTV) v MAR LLC (trading as MARHedge)*,[22] the court went a step further, and introduced a rebuttable presumption that an exclusion clause should not apply to a deliberate personal repudiatory breach of contract. In that case, the wording 'neither party will be liable to the other for any damage to software, damage to or loss of data, loss of profit,

[18] See generally J Adams and H MacQueen, *Atiyah's Sale of Goods*, 12th edn (London: Longman, 2010) ch 14.

[19] This point is too complicated for examination here, but the rules for construing such an agreement can be found in any standard work on the law of contract.

[20] [2002] BLR 218.

[21] [2005] EWCA Civ 845.

[22] [2009] EWHC 844.

anticipated profit, revenues, anticipated savings, goodwill or business opportunity, or for any indirect or consequential loss or damage' was held not to exempt the defendant from liability for deliberate breach. Particularly clear drafting will accordingly be needed if a defendant wants to be able to persuade a court that the parties intended an exclusion clause to cover a deliberate personal repudiatory breach of contract.

1.2.2.4 *Unfair Contract Terms Directive: background*

The newest statutory control on exclusion clauses is the EC Directive on Unfair Terms in Consumer Contracts,[23] implemented in the UK by the Unfair Terms in Consumer Contracts Regulations 1999 (SI 1999/2083).[24] The Directive provides that in a contract between a seller or supplier and a consumer, unfair terms shall not be enforceable against the consumer, although the remainder of the contract remains in force so far as that is feasible.

1.2.2.5 *Unfair Contract Terms Directive: terms which may be regarded as 'unfair'*

A term is unfair for the purposes of the Directive if (a) it has not been individually negotiated, and (b) 'contrary to the requirement of good faith, it causes a significant imbalance in the parties' rights and obligations arising under the contract, to the detriment of the consumer' (Art 3(1)). The annex to the Directive contains a list of terms which 'may be regarded as unfair' (Art 3(3) and Sch 2 to the 1999 Regulations).[25] Examples from that list which are particularly relevant to computer contracts include terms:

(b) Inappropriately excluding or limiting the legal rights of the consumer . . . in the event of total or partial non-performance . . .

(f) Authorising the seller or supplier to dissolve the contract on a discretionary basis where the same facility is not granted to the consumer . . .

(h) Automatically extending a contract of fixed duration where the consumer does not indicate otherwise, when the deadline fixed for the consumer to express this desire not to extend the contract is unreasonably early.[26]

[23] Directive 93/13/EEC, OJ L95, 21 April 1993.

[24] The 1999 Regulations replaced the Unfair Terms in Consumer Contracts Regulations 1994 (SI 1994/3159), by which the UK had originally implemented the 1993 Directive. Most of the 1994 Regulations were in fact re-enacted in 1999, but with modifications to reflect more closely the wording of the Directive.

[25] In a consultative document, *Implementation of the EC Directive on Unfair Terms in Consumer Contracts* (London: DTI, 1993), the DTI took this wording to mean that the terms in the list may be, but are not necessarily, unfair. Other Member States may have taken a stronger position on this point, but in any event sellers should take the cautious approach that including any of the terms in the annex is likely to give rise to a presumption of unfairness.

[26] Examples (f) and (h) are particularly likely to arise in maintenance contracts.

(i) Irrevocably binding the consumer to terms with which he had no real opportunity of becoming acquainted before the conclusion of the contract.[27]

(k) Enabling the seller or supplier to alter unilaterally without a valid reason any characteristics of the product or service to be provided.

(p) Giving the seller or supplier the possibility of transferring his rights and obligations under the contract, where this may serve to reduce the guarantees for the consumer, without the latter's agreement.[28]

(q) Excluding or hindering the consumer's right to take legal action or exercise any other legal remedy, particularly by . . . unduly restricting the evidence available to him or imposing on him a burden of proof which, according to the applicable law, should lie with another party to the contract.

These examples are not exhaustive—others from the annex may be applicable to particular computer contracts, and in any case the annex is purely indicative, so that terms having a similar effect are likely also to be construed as unfair.

1.2.2.6 *UCTA 1977: background*

UCTA 1977 is of more general application than the Directive, as it applies to contracts between businesses as well as to those between businesses and consumers. Suppliers of IT systems to consumers will need to consider both forms of control, whereas suppliers only to businesses can ignore the Directive.

1.2.2.7 *UCTA 1977, section 6: exclusions of liability under the SGA 1979*

Section 6 of UCTA 1977 deals with attempts to exclude liability under the SGA 1979. In particular:

(a) Section 6(1) provides that it is not possible to exclude the condition that the seller has the right to sell the goods (see sections 1.2.1.2 to 1.2.1.4).

(b) Section 6(2) provides that where the buyer deals as a consumer, it is not possible to exclude the seller's liability for correspondence to description, quality, and fitness for purposes (see sections 1.2.1.5 to 1.2.1.11). A buyer 'deals as a consumer' if (i) he does not buy in the course of a business, (ii) the seller sells in the course of a business, and (iii) the goods are of a type normally supplied for private use or consumption—see UCTA 1977, section 12.

(c) Section 6(3) provides that, where the buyer does *not* deal as a consumer, the seller's liability for correspondence to description, quality, and fitness *may* be excluded, provided the exclusion clause satisfies the test of reasonableness.

[27] This is a particular problem in mail order sales, especially where the order is placed by telephone.
[28] This too is a term which may be found in a maintenance contract.

1.2.2.8 *UCTA 1977, section 3: exclusions of liability for breaches other than of the SGA 1979 implied terms*

UCTA 1977 also affects clauses that attempt to exclude liability for breaches of terms other than those imposed by the SGA 1979. The most relevant section is section 3, which provides that where the buyer deals as a consumer, or where he deals on the seller's written standard terms, the clause must satisfy the test of reasonableness to be effective. In most IT contracts, section 3 will apply as well as section 6, in which case the section that provides the best protection for the buyer will be applied.

1.2.2.9 *When does UCTA 1977 not apply?*

The only obvious case in which UCTA 1977 will be irrelevant is where the parties depart substantially from the seller's standard terms, and the breach is not of one of the implied terms. The theory is perhaps that if the parties are of such equal bargaining power that they can negotiate a non-standard contract, any exclusion clause is seen by both sides as fair. The question remains whether the entire contract needs to be in standard form, or whether it is sufficient to bring the case within section 3 if the exclusion clause alone is the seller's standard term. These issues have been examined in some depth in a line of cases in the 1990s:

(a) *Salvage Association v CAP:* In *Salvage Association v CAP Financial Services Ltd*,[29] which related to the supply of bespoke software, CAP had put forward its standard contract and had negotiated certain changes to it. In deciding whether section 3 of UCTA 1977 applied to those exclusions, the official referee set out a list of factors which would be relevant:

(i) the degree to which the standard terms are considered by the other party;
(ii) the degree to which the terms are imposed on the other party;
(iii) the respective bargaining power of the parties;
(iv) the willingness of the party putting forward the terms to negotiate them;
(v) how far any alterations to the terms were agreed; and
(vi) the extent and duration of the negotiations.

On the facts of the case, because the Salvage Association had considered various drafts and taken legal advice on them and persuaded CAP to agree to changes (though not, it is implicit, in the relevant exclusion terms), this was enough to show that the contract was not made on CAP's written standard terms.

[29] [1995] FSR 654.

(b) *St Albans v ICL:* In *St Albans City and District Council v International Computers Ltd*,[30] CA, ICL had developed a complex package (COMCIS) to calculate and administer the community charge or poll tax system of local taxation. St Albans used COMCIS to calculate the number of community charge payers in its area, and used that figure to set its community charge rate. The COMCIS software contained an error, so that although the St Albans database contained all the necessary details, the population figure reported was too high and, as a result, St Albans suffered a financial loss.

The contract contained a clause limiting ICL's liability to the price or charge payable for the item of equipment, program, or service in respect of which the liability arises or £100,000 (whichever is the lesser); and completely excluding liability for, inter alia, any indirect or consequential loss or loss of business or profits sustained by the customer. Liability turned on whether this clause was reasonable under section 11 of UCTA 1977—see sections 1.2.2.10 to 1.2.2.13—and the first question to be decided was whether UCTA 1977 applied at all.

ICL contested that UCTA 1977 did not apply at all, arguing that the contract had not been on standard terms. However, the judge held that UCTA 1977 did apply: in other words, that St Albans had contracted on ICL's written standard terms. Even though many elements of the contract were negotiated at length (eg, delivery dates, specification), ICL's General Conditions (which contained the limitation and exclusion clauses) 'remained effectively untouched in the negotiations', and indeed were referred to by ICL staff as ICL's Standard Terms and Conditions in witness statements and letters.[31]

(c) *South West Water v ICL:* In *South West Water Services Ltd v International Computers Ltd*,[32] Toulmin J followed the *St Albans* decision in finding that, even though SWW originally offered its own terms in negotiations, in the event ICL had dealt on ICL's own standard terms which had been only slightly adapted. The fact that one fairly predictable eventuality—failure to progress the project to a point where there was a system in place for SWW and capable of being tested—had not been specifically addressed in the documentation also tended to suggest that the contract should be regarded as 'standard terms'.

(d) *Pegler v Wang:* In *Pegler v Wang*,[33] the contract in question consisted of a set of standard terms with an attached schedule of variations and additional terms. One of these additional terms was a provision entitling the customer, Pegler, to

[30] [1996] 4 All ER 481.

[31] In the earlier case of *Flamar Interocean Ltd v Denmac Ltd* [1990] 1 Lloyd's Rep 434, the judge suggested (though did not specifically decide) that the fact that many parts of the defendant's standard terms, other than the exclusion clause, were modified in negotiations meant that s 3 did not apply. One clear difference between that case and *St Albans v ICL* is that in *St Albans* there was a clear distinction between the particular terms, which were negotiated, and the General Conditions, which were not.

[32] 29 June 1999 (unreported).

[33] [2000] EWHC Technology 137.

recover any financial loss in the event that it terminated the contract for material breach. This conflicted with an exclusion clause in the main contract which set out a broadly worded exclusion of liability.

Purely on the question of whether the contract was on 'standard terms', the court found—perhaps somewhat counter-intuitively—that the contract was on standard terms notwithstanding the schedule of variations, as the standard exclusion clause itself had been included without any material variation to its wording.

(e) *Holman v Sherwood:* A similar approach was adopted by the court in *Horace Holman Group v Sherwood International Group Ltd*.[34] In this case, as in *Pegler*, the contract had taken the form of a set of the supplier's standard terms together with an attached annex of amendments, additions, and deletions. The court took the view that the fact that some degree of negotiation had taken place was not relevant to the question of whether any particular term had ceased to be 'standard'. In fact, as the changes to the supplier's standard limitation clauses were only minor in this instance, these terms in particular were to be treated as 'standard terms', so UCTA 1977 did apply.

1.2.2.10 *The UCTA reasonableness test*

The test of reasonableness is set out in section 11 of, and Schedule 2 to, UCTA 1977. Section 11(1) provides that for a particular provision to be 'reasonable', it must have been fair and reasonable to include the clause at the time the contract was made. The court will take account of the matters mentioned in Schedule 2, including:

(a) The strength of the bargaining position of the parties.

(b) Whether the buyer received some benefit (eg, a lower price) for agreeing to the clause.

(c) How far the buyer knew or ought to have known of the existence and extent of the clause.

(d) If the exclusion is contingent on compliance with some condition (eg, regular maintenance) whether it was reasonable to expect the condition to be complied with.

(e) Whether the goods were specially made or adapted to the customer's order.

The courts have also held that the question as to which of the parties can most readily insure against the loss is a relevant consideration, and that a limitation of liability is more likely to be reasonable than a complete exclusion.[35]

[34] [2002] 146 SJLB 35.

[35] *George Mitchell (Chesterhall) Ltd v Finney Lock Seeds Ltd* [1983] 2 AC 803. This was a case decided under the slightly different provisions of the Supply of Goods (Implied Terms) Act 1973 as its facts occurred before the 1977 Act came into force, but it was nonetheless clearly decided with at least one eye on that Act.

The courts have been through several stages of increasing sophistication in determining how the reasonableness test should apply in practice to system supply contracts, and the main currents are discussed below.

1.2.2.11 *The reasonableness test in practice: (1) towards the high water mark*
The earlier cases in the line of decisions mentioned in section 1.2.2.9 illustrate how the reasonableness test has historically been applied:

(a) *Salvage Association v CAP:* In *Salvage Association v CAP Financial Services Ltd*,[36] the official referee found the following factors tended to support the supplier's contention that the exclusion was reasonable: first, the parties were of equal bargaining power and, secondly, the Salvage Association had taken legal advice and advice from its insurers and auditors. Against those factors, however, were the following:

(i) UCTA 1977 puts the burden of proof of reasonableness on CAP;
(ii) CAP had insurance up to £5,000,000, and could thus stand a greater liability, whilst the Salvage Association could not easily obtain insurance against CAP's failure;
(iii) the risk of CAP's failure should have been low;
(iv) CAP assured the Salvage Association that it would succeed in constructing the software as required under the contract, and the Salvage Association had no reason to doubt this;
(v) CAP had already decided to increase the maximum limit of its liability from £25,000 to £1,000,000, but failed to do so in this contract for unexplained reasons;
(vi) CAP called no evidence to justify the £25,000 limit in relation to CAP's turnover or insurance, or the contract value, or the financial risk the Salvage Association was running.

The official referee found that the factors in favour of the clause being unreasonable far outweighed those in favour of its reasonableness, and held the clause to be invalid so that CAP's liability for the breaches of contract was unlimited.

(b) *St Albans v ICL:* Similarly, the judge in *St Albans City and District Council v International Computers Ltd*[37] held that the exclusion clause was not fair and reasonable, and was thus ineffective to exclude or limit ICL's liability.

[36] [1995] FSR 654.
[37] [1996] 4 All ER 481.

Although St Albans knew of the limitation and had attempted to negotiate it, the following factors operated to render the clause unreasonable:

(i) ICL had substantially more resources than St Albans;

(ii) ICL held product liability insurance in an aggregate sum of £50 million worldwide;[38]

(iii) ICL called no evidence to show that the limitation to £100,000 was reasonable, either in relation to the potential risk or the actual loss;

(iv) as in *Salvage Association v CAP Financial Services Ltd*, the contract had mistakenly been made on a superseded version of the General Conditions. In the current version the limitation was £125,000;

(v) local authorities are not in the same position as private sector businesses; their operations are constrained by statute and financial restraints and they cannot necessarily be expected to insure against commercial risks;[39]

(vi) St Albans received no inducement to agree to the limitation, and there was evidence that all ICL's competitors imposed similar limitations of liability;

(vii) when St Albans tried to negotiate the limitation, albeit at the last moment, ICL in effect said that this was not possible because it would delay the provision of the software to St Albans beyond the date for implementation of the community charge.

The judge accordingly found that ICL had not discharged its burden of proving that the term was fair and reasonable, and also that financially ICL was best placed to bear a risk of this kind through insurance and thus spread it across its customer base.

(c) *South West Water v ICL:* The judge in *South West Water Services Ltd v International Computers Ltd*[40] noted further that the extent to which a party has had discussions and has freely entered into a contract on the other party's standard terms may be relevant as an important circumstance in considering whether those terms are reasonable. ICL argued that its standard limitation clause should be treated as reasonable in this case because its terms had been subject to arm's length discussion and negotiation, but this was found not to be the case on the evidence.

[38] It is not clear how this figure was discovered by St Albans. In *Flamar Interocean Ltd v Denmac Ltd* [1990] 1 Lloyd's Rep 434, the judge specifically held that details of the defendant's insurance cover did not have to be disclosed on discovery, as the relevant question under UCTA was not the specific cover that the defendant held but the availability of insurance cover in similar situations.

[39] The case has received substantial criticism on this ground, which appears to reflect a somewhat idealized view of the relationship between local authorities and their suppliers. It seems unlikely to survive serious argument before another court.

[40] 29 June 1999 (unreported).

1.2.2.12 *The reasonableness test in practice: (2) the high water mark*

Horace Holman Group v Sherwood International Group Ltd[41] probably represents the high water mark of the courts' stringent application of the *contra proferentem* rule and the reasonableness test in favour of the customer. The contract had provided that the supplier, Sherwood, would have no liability for 'indirect, special, consequential or economic loss or loss of contracts, goodwill, revenue, profits, anticipated savings or other benefits . . . or for any loss [arising from third party claims]', and that certain other losses were subject to a 'price paid' cap.

On the specific issue of reasonableness, the court made several observations which seem a little counter-intuitive. For example:

(a) the court said that whilst both parties were large and capable of negotiating on their own behalf, this was not a major consideration to the determination of the reasonableness of the limitation;

(b) the court observed that as Sherwood's system was the best on the market at that time, and the equivalent could not have been obtained elsewhere without a lot of extra work, this also tended to undermine the reasonableness of the limitation—though it is unclear to this author why a supplier's standard limitation clause should be treated particularly unfavourably just because the supplier happens to have the best product on the market;

(c) there was evidence from both parties that all the terms were commonplace in the software industry, and the court held that Holman could not have obtained a contract from a different supplier without substantially similar clauses—though again, it is not clear why this should tend to undermine the reasonableness of a clause;

(d) with regard to the price paid cap, the court observed that the potential for loss was significantly greater than the financial limits in question—but this is precisely the reason for seeking to put a financial cap on the supplier's liability in the first place;

(e) with regard to the exclusion of liability for loss of savings, the court said in a memorable phrase, 'people buy software to make savings because . . . if it works properly, one computer loaded with the right software can replace a dozen Bob Cratchits sitting at their stools with pens'. On that basis, the court emphasized again that a good reason was required to justify the exclusion and none was found, so the exclusion of lost savings failed as well.

[41] [2002] 146 SJLB 35.

1.2.2.13 *The reasonableness test in practice: (3) the tide turns*

As a result of that line of cases leading up to *Holman v Sherwood*, the question started to arise whether the English courts 'had it in' for the IT industry.[42] However, beginning in about 2001, the tide turned back in favour of the supplier.

(a) *Watford v Sanderson:* In *Watford Electronics v Sanderson*,[43] Watford had purchased an integrated sales accounts and warehouse package for use in its mail order business. Total software and hardware costs and licence fees were in the region of £100,000, with damages claimed in excess of £5 million.

The contract was in standard terms, and also contained an exclusion of consequential loss and a price paid limitation clause. At first instance, the judge found that these limitations taken together were unreasonable, and the supplier Sanderson appealed on this point to the Court of Appeal.

The Court of Appeal overruled the 'broad brush' approach taken by the lower court in treating the consequential loss and the price paid limitation clauses as interconnected terms. This represents good news for suppliers, as these clauses will henceforth be construed separately so that if one is found to be unenforceable, there is at least a chance of succeeding under the other.

With regard to the consequential loss exclusion specifically, the Court of Appeal went back to some first principles, and the logical argument was expressed as follows:

(i) there is significant risk that a customized software product may not perform to a customer's satisfaction;

(ii) if that happens, the customer will not make savings it has expected to make, and this risk is (or at least ought to be) in the contemplation of the parties at the outset of the contract.

(iii) in this particular case, the supplier was better able to appreciate the risk of *whether* the product might fail; but the customer was in a better position to *quantify* that risk;

(iv) the risk of loss can generally be covered by insurance, although this may be available only at a cost which will in turn be reflected in the contract price.

Given all that background, when parties of equal bargaining power negotiate a price under an agreement which provides for the risk to fall on one particular party, the Court of Appeal said that the judiciary should be 'cautious' about saying that

[42] 'Do the Courts have it in for the IT industry?' was the title of a discussion at the Computing Services and Software Association at the end of 2001, where the panellists included the chairman of ICL and the judge in *Watford v Sanderson.* One of the themes at that session was that the IT industry does not help itself with poorly drafted specifications and contracting processes, multiple personalities within different parts of the supplier—different individuals dealing with software, hardware, and support sales—and so on.

[43] [2001] All ER 290.

the term is not reasonable. The parties should be taken to be the best judges of the commercial fairness of the agreement, with a court not intervening unless one party has in effect taken unfair advantage of the other. In the circumstances of *Watford v Sanderson* itself, the consequential loss exclusion was upheld.

(b) *SAM v Hedley:* That approach of the Court of Appeal was followed in the following year with *SAM Business Systems v Hedley*.[44] The case concerned a Y2K upgrade project, that the customer only decided to undertake at the last minute, signing the contract in October 1999, without doing proper due diligence either on the supplier or its standard contract documentation. The software licence provided for a money-back guarantee in certain circumstances, and it also contained clauses that excluded liability for damages resulting from use of the software, and excluding warranties as to fitness for purpose.

In the Technology and Construction Court, Judge Bowsher looked at these together and concluded that he would have found the exclusions unreasonable but for the money-back guarantee. He also took into account other factors like the parties' equal bargaining power, the existence of similar clauses in contracts from SAM's competitors, Hedleys' own failure to try to negotiate terms, and also their failure to do proper due diligence.

(c) *Kingsway v Red Sky:* Although the more recent case of *Kingsway Hall Hotel v Red Sky IT (Hounslow) Ltd*[45] went against the supplier, it illustrates again that the courts will at least be willing to treat exclusions in standard IT contracts as reasonable.

Kingsway operated a chain of hotels, and bought Red Sky's reservations software. The software was licensed under Red Sky's standard terms, clause 10.1 of which purported to exclude all warranties as to performance, quality, fitness for purpose, 'except as provided in clause 10.2' of the contract. Clause 10.2 then consisted of a warranty that the software would provide the facilities and functions set out in certain 'Operating Documents' to be supplied to Kingsway. There were also exclusions of loss of profits, and a liability cap of four times the contract value.

After the software turned out to be unsuitable, Red Sky sought to rely on its standard terms, arguing that clauses 10.1 and 10.2 together excluded the SGA implied terms as to satisfactory quality and fitness for purpose. They also said that the exclusions satisfied the 'reasonableness' test because the software package was just an off-the-shelf package—it had not been customized to Kingsway's requirements (in which case the hotel company might have been entitled to a higher standard of commitment). Kingsway argued in response that the exclusions could

[44] [2002] All ER (D) 311.
[45] [2010] EWHC 965 (TCC).

only have applied if it had been supplied with the Operating Documents referred to in clause 10.2, which was not the case.

In the event, the court found for Kingsway. Red Sky's attempted exclusion of liability did not apply, because it was based on the assumption that customers would satisfy themselves about fitness for purpose by reading the Operating Documents. The Operating Documents were critical, and as they had not been given to Kingsway, Kingsway could not decide for itself whether the system would be suitable for its needs, and had to rely instead on Red Sky's recommendations. As a result, the clause 10.1 exclusion did not apply and the statutory implied terms therefore formed part of the contract between Red Sky and Kingsway.

It is notable, however, that the court did not express fundamental reservations about the exclusion clause itself. The court observed that it might be reasonable for the supplier to exclude the implied terms as to satisfactory quality and fitness for purpose where the customer has the means to satisfy itself and does not have to rely on the advice of the supplier. In this case, it was rather the failure of Red Sky to observe process—providing the Operating Documents—that essentially led to the failure of the exclusions.

Taking these cases together, then, it is clear that there has been a major change in the way that the courts look at liability clauses in IT contracts. This may be in part attributable to the increasing use of IT systems in everyday domestic and business life, which has 'demystified' IT for the judiciary as it has for the wider population. The parties are now considered to be the best judges of the commercial fairness of the agreement, and this means that a really detailed, critical reading of the liability provisions in any IT contract is more important now than it ever was.

1.2.2.14 *Future developments in the law relating to unfair contract terms*

In February 2005, the Law Commission published its final Report and recommendations on unfair contract terms, together with a draft Bill intended to consolidate and simplify the statutory controls under UCTA 1977 and the 1999 Regulations.

In particular, the Law Commission recommended producing a single, unified regime to cover the whole of the UK, and improving protection for small businesses, which frequently find themselves signing contracts with larger businesses that contain unfair terms (a common feature of many IT contracts). However, despite the fact that the recommendations were widely welcomed, at the time of writing there has been no further progress, and the initiative is currently on hold pending negotiations on the draft EU Consumer Rights Directive (due to finish in late 2011).

1.2.3 Remedies

1.2.3.1 *Conditions, warranties, and intermediate terms*

The remedies available to a party for a given breach of contract are determined partly by the classification of the particular obligation that has been breached.

English law distinguishes between three broad categories of contractual obligation:[46]

(a) *Conditions:* A condition is a term of the contract which, if not performed, gives the innocent party the right to terminate the contract and to claim damages for breach.

(b) *Warranties:* A warranty is a term of the contract which, if breached, gives the innocent party the right to claim damages (but not to terminate outright).

(c) *Intermediate terms:* Because the effect of a breach of a given term may not become clear until the point in time at which it happens, many obligations are not readily capable of classification as either a condition or a warranty. For these 'intermediate terms', the remedy for breach depends on the effect of the breach itself. If the effect is such as to substantially deprive the innocent party of the entire benefit of the contract, the remedies will be the same as for breach of a condition (ie, termination and a claim for damages). Otherwise, the remedy will be the same as for breach of a warranty (ie, damages only).

1.2.3.2 *Classification of contract terms in practice*

The parties are free to designate any given provision as either a condition or a warranty. Where they do so, the courts will generally aim to give effect to the stated intention when it comes to remedies, although this is subject to several caveats. First, if the parties have designated the term as a warranty, but statute or case law expressly provides that terms of that kind are to be treated as conditions, then the courts will follow the statute or case law when it comes to remedies. Secondly, if the contract expressly provides for a particular remedy as the consequence of a breach of the relevant term, and that remedy is inconsistent with the parties' own stated designation, then the court will give the contractual provision about the remedy priority over the stated designation. Thirdly, the nature of the contract itself, or the circumstances and implications of the breach, may lead the court to apply a remedy that is inconsistent with the parties' original designation.

Where the parties themselves have *not* expressly identified a term as a condition or warranty, then different principles apply. First, if statute or case law expressly provides that the term is a condition or a warranty (as is the case with many of the implied terms under the SGA 1979 or the SGSA 1982, discussed above), then the court will apply the relevant designation. Secondly, if the contract expressly provides that breach of the term would entitle the innocent party to terminate the contract, then the court will treat that term as a condition; otherwise it will be a warranty. Thirdly, if the nature of the contract, or the circumstances and implications of the breach, lead the court to the conclusion that the parties must have intended that the effect of the breach should be to entitle the innocent party both to terminate the contract and to claim damages, then the court will treat that term as a condition;

[46] *Chitty on Contracts*, 30th edn (London: Sweet & Maxwell, 2009) 12-019 and 12-020.

conversely, if the court decides that the parties must have intended that the breach would only entitle the innocent party to damages, then it will be a warranty.[47]

1.3 COMMERCIAL AND DRAFTING ASPECTS

1.3.1 Introduction

1.3.1.1 *The need for express contract terms*

It will be clear from the above discussion that there is no shortage of contractual terms that can be implied by law into contracts for the provision of computer systems. These implied terms will not always reflect the parties' commercial intentions, and to that extent it is preferable for the parties to set out in express terms the position they are trying to achieve. However, the contract is more than just a 'legal' document. Its function should be to record all the terms governing the supply of the system—in terms of what is being delivered, how it is paid for, what happens if the goods or services supplied are unsatisfactory, and so on. The function of the negotiation process that leads to a written contract is to ensure that the parties understand each other's expectations (and their own) about the deal in question, and to draw out differences in understanding that can then be addressed before they lead to problems. Many projects go wrong precisely because, for whatever reason—time pressure, pushy salesmen, deliberate misrepresentation—the parties do not exercise sufficient care to ensure that the supplier's and the customer's expectations match.

1.3.1.2 *The need for proper due diligence*

Both parties should undertake a proper due diligence exercise as part of the preparation for a major system procurement. Although there is no standard template for what should be covered in this kind of investigation, prudent purchasers of IT systems and services will perform a thorough investigation into the technical feasibility of the engagement, the achievability of the development and implementation timetable, the accuracy of the financial modelling, the resources to be committed on each side, and any other important areas of risk or commercial exposure. The most carefully crafted contract is no substitute for critical thinking about risks and mitigation in the early stages of the procurement exercise.

The case of *BSkyB Ltd v HP Enterprise Services UK Ltd (formerly Electronic Data Systems Ltd)*[48] was the biggest IT dispute ever to come before the English courts, with the broadcaster claiming more than £700 million from the supplier, and it illustrates the risks of relying uncritically on ill-considered plans and timetables.

BSkyB made an announcement in February 2000 that they were going to implement a new CRM system within 12 months. It was known to be an ambitious

[47] Ibid 24-038 to 24-040.
[48] [2010] EWHC 86 (TCC).

timetable for such a major project, but having committed itself publicly to that goal, BSkyB conducted a tender process and signed a letter of intent with EDS. The parties initially agreed that they would aim for a go-live date of November 2001, but—under pressure from senior people at BSkyB—EDS subsequently represented that the go-live date could be brought forward by several months to July 2001.

The only way that EDS could make the timetable work on paper was to cut the contingencies that had been built into the original plan, which of course increased significantly the risk of failure. There were major disagreements about this approach within EDS, and indeed there were internal emails that suggested that the project manager had 'artificially manipulated' the timetable for the sake of acceding to the client's demands.

The project encountered extensive delays, and BSkyB dismissed EDS before the engagement was complete. The new CRM system was originally supposed to go live in July 2001 at a budget of £48 million, but was finally completed in March 2006 at a cost of £265 million—nearly five years late and more than five times over budget. BSkyB claimed damages totalling £700 million for a range of matters, including consequential losses and damage to reputation.

From the purely legal point of view, the principal issue in the case was the relationship between the contractual exclusion clauses and BSkyB's claim for fraudulent misrepresentation. EDS was found to have misrepresented the feasibility of the implementation timetable, and as a result was exposed to an unlimited claim for damages because none of the contractual liability caps operated to limit liability for fraudulent misrepresentation.

However, the case also illustrates the practical necessity of conducting a proper analysis of the major risks before committing to a contract. The court found that EDS's statement that they would be able to achieve go live by the July date carried an implication that they had done proper analysis and had reasonable grounds to believe that it was achievable. However, there was also evidence that BSkyB itself could and should have taken a more critical approach to the assurances from EDS: there had actually been strong reservations expressed within the broadcaster about the feasibility of the shortened timetable, and BSkyB's own Chief Technology Officer had suggested that the project was heading for disaster if EDS had not done sufficient analysis. A more thorough, open, and critical approach to the identification of these concerns might not have prevented the failure of the project altogether, but it could certainly have helped to mitigate the risk.

1.3.1.3 *The role of the legal adviser*

As noted at section 1.1.2 above, a well-drawn system supply contract will record all the parties' principal expectations about the procurement in question. Ensuring that these expectations match, and that they are properly documented in the contract paperwork, is the key role of the legal adviser in the contract process.

There is a common misconception in the IT industry that contract documentation is purely a matter for lawyers, and is somehow separate from the commercial

realities of a transaction. As a result, the legal adviser is often left out of the early stages of negotiation, and frequently has to raise key issues such as limitations of liability at a very late stage in the process. Putting together the right team for the procurement or sale should mean involving the legal team at the outset, and using their expertise to help draft and structure the documentation generally.

1.3.2 Specification

1.3.2.1 *Need for a written specification*

A clear specification is the foundation stone of a successful system supply contract. It defines what the supplier will provide, sets out the quality standards to be achieved, and forces both sides to think seriously about what is really wanted, and what is achievable. In every case, the specification should address:

(a) Functionality (ie, what the system is to do).

(b) Performance (ie, how well it is supposed to do it).

(c) Compatibility (ie, any software and hardware with which the system is likely to be used).

The importance of including a suitably detailed specification can be illustrated by two cases:

(a) *Micron v Wang:* In *Micron Computer Systems Ltd v Wang (UK) Ltd*,[49] one of Micron's complaints was that the system bought from Wang did not provide 'transaction logging'. The judge observed that

> the acknowledged absence of a transaction logging facility is not in reality a fault in the system which was sold. Micron can only complain about its absence if Micron can establish a contractual term, express or implied, or an actionable representation, to the effect that the system included such a facility. In order to make good its case on transaction logging, Micron must therefore establish that they made known to Wang that they required such a facility.

In the event, the judge found on the evidence that Micron had not made its requirement for transaction logging clear to Wang, and accordingly that part of Micron's case failed.

(b) *St Albans v ICL:* By contrast, in *St Albans City and District Council v International Computers Ltd*,[50] the local authority had made its requirements clear in its invitation to tender which had itself been expressly incorporated into the contract. When the system supplied failed to meet those requirements, the authority claimed successfully against the supplier on the basis of breach of an express term.

[49] 9 May 1990, QBD (unreported).
[50] [1996] 4 All ER 481.

1.3.3 Delivery and acceptance arrangements

1.3.3.1 *Delivery*

The arrangements for delivery should always be dealt with by express provisions in the supply contract. The contract should set out the date (or dates) on which delivery is to be made, whether all the elements of the system are to be delivered at one time or whether it is to arrive in instalments, and who has responsibility for installation and testing. From the point of view of contractual certainty, the ideal situation is for the contract to set out specific delivery dates. This may not be possible if, say, there is a lengthy development project prior to delivery, but even in that eventuality the contract should set out a timetable or project plan showing roughly how long each phase is likely to take. If no clear date is identified or identifiable, then as a matter of law the system will have to be delivered within 'a reasonable time': a position of contractual uncertainty that is unlikely to provide significant advantage to either party in the event of a dispute.

Consequences of late delivery and non-delivery What commonly happens if delivery is late is that the buyer waives the seller's obligation to achieve that date, and so loses the right to reject: for example, by continuing to request delivery after the contractual date has passed. This means that there is now *no* contractual date for delivery, and at best the seller is obliged to deliver within a reasonable time. In order to regain the right to reject, the buyer must reimpose a date by giving the seller reasonable notice that the buyer will refuse to accept that part of the system after a particular date.[51] Such notice is normally express, but it may be given impliedly (eg, by service of a writ[52]). As an additional protection for the buyer, the contract should ideally contain an express provision permitting cancellation of the contract, with or without compensation to the buyer, if the goods are not delivered by some cut-off date. Alternatively, if the supplier does not agree to a clear target date for delivery, the contract may provide for a notice period after which the buyer can withdraw, with an appeal against the notice to a third party.[53]

1.3.3.2 *Acceptance arrangements*

Formal acceptance procedures are a crucial aspect of any successful system procurement. Systems are acquired in order to perform a specified set of functions, within particular performance requirements. Until the system has been tested, the buyer will not be able to assess whether what has been delivered accords with the contract.

[51] *Charles Rickards Ltd v Oppenhaim* [1950] 1 KB 616.
[52] *Tool Metal Manufacturing Co Ltd v Tungsten Electric Co Ltd* [1955] 1 WLR 761.
[53] eg, an arbitrator, the engineer in construction contracts, etc.

Defining acceptance criteria The nature of acceptance tests varies widely between projects. Where a major piece of development work is involved, the parties may negotiate and document detailed testing arrangements as part of the contract document. At the other extreme, the acceptance procedure may simply be that if the buyer uses the system 'live' for, say, 30 days without rejecting it, then it is deemed to have been accepted. The vital features of any acceptance procedure, however, are:

(a) That it provides for an objective and measurable 'yardstick' as to the standards of performance and functionality to be demonstrated.

(b) From the buyer's point of view, that this yardstick will demonstrate to its full satisfaction that the system meets its requirements.

(c) That the procedure is clear as to the consequences of both the passing and failing of the acceptance test.

Consequences of acceptance On successful completion of the testing, the system will be deemed to have been accepted. Acceptance will generally trigger payment of the whole or the final instalment of any lump sum charges, or the commencement of periodic charges, and following acceptance the buyer's remedies will be limited to a claim under the warranty provision. The contract should also provide expressly for the consequences of failure to achieve acceptance. Typically, there will be a period during which the supplier may rectify problems and then retest; but further failure will signal the premature end of the contract, with the buyer able to return the hardware and software in exchange for a refund of any moneys paid.

1.3.4 Timetable

1.3.4.1 *Need for the timetable*

The preparation of the specification should enable the parties to assess the likely timescale for the project and so to prepare a project plan setting out key deliverables (or 'milestones') and their expected dates. In almost all major systems implementations, staged payments will be triggered by the achievement of individual milestones. It is accordingly essential that these are identified with as much precision as possible, and reflect the terminology of the contract generally. The buyer will generally have in mind a timescale within which it wants the system provided, although the sophistication of the timetable will vary according to:

(a) The complexity of the project in question—a major development contract may include target dates for numerous stages, each of which may be divided up into smaller phases such as functional specification, systems specification, program specification, development, program testing, systems testing, debugging, retesting, and acceptance.

(b) Payment arrangements—in particular, whether the price and payment arrangements are tied in to specified milestones, and the implications for both parties of any failure to meet target deadlines.

1.3.5 Pricing and payment

1.3.5.1 *Pricing and payment structures generally*

From the supplier's point of view, the heart of the contract is ensuring that he gets paid for the goods or services he provides. There are as many pricing and payment structures as there are types of IT deal. For example:

(a) a single charge for the entire development and implementation project;

(b) periodic charges for ongoing maintenance and support;

(c) separate purchase and licence fees in respect of hardware and software elements of the system (which licence fees may themselves be periodic or a single lump sum);

(d) 'utility' pricing for cloud computing services, based on utilization and payable according to the supplier's published tariff.

As a result, there is little to be gained from making generalizations about pricing and payment terms. The one point worth making is that, where payments are tied into specific targets (such as system acceptance), the terminology and structure of the payment schedule should accurately reflect that of the timetable.

1.3.5.2 *Timing of payments*

The time of payment will generally not be of the essence unless it is expressed as such. However, for the sake of contractual certainty, it is of course desirable to specify precisely when sums become due. This links in with delivery dates. A common practice in systems contracts is to pay by instalments as the various parts of the system are delivered, retaining a proportion of the price until the complete system has been tested. This arrangement will incentivize the supplier to perform these obligations in accordance with the contractual timetable, while the retention of a significant proportion of the fee until acceptance will give the buyer some security for performance. Suppliers will also often seek an express right to payment of interest on overdue amounts.

In respect of periodic fees specifically, the buyer will be concerned about the supplier's rights to increase the fee, and may seek to circumscribe these in some way. For example, only one increase a year may be permitted or rises may be limited by reference to an appropriate index. The buyer may also seek to delay the first payment until after the system has been accepted.

1.3.5.3 *Retention of title*

Where the seller gives credit to the buyer, there is always some doubt whether the seller will be paid. (Even substantial banks and law firms have been known to

default on debts.) For this reason, it is common for hardware suppliers to retain title in the goods they supply as security for payment. A retention of title clause is a provision in the contract that although the buyer is to be given possession of the goods, ownership is to remain with the seller until certain conditions (normally payment in full) are complied with. If the buyer fails to comply with the conditions, the seller is entitled to repossess the goods, and can then sell them to recoup its losses.

Retention of title clauses are permitted under section 19 of the SGA 1979. It is important that the seller retains title, property, or legal ownership (all these terms are equivalent).[54] As risk normally passes with property, a retention of title clause will also provide that the goods are at the buyer's risk from the moment of delivery. It should contain a clear statement of when the seller is entitled to repossess the goods, normally if payment is not made within the credit period, or if the buyer commits an act of insolvency or a receiver is appointed. It is also common to include a provision that the seller has the right to enter the buyer's premises to repossess the goods.

1.3.6 Intellectual property rights (IPRs)

1.3.6.1 *The need for express treatment of IPR issues*

System supply contracts generally involve the transfer of information, in some form, from one party to another: for example, program specifications (in a consultancy agreement), software (in a software licence), data for processing (in a bureau services agreement), or confidential business information (in a development agreement). The lawful use of such information is dependent on compliance with the laws relating to copyright, confidentiality, database rights, and other forms of intellectual property. In addition, the use of certain computer equipment may constitute an infringement of patent or similar rights if it is undertaken without the consent of the rights owner. As a result, it is essential that any system supply contract deals comprehensively with IPR issues, and in particular addresses:

(a) ownership; and

(b) IPR warranties and indemnities.

1.3.6.2 *Ownership*

The contract should specify what IPRs are to be created or used, and precisely who owns them. This is particularly important in contracts for software development or consultancy work because of section 11 of the Copyright Designs and Patents Act 1988, which contains a common trap for the unwary: work done under a consultancy contract will normally vest in the supplier, not the customer, so a formal written assignment of copyright is needed if the aim is for the customer to own the work product outright.

[54] Note that any drafting which amounts to a retention of equitable ownership will result in the creation of a charge which must be registered under the Companies Act 2006 or the Bills of Sale Act 1878.

1.3.6.3 *Treatment of third party software*

For similar reasons, where the system incorporates any third party software, the prudent customer will want an express assurance that the supplier has authority to grant the licence or sub-licence in respect of those third party rights. As a practical matter, it is essential to ensure that there is no 'hiatus' between the scope of the third party licence and the uses envisaged in respect of all other aspects of the system.

1.3.6.4 *IPR warranties and indemnities*

Although section 12 of the SGA 1979 provides a remedy for the customer if the seller should turn out not to have the right to sell the products in question,[55] in practical terms, the parties are unlikely to be happy to rely on this general law position:

(a) The customer will often impose a formal obligation to take curative action to deal with any allegations of third party IPR infringement: this is particularly so if the system is a critical part of the customer's business and merely rejecting it and claiming back the purchase price would leave the customer in a difficult position.

(b) Equally, the supplier may wish to reserve the right to dispute the existence or extent of the third party's claims, in order to preserve its reputation and position in the market.

As a result, most system supply contracts will contain a warranty in favour of the customer that use of the system will not infringe third party rights, and an indemnity in respect of any claims that may arise. (Similar provisions are commonplace in distribution and agency contracts, to protect the distributor/agent and its end-user customers against IPR claims brought in respect of products supplied by the principal.) The contract should set out any express warranties as to the supplier's ownership or entitlement in respect of the IPRs comprised in the system, together with a process for addressing any breach of those warranties. A clause which incorporates the following procedural points should assist in removing some of the potential complications:

(a) A right on the supplier's part to take over and litigate (in the customer's name) any such action by a third party, and to settle the action.

(b) A right for the supplier to modify the system so that it does not infringe the alleged right, provided that it still conforms with the specification.[56]

(c) An indemnity given by the supplier against the customer's losses in the event of a successful third party claim.

[55] See section 1.2.1.2 above.

[56] It must be noted that a seller cannot exclude or restrict the condition in the SGA 1979, s 12(1)—see sections 1.2.1.2–1.2.13. However, until the third party has established that the right has in fact been infringed, the seller is arguably not in breach of that condition. In any event, most buyers should be satisfied with effective cure.

1.3.6.5 *Confidentiality*

A further feature of the transfer of information between suppliers and customers is that provision needs to be made to ensure that the information is treated in confidence. In the context of a consultancy agreement or a bureau services contract, for example, the consultant may have access to all kinds of commercially sensitive information about the customer's business and systems. The customer will want to ensure that this information is only used for the express, permitted purposes. Similarly, where a software house is licensing programs for use by its customer, the supplier will want to ensure that its proprietary software is not disclosed to third parties.

1.3.6.6 *Access to source code*

Software elements of the system will usually be delivered to the customer in object code form, with the source code being retained by the supplier. The practical consequence of this will be that, whilst the buyer is able to use the software, he will not be able to modify or maintain it. He is dependent on the supplier for software maintenance, although he may be able to protect himself against the more dire consequences of such dependence by reason of the error correction rights conferred in section 50C of the Copyright Designs and Patents Act 1988. Again, however, the prudent customer would be unwise to rely on this general law provision, for which reason the contract should expressly provide for either:

(a) An express right to call for and to use the source code for development or maintenance purposes (a requirement which will often be vigorously resisted by suppliers), perhaps subject to confidentiality conditions, in order to protect the supplier's legitimate interests in the secrecy of this material.

(b) An escrow arrangement, whereby the supplier agrees to deposit a copy of the source code with an independent third party (the escrow agent) and then the supplier, customer, and escrow agent enter into a tripartite agreement to govern its release. The escrow agreement will provide for the initial deposit of the source code, and for its updating with error corrections and new releases. On the occurrence of certain specified events (eg, such as the supplier going into liquidation, or failing to provide maintenance services as contracted for), the escrow agent will release the source code to the customer for the purposes of maintaining the software. Organizations providing escrow services in the UK include industry bodies like the National Computing Centre and Intellect, and commercial operators like Iron Mountain. So far it would seem that the arrangements work successfully.

1.3.7 Other express warranties

1.3.7.1 *The need for express warranties*

The existence or otherwise of implied terms in system supply contracts is, as we have seen, a matter of some uncertainty. Indeed, such terms are seldom of much

assistance to the parties because of the very generalized way in which they are expressed. Concepts like 'satisfactory quality' or 'reasonable skill and care' are inevitably open to a high degree of judicial interpretation.

Furthermore, in the real world, the majority of IT contracts (whether on the supplier's standard terms or specially negotiated between the parties) will specifically exclude or limit the operation of all implied conditions and warranties. (The efficacy of such exclusions and limitations is examined at section 1.2.2 above.) As a result, it is in the interests of both the supplier and the customer to ensure that their agreement accurately documents all the assurances that the parties regard as important.

1.3.7.2 *Basic forms of warranty*

Express warranties given by suppliers are accordingly of considerable importance. Such express warranties normally take one of two basic forms:

(a) The warranty may state that the system will comply with its functional specification or user manual, or the service will conform with a documented service description, or meet certain specified performance criteria, or the like: such a warranty has the advantage that compliance or breach can be objectively measured, and is usually the best form of express warranty that a customer can obtain.

(b) The warranty may provide that defects or service failures will be corrected by the supplier, though the disadvantage here is that it begs the question of what constitutes a defect: for example, in the event of failure to perform a particular function, there may be a dispute about whether the lack of the particular function in fact amounts to a defect (which was precisely the issue in *Micron*—see section 1.3.2.1(a) above).

1.3.7.3 *Restrictions on warranties*

Whatever the form of warranty, it is likely to be subject to a number of restrictions:

(a) It will generally be limited to a fairly short period of time, probably between three and 12 months. After this time the system may be covered by the maintenance and support arrangements: in other words, ongoing maintenance after expiry of the warranty period has a separate price attached to it.

(b) Some warranty clauses also state that the supplier's only liability is to correct the non-compliance or the defect. The purpose would seem to be to exclude any liability for damages. To the extent that the supplier complies with the warranty this would seem to be effective, but if he fails to remedy the non-compliance or defect, an action for damages would lie for that failure.

(c) Warranties often state that they cease to apply if the customer makes any additions or modifications to the system. Customers would be well advised to limit the qualification to errors or defects in the system that are actually caused by the addition or modification.

1.3.8 Limitations and exclusions of liability

1.3.8.1 *Drafting effective exclusion clauses*

IT suppliers generally seek to restrict their potential exposure to users resulting from breach of contract or defects in the system. This is treated by some as purely a 'legal' issue, but in fact is a major question of commercial risk assessment and allocation. This type of provision is commonplace in system supply contracts, particularly where the contract is based on the supplier's standard terms, which typically contain a limitation clause along the following lines:

(a) The supplier does not exclude liability for death or personal injury caused by negligence, or for fraudulent misrepresentation.

(b) The supplier seeks to exclude liability altogether for 'special', 'indirect', or 'consequential' losses.

(c) The supplier accepts a limited degree of liability for certain other classes of 'direct' loss.

The general legal issues as to the enforceability of limitation and exclusion clauses are discussed at section 1.2.2 above. The first point in (a) above requires little further discussion: liability for death or personal injury caused by negligence, and liability for fraud, *cannot* be limited, as a matter of law.[57] The second and third points in (b) and (c) are discussed below.

1.3.8.2 *Consequential loss: general principles*

The parties need to consider what kinds of loss might result from a system failure, and who takes the risk. The basis of the supplier's argument to exclude liability for consequential loss or loss of profits is essentially that the nature of IT products means that their uses (and thus the potential consequential losses) are not easily foreseeable at the time the contract is made, and that the potential exposure is in any case disproportionate to the contract value. Whether this is an acceptable commercial stance depends on the nature of the system and the extent of the customer's dependence on it.

1.3.8.3 *Consequential loss: drafting issues*

However, turning that commercial position into effective (and commercially acceptable) drafting can be more problematic. There is no consensus as to the meaning of the expressions 'special', 'indirect', and 'consequential' in the context of contractual claims, and there is often a resulting lack of certainty as to the precise effect of the intended exclusion. It is not the purpose of this chapter to try to offer a definitive interpretation of these terms, but it may be helpful to summarize the semantic and

[57] UCTA 1977, s 2(1).

philosophical problems encountered by judges and academics in trying to pin down their meanings.

1.3.8.4 *Consequential loss:* Hadley v Baxendale

The starting point for any discussion of consequential damages is *Hadley v Baxendale*,[58] which distinguished two classes of loss recoverable for breach of contract. These are:

(a) 'such [damages] as may fairly and reasonably be considered either as arising naturally, i.e., according to the usual course of things . . . or such as may reasonably be supposed to have been in the contemplation of both parties at the time they made the contract as the probable result of the breach of it'; and

(b) if the parties were aware of 'special circumstances' at the time the contract was made, the damages 'which they would reasonably contemplate would be the amount of injury which would ordinarily flow from a breach under these special circumstances'.

1.3.8.5 *Consequential loss: the semantic labyrinth*

That basic distinction drawn in *Hadley v Baxendale* has been recast on numerous occasions over the last 150 years. However, the difficulty for the draftsman is that the terminology in common usage—'indirect' or 'consequential' loss, or 'special' damages—does not fit neatly into the *Hadley v Baxendale* rules, nor is it used in a consistent fashion.

For example, the expression 'consequential loss' is taken by some to mean pecuniary loss consequent on physical damage. However, when used in an exclusion clause, 'consequential' means losses arising under the second rule in *Hadley v Baxendale*, and so does *not* preclude recovery of pecuniary losses under the first rule.[59]

A more recent discussion of 'consequential loss' is *British Sugar plc v NEI Power Projects Ltd*.[60] It is also a good example of the confusion that can be caused by trying to use *Hadley v Baxendale* terminology to define concepts like 'direct', 'indirect', or 'consequential' loss. NEI supplied some defective power equipment to British Sugar, under a contract that expressly limited the seller's liability for 'consequential loss'. As a result of breakdowns, British Sugar claimed for increased production costs and resulting loss of profits. British Sugar argued for the narrowest construction of the term 'consequential loss', interpreting it to mean 'loss not resulting directly and naturally from breach of contract'; whereas NEI argued that the term meant 'all loss other than the normal loss which might be suffered as a result of the breach of contract, negligence or other breach of duty'. The courts found for the

[58] (1854) 9 Exch 341.
[59] See *Saint Line Ltd v Richardsons, Westgarth & Co* [1940] 2 KB 99.
[60] [1997] EWCA Civ 2438.

claimant, and approved earlier authorities that 'consequential damages' means the damages recoverable under the second limb of *Hadley v Baxendale*.

By this analysis, where loss of profits or loss of business (commonly regarded as typical examples of 'consequential loss') arise naturally from the breach of contract, they should be recoverable by the user. This is a result that may surprise many IT suppliers, but which was clearly followed in *Simkins Partnership v Reeves & Co Ltd*.[61] Reeves & Co had agreed to supply a telephone system at Simkins' offices. As a result of some modification work, various voicemail ports were left unsecured, with the result that an unknown third party obtained access to the system and used it to make international calls, for which Simkins was billed some £17,200. Simkins in turn claimed that amount from Reeves on the basis of breach of the implied terms of reasonable care and skill. Reeves sought to rely on a contractual exclusion of 'consequential loss', but the court held that the £17,200 claim was a *direct* loss; the unauthorized charges were (or should reasonably have been) in the contemplation of the parties at the time the contract was made, as a possible consequence of failing to secure the system adequately. The case clearly fell into the first limb of *Hadley v Baxendale*.

Similar confusion is often encountered in the interpretation of other commonly used terms, where the courts have sometimes struggled to express in a clear fashion their approach to the intertwined concepts of causation, foreseeability, and remoteness. For example:

(a) In relation to 'indirect loss', it used to be the case that the courts would hold a defendant liable (particularly in negligence) for all 'direct consequences' whether foreseeable or not, but they have long since ceased to try to define issues of remoteness and quantum in terms of 'direct', 'natural', or 'ordinary'. Instead, following the *Wagon Mound*[62] cases in the 1960s, the test of liability (in tort at least) is analysed simply in terms of foreseeability.

(b) To complicate matters further, the term 'consequential' has at one point been defined simply to mean 'not direct'—see *Millar's Machinery v David Way*[63]—but there is also an argument, following certain observations of Lord Diplock in *P&M Kaye v Hosier*[64] that the expression 'direct' could include 'consequential' losses provided these were not too remote.

(c) The term 'special damages' has at least four possible meanings, including (i) past (pecuniary) loss calculable as at the trial date—as opposed to all other items of unliquidated 'general damages'; and (ii) losses falling under the second rule in

[61] 18 July 2003, QB (unreported).

[62] *Overseas Tankship (UK) v Morts Dock and Engineering Co (The Wagon Mound)* [1961] AC 388, [1961] 2 WLR 126; and *Overseas Tankship (UK) v Miller Steamship C Pty (The Wagon Mound (No 2))* [1967] 1 AC 617, [1966] 3 WLR 498.

[63] (1935) 40 Com Cas 204.

[64] [1972] 1 All ER 121.

Hadley v Baxendale—as opposed to 'general damages' being losses recoverable under the first rule.

1.3.8.6 *Towards an 'assumption of responsibility' test*

In summary, the meanings of the terms 'indirect', 'consequential', and 'special' are at best unclear in the context of IT contracts, and it is surprising that they should continue routinely to be used. The inclusion of such imprecise terminology inevitably delays the contract process, creates uncertainty for users and suppliers alike, and reflects badly on the IT industry and its legal advisers. However, a line of recent cases in the higher courts shows a shift in judicial thinking, and one that will be welcomed by many IT contract specialists.

(a) *Transfield:* In *Transfield Shipping Inc v Mercator Shipping Inc*,[65] the charterers of a ship returned the vessel nine days late, which meant that the owners had to re-negotiate a follow-on charter on much less favourable terms than they had originally agreed. The owners sought damages for their loss of profit amounting to $1.3 million. The charterers argued, however, that the loss should be limited to the difference between the normal market rate for the follow-on charter and the rate that the original charterers had paid for the nine-day over-run, which came to just $158,000. In the House of Lords, their lordships held that the higher level of loss claimed by the owners was too remote to recover. Unfortunately, as often happens, they came to their various decisions for different reasons, but certain comments of Lord Hoffmann were of particular interest.

What Lord Hoffmann said was that the test of remoteness—that is to say, the test of whether a particular heading of loss is recoverable, or whether it was too far removed from the breach of contract—does not just depend solely on foreseeability, which is the conventional *Hadley v Baxendale* test. Rather, he said, the proper question to ask was whether in all the circumstances the loss was a type of loss which the defaulting party could reasonably be regarded as having assumed responsibility for at the time the contract was made.

If that is not the case—if the defaulting party cannot be regarded as having assumed responsibility for the particular kinds of loss—the innocent party will not be able to recover losses that may occur in the usual course of things. In effect, the remoteness test in *Hadley v Baxendale* is therefore a prima facie presumption about what the parties may be taken to have intended, which works fine in most cases, but is nevertheless capable of rebuttal where the commercial context or general understanding of market practice shows that a party would not reasonably have been regarded as assuming responsibility for those losses.

(b) *Supershield:* There was some initial doubt about whether *Transfield* was of wider application than just the shipping business (and indeed whether Lord

[65] [2008] UKHL 48.

Hoffmann had intended to create a new test of recoverability), but this was resolved within months by the Court of Appeal decision in *Supershield v Siemens*.[66] The case concerned a faulty water valve that led to flooding in the basement of an office block in the City of London, and the background involved a chain of sub-contracts for a water tank sprinkler system. At the heart of that system was a valve provided by Supershield, and it was this valve that failed. The flooding that resulted was exacerbated because the drains were blocked. Supershield claimed that in the normal course of things (ie the first limb of *Hadley v Baxendale*) the water should have just run away, and the damage would accordingly have been much less. The additional damage caused by the flooding should not, they said, be Supershield's responsibility.

Lord Justice Toulson took the opportunity to talk about the 'policy' rationale that underlies the rules about remoteness. The law on remoteness is based on the idea that the loss recoverable by the innocent party should be limited to the loss which the defaulting party may reasonably be taken to have assumed responsibility for, to protect the innocent party against those losses. The question of remoteness therefore cannot be considered in isolation from the overall purpose of the contract and the scope of the contractual obligations. Here the purpose of the valve was to protect from flooding, and thus Supershield had assumed contractual responsibility for the valve to work so as to prevent that loss even though the probability of simultaneous failure of the drains as a backup system was low.

These comments seem to confirm the approach of Lord Hoffmann in *Transfield*, that the question of assumption of responsibility is the proper question to ask.

(c) *Centrica*: The *Transfield* approach appears also to have been followed in a major IT case, *GB Gas Holdings Ltd v Accenture (UK) Ltd*.[67] GB Gas Holdings, a subsidiary of the energy group Centrica, engaged Accenture to supply a new IT system, which included a billing system for residential customers. Each party's liability was subject to a number of financial caps, according to different headings of potential loss or damage, and the contract excluded loss of profits; loss of business or revenue and any losses or damages to the extent that they were 'indirect', 'consequential', or 'punitive'.

There were problems with the system, and large numbers of customer accounts went unbilled. BG would then issue late bills, which led to major issues with customer satisfaction. Customer satisfaction was exactly what the new billing system was supposed to improve. Centrica claimed several heads of damage in the proceedings, and in particular, as far as this discussion of 'indirect' and 'consequential' loss is concerned, they claimed that the backlog of unresolved 'exceptions' had caused loss because they had had to pay out compensation to customers; pay increased gas

[66] [2010] EWCA Civ 7.
[67] [2009] EWCA Civ 912.

distribution charges; employ large numbers of additional staff to try to resolve the problems and to deal with the volume of customer complaints; and they also had had to write off millions of pounds for unbilled or late-billed supply of gas and/or electricity. Predictably, Accenture disputed that these losses were recoverable, arguing that many of these headings were 'indirect' or 'consequential'.

In the event, the first instance court found—and the Court of Appeal upheld—that many of the headings were in fact 'direct' and therefore recoverable. In particular:

(i) The £18 million paid out as additional gas distribution charges was recoverable, because the gas company's inability to provide its wholesale suppliers with complete and correct information about consumption had led to it being overcharged. Accenture had argued that these were 'indirect' losses as they were the result of contracts that were totally outside Accenture's knowledge, but the court decided that this was a direct loss as it arose naturally from the breach of contract.

(ii) Compensation paid out by Centrica to customers, totalling £8 million, was also recoverable. This was a direct loss because the context of the Agreement made it clear that one of its key purposes was to improve customer relations and services—this was actually stated in the recitals. Applying the *Transfield* concept of the 'assumption of responsibility', the court found that Accenture had assumed responsibility for losses in terms of customer compensation if the billing system failed to perform as intended.

(iii) Centrica recovered charges of £2 million for additional borrowing which had been incurred in order to make up for lost revenue through the period of late billing or non-billing of customers. The court held that these were direct losses, and 'the very likely consequence' of the breach by Accenture.

(iv) Centrica also recovered various other customer service charges, like stationery and correspondence costs arising from keeping customers up to date: the court held that all of these were direct losses as well.

1.3.8.7 *Drafting issues: reliance on standard terms and blanket exclusions*

What all these cases tell us is that the concepts of 'direct', 'indirect', or 'consequential' loss are very fluid, and they should be treated with extreme caution. In the context of IT and outsourcing contracts, though, companies routinely agree to use these terms in their liability clauses, with very little consideration about what they might actually mean in the context of any particular contract. This cannot be the best approach to this difficult but important aspect of the parties' relationship, and two

cases illustrate the risks for suppliers of simply trying to rely on blanket exclusions of liability.

(a) In *Regus (UK) Ltd v Epcot Solutions Ltd*,[68] a dispute over the failure to provide air conditioning at a serviced office, the supplier's standard terms contained an exclusion clause which purported to exclude liability for 'loss of business, loss of profits, loss of anticipated savings, loss of or damage to data, third party claims or any consequential loss'. At first instance, the court found that the term did not satisfy the UCTA reasonableness test because it effectively deprived the customer of any remedy for the supplier's failure to provide what was, in the overall commercial context, a basic element of the service. On appeal, the Court of Appeal[69] held that the first instance judge had been wrong, as the exclusion clause had not purported to exclude the 'prima facie' measure of contract damages, which in this case was the diminution in value of the services—a decision that was met with relief by many IT companies who routinely rely on this kind of provision—but the case nevertheless illustrates the importance of thinking critically about the types of loss.

(b) Similarly, in *Internet Broadcasting Corp Ltd (t/a NetTV) and NetTV Hedge Funds Ltd (formerly MARHedge TV Ltd) v MAR LLC (t/a MARHedge)*,[70] the deputy judge found it significant that the effect of the exclusion clause was effectively to deprive NetTV of any realistic remedy for default by MARHedge. The clause had provided that 'neither party will be liable to the other for any damage to software, damage to or loss of data, loss of profit, anticipated profit, revenues, anticipated savings, goodwill or business opportunity, or for any indirect or consequential loss or damage.' The court recognized that, ultimately, any loss suffered by a company can be characterized as financial or economic loss, so a clause that purports to exclude all liability for financial loss incurred by a company is more likely to be considered unreasonable by the courts.

There are of course sound reasons why companies may make a commercial decision to rely on standard exclusion clauses, including the simple practicality of using standard form contracts. However, where the engagement is of a nature that permits them to do so, it is surely preferable that both suppliers and customers should focus on the specific risks associated with the particular procurement. The customer will generally accept that the supplier has a legitimate concern about exposure to unspecified types of liability; but the kinds of loss that will flow from a breach of an IT supply contract *can* be classified, at least in general terms.

1.3.8.8 *Drafting issues: drafting for the allocation of specific risks*

In this respect, the hearing on assessment of damages in *Holman v Sherwood* provides some helpful headings for consideration. Once the limitation clauses

[68] [2007] EWHC 938 (Comm).
[69] [2008] EWCA Civ 361.
[70] [2009] EWHC 844 (Ch).

had been overturned, the parties went back to court to determine the heads of damage for which Sherwood would be liable. Holman had claimed under six heads of damage:

(a) third party costs (including disaster recovery, maintenance, contractors' fees, and the costs of upgrading its PCs to cope with the replacement system);

(b) other costs savings (which included savings which Holman had expected to make by bringing its insurance policy preparation work in-house, but which it was unable to achieve until three years after the original target date);

(c) audit savings, which it was unable to achieve for the same reason;

(d) the costs of employing staff who *would* have been made redundant if the system had gone live when promised;

(e) time wasted by directors and staff in attempting to implement the Sherwood system; and

(f) lost revenue opportunities—the work which the company might have won had it been administratively geared up to have handled the extra volume that the system was supposed to be able to manage—together with interest that might have been earned on those revenue opportunities.

These categories of loss are not intended to be definitive: there is no 'definitive list' as such, and each customer and supplier will have its own specific concerns. However, the starting point for constructing an effective provision must be to identify what categories of loss are foreseeable and how the parties intend to allocate these risks between themselves. The aim is to avoid the (ultimately futile) job of trying to *define* 'direct' or 'consequential' loss, and instead—having regard to all the commercial circumstances of the particular transaction—to try to allocate responsibility for those *specific* types of loss that the parties might have in mind: up front, and without resorting to semantic contortions. This approach, which has been advocated by many IT contract lawyers for years, now appears to have judicial backing by reason of the 'assumption of responsibility' test described in *Transfield.* Perhaps the trend over time will be away from traditional *exclusion* clauses, which describe the categories of loss for which a party will not be liable, and towards *inclusion* clauses which set out clearly the particular types of foreseeable loss that might arise from given breaches of contract.

1.3.8.9 *Financial caps on liability*

The recovery of potential loss is often limited to an agreed financial cap. It is common to place a financial cap on the supplier's liability, both for any one breach and also as a global limit (eg, £100,000 for any breach, £500,000 in total). Other than contracts on standard terms, it is likely that such figures will be subject to negotiation, and it is clear from the limited case law under UCTA 1977 that where the parties have genuinely negotiated a limitation the court will be likely to find that

limitation to be reasonable.[71] Some sellers limit liability to the contract price, though this seems to set the limits rather too low.

1.3.9 Contractual remedies

1.3.9.1 *Introduction*

Consideration needs to be given to the question of what happens if a contract does not go according to plan—for example, if the supplier fails to deliver a working system within the contracted time frames. The general law principles as to the remedies available for breaches of contract are set out in section 1.2.3 above. However, for the reasons discussed in that section, it is often desirable for the contract documentation to provide for specific remedies in particular situations.

1.3.9.2 *Customer remedies: liquidated damages*

One typical solution to the common problem of failure to adhere to a planned timetable is to provide for payment of liquidated damages to the customer for each day or week that final acceptance is overdue. This will involve a good faith attempt to estimate the cost to the customer of such delay; and if the delay persists for a specified length of time, the customer may also want a right to terminate. The liquidated damages clause sets in advance the precise sum to be paid as compensation for certain breaches (eg, late delivery at £X per day). Provided that sum is a *genuine pre-estimate* of the likely losses, and not a *penalty* to force the supplier to perform, the clause will be enforceable. This is so even if the customer's loss is in fact less than the agreed sum.

1.3.9.3 *Customer remedies: service credits*

Even if the project phase runs to plan, it may be the case that once use of the system has moved into its 'business as usual' phase, the supplier underperforms against its ongoing service obligations. It is common for contracts to include a service level agreement (or SLA) that sets out the targets that the supplier has to meet in terms of matters like system availability and performance. That statement of targets is then backed up by a remedy known as service credits, which provide for amounts to be deducted from the payments due under the contract, if actual performance fails to meet the target standards. As with liquidated damages, the aim is not so much to penalize the supplier for under-performance, as to incentivize effective delivery of the services. Service credits are a particularly important feature of outsourcing contracts—see section 3.2.2.10.

[71] *Phillips Products Ltd v Hyland* [1987] 1 WLR 659. See also the discussions of *Salvage Association v CAP Financial Services Ltd* [1995] FSR 645; *St Albans City and District Council v International Computers Ltd* [1996] 4 All ER 481 (CA); *South West Water Services Ltd v International Computers Ltd*, 29 June 1999 (unreported), at section 1.2.2.9 above, as illustrations of the consequences of failure properly to negotiate such limits.

1.3.9.4 *Supplier remedies: interest on late payment*
Similarly, on the supplier's side, the supplier may want an express right to withhold its services or to charge interest in the event of late payment, and in the last resort to terminate the contract altogether.

1.3.10 Change control

1.3.10.1 *The need for change control provisions*
The successful implementation of a complex IT system imposes responsibilities not just on the supplier, but also on the customer. Unlike the supply of a simple package, a bespoke contract is more of a joint effort and, whilst the primary obligation will be on the supplier to write any software and to deliver the system, the supplier will depend on the customer providing information about its business, testing the software, providing employees to be trained, and so on. Crucially, since the customer's requirements may change as the project progresses, the contract should provide a procedure for specifying and agreeing changes to the scope of work. These will involve adjustments to the functional specification, the price, and probably also the timing of the project.

1.3.10.2 *Documenting change procedures*
The proper documentation of these changes will avoid disputes later about what the supplier's obligations actually were. The contract should accordingly include a formal 'change control' clause, setting out a mechanism whereby the customer can request (and the supplier can recommend) changes to the specification, the project plan, or any other aspect of the deal. Any such change would need to be considered from the point of view of technical feasibility and its impact on timing and pricing generally, and no change should take effect unless it has been formally agreed by both parties and documented in the manner envisaged by the change control clause.

1.3.11 Termination

Provision has to be made for termination of the contract, setting out the circumstances in which the contract may be brought to an end and the consequences of that action. These provisions will vary according to the nature of the contract and the deliverables. Apart from a general right to terminate the contract in the event of material breach or the insolvency of the other party, the following points should be considered:

(a) Hardware procurement—the customer may wish to cancel/terminate the contract before the delivery date, and in that event the contract should set out the compensation payable to the supplier.

(b) Software development—contracts for development services are typically terminable by the customer if specific time-critical milestones are significantly overdue. Provision should be made for treatment of the developed software on termination, including delivery up of all copies (and source code) and certification that no copies have been retained.

(c) Contracts for continuing services—consultancy, support, and maintenance services, and bureau services should in any event be terminable on notice. The length of the notice, and the earliest dates on which it may be effective, are matters of negotiation in each case.

1.4 ADDITIONAL CONSIDERATIONS FOR SPECIFIC CONTRACTS

1.4.1 Introduction

The general legal and drafting issues discussed in sections 1.1 to 1.3 of this chapter will apply to the full range of system supply contracts. However, there are additional specific considerations that may apply to particular agreements, and these are discussed in this section.

1.4.2 Software licences

1.4.2.1 *Why is software different?*
Software comprises the instructions which cause hardware to work in a particular way: for example, to process a company's payroll. Looked at in this way, software is intangible, and difficult to classify in legal terms. Some of the relevant case law, as to whether the supply of software comprises 'goods' or 'services', is discussed at section 1.2.1 above. Equally important from the contractual point of view is the fact that software is primarily protected by the law of copyright, as a consequence of which the use of software generally requires a licence from the rights owner.

1.4.2.2 *Types of software*
There are various distinctions that need to be kept in mind when discussing software contracts:

(a) *Standard, bespoke, and customized software:* 'Standard' (or package) software is marketed as an off-the-shelf product to meet the requirements of a large number of users: commonly used business applications for example, such as Word or Excel. By contrast, 'bespoke' software is specially written to meet the requirements of the particular customer. 'Customized' software falls somewhere in between, involving the supplier altering its standard package so that it fits the

customer's needs more closely. Predictably, standard software will tend to be cheaper than bespoke, but may not reflect the way the customer's business operates, while bespoke will be more expensive but should be exactly tailored to the customer's requirements.

(b) *System software and application software:* System software organizes the way in which the hardware operates, whereas application software performs the functions actually required by the user (word processing, accounts, or whatever). System software is generally supplied by the manufacturer of the hardware, as a standard package, while application software might be standard, bespoke, or customized.

(c) *Source code and object code:* A final distinction to be aware of is that between source code and object code. This distinction is discussed at greater length in Chapter 7, but for the purposes of this chapter, 'source code' may be defined as a version of a program, using alpha-numeric symbols, which cannot be processed directly by a computer without first being 'translated' (or 'compiled') into a machine-readable form. 'Object code' is the machine-readable form of that program, which essentially comprises long series of ones and zeroes, corresponding to the complex 'on-off' instructions used to process data. (The significance of the distinction in the context of this chapter is that it is difficult for a person to read object code, and hence access to source code is needed in order to enable a person to support or modify a computer program.)

1.4.2.3 *Types of software contract*

Standard software is often supplied by retailers or distributors, without the customer entering into any direct contract with the software owner. The technique of 'shrink-wrap' licensing (discussed in section 1.4.2.6 below) is commonly used to try to establish this kind of direct contractual relationship. Contracts for bespoke software tend to be entered into on a more formal basis, because of the need to agree a specification and to address other issues arising out of the development process.

1.4.2.4 *Why is software licensed?*

Copyright subsists in computer software, so the use of software requires the grant of a licence. Apart from legitimizing the customer's use, however, the licence also enables the software owner to impose restrictions on the use of the software. For this reason, even where a copy of the software is sold without a direct agreement between the software owner and the customer, software owners still seek to impose shrink-wrap licence terms. The efficacy of such licences is discussed at section 1.4.2.6 below. A further discussion of the requirement for a licence, and the extent of implied and statutory rights in relation to acts such as decompilation and error correction, appears in Chapter 7, section 7.5.

1.4.2.5 *The main licence clause*

There is a broad range of possible licensing structures for computer software. These include, by way of illustration:

(a) the right to use the software on a single computer (sometimes identified by reference to a specific CPU number) at a single location;

(b) the right to use the software on any number of networked or clustered computers at different sites; or any combination of numbers and sites.

Limitations on use The use permitted is often restricted to the 'internal purposes' of the customer. This restriction is justified by the supplier on the basis that using the software for other purposes, particularly by using it to provide a bureau service for third parties, might adversely affect the supplier's ability to charge licence fees that it might otherwise receive from those third parties. The licence terms may also restrict the customer from transferring the software to any third party, again on the basis that the supplier has a right to know precisely who is using its software. Although these concerns appear reasonable, however, customers should be aware that these provisions have a number of serious implications:

(a) Companies which are members of a corporate group may find that such wording restricts their ability to process data for their associated companies.

(b) The restriction on assignment may be invoked by the supplier as an opportunity to charge increased fees in the event that the system has to be transferred, whether between companies in the same group (as part of a group restructuring, say) or to a third party (perhaps in the context of a business sale).

(c) Such restrictions are also sometimes invoked by the supplier as a means to prevent the customer getting a third party in to manage the system, or as a bar to outsourcing the system to third parties. (Outsourcing is discussed in more detail in Chapter 3.)

It is accordingly vital that the customer considers the business effect of licence restrictions at the very outset of its relationship with the supplier (and does so in the context of its long-term plans for its IT function and the business as a whole), and where necessary negotiates appropriate changes to the contract documentation. Failure to do so may leave the customer exposed to a claim for copyright infringement if it exceeds the scope of the permitted use, or to being charged additional licence fees for the right to do so.

Licence duration The licence will often be expressed as perpetual, or for a long fixed term (say, 99 years). In the absence of any express contractual provision, the normal rule is that an intellectual property licence is determinable by 'reasonable notice'. However, in determining what *is* reasonable (and indeed whether the licence should in fact be treated as unlimited as to duration), the court might have regard to

the consequences of termination for the licensee: these consequences might be severe in the context of business-critical systems or software.

1.4.2.6 *Shrink-wrap licensing*

Background Software is often mass-marketed through a distribution chain (or by mail order), in a similar manner to CDs or cassettes, with the result that there is no opportunity for the customer to enter into a formal licence agreement with the software owner. Many software owners have accordingly adopted the technique of the 'shrink-wrap licence': a licence agreement the terms of which are set out on the outside of the packaging, visible through clear plastic film, and are deemed to be accepted if the packaging is opened. The shrink-wrap licence purports to be a direct contract between the software owner and the customer (quite separate from the contract of sale by which the customer acquired the software) which takes effect when the customer breaks the shrink-wrap seal in order to remove the disk.

Enforceability Although the 'headline' terms of shrink-wrap licences are broadly the same as can be found in other forms of software licence (scope of use, duration, restrictions, and so on), there is a question as to whether shrink-wrap licences are actually enforceable as a matter of law, for two reasons:

(a) *Can a shrink-wrap licence embody all the elements of a contract?* Any valid contract requires three basic elements—offer, acceptance, and consideration—but the shrink-wrap structure does not 'map' cleanly onto these formal legal requirements. The visible display of the licence terms clearly constitutes an offer, and consideration is given by the licensee by virtue of the promises set out in the licence. However, it is unclear whether the licensee validly accepts the offer by breaking the seal, as the usual rule is that acceptance of an offer must be communicated to the offeror.

It is of course open to the offeror to waive that requirement for communication, and a court anxious to enforce the licence against the licensor may well find that the wording on the licence constitutes such a waiver. However, when considering enforcement against the licensee, the same considerations do not apply: an offeror cannot unilaterally declare that silence will constitute consent, nor can a party impose a contract by ultimatum. In the absence of clear acceptance by words (such as by signing a user registration card) or conduct (such as returning a defective CD for replacement), the enforceability of the licence by the licensor is uncertain.

(b) *Does the doctrine of privity of contract operate to prevent enforcement of the shrink-wrap licence?* The doctrine of privity provides that a person cannot take the benefit of a contract unless he is also a party to it. This principle has historically posed problems for suppliers of shrink-wrap software in England and Wales, as it has been open to question whether they are legally entitled to enforce such licence terms in the absence of a direct contract with the customer.

Beta v Adobe The Scottish case of *Beta Computers (Europe) Ltd v Adobe Systems (Europe) Ltd*[72] illustrates the difficulties that these legal issues can cause in practice. The customer (Adobe) had placed a telephone order with its supplier (Beta) to provide a standard package produced by a third party software house (Informix). Beta delivered a copy of the program to Adobe, which came in shrink-wrap packaging which included the statement: 'Opening the Informix software package indicates your acceptance of these conditions'. Adobe did not use the software, and sought to return the package (unopened) to Beta. Beta refused to accept it back, and sued for the price. In its defence, Adobe argued that its transaction with Beta was conditional on Adobe seeing and approving the licence terms: in other words, that there was no effective contract until Adobe had accepted the terms of the shrink-wrap licence by breaking the seal. Lord Penrose found that:

(a) A contract for the supply of a standard package made over the telephone was not completed until the customer had seen and accepted the shrink-wrap licence terms—and since Adobe had not in fact accepted the terms and had rejected the software, there was accordingly no contract.

(b) If the customer *had* accepted the licence terms by opening the package, then the licensor would have been able to enforce those terms under the Scottish doctrine of *ius quaesitum tertio* (ie, as a third party beneficiary).

(c) The licence terms were not in themselves capable of constituting a contract between Informix and Adobe that was discrete from the main transaction between Adobe and Beta.

However, as already noted in section 1.2.1.14, this decision is heavily dependent upon a Scots law doctrine for which there was no English equivalent, and so is of dubious value as an authority in England.

In England and Wales the position was clarified by the Contracts (Rights of Third Parties) Act 1999, which applies to all contracts entered into after 10 May 2000. A non-party to a contract will henceforth be entitled to enforce a term in it where:

(a) the contract expressly provides that he may (s 1(1)(a)); or

(b) the term purports to confer a benefit on him (and it does not appear from the contract that the parties did *not* intend it to be enforceable by him) (s 1(1)(b)).

As a result, the English law concerns as to enforceability have largely evaporated. The Act applies to contracts entered into after May 2000 and it seems unlikely that we will now see any legal challenge to the basic concept of a shrink-wrap licence.

[72] [1996] FSR 367.

1.4.2.7 *Specific issues applicable to bespoke software*

Contracts for bespoke software development work have many similarities to licences of standard software, but there are also important differences that arise from the fact that the bespoke software does not exist at the time the contract is made. The main differences are summarized below.

Unique specification The essence of a bespoke software contract is that the software is written, or a package is to be tailored, to the requirements of the user. This means that the functional specification is of critical importance, just as in other system supply contracts (see sections 1.2.1 and 1.3.2 above). In the context of software development, the functional specification is best prepared by the user alone (possibly with the help of outside independent consultants) or by a combination of the user and the software house, with the user maintaining ultimate control of its contents. Indeed, where a large and complex system is proposed there may be a contract with the software house or a consultant, for the production of the specification, quite separate from the contract from the writing of the software.

Acceptance testing Acceptance testing will also occupy a more important role in relation to bespoke software than it does in relation to a standard package.[73] If package software has been seen working at other users' sites or has been used on a trial basis by the user, the requirement for a formal acceptance test of the package may not be so important. However, in the case of completely new software, acceptance testing is clearly crucial, to determine whether the software house has delivered software conforming with the contract and to determine whether it is entitled to be paid.

IPR ownership By contrast with contracts for the supply of standard packages, the intellectual property rights in which necessarily remain with the software supplier, a bespoke contract may vest the intellectual property rights to the software in the user. The property rights that are relevant are primarily copyright and (to a lesser extent) confidential information, although patent rights cannot be totally ignored. The general rule of English copyright law is that where a person commissions another to produce a copyright work, the copyright in that work vests in the author, and not in the commissioning party.[74] If there is no express provision as to ownership it would be open to the court to imply that notwithstanding the general rule, in equity the copyright belongs to the user, but to reach such a conclusion there would have to be some evidence that this was the intention of the parties.

All these matters should be explicitly addressed in any bespoke software contract.

[73] See S Charlton, 'Product Testing: Liability, Acceptance, Contract Terms', *Computer Law and Security Report*, January–February 1989, p 23.

[74] See section 7.3.1.

1.4.3 Maintenance and support contracts

1.4.3.1 *Introduction*

Almost all new systems are supplied with a warranty as to functionality and performance, though this warranty will generally be of limited duration. It is quite common for the supplier, in addition to this warranty, to offer a maintenance contract which covers part or all of the expected lifetime of the system, subject to payment of additional periodic charges.

1.4.3.2 *General maintenance obligations*

The extent of the maintenance offered will vary according to the particular contract. It may be:

(a) Regular preventative maintenance.

(b) Repair on a time-plus-parts cost basis.

(c) Remote diagnostics with on-site attendance where required (primarily in respect of hardware).

(d) Full maintenance service with every fault attended to within a certain number of hours of its reporting, in accordance with a set SLA.

The precise service will depend on the customer's requirements, the supplier's ability to provide maintenance, and the charges agreed between the parties. Some important points that should be covered by any maintenance agreement are:

(a) *Response time:* The supplier should guarantee that problems will be attended to within a specified time, with 'target' times for activities such as responding to initial calls, provision of telephone assistance, attendance on site, and time to actually fix. The shorter the response time required, the more expensive the contract. While it is not possible to guarantee in advance how long any actual repair will take, the contract should be clear as to the consequences of failing to meet these target times, which may include liquidated damages in the event of late response or delayed repair.

A related point on time limits is that contractual response times to calls for assistance are often less stringent in software maintenance contracts than in hardware maintenance contracts. This is curious, since the consequences of faulty software are at least as serious as those of faulty hardware, if not more so.

(b) *Fault classification:* Faults vary in importance, depending upon the extent to which the functionality and performance of the system are affected, and the supplier may agree to respond more quickly to more important faults. For example, a 'Level 1' fault might be one that effectively stops the customer doing business and to which an urgent fix is required; whereas a 'Level 3' fault may be some defect in the system that is trivial or annoying, but not directly harmful. There are no universally recognized classifications of fault severity, and the classifications are

a frequent sticking point in contract negotiations. However, it is essential that there is a clear and effective mechanism for classifying faults quickly: leaving classification 'to be agreed at the time' is just as risky as providing that either party has the unilateral right to classify faults in its sole discretion.

(c) *Replacement:* The contract should make it clear what is to happen if part of the system (particularly any hardware element) needs to be removed for repair or replacement, and in particular whether the supplier will provide temporary replacement equipment and within what period of time.

(d) *Duration, increase of charges, and renewal:* As the system ages, maintenance charges will necessarily increase. The contract should set out a minimum period of time for which the supplier will provide maintenance, and some way of assessing the charges that will be made in future years, for example by reference to indexation. Phrases like 'the supplier's current charges as amended from time to time' should not be acceptable, as there is no ceiling on what he might decide to charge. The agreement should also, from the customer's point of view at least, contain a right of renewal.

(e) *Transferability:* If the customer wishes to resell the system at some later date, or to transfer it intra-group, he will also need to transfer the benefit of the maintenance agreement. The contract should therefore contain a provision to this effect. The supplier might also wish to transfer the burden of the contract to another organization, but a provision permitting this should be resisted by the customer: there is no guarantee that the new supplier will have sufficient expertise or experience of the system in question.

1.4.3.3 *Specific issues relating to software maintenance: source code*

Software maintenance usually comprises two elements:

(a) the correction of software errors (or 'bugs'); and

(b) the provision of enhancements and updates to the software.

Software maintenance—sometimes also called 'support'—has up to now normally been provided by the supplier of the software because of the necessity to have access to the program source code. However, as noted in Chapter 7, section 7.5.7, the customer has a limited right to decompile the object code to produce source code for the purpose of error correction (though not any other form of maintenance such as the development of enhancements or updates).[75] The source code may in any case be made available to the customer, either because it is the policy of the supplier to do so,[76] or because the intellectual property rights vest in the customer (eg, under a

[75] However, the right can be excluded by contract, at least as implemented in the UK: s 50C of the Copyright Designs and Patents Act 1988.

[76] In *Andersen Consulting v CHP Consulting Ltd*, 26 July 1991, Ch D (unreported), the judge described the standard licence agreement of the claimants relating to the program in question, under which the

bespoke contract), or because the customer has obtained access to the source code pursuant to an escrow agreement. In such cases the customer should be able to maintain the software on its own account (or appoint a third party to do so).

1.4.3.4 *Specific issues relating to software maintenance: upgrades*
Apart from error correction, the supplier will usually agree to supply a copy of all enhancements and updates developed by him during the term of the maintenance agreement. These fall into a number of categories:

(a) Corrections of previously reported errors.

(b) Updates necessitated by changes in the law.

(c) Variations necessitated by changes in the system software that runs on the hardware in question.

(d) Improvements or new functions.

The customer will often be obliged to accept and install the enhancements and updates, so that the whole of the maintenance company's customer base is using the same version of the software. For this reason, it will often be a requirement of the software licence that the licensee enters into a software maintenance agreement in the first place.

1.4.3.5 *Warranties and liability*
Maintenance agreements are contracts for the provision of services and accordingly, by virtue of section 13 of the SGSA 1982, there will be an implied term that the maintenance company will use reasonable skill and care in carrying out the service. It is fairly unusual to find express warranties as to the *quality* of the maintenance services, although ideally the supplier should agree to maintain system functionality and performance to the standards set out in the original system supply agreement. Suppliers will often seek to impose liability limitations similar to those in other system supply contracts, and the observations already made in that regard apply equally in this context.

1.4.4 Cloud computing

1.4.4.1 *Introduction*
Cloud computing involves the delivery of computing facilities as a service over the internet, with access to shared resources (like computers and data centres) located in different locations, and perhaps ultimately controlled by different entities. It is intended to be a kind of 'utility' model of computing, where the user can buy

program source code was supplied to licensees for a fee of £125,000. The judge noted that 'the result is that the plain intent of the contract was that the licensee should have the ability, the material and the right to alter and amend the programme [sic] by persons other than those who had written it'.

computing capacity as he needs it, without the infrastructure costs of purchasing and implementing a system specifically for himself.

At the heart of the model is the idea that hardware and software will be provided remotely as a service, on an as-needed basis. Cloud services can also be accessed by users regardless of their location, and regardless of device—a PC, laptop, or a mobile phone. There have been cloud services aimed at consumers for some time, such as Gmail, Hotmail, and Facebook. Businesses have been slower to take up cloud services, but that is increasingly happening, with the way being led by salesforce.com which provides a CRM solution where all the information about a client's customers is likewise stored and processed somewhere out there 'in the cloud'.

1.4.4.2 *Categories of cloud service*

There are several broad categories of cloud service. Almost any computing resource can be offered 'as a service', but the most common classifications are as follows:

(a) *Infrastructure as a Service (IaaS):* Providing 'infrastructure as a service' means making available IT infrastructure (eg server and storage capacity and associated local network resources) on an 'on-demand' basis, such as Amazon.com's Elastic Compute Cloud (also known as EC2). The service provider supplies to the customer a generic hardware 'foundation' on which the customer can install and run its own operating system and applications. The customer's staff can then just access the resources via the internet when they need them. The service is normally charged for according to usage (eg x pence per hour of server time), so the customer does not have to make any upfront investment in its server and storage infrastructure. On top of that, maintaining and upgrading the basic infrastructure should be the job of the service provider, which means that the customer should always have access to the latest technology without having to do its own technology refresh project.

(b) *Platform as a Service (PaaS):* 'Platform as a Service' is a level above that. Here the customer has access to a full 'platform'—that is to say, the basic infrastructure overlaid with the relevant operating systems and tools to create a full 'runtime' environment—in which to develop and deploy applications. This approach is often used by developers to get access to the substantial computing power that may be needed to create and host new applications. Users can store their code and data in the cloud, paying only for the storage space and processing time that they actually need, and then using the cloud as a large-scale channel for distributing their software to consumers. Examples include Microsoft's Azure platform, which specifically targets developers.

(c) *Software as a Service (SaaS):* At the highest level, there is 'Software as a Service'. This is the cloud offering that has most penetrated the business world, probably because it was already familiar from earlier models of remote computing like bureau services or ASP. In this case, application software is delivered as a hosted or managed service over the internet. Users can then access that software as required, and the best-known instance is the CRM service provided by salesforce.com.

Charging is usually based on a 'per seat per month' subscription, with additional fees based on usage. Apart from the purely financial implications, though, the service provider takes responsibility for ongoing support, patches, and upgrades, which takes a major administrative burden off the in-house IT department.

1.4.4.3 *Cloud models*

In order to understand the special legal issues arising from cloud computing it is also important to understand the various models through which cloud services can be delivered. These are commonly referred to as 'private', 'public', 'hybrid', and 'community' cloud. What differentiates these models is the degree of control that the user has over the infrastructure, which in turn informs the privacy and contractual implications of buying cloud computing.

(a) *Private cloud:* The private cloud is the simplest and most easily understood model. When people talk about a 'private' cloud, they are referring to a dedicated, customized cloud service under which multiple organizations (maybe different companies within the same corporate group, or different locations within a single company) share computing resources within a single organization. That 'private cloud' might be proprietary to the user—so, for example, a big Wall Street bank might set up data centres in two or three time zones around the world, which can be used by all its affiliates, and which is managed internally: that is, effectively building its own cloud model. Equally, though, the bank could use an outsourced service, with a third party supplier housing and managing all the computing resources, but again in private data centres, and on physical infrastructure which is dedicated only to that bank.

It will be self-evident that pursuing this highly bespoke route erases some of the perceived benefits of cloud computing. It is bespoke, it is not shared with other companies, and it is more expensive. This model is not fundamentally different from having proprietary data centres—the customer is just using them more efficiently. On the other hand, it means that the customer has a high degree of visibility and control over matters like performance and security, and can still take advantage of certain other benefits of cloud computing, like optimizing usage and maximizing resilience against outages.

(b) *Public cloud:* At the other end of the scale, there is the 'public' cloud, consisting of a completely outsourced service provided by a third party, where all the infrastructure is shared for maximum economies of scale. So in this case the customer gets the financial benefit, but with little customization and little control over matters like security. Amazon EC2, Google AppEngine, and the Windows Azure are all examples of a public cloud: the user can sit at a desk, click through to one of those services, enter a few credit card details, and begin using the service. (It really is as simple as that.)

Predictably, use of the public cloud gives rise to security and privacy issues. Depending on what the user is actually doing in the public cloud, he may be handing

substantial volumes of data over to the service provider, which is then processed in half a dozen different data centres across the world. Companies are rightly cautious about giving data to a service provider in circumstances in which they cannot say with certainty where the data is stored or how to get it back if the service provider goes out of business.

(c) *Hybrid cloud:* As the result of these concerns, an intermediate model has developed, called the 'hybrid' cloud, which as the name suggests combines elements of both the private and public model. In this kind of arrangement, a company provides and manages some resources in-house and has others provided externally. For example, a company might use a public cloud service like Amazon's Simple Storage Service (Amazon S3) for archiving, but still maintain in-house data storage for operational customer data that is needed from day to day.

The hybrid model is supposed to allow a business to take advantage of the scalability and cost-effectiveness of the public cloud, whilst still keeping its arms firmly around essential applications and data that are critical to its business.

(d) *Community cloud:* Finally, the 'community cloud' consists of the sharing of private clouds among entities with similar interests. For example, computing resources could be shared across organizations like the military or government, or across companies operating in the same sector. The UK Government proposes to create a 'G-Cloud' for use across public sector organizations.[77]

Because of the issues of privacy and security, many businesses are cautious about the public cloud, and contracts lawyers are most likely to be asked to consider documentation for the other models. The key contractual implications are discussed below.

1.4.4.4 *Key legal and contractual issues*[78]

At one level, a cloud computing contract is just another contract for IT services. The customer should undertake proper due diligence into the supplier and its track record, and ensure that the contract documentation contains a suitable description of the services to be provided, warranties, and service level commitments. The current practice among the major public cloud providers is to try and keep performance assurances to a minimum: they generally currently offer their services only on an 'as is' basis, with many excluding warranties as far as they legally can. Note that any such exclusions will of course be subject to UCTA 1977, as the public cloud offerings are by their very nature contracted for on the supplier's standard terms.

[77] UK Cabinet Office, *Government ICT Strategy* (March 2011).

[78] For a comparative analysis of leading cloud computing service terms see S Bradshaw, C Millard, and I Walden, 'Contracts for Clouds: Comparison and Analysis of the Terms and Conditions of Cloud Computing Services', 1 September 2010, Queen Mary School of Law Legal Studies Research Paper No 63/2010, available at <http://ssrn.com/abstract=1662374> (1 September 2010).

This often pushes corporate customers in the direction of a private or community cloud, where these issues can be negotiated properly and the customer can get some firmer commitments about service availability and security, for example. The degree of negotiability is of course linked, inextricably, to the degree of customization of the required cloud solution and the price that the customer is paying for it.

The nature of the cloud means that special consideration needs to be given to the treatment of data, and the key issues are set out below.

(a) *Control of data and confidentiality:* One of the major obstacles to the universal take-up of cloud computing is that service providers are basically asking consumers and businesses to rely on their reputations as a security policy. In the public cloud at least, where many contracts are simple 'click through' standard terms on a computer screen, the service providers currently purport to disclaim almost any liability for loss or corruption of data. It is essential that customers review the terms of any cloud computing contract critically, to ensure that they fully understand what is being promised (or more likely, excluded) in terms of assurances about data security.

Having said that, there is also a valid alternative viewpoint, that cloud computing offers much greater security than traditional methods of storing and transferring data. Most of the data security incidents that come in front of the Information Commissioner's Office in England have been to do with individuals taking work home and then losing an unencrypted laptop or memory stick. IT security at the largest cloud vendors is very good—companies like Amazon.com and Google employ extremely smart people—so if data is held in the cloud and users can access that from their PCs at home, that is arguably a much better way of dealing with home working than allowing people to copy data onto USB sticks which then get lost or stolen.

(b) *Data protection and privacy:* Data protection is predictably a major issue if personal data is going to be put into the cloud. A detailed discussion is beyond the scope of this chapter,[79] but in terms of legal analysis, it is the customer who will be the data controller under the Data Protection Act 1998 ('DPA'), because it is the customer who is responsible for deciding the purposes and manner in which the personal data is processed. Customers accordingly need to ensure that the processing of personal data by the cloud service provider is done under a written agreement; and that the service provider undertakes to do so only in accordance with the data controller's instructions and to ensure that appropriate technical and organizational measures are taken to keep the personal data secure.

[79] The Information Commissioner's online code of practice, published in 2010, sets out some specific questions that users should ask of cloud service providers before committing any personal data to the cloud. See further W K Hon, C Millard, and I Walden, 'Who is Responsible for "Personal Data" in Cloud Computing? The Cloud of Unknowing, Part 2', 21 March 2011, Queen Mary School of Law Legal Studies Research Paper No 77/2011, available at <http://ssrn.com/abstract=1794130>.

As noted above, few of the standard terms that are offered online by public cloud service providers include any such provisions; or, if they do, they undermine the effect by purporting to exclude any liability for loss or corruption of, or unauthorized access to, personal data. For that reason, it seems unlikely that most current public cloud offerings are going to satisfy the requirements of the DPA.

(c) *Ensuring access to data:* Customers need to consider what measures they should be putting in place internally to ensure that they can get hold of their data if there are problems with the cloud service. Should customers make their own back-ups, say, so that they can readily reconstitute data if the service provider has a catastrophic failure? If so, does that actually undermine the very value proposition that the cloud provider is offering?

(d) *Business continuity and disaster recovery:* Associated with the question of data security generally, customers will want to be sure that the service provider has adequate business continuity and disaster recovery plans in place. Here, the private cloud model permits a high degree of customization, so customers can adopt a more traditional and tailored approach in terms of specifying what the service provider should be doing by way of business continuity. Conversely, in the public cloud there will be a limited degree to which customers can influence the service provider's business continuity and disaster recovery, but it would nevertheless be sensible to investigate this as part of due diligence.

1.5 CONCLUSION

The delivery of a working system which meets the customer's needs is a difficult enough task, but it is even more difficult to achieve in a contractual vacuum. In summary, there are three main advantages to a properly negotiated and well-drawn contract:

(a) Identification of the issues.

(b) Clarity as to the obligations of each party.

(c) Agreement in advance on how disagreements are to be resolved.

The overall aim is a good working relationship, leading to successful performance of the contract and the installation of an effective system. While it is tempting to use standard form contracts, particularly given the time and cost that can be involved in negotiating individual agreements, for any major system procurement the preferred approach must always be to try to ensure that the contract documentation specifically addresses the risks of the particular engagement and the implications of failure.