Ownership Rights in Performance-Based Contracting: A Case Study of English Law

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Abstract

Clients and contractors need to be aware of the project’s legal environment because the viability of a procurement strategy can be vitiated by legal rules. This is particularly true regarding Performance-Based Contracting (PBC) whose viability may be threatened by rules of property law: while the PBC concept does not require that the contractor transfers the ownership in the building materials used to the client, the rules of property law often lead to an automatic transfer of ownership. But does the legal environment really render PBC unfeasible? In particular, is PBC unfeasible because contractors lose their materials as assets? These questions need to be answered with respect to the applicable property law. As a case study, English property law has been chosen. Under English law, the rule which governs the automatic transfer of ownership is called quicquid plantatur solo, solo credit (whatever is fixed to the soil belongs to the soil). An analysis of this rule reveals that not all materials which are affixed to land become part of the land. This fate only occurs in relation to materials which have been affixed with the intention of permanently improving the land. Five fictitious PBC cases have been considered in terms of the legal status of the materials involved, and several subsequent legal questions have been addressed. The results suggest that English law does actually threaten the feasibility of PBC in some cases. However, it is also shown that the law provides means to circumvent the unwanted results which flow from the rules of property law. In particular, contractors who are interested in keeping their materials as assets can insist on agreeing a property right in the client’s land, i.e. a contractor’s lien. Therefore, the outcome is that English property law does not render the implementation of the PBC concept unfeasible. At a broader level, the results contribute to the theoretical framework of PBC as an increasingly used procurement strategy.
Keywords: Procurement management, Performance-Based Contracting (PBC), ownership, contract drafting, contractor’s lien.

1. Introduction
Performance-Based Contracting (PBC) is a procurement route which differs from other routes such as traditional general contracting by placing an emphasis on the performance of the thing contracted for. In this paper we examine whether PBC is viable in terms of the legal environment of the project. As a case study, English law has been chosen. The research focuses on questions of property law, and particularly on the question whether the viability of PBC is vitiated by the legal rule *quicquid plantatur solo, solo credit* which provides that all materials which are affixed to land become part of that land.

2. Performance-Based Contracting (PBC)
The hallmark of PBC is its focus on the target performance which is required for the client’s business processes. In short, PBC clients buy services and not products or assets (Ancell 2007; Gruneberg et al. 2007; Szigeti and Davis, 2005). The PBC concept has been variously described in terms which contain the prefix ‘performance-based’ such as in ‘performance-based building’ or ‘performance-based service acquisition’ (see Gruneberg et al., 2007; Szigeti and Davis, 2005). The concept is also referred to as the ‘performance approach’ which Gibson (1982) described as “the practice of thinking and working in terms of ends rather than means.” Thus, the PBC concept requires clients to define output specifications for the services they require without prescribing how these services are to be provided (Smith 2008: 316). The concept is not new: Szigeti and Davis (2005) point out that a performance specification was already used by King Hammurabi of Babylon who, about 4,000 years ago, issued building regulations according to which dwellings had to be stable enough not to collapse. If they collapsed and killed a man, the builder was to be punished with death. This can be classified as an output specification because the details of the construction work are not described.

It is important to appreciate that there is more than one way to translate the PBC concept into practice. In particular, the performance sought by the client can be defined at different levels, e.g. with regard to the whole building or with regard to individual systems, sub-systems, or components (such as fire doors). In point of fact, there may not even be a need to build a permanent structure at all.

A current application of PBC is the concession agreement in PFI/PPP projects in which the Special Purpose Vehicle (SPV) promises to provide specific services over an extended period of time. Another example of PBC is the procurement method Design and Build (D&B) although this example is less ‘pure’
because D&B contractors are not under a service obligation. D&B can be considered as an example of PBC because the D&B client issues a performance specification (which is a central aspect of PBC) and the D&B contractor is obliged to erect a building which satisfies these requirements. The close relationship between PBC and D&B was also described by Fenn et al. (2005: 33).

In a wider context, i.e. not confined to construction, PBC is a business phenomenon which is referred to as ‘transition from products to services’ (Oliva and Kallenberg 2003): in sectors as diverse as engineering and IT, traditional suppliers of products have been switching to offer whole service packages, often referred to as ‘solutions’ (Foote et al. 2001).

3. Automatic transfer of ownership in the materials used

From a theoretical viewpoint, the PBC concept does not require a transfer of ownership when a PBC contractor affixes materials to the client’s land in order to provide a service. A transfer of ownership is not necessary because PBC clients are supposed to pay for services only, and not for materials. However, such a transfer may occur automatically and therefore unintentionally.

3.1 The general rule as to the passing of property: quicquid plantatur solo, solo credit

Under English property law, the general rule as to the passing of property in materials is referred to under the latin tag *quicquid plantatur solo, solo credit* (whatever is fixed to the soil belongs to the soil). The rule is based on case law.1 Its origins go back to the fourteenth century.2

In a famous judgment from the 19th century Judge Blackburn provided the following definition of the rule:3 “Materials worked by one into the property of another become part of that property. (...) Bricks built into a wall become part of the house (...).” There are two technical terms which are important for the understanding of the rule: loose materials are considered as ‘chattels,’ and materials which have become part of the land are called ‘fixtures.’ With their affixation to land, chattels may become fixtures. If this is the case, the materials become absorbed by the legal status of the land and are thus considered as part of the freehold. Fixtures pass with the land on any subsequent disposition (Gravells, 2004: 7).

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2 The oldest authority cited in the decision *Elwes v Maw* (1802) 3 East 38 was a case from the year 1323: Year-book 17 E 2 p. 518.

3 *Appleby v Myers* (1867) L.R.2 C.P. 651.
It is often difficult to establish whether a chattel has become a fixture. English courts have developed a vast quantity of case law regarding this question. The evolved principles are known as the ‘principles relating to fixtures.’ The two most important factors are the ‘degree of annexation’ and the ‘purpose of annexation.’ Of these two, the purpose of annexation is the more decisive.4 The test of purpose – why have the materials been affixed? – must be carried out objectively and not subjectively. 5 What is meant by ‘objective purpose’ was described by Lord Clyde as follows:6 “It is the purpose which the object is serving which has to be regarded, not the purpose of the person who put it there.” In order to determine the objective purpose, one has to consider all the externally observable circumstances of the case and infer from them on the purpose (Gray and Gray, 2007: 11). It follows that if a chattel “is designed for the use or the enjoyment of the land,” it will be held to have become a fixture, while it will be held to have remained a chattel if the object is designed “for the more complete use or enjoyment of the thing itself”.7

3.2 The general rule applied to materials used under the PBC approach

The way how the principles relating to fixtures pan out in PBC projects can be illustrated by the following five examples. The analysis is confined to the situation in which a PBC contractor erects a building, or a part of a building, on the land of the client (i.e. not on his own land).

Example A: Materials used by a PBC contractor to erect a whole building on the land of the client. Here, the materials will usually become fixtures because buildings are usually designed to serve as a permanent improvement of the land (the objective test of purpose leads to a qualification of the materials as fixtures).

Example B: Medical equipment which a PBC contractor affixes into the wall of a hospital building of the client. Such materials will usually be regarded as fixtures. This is because medical equipment is generally considered as serving the purpose of the building and thus the land. However, the circumstances of the case may lead to a classification of the equipment as a chattel, for example if the equipment was more expensive than the building itself. Here, one could argue that it is more the building (and the land) which serves the ‘enjoyment’ of the equipment, than vice versa.

Example C: A hospital container placed on the land of the PBC client for a period of three months. Such a container will probably remain a chattel. Both criteria, the degree of affixation and the test of purpose, militate for such a classification. In the decision Elitestone Ltd v Morris it was explicitly stated that a

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5 Elwes v Brigg Gas Co (1886) 33 Ch D. 562, 567; Elitestone Ltd v Morris [1997] 1 W.L.R. 687, 693, 698.
removable house may remain a chattel: “A house which is constructed in such a way so as to be removable, whether as a unit, or in sections, may well remain a chattel, even though it is connected temporarily to mains services such as water and electricity.”

Example D: Neon light fittings installed at the ceilings of an office room (on the client’s freehold) to provide light services, affixed by screws and bolts. Here, the light fittings would become fixtures because the general purpose of light fittings is to illuminate the room and thus to permanently improve the freehold.

Example E: Desk lights placed on office desks to provide light services, only attached to the building through the connection to electrical sockets. These desk lights will probably be considered as chattels because of their very low degree of affixation to the land. A similar case was *Hulme v Brigham.* Here it was decided that printing machines of 9 to 12 tons weight, located in a factory and affixed to the building by the electrical connection only, remained chattels.

### 3.3 Results
Subject to particular requirements the rule *quicquid plantatur solo, solo credit* causes an automatic transfer of ownership in the materials used. The decisive criterion is the ‘test of purpose’ and thus the question whether the materials are affixed in order to permanently improve the land. If this is the case, they become fixtures and therefore part of the land.

In the majority of the PBC examples the materials become fixtures and thus part of the land (examples A, B, and D). Only materials which are more expensive than the land to which they are affixed (exception in example B) and materials which are very loosely affixed (examples C and E) may remain chattels.

The examples also show that the borderline between chattels and fixtures is very case-specific and context-dependent, an observation which Gray and Gray (2007: 12) describe as typical for the demarcation between chattels and fixtures.

### 4. Subsequent questions to the transfer of ownership

#### 4.1 Overview

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9 [1943] K.B. 152.
The application of the rule *quicquid plantatur solo, solo credit* to PBC leads to several questions. The first one asks generally whether the PBC parties are able to exclude the rule by agreement. In other words: does a ‘retention of title’ clause prevent the transfer of ownership? Regarding this matter see Section 4.2.

If an automatic transfer of ownership has occurred, the following three further questions may arise. While the first relates to the PBC contractor’s interest in performing the contractual obligations, the other two concern the contractor’s interest in the materials as assets:

- Are PBC contractors entitled to access the building to repair or replace defective materials (in order to perform their contractual obligations)? See Section 4.3.
- Are PBC contractors entitled to remove the materials at the end of the contract period? See Section 4.4.
- Does the automatic transfer of ownership lead to a ‘contractor’s lien’ regarding the land of the client? See Section 4.5.

### 4.2 Retention of title clauses

The automatic transfer of property caused by the rule *quicquid plantatur solo, solo credit* cannot be delayed by agreement because ‘retention of title’ clauses are invalid in contracts for work and materials (see for example *Tripp v Armitage* (1839) 4 M & W 687; for more case law see Barber 1998: 359; Millett 1994: re no 116). This seems to be the legal situation for any contractual relationship in which one party affixes materials to the land of the other party. Hence, if there is a performance-based contract and the PBC contractor affixes materials to the land of the PBC client, a retention of title clause would be invalid. This is a marked difference to contracts for the sale of goods. There, clauses stipulating a retention of title are valid: the property passes when the parties of the contract intend it to pass, see Sections 16 onwards of the Sale of Goods Act 1979.

The fact that the automatic transfer of ownership cannot be avoided by agreement can be explained by the ‘test of purpose.’ As outlined in Section 3.2 above, this test requires an analysis of the *objective purpose* for which the affixed materials are serving. In other words, the terms of the parties’ *subjective* agreement (i.e. the terms of the retention of title clause) are irrelevant. This was made very clear by Luther (2004: 618) who pointed dour: “an express agreement cannot be taken as evidence of the party’s intention.”

### 4.3 Rights to replace defective materials
If an automatic transfer of ownership has taken place, the question can arise whether PBC contractors are entitled to access the built facility to replace defective materials with newer ones. The salient reason why PBC contractors may want to replace defective materials is that they otherwise cannot discharge their service obligation.

The parties can certainly include an express term into the contract which entitles the PBC contractor to access the client’s property and to replace defective materials. But an express term is not even necessary if there is an implied term to this effect. The case *Appleby v Myers*\(^\text{10}\) suggests that contractors who are under an obligation to keep the property in repair for a certain period of time have an implied contractual right to replace defective materials (Furst and Ramsey, 2006: ref no 10-013). Such a maintenance obligation is very similar to the PBC contractor’s service obligation: in both cases the building needs to be maintained. Therefore one can argue that the implied term mentioned above will also apply to performance-based contracts.

4.4 Right of removal

PBC contractors who have lost the ownership rights in their materials may want to remove the materials at the end of the contract period. Whether there is a right of removal or not can be determined by a three-step approach:

The first step: ‘Have the chattels become fixtures?’ If the materials remain chattels despite their affixation to the land, they can be removed by the PBC contractor at the termination of the contract period, subject to contractual obligations to the contrary. This is because the PBC contractor keeps full ownership interests in those materials.

The second step: If the materials have become fixtures: is there a right of removal based on common law? Whether a right of removal regarding fixtures exists hinges on the legal status of the contractor towards the client’s land: (1) If the PBC contractor is a tenant (leaseholder) of the land, a right of removal typically exists. (2) In contrast, if the PBC contractor is not a tenant, the situation is not entirely clear but one can argue that a common law right of removal exists in this situation as well.

- Regarding (1): Lease: While, as a general rule, tenants are not entitled to remove fixtures from demised land, there is an exception for tenant’s fixtures. The exception says that tenants have the right to remove tenant’s fixtures at the termination of the lease. This right encompasses

\(^{10}\) (1867) L.R. 2 C.P. 651, 659.
ornamental, domestic, agricultural, and trade fixtures. (The common law recognises several rights of removal of fixtures to the benefit of tenants towards their landlord: business tenants can remove ‘trade fixtures’ (Barber, 1998: 355; Bennett, 1998: 275), and all tenants can remove ‘ornamental fixtures’ (e.g. pictures affixed for ornamentation Barber, 1998: 355, Bennett, 1998: 275), and ‘domestic fixtures’ (e.g. a kitchen range) (Curzon, 1999, 23).) In the context of PBC, only trade fixtures are relevant. These are defined as fixtures which were affixed to the land for the purpose of trade.\textsuperscript{11} Examples being seats installed in a demised theatre building\textsuperscript{12} and large huts built by a tenant for activities of an Air Training Corps.\textsuperscript{13} Materials affixed by PBC contractors will usually be trade fixtures because their affixation takes place for the purpose of the contractor’s trade (provision of services). Hence, if the materials are affixed to the land in order to discharge the contractor’s service obligation, a right of removal exists. This right can be exercised at least until the end of the tenure.

- Regarding (2): Non-lease: If there is no lease between the PBC parties, the principles related to trade fixtures do not directly apply. However, one can argue that these principles are applicable by analogy because the interests of the respective parties are very similar. In the context of construction contracts, such an analogy has been proposed by Furst and Ramsey (1996: re no 10.013) regarding plant which was erected for the purposes of the work and attached to the land. This situation is practically the same in a PBC scenario in which a PBC contractor affixes materials to the client’s land to provide a service. In both situations, the contractor is entitled by the underlying contract to access the client’s land. In legal terms such a contractual entitlement to access land is called a contractual licence (see Gravells, 2004: 538). Based on the opinion of Furst and Ramsey, it seems to be reasonable to suggest that a contractual licence (to enter the PBC client’s land) is enough ground for PBC contractors to be entitled to remove trade fixtures at the end of the licence period.

In summary, a PBC contractor always has a right of removal based on common law independent from the question of whether there is a lease or a licence in place. Thus, while the rule \textit{quicquid plantatur solo, solo credit} does not allow PBC contractors to retain ownership in the materials used, the principles relating to trade fixtures allow their removal. The English law proves to be well-balanced.

The third step: If the materials have become fixtures but there is no right of removal based on common law: is there a right of removal based on contract? In other words: is there a contractual right to remove

\textsuperscript{11} Elitestone Ltd v Morris [1997] 1 W.L.R. 687, 695.
\textsuperscript{13} Wessex Reserve Forces and Cadets Association v White [2005] EWCA Civ 1774.
fixtures? This question seems to be redundant because there is always a right of removal based on common law. However, if the parties explicitly agree upon such a right, its express terms have to be considered. These terms may contain important information, for example regarding the time period in which the contractor is allowed to remove the fixtures.

4.5 Contractor’s lien

A right of removal will not always be sufficient to safeguard the interest of PBC contractors in the materials as assets. This is because a contractor who has lost the ownership in the materials may have no interest in retrieving the materials if their second hand value is very low. This can be a severe problem for PBC contractors. However, the problem may be overcome by granting the contractor an interest in the client’s land to which the materials have been affixed. This should be done in the main PBC contract. The appropriate form would be a contractor’s lien which is a title to property for the benefit of those who have supplied labour or materials that improve the property.

If the parties agree upon a lien, the contractor would be in a powerful position: he could commence a foreclosure sale of the client’s land to satisfy his financial interests if the client defaults in payment. The contractor’s interest in the land has to be confined to the amount due. In general, this amount will decrease with the time because PBC contractors usually receive a regular (e.g. monthly) service charge. A clause by which a contractor’s lien could be agreed could be drafted as follows (this proposal is meant for academic discussion):

“The client grants the contractor a lien regarding his/her freehold: [description of the particular piece of land including land register number]. The amount of the lien is: [contract price]. If the client defaults in payment, the contractor is entitled to demand a foreclosure sale of the client’s land. The lien will terminate when the client has discharged his payment obligations under the contract. The contractor’s entitlements under the lien are confined to the part of the contract price which is due.”

In the laws of the United States a contractor’s lien is usually referred to as ‘mechanic’s lien.’ In most States of the US, such security interests in the land of the client are based on statute law. Under English law, a mechanic’s lien does follow from neither judge-made law nor statute law. It must therefore be expressly agreed.

5. Additional considerations: privity of contract
Several problems can occur as a consequence of the English ‘privity of contract’ principle. Firstly, it follows from this principle that a contractual right to repossess materials is only effective between the parties to the contract. This can cause problems if materials are procured through a supply chain and the freeholder/client is not privy to the contract in which the former owner of the materials has reserved a right to repossess them. As Barber exemplifies, this problem can especially arise when a second-tier supplier enters into a contract with the contractor on the basis of a ‘retention of title’ clause. This clause will have no effect against the freeholder/client of the main contract (Barber 1998, 356-7).

Another problem is that the former owner of materials (e.g. a PBC contractor) can enforce a contractual right of removal only against the original freeholder but not against third parties to whom the original freeholder may have sold the land. Even if the parties agree in the contract that the right of removal should also be effective against subsequent owners, a claim of the former owner of the chattel against the new freeholder would not be successful because the new owner is not privy to the contract. Moreover, under English law, there is no ‘property right’ with the content of removing materials in case of default in payment and the parties are not allowed to create new property rights (numerus clausus of property rights). If there was such a ‘property right’, it could be implemented against third parties without the consent of the third party. This ‘exigibility’ is one of the ‘hallmarks’ of property rights (Swadling, 2000: re no 4.05).

6. Conclusion

We have established that the PBC concept does not require a transfer of ownership of the materials used because PBC contractors are not paid for the supply of materials. However, a transfer may occur automatically and therefore unintentionally. This is especially true for PBC projects when a contractor affixes materials to the land of the client. The transfer cannot be avoided by agreement. These findings represent a challenge for the concept’s implementation into practice. In particular, the automatic transfer of ownership might negatively affect the contractor’s interests, namely the interest in performing the contractual obligations and the interest in the materials as assets.

The repercussions of the automatic transfer were tested by analysing several subsequent questions. The results suggest that the old rule of property law does not prevent a translation of the PBC concept into practice: there are challenges but English law provides sufficient options to safeguard the interests of the PBC contractor. Clients and contractors should be aware of the contractual means which make PBC a viable procurement method under English law. At the core is the contractor’s interest in the materials as assets. In order to safeguard this interest, the parties can agree upon a contractor’s lien, i.e. a security interest in the title to the land. While such a property interest is a statutory right of the contractor in other
jurisdictions, it has to be explicitly agreed upon by the parties under English law. Another right which safeguards the same interest of the contractor is the common law right to remove fixtures at the end of the contract term. Finally, the contractor’s interest in performing his contractual obligations is supported by the contractor’s entitlement to access the client’s property to replace defective materials.

To sum up the main results of the analysis, on the face of it, the legal rule *quicquid plantatur solo, solo credit* might defeat the management intention which lays behind the PBC concept, but in reality, a little careful drafting enables the desired outcome to be supported. Therefore, the old rule of property law does not represent a serious threat to the translation of the PBC concept into practice.

Incidentally, it has also been demonstrated that the legal environment is extremely relevant for the course of action of contract drafters: The fact that a mechanic’s lien exists in most US States (by virtue of statute law) but is not provided for in English law illustrates how important the specific legislative context is. In some countries, a matter requires a special clause, but in others not. In the given example, English law requires the parties to expressly agree upon a contractor’s lien.

If the parties rely on a contractual solution to circumvent a property law problem, the privity of contract principle needs to be considered. Problems may especially occur if services are procured through a supply chain or if a PBC client sells the freehold before the end of the PBC (service) contract period.

The results presented in this paper will be verified in future research. It is planned to analyse how the legal problems which stem from the old rule of property law are accommodated in practice, for example in PFI projects. The research questions will especially pertain to the relevance of the means of safeguarding the PBC contractor’s interests which have been discussed in this paper. For example, the frequency of use of contractors’ liens shall be examined.

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