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## 9 Asset management under government franchising

### Key points

- In the past decade or so, the use of government franchises has increased around the world, mainly for water and transport services.
- Typically under franchise arrangements, the government owns the infrastructure assets and is responsible for funding and arranging finance for new investment — that is, franchisees make no equity contribution to the investment.
- The private sector is involved to introduce expertise and incentives to promote efficiency and innovation in the management of infrastructure assets.
- A sound, strict and contractually binding asset management regime is required under government franchising arrangements in order to preserve and protect publicly-owned infrastructure facilities operated by franchisees.
- Despite the potential to create competition, government franchises typically include prescriptive contract specifications that enable governments to regulate tariffs, service levels, performance standards, and maintenance and investment requirements.
- Incentive problems can arise with government franchises that preclude fully competitive and efficient outcomes. Periodic tendering is one way of addressing these limitations.
- Despite the potential advantages in terms of incentives for improved production efficiency and asset management, the experience considered in this report has generally been disappointing.

Government franchising involves a government or public-sector agency (the franchisor) granting an exclusive right to a private or other independent entity (the franchisee) to occupy, operate and maintain publicly owned infrastructure facilities to deliver services over a predetermined period of time. This approach differs from licensing arrangements whereby businesses are granted permission to supply infrastructure services with their own assets.

Poorly maintained infrastructure, existing high operating and maintenance costs, and the inability of incumbent public-sector operators to resolve maintenance

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problems are among the most common reasons cited by governments for granting franchises to the private sector.

The use of government franchises can contribute to the same broad goal of ensuring capital adequacy as the other financing vehicles examined in this study. Private-sector involvement through a competitive selection process can bring enhanced incentives to promote efficiency and innovation in asset management. It can lead to a longer service life and improved condition and utilisation of existing assets, thus reducing the funding burden of new or replacement investment.

Franchise contracts typically include incentive mechanisms superimposed over conventional operating contracts to induce better asset management outcomes. Moreover, franchise payments can depend on agreed indicators of asset maintenance performance.

Government franchises are a variant of public–private partnerships (PPPs) in which the franchisees typically make no equity contribution to the infrastructure but could possibly raise finance for capital maintenance and extensions. Depending on the contractual terms, such arrangements provide a means of transferring certain performance and demand risks associated with existing infrastructure from the public to the private sector.

Case studies of government franchising in Australia and selected overseas countries are described in section 9.1, highlighting contractual arrangements for asset management, investment planning and financing. Drawing on these applications, general policy issues relating to government franchise arrangements are discussed in section 9.2. This is followed by a summary of their strengths and weaknesses in section 9.3.

## **9.1 Applications and trends**

In Australia, government franchising has been used in the provision of various services. Some examples, which are examined in more detail below, are:

- scheduled bus services in Adelaide and Perth
- rail passenger services in Melbourne
- water supply and sewerage services in Adelaide.

Government franchising arrangements are well established in most other OECD countries, mainly in the provision of water and transport services.

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## Bus services in Adelaide and Perth

Since the late 1990s, public bus services in Adelaide have been operated by franchisees using government-owned infrastructure facilities (box 9.1). For the financial year 2005-06, bus service payments made to franchisees totalled \$122 million. This excluded nominal charges and expenses made by the SA Government for supplying buses and depots to the franchisees (DTEI 2006).

Leasing government-owned buses and depots to the franchisees was seen as way of reducing barriers to entry and increasing tender competition (Wallis and Bray 2001). From a competition policy perspective, this could be important, particularly given the relatively small bus-leasing market in Australia.

### Box 9.1 Reforms of the passenger transport system in Adelaide

Between the mid-1970s and the mid-1990s, all public transport services in Adelaide were provided by the State Transport Authority (STA). Major reforms in passenger transport were introduced in 1995 through the *Passenger Transport Act 1994*. This legislation was aimed at separating the policy, regulatory and operational functions of the STA by:

- creating the Passenger Transport Board (PTB) to fund, plan, commission and regulate passenger transport
- converting the STA into a new statutory operating body, TransAdelaide
- requiring all scheduled land passenger services in the State to be operated under franchises with the PTB.

After the STA was abolished, all its assets — including the O-Bahn busway, buses and depots — were transferred to Transport SA, the department charged with the management of the State's transport system.

Since then, all the bus services have been franchised out in two stages of competitive tendering. The first stage was held between 1995 and 1997 for about half of the bus services. TransAdelaide was contracted for the remaining services. The second stage was held in 1999 and 2000 for all the services, including retendering of those previously tendered in the first stage. In 2004, a franchisee decided not to renew its then existing contracts and those franchised services were subsequently retendered.

Between the two stages of tendering, contract terms and conditions were modified in light of a 1998 review of franchise arrangements. The changes led to fewer but larger sized contracts being offered, longer contract durations and increased flexibility for contract renewal. The review also led to better structured payment incentives to align franchisee interests with government goals in relation to budgetary certainty, service quality and patronage level.

Source: Wallis and Bray (2001).

Other options considered were selling the assets to successful tenderers and requiring them to supply their own fleet. Both were regarded as impractical. For the first, if the franchisees chose not to purchase the government buses, the Government would be left with substantial unusable assets which would have to be written down. For the second, given a relatively short contract duration, the franchisees might be unwilling to invest in a sizeable stock of assets that could not be written off over the contract period.

With the Government supplying the buses and depot facilities, however, there are potential limits on the scope for service innovation and resource deployment. In a review undertaken by the Government in 1998, industry participants commented that depot sharing was undesirable and that the government depots tended to be over capitalised and too large for those operating a small or medium fleet. Moreover, with lease charges being separate from franchise payments, increased total bus requirements places no additional cost on franchisee. As a consequence, there could be an incentive to increase total bus requirements and schedule services to minimise driver costs rather than driver and bus costs combined (table 9.1).

**Table 9.1 Key features of the franchised bus services in Adelaide**

<i>Aspect</i>	<i>Franchises in 1995 to 1997</i>	<i>Franchises in 1999 and 2000</i>
Contract number and geographic coverage	<ul style="list-style-type: none"> <li>• 10 area or 'lines of route' contracts</li> <li>• 4 single-route contracts</li> </ul>	<ul style="list-style-type: none"> <li>• 6 area or 'lines of route' contracts</li> <li>• 1 single-route contract (City Free)</li> </ul>
Contract size	<ul style="list-style-type: none"> <li>• Area contract: 11 to 94 buses</li> <li>• Route contract: 10 to 24 buses</li> </ul>	<ul style="list-style-type: none"> <li>• Area contract: 30 to 200 buses</li> <li>• Route contract: 10 buses</li> </ul>
Contract duration	<ul style="list-style-type: none"> <li>• 2 and a half to 4 and a half years initially</li> <li>• Renewal by negotiation for up to 5 years</li> </ul>	<ul style="list-style-type: none"> <li>• 5 years initially</li> <li>• Renewal for a further 5 years</li> </ul>
Franchisee and market share	<ul style="list-style-type: none"> <li>• Serco: 19 per cent</li> <li>• Hills Transit: 3 per cent</li> <li>• TransAdelaide: 24 per cent by tendering and 54 per cent by negotiation with PTB</li> </ul>	<ul style="list-style-type: none"> <li>• Serco: 53 per cent<sup>a</sup></li> <li>• Torrens Transit: 36 per cent</li> <li>• Australian Transit Enterprises: 8 per cent</li> <li>• Transitplus: 3 per cent<sup>b</sup></li> </ul>
Ticketing	<ul style="list-style-type: none"> <li>• All franchisees using a common fare and ticketing system specified by PTB</li> <li>• Ticketing equipment provided by PTB</li> <li>• Franchisees responsible for fare collection, ticketing operations and fare evasion management</li> <li>• All fare revenue returned to PTB</li> </ul>	<ul style="list-style-type: none"> <li>• As for the previous round of tendering</li> </ul>
Service specification and development	<ul style="list-style-type: none"> <li>• Minimum service standards set by PTB</li> <li>• Additional 'points' given in tender evaluation for service enhancements</li> <li>• Proposals for service changes subject to approval by PTB</li> </ul>	<ul style="list-style-type: none"> <li>• Minimum service standards set by PTB, permitting minor timetable changes</li> <li>• Franchisees responsible for annual service review</li> </ul>

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Table 9.1 (Continued)

<i>Aspect</i>	<i>Franchises in 1995 to 1997</i>	<i>Franchises in 1999 and 2000</i>
Payment formula	<ul style="list-style-type: none"> <li>• Franchisees responsible for funding service innovations</li> <li>• Total payment (T) = Fixed sum (F) + Patronage payment (P)</li> <li>• F is linked to base-year patronage</li> <li>• P relates to changes in patronage from base-year level, averaging between \$1.00 and \$1.80 per incremental passenger</li> <li>• For payment purposes, allowable annual rate of patronage increase in any month is capped at 10 per cent</li> <li>• P is between 40 per cent and 67 per cent of F for different contracts</li> </ul>	<ul style="list-style-type: none"> <li>• Stronger emphasis on 'partnership' relationship between franchisees and PTB and less involvement of PTB in detailing service standards</li> <li>• Total payment (T) = Fixed sum (F) + Patronage payment (P) + Service payment (S)</li> <li>• F is linked to base-year patronage and service levels</li> <li>• P is linked to uncapped changes in patronage from base-year level, averaging between \$0.60 and \$1.00 per incremental passenger</li> <li>• S is linked to agreed service changes from base-year levels</li> <li>• On average, P is about 25 per cent of F and S is significantly greater than P</li> </ul>
Provision of buses and depots	<ul style="list-style-type: none"> <li>• Most franchisees required to lease the government bus fleet and depots</li> <li>• All used government buses and depots and some introduced their own sub-depots</li> </ul>	<ul style="list-style-type: none"> <li>• Franchisees required to lease the government bus fleet, with an option of supplying own buses</li> <li>• Leasing government depots is optional</li> <li>• All used government buses and depots and some introduced their own sub-depots</li> </ul>
Asset lease	<ul style="list-style-type: none"> <li>• Lease charges paid via franchisees</li> </ul>	<ul style="list-style-type: none"> <li>• Lease charges deducted from franchise payments<sup>c</sup></li> </ul>

<sup>a</sup> Services taken over by Torrens Transit and Australian Transit Enterprises since April 2005. <sup>b</sup> A joint venture between TransAdelaide and Australian Transit Enterprises. <sup>c</sup> This change was made primarily to minimise transactions and the associated administrative and financial costs under the goods and services tax regime.

Sources: SA Auditor-General Department (2005); Wallis and Bray (2001).

In Western Australia, Perth public bus services are operated by private companies using government-owned facilities. This has been the case since the WA Government implemented a bus reform program in 1996.

The WA Office of the Auditor General (2000) noted that, by retaining ownership of the buses and supporting infrastructure, the Government could reduce exposure to service disruption in the event of contract default.

In 2005-06, three franchisees were responsible for operating scheduled bus services and maintaining the bus fleet in Perth under 11 area-based contracts (PTA 2006). The total operating cost, exclusive of capital charges, was about \$200 million. For individual contracts, the payment made to the franchisee was comprised of a fixed management fee (roughly 15 per cent of total), a patronage-dependent component (20 per cent) and a price-indexed component for variable costs such as fuel and labour (65 per cent).

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## Rail passenger services in Melbourne

In Melbourne, the train and tram networks have been operated by private companies since 1999 (box 9.2). The rail infrastructure — including tracks, depots, stations, signalling and traction power equipment — is owned by the Victorian Government entity VicTrack. These facilities were leased to franchisees at nominal charge rates. On the other hand, the rolling stock was transferred to franchisees through sale or lease arrangements (DOI 2005).

The contract renegotiation in the early 2000s resulted in changes to the provisions governing franchisees' roles and responsibilities in maintaining the rail infrastructure and the rolling stock. Consequently, the franchise arrangements

### Box 9.2 Reforms of the passenger transport system in Melbourne

The Victorian Government decided to franchise all passenger rail operations within the metropolitan area under its policy of extending private-sector involvement in public infrastructure services in 1997. It subsequently transformed the train and tram services into separate business units, and tendered out contracts for the operation and maintenance of individual businesses.

In June–July 1999, the Government awarded five franchise contracts to three private companies for operating trams and trains in Melbourne (see table below). These contracts, which started in August 1999, had a duration of between 10 and 15 years.

#### Franchisees operating passenger rail services in Melbourne

<i>Original service</i>	<i>Operator as at August 1999</i>	<i>Operator as at April 2004</i>
Yarra Trams	MetroLink	Yarra Tram <sup>a</sup>
Swanston Trams	National Express	Yarra Tram <sup>a</sup>
Bayside Trains	National Express	Connex <sup>b</sup>
Hillside Trains	Melbourne Transport Enterprises	Connex <sup>b</sup>
V/Line Passenger	National Express	V/Line (government-operated)

<sup>a</sup> Rebranded from MetroLink. <sup>b</sup> Rebranded from Melbourne Transport Enterprises.

In December 2002, one franchisee (National Express) withdrew from its three contracts because of financial difficulties. After making some interim operating arrangements to maintain services, the Government restructured all the contracts into one train and one tram franchise. These were awarded after bilateral negotiations to the two remaining operators. The current contracts commenced in April 2004 and were scheduled to end in November 2008, with an option for extension up to May 2010.

On the other hand, the V/Line operation was transferred back to the public sector starting from October 2003.

Source: VAGO (2005).

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shifted away from incentive-based contracts towards fee-for-service contracts (Stanley and Hensher 2003).

### *Infrastructure maintenance*

Under the 1999 franchise arrangements for the provision of rail services in Melbourne, the franchisees were required to produce annual asset management plans coupled with three-yearly asset condition surveys. The asset management plans were indicative only, documenting *intended* capital works programs. Through the asset condition surveys, the condition of infrastructure was assessed by class and type of asset according to agreed methodologies for deriving an overall condition index.

Part of the payments for the franchisees' maintenance and renewal works was kept in an escrow account which could be drawn down only for maintenance expenses. If survey results showed a deterioration of infrastructure condition, the franchisee is able to increase maintenance and renewal expenditures. Conversely, if the franchisee was found to be ahead of its condition requirements, it would be allowed to keep any surplus funds.

The original infrastructure maintenance regime was outcome-oriented, providing the franchisees with considerable flexibility in planning and undertaking maintenance and renewal works. However, in an evaluation associated with the 2004 refranchising process, the survey approach to assessing infrastructure condition was considered flawed due to its practical complexity and lack of clear performance targets to guide maintenance spending.

Subsequently, an input-based infrastructure maintenance regime was introduced for the franchise renegotiation. Accordingly, each franchisee is required, as part of its tender offer, to provide an asset management plan setting out details of its *committed* maintenance and renewal program over the franchise period — including physical scope of works, activity levels, performance standards, inspection frequency, quality assurance strategies and resourcing arrangements.

In addition, the franchisees have to produce annual work plans detailing specific works to be undertaken within particular years. For contract enforcement, the department can audit the maintenance and renewal activities and withhold franchise payments if works are not delivered to the required standards.

The franchisees can make claims on the escrow account at the end of each month for works set out in their work plans. These claims are for the direct costs of works only — excluding corporate overheads — and are subject to a monthly maximum. Any cost overruns must be met by the franchisees. Five per cent of the value of all

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monthly invoices presented by each franchisee is retained and, subject to satisfactory audit results, released on a quarterly basis to the franchisee. Any surplus funds in the escrow account at the end of the franchise period are returned to the Government.

### *Rolling stock acquisition and maintenance*

The 1999 franchise agreements required the franchisees to ‘buy’ all the existing rolling stock and make arrangements for its sale or lease-back (Greig 2002).<sup>1</sup> However, rolling stock with total worth of \$448 million was ‘returned’ to the Government when National Express prematurely surrendered its franchises in 2002 (VAGO 2005).

Under the 2004 renegotiated franchise arrangements, the ownership for most of the old rolling stock was transferred to a public corporation (Rolling Stock Holdings Victoria, a wholly-owned subsidiary of VicTrack). These assets are leased back to the franchisees for a nominal consideration.<sup>2</sup>

Under the 1999 franchise arrangements, the original franchisees were required to replace the oldest 40 per cent of the train and tram fleets (except for the historic Z-class trams) and refurbish the rest. New rolling stock was acquired through leasing companies (Commonwealth Bank and Allco) that contracted with manufacturers to build new trains and trams and then leased them to the franchisees over a period of 15 years.

In effect, the leasing companies have financed the purchase of new rolling stock, with lease charges (as well as refurbishment costs) to be paid by the Government as part of the franchise payments. As a result of the 2004 renegotiation, the Government funds virtually all of the rolling stock’s value through designated payments for rolling stock investment (VAGO 2005). In addition, the Government pays insurance on the new rolling stock and guarantees lease payments in the event of default by the franchisees.

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<sup>1</sup> According to VAGO (2005), the existing rolling stock was ‘provided’ to the franchisees for nominal consideration. This seems to imply that the rolling stock was transferred to the franchisees without its sale.

<sup>2</sup> There are exceptions to this leasing arrangement. First, Connex continues to own outright the Hitachi trains which it purchased under its previous franchise, and is responsible for disposing them once they are withdrawn from service. Second, Yarra Trams continues to own the vehicles it purchased under its previous franchise, and is required to hand them back to the Government for a nominal sum at the end of its current franchise.

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When the lease for the new rolling stock expires, the Government has the option of purchasing the vehicles for a predetermined residual value, negotiating for an extension of the lease term, or procuring replacement vehicles (for example, if it is dissatisfied with the performance of the leased vehicles). Moreover, as the lease period is longer than the franchise period, the Government is obliged to take over the leases at the expiry or early termination of the franchises.<sup>3</sup>

New rolling stock was purchased by means of ‘dry’ leases — with franchisees being responsible for any maintenance work. Although the control of rolling stock rests with the franchisees, the Government has contractual powers to ensure proper maintenance of the rail fleets.

The current franchise agreement includes detailed specification of the engineering standards to be applied in deriving a ‘condition index’ for each type of vehicle. The franchisees are required to ensure that none of these performance indicators deteriorates throughout the franchise period.

To this end, the franchisees are each required to prepare a rolling stock management plan and annual rolling stock maintenance plans. These plans set out their maintenance and renewal strategy, as well as capital work programs for vehicle refurbishment, modification and upgrading.

The department can audit each franchisee’s rolling stock maintenance and renewal works. Where such audits identify a failure to meet the required standards, the franchisee must undertake remedial action.

At the end of the franchise period, the department will undertake a comprehensive fleet inspection to ensure that each rolling stock item is in serviceable condition (subject to normal wear and tear) and without unrepaired vandalism, accident damage or graffiti. The department has the right to require the franchisees to carry out any necessary remedial work and meet the costs of undertaking such work.

### *Remuneration of franchisees*

The franchisees receive operational income from two main sources. First, fare-box revenue is allocated by the proportions of 40:40:20 for train, tram and bus operations.<sup>4</sup> Second, payments are made by the Government to the franchisees to

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<sup>3</sup> Given the Government’s significant stake in the ‘privately-owned and leased’ rolling stock, it is treated as a contingent liability in the department’s financial statements (DOI 2006).

<sup>4</sup> Under the 1999 franchise agreements, the allocation of fare-box revenues was based on passenger numbers and passenger kilometres as measured by surveys. This was noted to be contentious because the surveys were considered unreliable (ACIL Tasman 2006).

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cover the operating subsidy, including the leasing costs and the compensation for community service obligations.

The franchise payments comprise a fixed and a variable component:

- The fixed component covers: (i) operating subsidies for the provision of specified levels of services; (ii) payments for leasing new rolling stock; and (iii) capital grants for infrastructure construction and other capital projects.
- The variable component includes various adjustments for inflation, concession fare top-up, patronage growth, service alterations, and various operational performance and eligibility criteria.

The Government's franchise payments totalled \$301 million in (part of) 1999-2000 and \$349 million in 2000-01. According to projections prepared for the 1999 franchise arrangements, performance-based payments were expected to grow from 12 per cent of total payments in 1999-2000 to about half the total payments by 2009.

Operating subsidies were originally expected to be no longer necessary after 2009, with ongoing payments being linked to only operating performance and capital investment. However, given the financial difficulties encountered by the original franchisees after only a few years into the franchise process, it became apparent that the projection of self-sustaining franchised services would not be realised.

Following the renegotiation in 2004, government payments to the franchisees increased significantly to \$560 million in 2004-05 (VAGO 2005). About 85 per cent of the payments were for operating subsidies and leasing costs of new rolling stock. Some payment increases (around 5 per cent) were related to new service requirements in the current franchises.

## **Water supply and sewerage services in Adelaide**

In 1995, the SA Government undertook reform initiatives to, first, corporatise its water utilities and then franchise the management, operation and maintenance of its water systems (treatment plants and pipe networks) servicing Adelaide.

Subsequently, the Government awarded a fifteen-and-a-half-year contract to the private United Water for providing water services in Adelaide from January 1996. The contract specifies detailed performance targets for treated water quality, water pressure and emergency response time that the franchisee must achieve throughout the contract duration. Penalties are applicable in the event of failure to meet the specified standards.

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The Government retains ownership of all water resources and infrastructure assets and, through its corporatised agency, SA Water, bears the overall responsibility for public water supply. SA Water sets service standards, implements the Government's water pricing policy, operates billing and revenue collection services, and makes investment decisions.

The franchisee is required to support asset management by conducting regular asset audits and preparing short- and long-term plans for infrastructure rehabilitation, renewal and augmentation. According to Laval (2003), a major emphasis of the asset planning process is to balance capital expenditure and maintenance. Capital project proposals are subject to 'whole-of-life' costing of both capital expenditure and maintenance.

All decisions and approvals regarding the priority and allocation of capital funds for water infrastructure remain with SA Water. On the other hand, the franchisee acts in the capacity of a project manager for approved capital programs.

Birnbauer (2003) reported that the Adelaide water service contract was worth \$1.5 billion. However, the information on actual contract payments remains commercial-in-confidence.

According to Laval (2003), annual contract payments made to the franchisee comprise:

- a fixed sum to cover general management and defined operating functions, some maintenance costs and corporate overheads
- reimbursement for costs payable by SA Water — mainly maintenance-related costs and consumables
- charges for design and project management services as well as construction of minor extensions and connections to the water networks.

The contract has provisions for the renegotiation of charges and fees every five years to take into account changes in operating conditions. Moreover, annual targets are set for the amount of reimbursable costs, which are based on the moving average cost in the previous three years. Any savings or overruns of these costs are shared between the franchisee and SA Water.

## **European examples**

In many European countries, public transport services are being reformed with part or all of the publicly-owned networks and facilities transferred to independent

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operators through competitive tendering or negotiation (Hirsch 2005; van de Velde 2001):

- France has a long history, starting in 1972, of franchising urban transport services in areas outside Paris (Laconte 1995)
- Germany, public transport authorities have recently begun trialling franchised operations
- Sweden, franchise arrangements were introduced in 1992 for unprofitable regional passenger services on the national railway network
- Stockholm Local Transport started franchising the operation and maintenance of its urban transit system in the mid-1990s (box 9.3).

In France, municipal water utilities are prohibited by law from selling their infrastructure assets (Bakker 2003). Government franchising is the most common method used for the provision of water services. This includes awarding

### Box 9.3 **Stockholm Local Transport**

Stockholm Local Transport (SL), as an agency of the Stockholm County Council, is responsible for coordinating and procuring public transport services in the metropolitan area of Stockholm. There, all the bus and rail services are franchised to various companies that operate under a 'one-network, one-fare' system.

Over time, SL has shifted from contracts for individual service routes to ones covering service areas or systems. At present, Connex has contracts for the metro system, the light rail system and regional railway services. Roslagståg AB, a joint venture between Danish State Railways and Swedish operator Tågkompaniet, runs the Roslag network.

Stockholmståg, which is jointly owned by the private Tågkompaniet and the state-owned SJ AB (the former national railway company), recently won the contract for regional commuter train services starting from June 2006. This contract was previously held by Citypendeln of the French Keolis group, which was troubled by driver and vehicle shortages that led to early contract termination.

SL franchises are normally awarded for a five-year term, renewable for up to five more years. SL specifies train capacity and headway but not the operating timetable, requiring the franchisees to meet a range of performance targets. Bonus or penalty payments in the order of 1 to 2 per cent of contract value are included to provide incentives for improving service quality in particular areas.

The franchisees cannot reduce staff pay or change the terms of employment. However, they have increased flexibility to deploy staff resources. This has led to some innovations in labour use. For example, depot staff are trained to drive as necessary in peak periods and maintenance work is scheduled for off-peak hours.

*Sources:* Briginshaw (2005); OECD (2005c).

procurement contracts for operation and maintenance only, as well as lease contracts that require the franchisees to invest only in maintaining the network (Chong et al. 2006; Haarmeyer 1992).

Elsewhere in Europe, local public authorities mostly operate their own water supply systems (table 9.2).

**Table 9.2 Share of population serviced by ownership and management structure of water utilities (per cent)**

	<i>Public ownership and management</i>	<i>Public ownership with franchise management</i>	<i>Private ownership and management</i>
Ontario, Canada <sup>a</sup>	94	6	0
France	25	75	0
Germany	85	15	0
United Kingdom	12	0	88
United States	86	1	13

<sup>a</sup> Estimates for Ontario were derived using data from Ontario SuperBuild Corporation (2002) and adjusted for the reversion of franchised water services in Hamilton back to the public sector in 2004.

Sources: Bakker (2003); Hudson Institute (1999); Productivity Commission estimates.

### Canadian examples

In Canada, an overwhelming majority of community-based water supply systems are owned, operated and maintained within the public sector. Several municipal governments have contracted private operators of water services for between five and 10 years (Bakker 2003).

Of the various publicly-owned commuter rail lines in Toronto, one is operated by a franchisee. Other Canadian infrastructure facilities under franchised management include Hamilton International Airport, Goderich Port, the Saint Lawrence Seaway and Bruce Nuclear Power Plant (CCPPP 2000, 2006).

### Examples in the United States

In the United States, applications of government franchising public infrastructure services are numerous but they remain minor relative to the predominance of public-sector control and management (Due 2003). These include the following:

- Out of the 21 commuter rail systems operating in various metropolitan areas — which are all publicly owned — 14 are franchised for external management. The franchised systems tend to have a smaller scale than those managed within the

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public sector, accounting for only 15 per cent of the total service output measured in train revenue miles (NTD 2005).

- Franchised public bus services account for 12 per cent of the total service output measured in passenger miles for this transport mode (NTD 2005). In most of these cases, the owner agency or department provides operating facilities and leases buses to the franchisee. For the Denver Regional Transportation District franchise over the period 1994 to 1999, the franchisee was required to provide new buses with an option for the agency to purchase them at the end of the contract term (Cox and Duthion 2001).
- In 2005, the City of Sandy Springs, Georgia, entered into a franchise agreement with a private corporation for all municipal services except police, fire and emergency call services. This contract has an initial one-year term, with provision for annual renewal for up to five more years (NCPPP 2006).
- Existing toll roads have been franchised in four states, with the franchisees paying upfront US\$6.4 billion in total to the owner governments. Two substantial arrangements were made for the Chicago Skyway and the Indiana Toll Road in the mid-2000s, prescribing franchise periods of 99 and 75 years respectively (Reason Foundation 2006).
- Airport operations were first franchised in late 2000 when a private company was awarded a 99-year contract for running the Stewart International Airport in Newburgh, New York. This franchise was terminated and reverted to public-sector management in January 2007. To date, Indianapolis International Airport is the only commercial airport in the country that is operated wholly under a franchise. A dozen others are partially franchised to private terminal operators.
- Over 80 per cent of the publicly-owned seaport terminals in the United States are franchised for operations by private companies, often the shipping lines using the terminals (Reason Foundation 2006).
- A small proportion of municipal governments have contracted out the operation and maintenance of their water supply systems (table 9.2 and box 9.4).

## **New Zealand examples**

In New Zealand, the privately-owned United Water operates the water and wastewater services in Papakura under a franchise contract awarded by the council in 1997 for an initial term of 30 years with the provision for renewal for a further 20 years. The franchisee paid the council a once-off fee of NZ\$13 million (or

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### Box 9.4 Franchised water services in the United States

According to a series of case studies by the US Conference of Mayors' Urban Water Council (1997) and the US National Council for Public–Private Partnerships, government franchising is the predominant form of PPP for water services. These franchises typically have an initial term of three to five years. A longer franchise term is uncommon because of legislative restrictions on long-term contracting by local governments and public authorities.

Haarmeyer (1992) noted that, historically, the use of PPPs other than franchising was driven by difficulties in issuing municipal bonds to raise capital or by a need to quickly meet environmental regulations following the 1986 amendments to the *Safe Drinking Water Act of 1974*. As no federal funds, grants or low-interest loans were available to assist communities in compliance, some municipal governments sought private finance for the construction of new facilities.

The *1986 Tax Reform Act* led to tax code changes that restricted a municipality's capacity to issue tax-exempt bonds for PPP projects. This tended to diminish the tax advantages and, hence, increase the costs of financing through PPPs. Consequently, franchising remained a more cost-effective option than other forms of PPPs.

NZ\$34 per capita) in return for the right to all tariff revenues over the franchise period (Controller and Auditor-General 2006).<sup>5</sup>

## 9.2 Policy issues

The franchised operations examined typically are characterised by the:

- government owning the infrastructure assets and being responsible for funding and arranging finance for new investments
- franchisee being granted free or low-cost access to infrastructure assets and having low capital requirements except for investments in asset maintenance
- franchised service being a network and having monopolistic production
- contract having detailed specification of maintenance criteria and service standards that the franchisee has to meet
- payment scheme which can include an incentive-based component for promoting efficiency initiatives but the franchisee being required to take on virtually no investment risk and limited operational risk (box 9.5)

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<sup>5</sup> Subsequent to this franchise contract being awarded, legislation was passed in 2002 prohibiting local governments from entering into a franchise for water services that has a duration longer than 25 years, or that involves transferring pricing, policy development, or infrastructure ownership responsibilities to a private entity.

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- franchise having a relatively short duration (generally less than ten years) subject to renewal or reletting.

These contractual features reflect a procurement relationship between the private- and public-sector parties to achieve the policy goal of providing public infrastructure services and maintaining publicly owned assets as efficiently as possible. Such joint ventures can generate benefits for both parties involved.

#### Box 9.5 Allocation of operational risk in government franchises

In government franchising, the operational risk of a franchised service is split between the government and the franchisee according to the remuneration arrangement. Common franchise remuneration schemes can be classified as follows:

- *Cost-plus* — The franchisee keeps none of the service revenue and its operating expenses are reimbursed by the government, which also pays a management fee as bid by the franchisee. In effect, the franchisee does not carry a revenue risk and its cost risk is limited to the terms of the contract.
- *Gross cost* — The franchisee keeps none of the service revenue and is paid (as it bid) by the government for providing services as contractually specified. Penalties typically apply for failure to meet the required service standards. Accordingly, the franchisee carries cost risk but not revenue risk.
- *Gross cost with incentives* — As a variant of ‘gross cost’ remuneration, the franchisee is paid at a contracted rate (as it bid) per unit of service output provided. It therefore carries not only full cost risk but also partial risk relating to the demand for the service.
- *Net cost* — The franchisee keeps the revenue and, in addition, receives certain payment (as it bid) from the government. Such arrangements enable a transfer of revenue and cost risk from the government to the franchisee, possibly with a capping of the risk to be borne by the franchisee.
- *Commercialised service* — The franchisee pays a lump-sum fee to the government for the right to collect and retain service revenue. The tendering is based on bids on the payment to the government, or the rate of service price charged on customers, or a combination of both. Such an arrangement relinquishes the government’s ongoing budgetary burden of funding the service, and results in a transfer of revenue and cost risk to the franchisee.

The franchised bus service in Adelaide, for example, is operated under a ‘gross cost with incentives’ contract. By contrast, many US government franchises are structured on the basis of ‘gross cost’ remuneration, which is also exemplified by the Adelaide water franchise.

Sources: Shaw (1996); Wallis and Bray (2001).

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For the private sector, government franchises create opportunities to exploit the commercial potential of existing infrastructure capacity and underlying demand for particular essential services. The availability of government-owned assets means only a modest requirement for equity investment by the private sector, removing a significant capital barrier to market entry. It also enables the private sector to strengthen its managerial and operational skill base and to take advantage of scale economies that enhance the viability of related businesses.

For the public sector, government franchises create opportunities to tap into the private sector for efficiency and expertise. Franchise arrangements are unlikely to ameliorate market failures that underpin any need for government intervention (chapter 2). Consequently, governments have to continue their role in market regulation when franchising public services.

Public ownership of infrastructure assets facilitates ‘regulation by contract’ — that is, using a franchise contract to set service standards and prices rather than formally regulating a market supplied by only one private business.

A number of important policy issues arise from the use of government franchises in relation to managing publicly owned infrastructure assets, including:

- design and implementation of a market mechanism to create competition
- scope for taking advantage of private-sector efficiency
- transfer of the right to use publicly owned assets to the private sector
- contractual specification of asset maintenance requirements.

### **Creating competition**

According to Dnes (1995) and OECD (1998, 2005c), government franchises contribute to higher operational efficiencies and lower maintenance costs by creating competition in two forms — ‘competition for the market’ and ‘yardstick competition’.

Competitive tendering for a franchise to operate the whole of an infrastructure system or network can instil ‘competition *for* the market’ — as opposed to ‘competition *in* the market’, which is often infeasible for infrastructure services characterised by significant economies of scale, scope and network integration. Market competition is initiated through franchise bidding and extends over the franchise period as the incumbent franchisee faces incentives to be efficient in order to receive favourable consideration upon franchise renewal or retendering.

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### Box 9.6 Regulation of the service price in a government franchise

The franchise contract between the Papakura District Council in New Zealand and the private United Water incorporates a ‘user pays’ system for water use. For the first two years of the franchise period, service charges were contractually fixed. For the subsequent years, the franchisee could increase service charges — from a relatively low base — up to the Auckland average prices.

The government auditor raised concerns including that the franchise:

- allowed price increases that would fail the council’s objective to protect ratepayers’ interests by locking in the pre-existing low-cost regime
- contained no specific, agreed method for calculating Auckland average prices
- provided no protection against potential inefficiencies of other councils in the Auckland area that could be reflected in their service charges and, consequentially, in the Auckland average prices
- provided no protection against the franchisee’s ability and incentive to influence the Auckland average prices through securing a franchise for water services from one or more of the other local authorities in the area
- had no provision for sharing any potential benefit from increased efficiency in service delivery that would accrue to the franchisee.

It was concluded that any claim of efficiency gains and competition benefits obtainable from the franchise remained speculative.

Source: Controller and Auditor-General (1998, 2001).

A key advantage of short-term contracts over long-term contracts is that a recurrent tendering process facilitates adaptive, sequential changes to franchise arrangements over time. This helps overcome the problem of *contractual incompleteness* in long-term contracting — that is, contingencies affecting franchisee performance cannot be comprehensively described and appropriate adaptations to each contingency cannot be fully anticipated and specified in advance. However, contract establishment costs can increase considerably over a series of franchise renewals or rebidding.

‘Yardstick competition’ is a means by which virtual competition is created through comparing relative performance between franchisees operating different segments of an infrastructure network. In some cases, comparative performance measures are used as the basis for determining franchise payments.

This competition for the franchise does not alleviate the need for government monitoring of service delivery. However, the level of control retained by government often seems excessive. Government franchises typically include

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prescriptive contract terms that enable governments to regulate tariffs, service levels, performance standards, and maintenance and investment requirements.

Among the examined applications of government franchising, few involved giving a franchisee the autonomous right to set service prices. Arguably, such an arrangement constitutes selling off the revenue-generating capacity of particular infrastructure assets over the franchise period, thus deviating from a typical procurement relationship.

The government's regulatory capability would be compromised when pricing rights or discretions are transferred to the private sector, even though infrastructure ownership is retained in the public sector. This problem is particularly prominent in relation to safeguarding against the extraction of economic rent from monopolistic production in the private sector (box 9.6).

In reality, incentive problems also arise in periodic tendering of government franchises, compromising fully competitive and efficient outcomes (box 9.7). This has been evidenced by limited or dissipated competitive pressures in some applications of government franchising where the number of bids per contract dwindled considerably upon retendering or the franchised service reverted back to public-sector management.

In some refranchising cases, competitive tendering was replaced by negotiation — a less effective way to sustain competition (Bulow and Klemperer 1986; Milgrom 1989). This might be necessitated by an insufficient number of bidders leading to no-bid contract extension, or additional complications in revised franchise arrangements that render a price-based competition mechanism unsuitable. However, the award of franchises to particular businesses would then likely be related in part to their negotiation skills and tactics, rather than their relative cost efficiency to the extent that could have been revealed in competitive tendering.

Practical use of yardstick competition in franchise arrangements appears to have been limited, reflecting the difficulty of measuring operational performance and establishing comparability between franchises. Splitting an infrastructure network into separate franchises for the purpose of peer competition can also cause coordination problems, reducing overall network efficiency (OECD 2006c).

### **Taking advantage of private-sector efficiency**

The notion that private businesses, given their profit motive and greater flexibility in employing labour and capital, are better run and more efficient than their

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public-sector counterpart is a commonly cited rationale for government franchising. There have been claims that government franchises brought innovations, service improvements and cost savings.

Operational cost decreases attributable to government franchise arrangements have been quoted as ranging between 20 and 60 per cent (Cox and Duthion 2001; Cox, Love and Newton 1997; Wallis and Bray 2001). Such savings, if fully attainable, could be exploited to reduce public subsidies, increase services, upgrade maintenance, or expand infrastructure capacity.

Hensher and Wallis (2005) noted that such cost savings were, in the main, once-off and the outcome of a first-time tendering process. Subsequent retendering delivered

#### **Box 9.7 Incentive problems in periodic tendering**

Numerous potential incentive problems in a periodic tendering process have implications for the outcome of a government franchise. These include:

- Facing the risk of severe service disruptions and costly franchise retendering, the government is vulnerable to ‘hold-up’ by a franchisee running into financial trouble and threatening to seek renegotiation of contract terms and conditions.
- Anticipating the possibility of a government bailout, franchise bidders have incentives to strategically underbid competitors in order to ‘buy in’ the contract first and, later on, renegotiate better terms and conditions. This contributes to the ‘winner’s curse’ — that is, the winner is whoever most overestimates the true profitability of the contract — and reinforces the tendency for governments to bail out failed franchises or to increase franchise payments in retendering or renegotiation. The study by Athias and Nuñez (2007) provides econometric evidence of the winner’s curse in tenders for infrastructure service contracts.
- It is difficult and costly to measure and verify asset conditions. As such, there is a risk that the incumbent franchisee will skimp on infrastructure maintenance. Further, government-owned assets can be allowed to unduly deteriorate towards the end of the franchise term if franchise renewal is expected to be unlikely.
- The incumbent franchisee is likely to have an information and resource advantage over other bidders, imposing significant barriers to competition at the time of franchise retendering. The study by Wolfram (2004) provides econometric evidence of incumbent advantages in periodic tendering for infrastructure service contracts, even when such contracts required little purpose-specific investment.
- The government can be left with no choice but to continue a franchise program that displaced its in-house capabilities, despite unclear cost implications and diminished competition among potential bidders.

*Sources:* OECD (2005c); Ribreau (2004).

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minimal further cost reductions or even led to increases in franchise costs. Such cost increases resulted partly from more demanding contract specifications and partly from contract price corrections associated with the winner's curse effect as explained in box 9.7.

On the other hand, there have been critical reports about the unsatisfactory outcomes from government franchising. Some criticisms reflected discontent over service problems or disruptions believed to be caused by the poor performance of individual franchisees, particularly inadequate asset maintenance (Birnbauer 2003; Carty 2003; Due 2003; Moist 2006). Some questioned claims of cost saving as an advantage of franchising and emphasised the difficulty of verifying such claims owing to limited access to financial information because of commercial confidentiality (Mees et al. 2006; Spoehr et al. 2002).

### **Transferring infrastructure assets**

The characteristics of infrastructure capital — costly to build, long-lived, and site- and purpose-specific — have crucial implications for the way that government franchises are structured to ensure efficient asset maintenance and renewal. These characteristics are the root of the *stranded-asset problem*. Reflecting this problem, the value of an infrastructure asset is intrinsically tied to it being used for the production of a particular service. As such, their values are hostage to changes in service requirements and production technology. Consequently, infrastructure asset values are difficult to assess for resale purposes.

Very few government franchises involved bundling a procurement contract with a sale of infrastructure assets in bids — they have been confined to cases where the infrastructure could be traded in an established leasing market or had a low residual value as a result of prior depreciation. This franchise characteristic is attributable to incentive and transaction problems associated with the valuation of specialised, long-lived assets that tend to impede the efficacy of periodic tendering (Williamson 1976).

There is likely to be a wide gap between the asset price assessments by the incumbent and the succeeding operator in cases of refranchising. Typically, the incumbent is well informed of asset conditions and the cost-saving effect of previous maintenance efforts. In contrast, any other prospective bidder is informationally disadvantaged and faces considerable uncertainty about the residual asset value at the end of the franchise period. Consequently, costly negotiation or arbitration would become necessary in order to determine a 'fair' or agreed asset price — if this is possible at all.

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The burden of proof in any claim of excess capitalisation falls on the would-be franchisee inasmuch as information on true asset values is asymmetrically distributed to the disadvantage of prospective bidders. Indeed, it is notoriously difficult to detect and litigate against the manipulation of accounting records by private-sector businesses intent on inflating asset value.

Retaining infrastructure ownership in the public sector appears to be a pragmatic solution to the asset valuation problem that could have beset periodic franchise tendering inclusive of an outright asset sale. Through financial engineering, nominal leases have been devised to transfer publicly-owned assets between government and private business and between successive franchise holders. Moreover, three-party financial leases — involving the government, franchisee and lessor — have been used to facilitate public investment through government franchises without accessing private-sector equity.

The way in which lease charges are set for the use of government-owned assets varies between different applications of government franchising. In some cases, commercial rates have been applied to leasing equipment and facilities from governments. The norm, however, appears to be that governments provide infrastructure assets at no cost or for a nominal consideration to franchisees.

There is no standard accounting procedure to record asset transfer transactions in the use of government franchise. Reflecting the diversity of contract structures and accounting discretions, the costing of asset transfer appears to have been arbitrary and inconsistent. This adds to the difficulty of finding credible cost information to evaluate government franchises (box 9.8).

### **Specifying maintenance requirements**

Effective use of government franchising requires adequate protection of the condition or quality of publicly-owned infrastructure assets that have a service life beyond the franchise duration. To this end, performance incentives or prescriptive contractual specifications are normally included in franchise arrangements.

The incentive-based approach to ensuring adequate asset maintenance by franchisees basically involves transferring to them some consequential risk arising from asset deterioration and degradation. Depending on the structure of the contract, franchisees have incentives to undertake maintenance activities that increase service demand or lower overall operating costs.

Provided that franchisees are rewarded for any increase in demand, the commercial desire to grow profit can be a driver of improved maintenance efforts. Alternatively,

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### **Box 9.8      Accounting of asset transfer in government franchises**

Estimates of the relative cost advantage in government franchises are affected by the treatment of government-provided assets as an uncompensated input for use by franchisees. This is apparent in the following examples.

#### *Bus services in Denver*

The US Denver Regional Transportation District (RTD) was required by law to convert 35 per cent of its public bus services to competitive tendering by 1998. In its procurement program for the period 1994 to 1999, RTD required the franchisees to supply new buses instead of providing the buses through a nominal lease. This resulted in increased franchise payments by RTD.

Subsequently, RTD advised the state legislature that franchise costs had escalated to the point that there was little difference from the costs of internal provision. This convergence of costs, however, was a direct result of excluding capital financing charges in its own costs for leasing new buses to the franchisees but including these charges in franchise costs in the case of franchisees supplying new buses (Cox and Duthion 2001).

#### *Bus services in Adelaide*

The franchise arrangements for bus operations in Adelaide include provision for the franchisees to lease buses and depots from the SA Government. On behalf of the transport department that owned these facilities, the Passenger Transport Board (PTB) charged the franchisees for using government-owned buses and depots at commercial rates. The lease charges were around \$30 million in 2002-03 (DTUP 2003).

The dissolution of PTB and its replacement by an agency within the transport department in late 2003 eliminated the need for the interdepartmental transfer of lease charges. Consequently, franchise payments were adjusted to exclude lease charges for government-owned buses and depots — of which the total nominal value in 2004-05 was reported to be less than \$3 million (DTEI 2005).

#### *Tram and train services in Melbourne*

The Victorian Auditor General Office assessed that the 2004 refranchising arrangement for Melbourne train and tram services represented reasonable value-for-money (VAGO 2005). As part of the evidence presented to support this conclusion, the auditor noted that franchising expenses increased mainly as a result of policy initiatives, the withdrawal of the original franchisee (National Express) and the interim operating agreements.

The auditor's estimation of moderate costs associated with the collapse of the 1999 franchises, however, was a direct result of: (i) revaluing old rolling stock 'returned' to the State — which was initially 'provided' to franchisees for nominal consideration — at \$448 million; and (ii) applying this appreciation of asset value to offset over 60 per cent of the settlement and transaction costs incurred for the refranchising exercise.

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the incentive can be based on a direct relationship between franchise payments and some indicators of the asset maintenance performance. Generally, this approach has the advantage of encouraging innovation in maintenance practices and avoiding prescriptive contractual control of franchised operations.

Despite its theoretical attractiveness, the use of contractual incentives for asset maintenance seems to have been beset by practical hurdles.

- It is often unlikely that franchisees can increase service demand through improvement of their maintenance performance, provided that certain minimum service standards are met.
- Demand is not observably related to maintenance input.
- A relatively short franchise duration does not allow franchisees to innovate and reap the financial gains from innovation, whereas increasing the franchise duration would compromise competition pressures and innovation initiatives.
- Aggregate or simple measures of asset condition or quality, devised on the grounds of practicality, can be poor indicators of maintenance adequacy.

Clear and detailed specification of asset maintenance and management duties has increasingly been recognised as an important part of franchise arrangements for providing infrastructure services. This approach places an emphasis on having a comprehensive asset management regime before franchising (box 9.9).

**Box 9.9 Inadequate attention to asset management**

Although it is a normal business practice to prepare asset management plans in both the public and private sectors, it was not followed in some franchise arrangements.

- In awarding a franchise for water services, the Papakura District Council in New Zealand did not include a contractually binding asset management plan. Afterwards, the franchisee produced one for its own purposes but refused to formally give the council the right of access to its plan for reasons of proprietary rights and commercial sensitivity (Controller and Auditor-General 1998, 2001).
- The OECD (2006c) reported that a complete asset management regime for franchised railway services in the Netherlands was not initially established. With no register of the infrastructure facilities and their remaining life and quality, it was found impossible to assess the maintenance costs of the whole network.

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A sound asset management regime underpins an effective contractual relationship between the government and the franchisee in three ways, namely it:

- provides an inventory of the assets and a record of their initial condition or quality so that both parties can have a common understanding about the state of the infrastructure at the commencement of the contract
- provides benchmarks for the existing maintenance input and sets exacting standards or requirements for asset maintenance and enhancement to be undertaken by the franchisee over the contract duration
- includes procedures for monitoring franchisee performance in asset management and maintenance, addressing any performance shortfall and ensuring that the assets are returned to the government in a suitable condition at the end of the franchise.

For effective asset management, franchise contracts must contain sufficient detail about the asset management regime to be used. An agreement containing only broad standards invites opportunistic or ‘gaming’ behaviour by franchisees, increasing the risk of dispute over the interpretation and implementation of what constitutes satisfactory performance. For example, descriptive asset condition grading systems are vulnerable to subjectivity.

### **9.3 Strengths and weaknesses**

In sum, government franchises have potential advantages compared with the conventional public-sector provision of public infrastructure services through:

- lower budgetary costs, and stronger incentives for efficiency and innovation
- ‘regulation by contract’ to ensure consistency of market outcomes and policy objectives
- compatibility with integrated network or system planning
- retention of public ownership of valuable and strategic infrastructure assets.

However, the experiences considered in this chapter have generally been disappointing. Effective use of government franchising depends on:

- experienced and capable government staff to design and administer periodic tendering and negotiation processes
- prudent and secure procedures to transfer and recover publicly owned assets
- effective management of the contract over the franchise period
- adequate investment and access to finance by government.

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Importantly, the success or failure of a government franchise can be affected by whether the franchisee makes adequate provision to ensure that infrastructure assets are maintained in good condition. In turn, this depends on the presence or absence of rigorous oversight and monitoring of the asset maintenance undertaken by the franchisee. In this respect, there is no substitute for a sound and strict asset management regime in order to preserve publicly-owned infrastructure used for government franchises and, thereby, to protect the interests of taxpayers and service users.

In summary, while not directly related to financing, the three assessment categories can be considered to assess the overall contribution to efficiency of infrastructure provision of government franchising.

*Risk management* — The scope for risk management comes with the incentives for optimal maintenance of the infrastructure assets by the franchise operator. While it has proved difficult to construct contracts that shift the risk of poor maintenance, or costs of over investing in maintenance onto the franchise operator, this could be more a reflection of the public sector contracting skills.

*Transaction costs* — Franchise arrangements can be expensive to tender, negotiate and contract. There are also potentially high costs of monitoring performance, including asset maintenance.

*Market and other disciplines* — The aim of franchising is to bring private sector efficiencies to bear in the operation, rather than in the construction phase of the infrastructure asset's life. Hence franchising is unlikely to impose any discipline on the investment decision, unless the attractiveness of this operating option is taken into consideration. This may provide additional information that would affect the investment choice.