1 Background

With the imminent demise of PFI a better version is now needed for provision of public infrastructure[1]. The replacement should ideally still use private funds for the long-term finance, and responsibility for delivery should remain with the private sector. However loading risk onto the private concessionaire has been deemed not to provide good value for money, and the inflexibility of PFI contracts, locking government into long-term operating concessions, needs to be changed.

A key driver for PFI was account reporting which enabled PFI to be defined as an operating lease which did not need to be recognised 'on balance sheet'. Under IFRS 16, applicable for UK government accounts from January 2019, there is no distinction between finance and operating leases for the lessee – all must be 'on balance sheet'.

The 2018 inquiry by the UK Public Accounts Committee[i] has effectively put an end to the use of PFI, and an alternative is now required to provide £25 bn pa or more of investment for UK's infrastructure.

2 FELT as an alternative

The Innovative concession model FELT (Finance, Engineer, Lease and Transfer) aims to give back control of development and operation to the public sector while retaining the private sector's role in finance and delivery of the infrastructure.

The FELT concession model was developed by Mike McWilliams (McWilliams, Finance, Engineer, Lease and Transfer (FELT): an innovative alternative for development of hydro, 2017) initially to mobilise private finance for capital intensive hydropower projects in difficult commercial environments. BOOT, which had proved moderately successful for thermal power projects, has largely failed for hydropower due to its long gestation period, high development and capital costs and problematic risk profile. A model was required that would turn developments that were too risky to finance into investment-grade opportunities. Key to this was the separation of the 'provision of the infrastructure' from its operation, and establishment of a secure lease-based revenue stream. In emerging economies the lessee would need to have a sovereign guarantee to underwrite its lease payment obligations, and cast-iron political risk insurance.

The requirements for a PFI replacement are different – largely focusing on cost reduction and flexibility. However the solution is substantially the same (McWilliams, FELT - Replacing BOT and PFI, 2018). PFI loads as much risk as possible onto the private concessionaire resulting in exorbitantly high costs and inflexible contracts to manage these risks. FELT takes the opposite approach – only apportioning those risks to the FELT Contractor that he can control.

3 What is FELT?

FELT, an acronym for Finance, Engineer, Lease and Transfer, is an innovative concession model for development of public infrastructure. Under FELT a public entity defines its requirements, carries out studies, obtains land, licences and permits and brings the project to "shovel-ready" status, as if the project is to be awarded on an Engineering, Procurement and Construction (EPC) / Turnkey basis.

[1] The Office for National Statistics takes a fairly restricted view of public infrastructure, including only transport, energy, water, waste, communications and flood defences; here we are considering a broader range of infrastructure including also schools, hospitals, prisons and other public buildings – both new-build and refurbishments.

It then goes to the market to competitively procure a consortium to deliver the project under a FELT contract. The private sector consortium will finance, design, construct and commission the project. On completion the project facilities are leased to the public entity for its beneficial use for a specified term. At the end of the FELT term the facilities are transferred free-of-charge to the public entity, which then has full ownership of the project.

The public entity can operate the facilities itself or contract out this function. The term of the operating contract may be different from that of the FELT contract (most likely shorter). The lease payment is not dependent on the performance or availability of the facilities; once construction is completed to the required specification, and proven to perform as specified through appropriate performance and durability tests, there is no obligation on the private consortium other than to make the facilities available to the lessee.

A key requirement of FELT is that the lease payment obligations are underwritten by government, if necessary with appropriate guarantees, such that the FELT lease is of "investment grade".

Since many of the risks associated with PFI are no-longer carried by the concessionaire, the cost of a FELT contract is expected to be around two-thirds of the equivalent BOT or PFI contract. Although re-allocation of risks does not remove them, the costs are not crystalized at contract award, and will only be incurred if the risks materialise. Under FELT the government is also responsible for the costs and risks of operation and maintenance (O&M) which may be carried out in-house or contracted out.

4 What type of Infrastructure is suitable for FELT?

The FELT model can be applied to virtually any public infrastructure, including power projects, roads, rail, hospitals, prisons and schools. Projects can be greenfield or refurbishments, and can either be revenue-generating or funded from the public purse.

For the end of term transfer to have value, it is desirable for the usable project life (with appropriate refurbishment) to significantly exceed the FELT contract term. However the transfer can also be used to give responsibility to the public sector for decommissioning or re-purposing, if this is likely to be more cost-effective.

5 How to reduce the cost further?

One of the features of FELT is that the FELT Contractor is responsible for raising all of the capital finance. While the long-term lease is of investment grade and hence will carry a low yield, the construction finance remains high risk and hence is expensive. The construction stage financiers will require a suitable debt service cover ratio (DSCR) in the range 1.2 to 1.5, and this DSCR will define the minimum level of the lease payment. Additionally the high cost of debt finance during construction adds a significant IDC component to the project cost, especially for long construction period projects.

With the lease payment set for the DSCR based on the interest rate of construction stage debt, the opportunity to refinance at investment grade terms once construction is complete offers a disproportionate bonus to the FELT Contractor. It is expected that some of this prospective bonus will drive down the bids in the FELT tender. However there is a better way to reduce the lease payments.

6 The new BELT model

BELT, an acronym for Borrow, Engineer, Lease and Transfer, is identical to FELT other than the government lends funds to the BELT Contractor for the duration of the construction period and the two-year post-completion warranty period. These funds are lent at the government's medium-term cost of borrowing (perhaps 5 or 10-year gilts) plus a small administration fee. The BELT Contractor is required to self-finance 20% of the nominal capex, which would be injected pari-passu with the debt drawdown. Debt drawdown will be independently certified based on construction progress such that the outstanding debt is never less than 80% of the value of the works completed. The government, as the debt provider, would have step-in rights in the event of default.

Following completion of the project and expiry of the 2-year warranty period, at which time the BELT lease achieves its investment grade status, the BELT Contractor is required to refinance in the commercial market (it is envisaged this re-finance will be pre-agreed prior to start of construction).

Without the DSCR constraints, the lease price can be reduced to a level where it provides a reasonable return to the BELT Contractor for his equity at risk. It is envisaged that BELT leases may be as low as 50% of a FELT lease, or one-third of the equivalent PFI or BOT payment.

7 How will BELT be funded?

It is proposed that a government-backed National Infrastructure Fund (NIF) would be established to lend to BELT Contractors. This would be a revolving fund, with drawdown during the construction period and full repayment two years after completion of construction. To finance £25 billion of infrastructure projects starting each year, and assuming 20% self-finance by the BELT Contractor and linear drawdown during construction, the peak funding requirement would be less than £100 billion, built up over a period of six years.

8 Summary

The use of FELT Contracts returns much of the control of infrastructure development and operation to the public sector while giving responsibility for delivery to the private sector and using private finance throughout. The cost of a FELT contract is expected to be around two-thirds that of the equivalent PFI or BOT concession.

The use of BELT contracts, supported by a National Infrastructure Fund, could potentially reduce costs to one-third of an equivalent PFI or BOT concession, while using private sector funds for long-term finance.

These cost reductions are not absolute, since the government is carrying the long-term risks, including those for O&M, but FELT and BELT are likely to provide substantially better value for money than either PFI or BOT.

Appendix A Abbreviations and acronyms

BELT	Borrow, Engineer, Lease and Transfer
BOT	Build, Operate and Transfer
BOOT	Build, Own, Operate and Transfer (synonymous with BOT)
DSCR	Debt service cover ratio
EPC	Engineering, Procurement and Construction
FELT	Finance, Engineer, Lease and Transfer
IDC	Interest during construction
IFRS	International Financial Reporting Standards
NIF	National Infrastructure Fund (proposed)
O&M	Operation and Maintenance
PFI	Public Finance Initiative
PPP	Public-Private Partnership

Appendix B References

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[i] Public Accounts Committee Report, June 2018
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