The rise of hybrid delegated management contracts: *emerging lessons from France*

Delegated management contracts are becoming increasingly diverse and can no longer be easily classified into a single category in the spectrum of public-private participation options that exist. Variants include the basic *affermage* delegated management contract, in which the operator undertakes operation and maintenance, and collects tariffs for the contracting authority. **JAN JANSSENS, DIDIER CARRON** and **VIVIAN CASTRO-WOOLDRIDGE** share their perspectives of this trend, and look at the characteristics and benefits of a particularly innovative approach, the performance-based affermage, applied in the case of France's largest water utility, SEDIF - Syndicat des Eaux d'Ile-de-France, which supplies water to areas across the Greater Paris region.

Delegated management contracts today have more of a mixed, hybrid nature than in the past. They borrow elements from different models to create a new, tailored model. The result is that many delegated management contracts can no longer be easily classified into a single category on the public-private partnership (PPP) spectrum.

The basics of the affermage contract

An affermage is one type of delegated management contract in the PPP spectrum. Under this type of a contract, the operator is responsible for operations and maintenance (O&M). The operator collects the tariff directly from consumers on behalf of the contracting authority (CA). The CA is usually responsible for major rehabilitation and new capital works. However, each contract defines the exact terms and responsibilities for financing and implementing maintenance, rehabilitation and new works (Table 1).

The operator earns an operator's price based on an agreed-upon proportion of the water tariff (per m^3) that is produced and sold. The difference between the tariff and this price is paid to the CA, which may be either an asset holding company, or the government, depending on the sector's institutional framework. The CA uses these funds to pay its expenses, including debt service on capital investments.

The affermage combines public financing with attracting private efficiency. It may be attractive in situations where private equity and commercial debt for the water supply and sanitation sector are not readily available. CAs may also prefer an affermage to just a management contract because the affermage transfers the commercial risk to the operator, believed to create greater performance incentives.

Differences and similarities between the affermage and the lease

The commonly used English translation of affermage into lease contract may be misleading. The words affermage and lease are often used interchangeably, although they are technically different. In the affermage contract, applied in civil law contexts, the operator has an intangible personal right to the infrastructure (similar to a patent or a copyright), but not the real property right of a leasehold (bail or rental). The lease contract, originally designed within a common law context, may however be constructed as a synthetic equivalent to the affermage. Table 2 describes a few of the key differences and similarities between the affermage and the lease models.

An affermage / lease contractual framework may feature five contracts: the delegated management or affermage / lease contract with, in parallel, the performance contract; the concession contract with, in parallel, the development

Table 1: The affermage model – roles and responsibilities

	Role	Functions
Government	Define the water sector policy and strategy	Define the sector's policy Define the institutional framework Manage water resources Establish the regulatory framework Review and approve tariffs and subsidies
Asset holding company	Manage resources (on behalf of the government)	Manage assets (development, amortization, debt service) Develop and implement master plan and investment plan Secure finance Acts as the contracting authority for new works Liaise with the public / implement awareness campaigns Monitor the quality of operations and maintenance (maintenance audit) Monitor / oversee the operator's performance based on contractual targets
Operator	Deliver services (technical operations and commercial management)	Operate and maintain infrastructure (fixed assets and operations materials) Renew operations materials Purchase meters and materials for connections Renew and extend the distribution network (based on contractual obligations) Project management of extension works of distribution network, financed by donors Studies to justify necessity of renewal and extension works Billing and bill collection Customers public relations, and customer accountability

contract; and the end-user contract with the consumer (see Figures 1 and 2). In addition there may be a technical assistance contract beween the operator and its majority professional shareholder.

The flow of funds

There are various possible scenarios for the flow of funds. In a simplified affermage context, the operator collects tariffs directly from its customers and deposits this revenue into its own account (i.e. the tariff account). The total revenue, the volume of water billed, multiplied by the tariff, is collected by the operator and goes into its own tariff account. The operator retains part of the total revenue at a certain fee per cubic metre (which is the bid criterion). The CA (either the government or the asset holding company (AHC)) then receives the balance, which is the volume billed multiplied by the difference between the average tariff and the operator's fee. This balance is used for investments and debt service.

Also in the lease arrangement, the operator collects tariffs directly from its customers (Figures 3 and 4 illustrate the flow of funds).

Either the operator or the CA may hold the tariff account. In case the operator holds the tariff account, it remits to the AHC the operational surplus – the difference between collected tariff revenues and O&M expenditure. If the difference is negative, then the AHC must subsidize the operational deficit and / or can opt to increase tariffs, subject to prevailing tariff review regulations.

In cases where the CA holds the tariff account, it reimburses the operator's O&M costs out of the tariff revenue. In the lease model, the operator always pays a lease fee for infrastructure to the CA – and the bid award criterion is the highest lease fee offered.

It is clear that in both cases there is a need for the AHC (or the regulator) to closely monitor the costs of O&M (price cap regulation) as the operator will have the tendency to inflate these.

Emerging hybrid contracts

Today's emerging options for delegated management are increasingly hybrid contracts. One example of a hybrid is the enhanced lease (or affermage amelioré), whereby the operator may not be given the immediate responsibility for implementing capital investments, but is responsible for implementing certain renewal investments. Examples of the affermage amelioré may be found in Senegal and Cameroon.

A subsidized concession is another example of a hybrid contract, whereby the operator is responsible for contributing financially to capital investments that are also receiving public subsidies.

These emerging hybrids are less constrictive than traditional models and provide more options for transferring commercial risks and for attracting private finance. However, they work best in contexts where a certain level of reform has already taken place and there is a strong and capable CA.

The performance-based affermage model

Another emerging, innovative model is a more sophisticated affermage model – what we call the performance-based affermage (PBA) model, which is based on an incentive-driven and more equitable distribution of the surplus between the operator and the CA. The PBA is also innovative for its

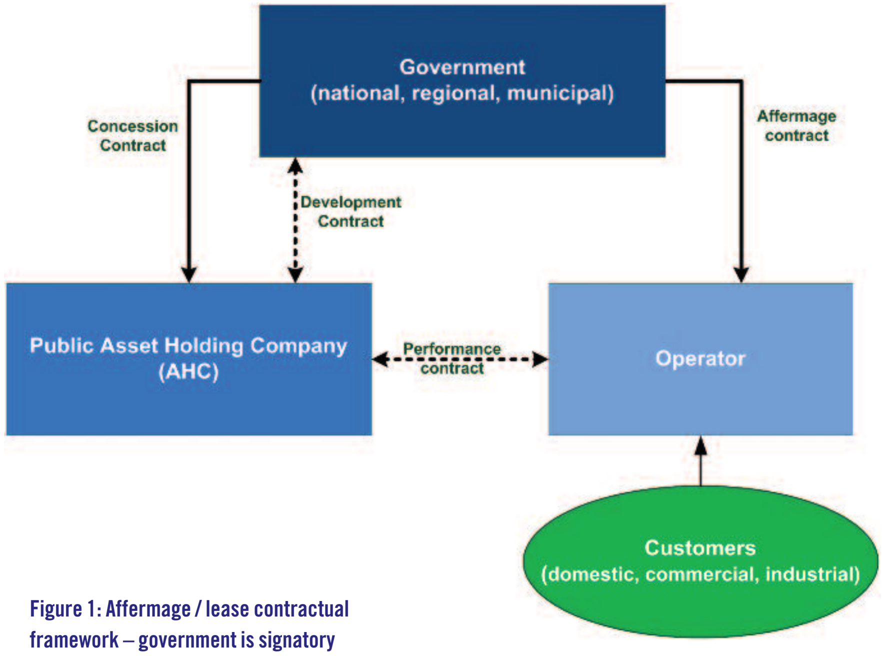


Figure 1: Affermage / lease contractual framework – government is signatory

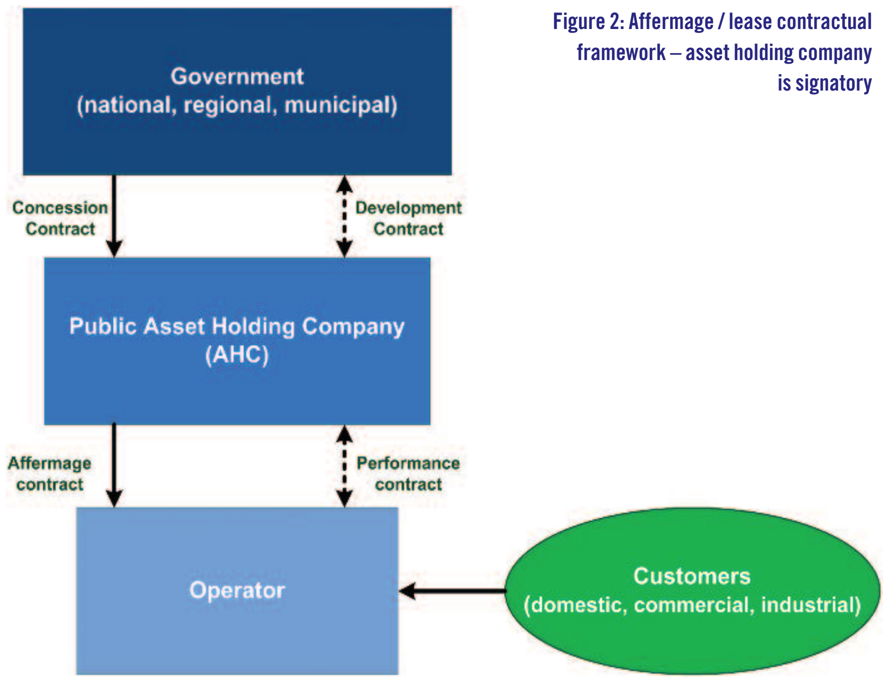


Figure 2: Affermage / lease contractual framework – asset holding company is signatory


SEDIF's Massy Palaiseau reservoir.
Credit: Pöyry.

combination of both operational and financial parameters for calculating the operator's revenue and bonus.

Why is this innovative?

In a conventional affermage contract, the operator pays for operations and maintenance costs, remits the difference between average tariff and operator's price to the CA, but retains the entire operational profit. In the PBA, the operational profit is shared between contracting parties according to an incentive structure that combines both operational and financial performance indicators – and which are explicitly defined in the contractual agreement.

Figure 5 illustrates the differences in the distribution of revenue between the conventional and the PBA models. The most obvious benefits of the PBA include:

- Efficiency gains – reduced operational expenditure
- More equitable distribution of operational profit – a reduced operator's income
- More equitable revenue distribution – an increase in the operator's payment to the CA
- Introduction of a performance-based bonus – according to the operators' financial and technical performance

In some PBAs, the operator's surplus is transferred to an escrow (third party-managed) account in order to create comfort for the operator. The operator can only access these funds when it achieves both the financial and technical performance targets.

In case of poor performance vis-à-vis the contractual targets, the operator may only earn a reduced part of the surplus, or even no surplus. In case of high performance, vis-à-vis the contractual targets, the operator may earn a large part of the surplus, up to 100 percent, depending on the contractually agreed equation for distributing the surplus between the parties.

How are the operator's final earnings calculated?

The operator's surplus is calculated as a function of his technical and financial performance. The equation may vary, but in the context of the Syndicat des Eaux d'Ile de France's (SEDIF) performance-based affermage, serving more than four million people, the operator's surplus was calculated as follows:

Operational performance
- 25% on water quality, wastewater and asset management
- 25% on quality of customer service

Financial performance
- 25% on profitability
- 25% on cost controls (i.e. productivity efficiency)

The application of these operational and financial indicators requires reliable baseline data, and the contract should define both target and minimum values for each indicator. In the case of SEDIF, the baseline data was audited and validated by an accredited independent third party prior to the tendering process.

Incentivizing increased efficiency

The PBA is a performance-based contract, with the operator's profit varying as a function of a combination of both its

Figure 3: Lease – flow of funds (operator holds the tariff account)

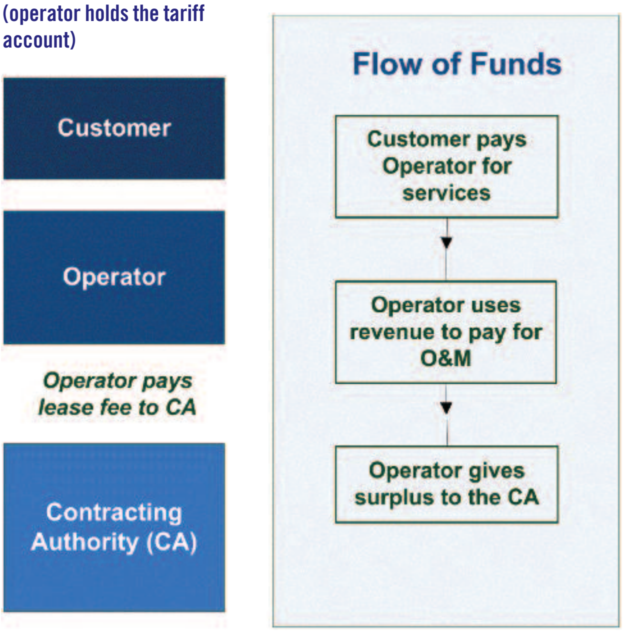
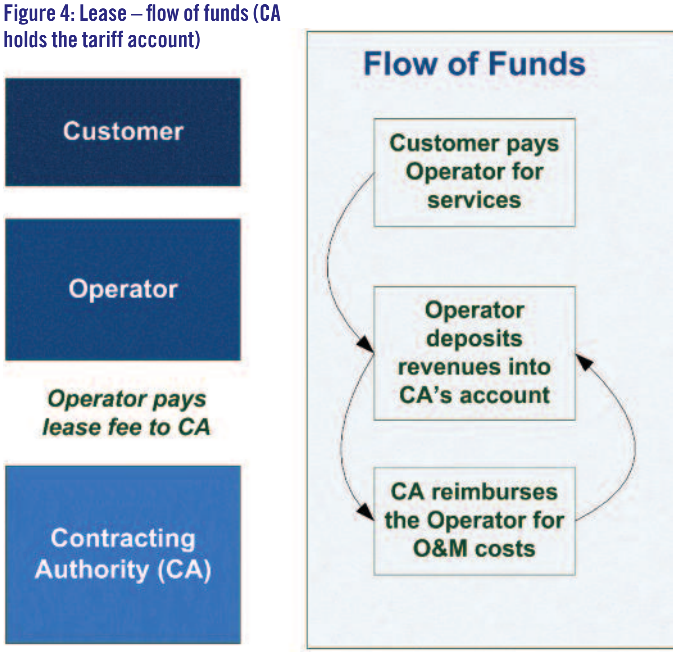


Figure 4: Lease – flow of funds (CA holds the tariff account)



technical and financial performance. In situations where the operator's profit can be clearly quantified through a dedicated accounting system, the performance incentive mechanism may be applied on the total operational surplus, or on a given proportion (e.g. 50 percent).

In cases where the operator's operational profit cannot be easily quantified or ring-fenced due to combined accounting for many interrelated activities (or other reasons), the incentive mechanism can instead be applied on a predetermined, fixed part of the operator's revenue.

What are the advantages of the PBA?

The operational surplus or profit – the financial gains – of the operation is shared between contracting parties on the basis of an incentive structure combining operational and financial performance indicators (PIs). The contractual arrangement may be more politically attractive to public authorities, particularly in contexts where officials and civil society may feel that private operators benefit disproportionately from PPP arrangements. The contract design also helps strengthen the bargaining power of the public authority to demand improved service delivery from the operator.

In the case of SEDIF, the PBA contract was designed so that two to three years before the end of the contract, SEDIF would be in a position to freely explore and choose another – perhaps different – PPP option, or return to publicly managed operations. This flexibility in decision-making is helped by the fact that the contract ensured public ownership and access to data and open book operations, including most of the information systems developed during the contract period.

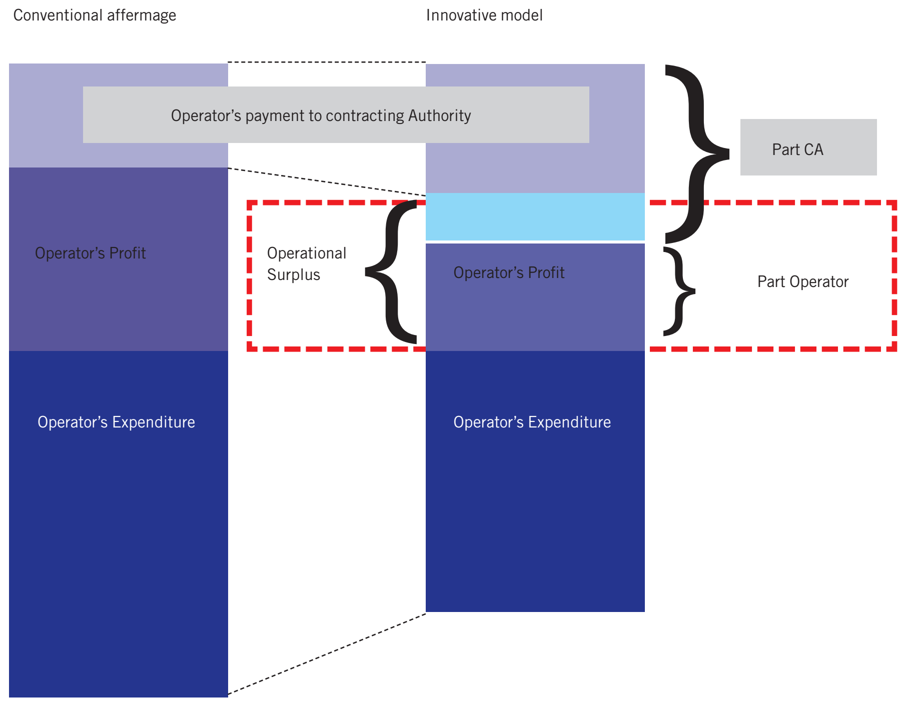


Figure 5: Revenue distribution – conventional affermage vs. performance-based affermage (PBA)

Key preconditions for the successful implementation of this type of affermage include an incentive mechanism based on an audited and validated baseline, and a capable contracting authority, leading to a balance of power and mutual respect between partners.

Experience shows that in low and middle-income countries, most often a sequential approach is the preferred way forward, starting with a technical assistance or an input-based, professional support partnership, and moving towards a deeper partnership, such as the present output-based PBA contract.

Conclusion

Delegated management contracts, and in particular the affermage-based option, today have more of a mixed, hybrid nature than in the past. These new hybrids borrow elements from different models to create new, more tailored arrangements for incentivizing efficiency gains and equitable distribution of revenue gains amongst partners, which makes these arrangements quite attractive for the water supply and sanitation sector. ●

Reference

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Table 2: Key features of the affermage and lease models

Features	Affermage	Lease
Operator's price	based on €/m³ produced and sold (volumetric)	Annual monetary, non-volumetric, based on cost-plus
Competitive bidding process	Lowest bid (operator's price) wins The operator's price covers O&M costs, including some renewal costs	Highest bid (lease fee) wins The lease fee is paid to the CA by the operator
Performance incentives	linked to water production (m^3)	Linked to water sales
Bulk metering	Mandatory	Optional, is not a prerequisite
Domestic metering	Mandatory	Optional, is not a prerequisite
Regulation	By contract (contract compliance in achieving target performance)	Cost-plus or price-cap

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