

## The effective life of trucks







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Mr Mike Almond Chairman Australian Trucking Association Minter Ellison Building 25 National Circuit FORREST ACT 2603

17 March 2004

Dear Mr Almond

#### The effective life of trucks

On behalf of KPMG, we are pleased to submit the final version of our report on *The effective life* of trucks.

The report analyses the impact on Australian trucking businesses of acquiring new trucks under the proposed changes to the effective life of trucks under the capital allowance provisions of the *Income Tax Assessment Act.* 

We have examined issues as requested, including:

- the cash flow impact of a change in effective life from 5 to 15 years;
- case studies of some trucking businesses;
- the scope for moderating the impact of the change through self assessment and the Simplified Tax System;
- the likely impact of the proposal on financing arrangements, specifically leases;
- the treatment of trucks in other countries; and
- the treatment of other industry sectors of national importance (such as aircraft and gas pipelines).

We trust that this report will be of significant value to the road transport industry with respect to this issue.

Yours sincerely

David Stevens Partner





This report is prepared by KPMG Australia's Tax Strategy & Policy Group for the Australian Trucking Association.

The views in this report are those of the authors only.

No warranties or guarantees are given for reliance by others on the report, its contents, finding or recommendations.

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# 1 Executive Summary

## The road transport sector is vital to all Australians

The road transport industry plays a vital role in the Australian economy both in carrying the goods and products of other industries and as a significant industry in its own right. The Government Green Paper on the transport sector, AusLink, states that the transport sector as a whole accounts for 4.9% of total economic activity, worth \$31 billion in 2000-01, of which 72% of the total tonnage is transported by road. The total number of articulated and rigid trucks in the Australian road transport fleet is about 64,000 and 349,000 respectively. The sector comprises some 32,000 businesses, of which some three-quarters are owner-driver or 'micro-fleet' businesses. It is estimated that the industry directly employs some 153,000 Australians and provides employment opportunities for a further 250,000 in supporting activities. Road transport is also of vital importance in servicing the needs of rural and regional Australia. The Bureau of Transport and Regional Economics has observed the total non-bulk freight transport task typically grows at a rate one and a quarter times faster than the economy – a trend that is expected to continue into the future. AusLink anticipates that the non-bulk (non-urban) road freight will more than double by 2020 and interstate road freight will almost triple over the same period.

## Proposed change will have a negative impact on the road transport sector

The proposed increase in the effective life of trucks to fifteen years under the Uniform Capital Allowance regime will have a negative impact on the Australian road transport industry. Such a change will have the same impact as bringing forward tax collections on the industry and result in reduced cash flow for road transport operators. Transport operators will be forced to fund this gap or seek to recover it through increased freight charges. A road transport operator acquiring prime movers after the implementation of a fifteen year effective life regime would need to fund an after tax cash flow gap of around \$8,800 per year for each truck. The proposed change can be expected to increase leasing costs for trucks by approximately one hundred basis points.

## Proposed change does not reflect true value

The proposed effective life of fifteen years is not consistent with the expected actual usage and value diminution of trucks. It will lead to large balancing charge adjustments at the time of vehicle sale.

Alternatives to the proposed effective life of fifteen years are limited. Self assessment based upon measures other than effective life is unlikely to be a realistic option for the majority of road transport operators. Small



businesses in the road transport sector have generally not adopted the Simplified Tax System, but small businesses would be able to access the benefits of alternative depreciation arrangements if they met the eligibility threshold criteria for the Simplified Tax System.

### Proposed change is at odds with other Government policies

There are therefore broader economic and national interest factors that the Government should consider, which the ATO is not able to consider under the Uniform Capital Allowance regime.

The Government has endeavoured to lower the cost of transport in Australia through measures such as the Energy Grants Credits Scheme. Under a proposed effective life of fifteen years buyers of new trucks would be expected to seek to recover the annual cash flow difference in the market at the rate of about 4.4 cents per kilometre. For a 20 tonne truck this would equate to a 3.9 per cent increase in freight costs. The proposed change will therefore increase the cost of transport in rural and regional Australia.

The proposed change is also contrary to the direction of Government policy in other areas of the economy and the transport industry – specifically environment policy, road safety and increased transport efficiency.

A change to an effective life of fifteen years would eventually make the Australian road transport industry comparatively less efficient and more costly to operate, with an incentive to retain current vehicles for a longer period rather than upgrade the vehicle fleet. An increase in effective life will lead to road transport businesses deferring the acquisition of new trucks, delaying the introduction of safer and more environmentally friendly vehicles. It will also mean that Australia is competitively disadvantaged in its road transport sector by comparison with major trading partners.



## 2 Background

Income tax law allows businesses to claim deductions for the expenditure incurred in gaining or producing assessable income. While the acquisition of capital assets is generally not deductible, the decline in the value of capital assets used in gaining assessable income (depreciation) can be written off over time as tax deductions.

The Uniform Capital Allowance regime was introduced in July 2001 and applies to most depreciating assets, replacing a wide range of former capital allowance regimes. Deductions under the Uniform Capital Allowance regime are based upon the decline in the value of the asset.

The Australian Taxation Office (ATO) is progressively reviewing and making determinations with respect to the effective life of a wide range of assets. While taxpayers may opt to make their own effective life calculations, the determinations made by the ATO provide a 'safeharbour' for most taxpayers. Taxpayers who seek to make their own determinations of the effective life of an asset would need to have a strong defensible case in the event of an ATO audit.

Reference will be made throughout this document to "trucks." We have included in this definition light rigid trucks with a gross vehicle mass between 3.5 and 4.5 tonnes, heavy rigid trucks with a gross vehicle mass of more than 4.5 tonnes and prime movers comprising a turntable or other towing device that can be linked to one or more trailers as an articulated truck.

The current effective life determination for buses, lorries and trucks is as follows:

Asset	Life (Years)	Date of Application
Motor Vehicles, etc		
Buses, lorries and trucks;		
Generally	6 <sup>2</sup> /3	1 Jan 2001
Heavy haulage of goods or	5	1 Jan 2001
passengers (long-distance and		
inter-city)		
Heavy haulage (mining,	5	1 Jan 2001
building and construction and		
road making industries)		

Table 2.1

Source: Taxation Ruling TR 2000/18



## The ATO recommendation

The ATO has recommended that the effective life of trucks should be increased from five to fifteen years. While deductions under the Uniform Capital Allowance regime are meant to be based on the decline in the value of the asset, an effective life of fifteen years would mean that the actual market value of the truck would decline at a much faster rate than would be allowed by the ATO. In particular this would apply to trucks employed in high utilisation roles such as interstate line haul operations.

A high level estimate of the revenue implications of this proposed change is that it is likely to be of the order of \$57 million per year, based upon the estimates in the *Review of Business Taxation* and the relative contribution of the road transport sector. The *Review of Business Taxation* estimated revenue gains from the depreciation changes at \$285 million per year in 2004-05 for the transport and storage sector. Road transport constitutes 34% of the transport and storage industry gross value added in Australian Bureau of Statistics National Accounts data. Trucks comprise some 17% of total commercial vehicles in the Motor Vehicle Census, but since they have a higher value than light commercial vehicles, a conservative estimate of 20% of the revenue from the transport and storage sector may be appropriate.

The change to the effective life of trucks was originally due to take effect from 1 January 2004. Following representations by the transport industry, the ATO has deferred the proposed implementation of this change to the effective life of trucks until 1 July 2004.



## 3 Impact on road transport businesses

The impact of the proposed changes to the effective life of trucks on road transport businesses will vary with the profile of those businesses – specifically the number and cost of the trucks they use and the rate of turnover in their vehicle fleets.

A road transport business acquiring prime movers after the implementation date of a fifteen year effective life regime would need to fund an after tax cash flow gap of around \$8,800 per year for each truck.

The key impact of the change to the effective life of trucks will be on business cash flow. On disposal the owners of the trucks will make a balancing adjustment for the difference between the depreciated value of the vehicle and the sale price. Under the current system the depreciated value of the truck can be written down to zero after five years, meaning that on disposal after this time there is a tax liability based upon the disposal price. Under the proposed effective life of fifteen years, the written down value of the truck after five years will typically be greater than the disposal price, meaning that the owner will be able to claim a deduction for this difference.

In dollar terms, the amounts are equal under either the current capital allowance rate of five years or the proposed capital allowance rate of fifteen years. The critical issue is therefore the time value of money. The net effect of the proposed effective life of fifteen years will be to bring forward tax collections from road transport businesses. This will have a real cash flow impact on the road transport industry.

## Example 1: Prime mover

Modelling the impact of the proposed changes to effective life is based upon a prime mover valued at \$220,000, used for line haul for a period of five years, sale price received on disposal is \$90,000. The current effective life for line haul vehicles is five years; compared with the proposed effective life of fifteen tears. The truck is owned by a company, paying the corporate tax rate of 30%. A cash rate of 10% is assumed for the purposes of discounted cash flow analysis.

#### Prime cost method

Prime cost depreciation over five years equates to \$44,000 per year over five years – an after tax effect of \$13,200 per year. On the basis of fifteen years



effective life this is reduced to \$14,667 per year – an after tax effect of 4,400 per year.

On sale of the truck on the current five year effective life basis, there is a gain of 90,000 to the company on disposal and therefore a tax liability of 27,000. On sale of the truck on the proposed fifteen year effective life basis, there is a loss of 56,667 to the company on disposal and therefore a tax benefit of 17,000.

The cumulative cash flow gap in present value prior to disposal of the truck is \$36,700 after five years.

The after tax cash flow difference between an effective life of five years and an effective life of fifteen years is \$8,800 for each of the five years ownership of the truck. The difference in tax benefit from depreciation on a net present value basis over the five year period due to the cash flow differences is \$36,600 for depreciation using five years effective life, against \$29,900 for depreciation using fifteen years effective life; a difference of \$6,700.





#### Diminishing value method

Diminishing value depreciation over five years starts at 66,000 in the first year, declining to 15,847 in the fifth year – an after tax effect of 19,800 in the first year, declining to 4,754 in the fifth year. On the basis of fifteen years effective life this is reduced to 22,000 in the first year, declining to 14,434 in the fifth year – an after tax effect of 6,600 in the first year, declining to 4,330 in the fifth year.

On sale of the truck on the current five year effective life basis, there is a gain of \$53,025 to the company on disposal and therefore a tax liability of \$15,907. On sale of the truck on the proposed fifteen year effective life



basis, there is a loss of \$39,908 to the company on disposal and therefore a tax benefit of \$11,972.

The cumulative cash flow gap in present value prior to disposal of the truck is \$36,700 after five years.

The after tax cash flow difference between an effective life of five years and an effective life of fifteen years is \$13,200 in the first year, declining to \$424 in the fifth year. The difference in tax benefit from depreciation on a net present value basis over the five year period due to the cash flow impact is \$37,900 for depreciation using five years effective life, against \$31,200 for depreciation using fifteen years effective life; a difference of \$6,700.



#### Chart 3.2

## Example 2: Rigid truck

Modelling the impact of the proposed changes to effective life is based upon a 5 tonne rigid truck purchased for \$45,000, used for local journeys for a period of seven years, travelling 280,000 kilometres, sale price received on disposal is \$21,500. The current effective life for general trucks is six and two-thirds years; this is compared with the proposed effective life of fifteen tears. The truck is owned by a company, paying the corporate tax rate of 30%. A cash rate of 10% is assumed for the purposes of discounted cash flow analysis.

#### Prime cost method

Prime cost depreciation over six and two-thirds years equates to 6,750 per year over six years and 4,500 in the seventh year – after tax effects of 2,025 and 1,350 per year respectively. On the basis of fifteen years effective life this is reduced to 3,000 per year – an after tax effect of 900 per year.



On sale of the truck in the seventh year on the current six and two-thirds years effective life basis, there is a gain of \$21,500 to the company on disposal and therefore a tax liability of \$6,450. On sale of the truck in the seventh on the proposed fifteen year effective life basis, there is a loss of \$2,500 to the company on disposal and therefore a tax benefit of \$750.

The cumulative cash flow gap in present value prior to disposal of the truck is \$5,600 after seven years.

The after tax cash flow difference between an effective life of six and twothirds years and an effective life of fifteen years is \$1,125 for each of the six full years ownership of the truck. The difference in tax benefit from depreciation on a net present value basis over seven years due to the cash flow differences is \$6,100 for depreciation using six and two-thirds years effective life, against \$5,300 for depreciation using fifteen years effective life; a difference of \$800.





#### Diminishing value method

Diminishing value depreciation over six and two-thirds years starts at 10,125 in the first year, declining to 2,194 in the seventh year – an after tax effect of 3,038 in the first year, declining to 658 in the seventh year. On the basis of fifteen years effective life this is reduced to 4,500 in the first year, declining to 2,391 in the seventh year – an after tax effect of 1,350 in the first year, declining to 717 in the seventh year.

On sale of the truck in the seventh year on the current six and two-thirds years effective life basis, there is a gain of \$13,900 to the company on disposal and therefore a tax liability of \$4,200. On sale of the truck in the seventh year on the proposed fifteen year effective life basis, there is a

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negligible loss to the company on disposal and therefore almost no tax benefit.

The cumulative cash flow gap in present value prior to disposal of the truck is \$3,790 after seven years.

The after tax cash flow difference between an effective life of six and twothirds years and an effective life of fifteen years is \$1,690 in the first year, declining to \$60 in the seventh year. The difference in tax benefit from depreciation on a net present value basis over the five year period due to the cash flow impact is \$6,520 for depreciation using six and two-thirds years effective life, against \$5,610 for depreciation using fifteen years effective life; a difference of \$920.





## Cost of major servicing

Trucks typically require major servicing during their vehicle life in order to remain usable. We have been provided with indicative servicing histories for several different trucks and the cost of servicing them.

Without such maintenance and servicing, these trucks would clearly have no economic value. The expenditure on the truck maintenance and servicing after less than two million kilometres of work would typically approximate or even exceed the original cost of the truck and would continue to do so into the future. In many respects the key components of the original vehicle have been replaced or subjected to major renovation in a period that is substantially less than the proposed fifteen years effective life.



#### Example 1

A prime mover costing \$165,000 with a gross combination mass of 50 tonnes travels one million kilometres in line haul operations in its first five years. During this period the truck would require preventative maintenance and regular servicing. After the first five years the cost of major component overhaul, including engine rebuild, gearbox overhaul and other critical components after this period would be \$83,500 – equivalent to more than half the original cost of the truck.

After a further 900,000 kilometres, the truck would again require major servicing, to the engine, gearbox and body refurbishment. The total estimated cost of this maintenance would be approximately \$97,500.

#### Example 2

A prime mover costing \$235,000 with a gross combination mass of 140 tonnes is used in road train operations. It travels one million kilometres in its first three years. After this period it requires repair and maintenance to the engine, gearbox and other major components estimated to cost approximately \$97,000.

After a further 800,000 kilometres, the truck would require further major repair and maintenance to the engine, gearbox, radiator, intercooler and body refurbishment. The total estimated cost of this repair and maintenance would be approximately \$113,000.

## Effective Life and Truck Value

The proposed effective life of fifteen years will mean that for most of their economic life trucks would have a depreciated value that considerably exceeded their actual market value.

The chart below illustrates the nature of the gap between the value of a truck over fifteen years when compared with prime cost and diminishing value depreciation over a fifteen year period. This chart is based on the scenario outlined in the ATO *Discussion Paper on the Effective Life of Trucks* (28/06/2003) with respect to the typical life cycle for an articulated truck.

- The truck costs \$250,000 new and does not have any extra features.
- After its first life of four years the truck is sold for about 55 per cent of the cost of a new truck, having travelled about 1,300,000 kilometres.
- After its second life of a further four years the truck is sold for about 25 per cent of the cost of a new truck, having travelled a total of 2.1 million kilometres.
- After its third life of a further eight years the truck is sold for about 15 per cent of the cost of a new truck, having travelled 2.7 million kilometres.





The proposed effective life regime of fifteen years is not consistent with the expected actual usage and the value diminution of trucks. It will lead to large balancing charge adjustments at the time of vehicle sale during at least the first ten years.

## 4 Case studies

These case studies are based upon direct input from transport operators. KPMG has also commented upon the information that was provided.

### Case Study 1

#### Profile

This company has a line-haul fleet of 130 trucks. The line haul trucks average about 200,000 kilometres per year. Trucks are typically retained for a period of four to five years and normally sold after one million kilometres of service, which the company regards as the standard useful or economic life. Current practice is to depreciate these vehicles on a prime cost rate of 10%; the written-down value of these vehicles has typically matched their disposal cost (i.e. approximately 60% of purchase price after four years or 50% after five years).

The company also has a fleet of trucks that are used in the mining sector. These trucks have comparatively harsh working lives and the company disposes of them after two years or 400,000 kilometres. The trucks are sold at approximately their written down value, which the company self-assesses and depreciates at a rate of 20% per year.

The company has a third group of 260 trucks in its depot fleet. These trucks are based in single locations and perform local low kilometre transport tasks, such as from railheads to cities. In some cases the trucks in this fleet are 'retired' line-haul prime movers. The self-assessed depreciation rate claimed for this component of the fleet is 5% per year.

#### Impact

The company estimates that if it adopted an effective life of fifteen years for its truck fleet the cost in cash flow would eventually be about \$5 million per year, specifically about \$10,000 for each line haul truck and \$20,000 for each truck used in the mining sector.

Based upon our understanding of the business and assuming no change in fleet composition or use, the company estimate of the proposed change might be slightly high, but otherwise broadly in line with our expectations of the cash flow cost to the company. The impact would cut in progressively as new trucks are acquired after the implementation of the proposed change to effective life. Based upon existing vehicle turnover, the full impact of the proposed change would phase in over a five year period. The company believes that it has the resources and experience to self assess for periods that are shorter than the Commissioner's proposed determination of effective life. Our view is that this approach would need to take account of the total effective life by all owners of the vehicles.



## Case Study 2

#### Profile

The company has transport and warehouse operations in Victoria, New South Wales, Queensland and South Australia. It comprises five discrete business entities providing services to customers requiring storage and distribution, local trucking services, interstate haulage, courier services and truck repair facilities.

Recent growth has come predominantly through contract hire operations dedicated to particular clients with their transport needs so they can focus on their core business. These contracts require a dedicated fleet of trucks finished in the client's livery and the contracts typically have a five-year life. The trucks are acquired specifically to service the needs of those contract clients. The company owns over 130 trucks and 45 trailers of which 72 trucks and 22 trailers are dedicated to customers under five year contracts.

#### Impact

The company estimates that the proposed change to the effective life of trucks will have a serious effect on its tax position and cash flow. Analysis of its fleet under current depreciation rules and following the proposed change suggests a negative tax impact of \$1.7 million and a negative cash impact of almost \$1 million over a five year period when trucks are replaced.

Based upon our understanding of the business and assuming no change in fleet composition or use, this estimate would be broadly in line with our expectations of the cash flow cost to the company. The impact would phase in progressively over a five year period as new trucks are acquired after the implementation of the proposed change to effective life. Response would likely be increases in the contract rates as contracts are renewed.

### Case Study 3

#### Profile

This small business is in livestock carriage with a fleet of five articulated trucks. The trucks typically cover about 225,000 kilometres per year and disposal takes place after five years or about 1 million kilometres. New trucks are purchased for about \$220,000 and price received on disposal is usually between \$85,000 to \$90,000 after five years.

#### Impact

The business is not yet in a position to quantify the impact of the proposed changes to effective life under the Uniform Capital Allowance regime. It believes that the changes to effective life would have a negative impact.



On the basis of the information provided and our understanding of the business we estimate that after five years the cost to cash flow for this business would be of the order of \$44,000 per year, when it would be anticipated the vehicle fleet had been replaced under the proposed new effective life regime. Although it might be otherwise regarded as a small business, it would probably exceed the threshold requirements for Simplified Tax System and therefore be unable to access STS depreciation benefits.

### Case Study 4

#### Profile

This business has some 66 trucks engaged in line haul refrigerated transport operations. Company policy is to retain the trucks for about five years, replacing them after they have covered 800,000 to 900,000 kilometres. Current practice is to depreciate the trucks on a prime cost basis at a rate of 12% per year. Price received on disposal of the trucks is about 40% of the purchase price. The business acquires one new truck every month on average.

#### Impact

The company estimates the proposed change to effective life will have a negative cash flow impact of \$1.2 million per year. The company has progressively moved away from owner-drivers to a company vehicle fleet, enabling it to have greater control over issues such as driver fatigue management. The company may consider reverting to an owner-driver structure because of their capacity to access a faster rate of depreciation under the Simplified Tax System.

Based upon our understanding of the business we consider that the estimated impact on after tax cash flow from the proposed changes to effective life would be less than that estimated by the company. Our estimate is that that the likely impact after progressive replacement of the truck fleet under the proposed new effective life regime would be an *after tax* negative cash flow of the order of \$650,000 per year.

### Case Study 5

#### Profile

This company has some 100 trucks engaged in line haul activities. Trucks acquired range in price from between \$270,000 to \$230,000. The trucks are depreciated over five years on the basis of diminishing value. Company policy is dispose of trucks after five years or 1.5 million kilometres. Price received for trucks on disposal is usually about \$150,000.



#### Impact

The company regards the proposed change to effective life as bringing forward the tax collection. The effect of the balancing adjustment on disposal means that in strict dollar terms the company would not be affected. The company has not directly analysed the cash flow impact of the proposed change to effective life.

Based upon our understanding of the business our estimate of the likely cash flow impact is an after tax negative cash flow of approximately \$1,000,000 per year after full replacement of the truck fleet under the proposed new effective life regime.

## Likely responses by road transport businesses

The change to effective life would take effect for the acquisition of trucks after a specified date, at this stage proposed to be 1 July 2004. The introduction of the longer effective life from this date would be likely to have several effects:

- Pre-order / purchase of trucks in advance of the implementation date with a likely pause or slowdown in acquisitions after the implementation date.
- A gradual increase in transport costs as operators increasingly seek to recover the cash flow difference in the market. Based upon a line-haul truck travelling 200,000 kilometres per year, fleet owners would probably seek to recover about 4.4 cents per kilometre to cover the annual after tax cash flow difference. Using the Bureau of Transport and Regional Economics freight rate statistics of 5.66 cents per net tonne kilometre, this would represent a 3.9% increase in freight rates for a 20 tonne truck.
- Two classes of trucks, with different cost and cash flow profiles. Trucks purchased before the implementation date will have cash flow advantages over trucks purchased after the implementation date, therefore limiting the capacity of the buyers of the new trucks to recover the cost differences in the transport market.

Buyers of new trucks under a proposed effective life of fifteen years would be expected to seek to recover the annual cash flow difference in the market at the rate of about 4.4 cents per kilometre. For a 20 tonne truck this would equate to a 3.9 per cent increase in freight costs.

# 5 Likely impact on financing arrangements

## Leasing of trucks

Leasing, including operating leases and finance leases, is one of the main methods of financing trucks. An operating lease is a form of hiring an asset, whereby the lessor retains ownership of the asset and is liable for the costs of ownership, and the lessee is charged a lease fee to use the asset and is liable for the operating expenses. The main advantages of an operating lease for a lessee are that it enables the acquisition of assets without a large outlay of capital, and at the end of the lease, the lessee has no liability for any residual on the lease.

From a taxation perspective, the lessor under an operating lease is the 'holder' of the leased asset, and therefore is able to claim a deduction for depreciation on the asset. A lessor does not have the option of self-assessment, since they do not directly make use of the asset.

# Impact of the proposed increase in the effective life of trucks on the financing of trucks

The proposed increase in the effective life of trucks will result in reduced deductions for depreciation being allowable to the lessor, which in turn would have a negative impact upon the margins of leasing companies.

The wider impact of this for the leasing and trucking industry will be:

- On leasing companies cost and price structures: commercial forces will cause the cost of lease finance for trucks to increase in order to maintain lessors profit margins and remain competitive;
- On the financing options that leasing companies can offer to customers: as a result of the higher cost structure in offering an operating lease, they may become uncompetitive and a less preferred option, putting leasing behind other financing alternatives, such as hire purchase;
- On the competitiveness of leasing companies in Australia: in light of the differential in depreciation rates the proposed change in effective life between Australia and other countries (refer to the international comparison), larger trucking operators may consider offshore leasing arrangements. This would be a facility likely to be considered only by the larger fleet owners.

Other things being equal, the proposed change in effective life to fifteen years can be expected to increase leasing costs by approximately 4.1%.



#### Example

An operating lease for a prime mover valued at \$220,000, used for line haul for a period of five years, sale price received by the leasing company on disposal is \$90,000. Example is exclusive of GST and any stamp duties.

Lease payments of \$3,332 are made at the end of each month, based upon an interest rate of 8.7%. A cash rate of 10% is assumed for the purposes of discounted cash flow analysis.

The proposed change to the effective life of the prime mover from five years to fifteen years would represent a difference over the life of the lease of 6,700 in present value. In order for the lessor to recover this amount over the life of the lease, it would be necessary to increase lease payments to 3,470 – equivalent to a 100 basis points increase to an interest rate of 9.7%.

## 6 Small business and STS

The Simplified Taxation System (STS) was introduced on 1 July 2001, and comprises several measures designed to decrease the tax compliance burden on small business.

To come within the STS for a particular income year, a taxpayer must satisfy the following threshold criteria:

- Be carrying on a business in the relevant year of income;
- Have an *STS average turnover* of less than \$1 million;
- Have depreciating assets with an *adjustable value* (broadly, its original cost less any accumulated depreciation) of less than \$3 million.

The *STS average turnover* of a taxpayer is the value of business supplies (that is, supplies in the ordinary course of business) that it has made over the year of income, plus the value of any business supplies made by any additional entities with which the taxpayer is grouped for taxation purposes.

If a taxpayer satisfies the above criteria, they may take advantage of the following:

- STS Accounting Method;
- Simplified depreciation rules;
- Simplified Trading Stock rules (not discussed).

The STS accounting method allows STS taxpayers to recognised income as being derived and expenses as being incurred for taxation purposes on a *cash basis*.

The simplified depreciation rules allow:

- An immediate write-off for depreciating assets costing less than \$1,000;
- Assets with an effective life of less than 25 years to be pooled into a general STS pool and be collectively depreciated at 30% per annum;
- Assets with an effective life of greater than 25 years to be pooled into a long life STS pool and be collectively depreciated at 5% per annum;
- For the year in which an asset is newly acquired (regardless of what point in the year it was acquired) a depreciation deduction can be claimed as follows:
  - 15% if the assets is in the general STS pool;
  - 2.5% if the asset is in the long life STS pool.

The Simplified Tax System is therefore a mechanism available to very small transport businesses, typically owner drivers. It is however a cash-based



rather than an accruals-based system that may create difficulties for owner drivers who have adopted accruals based systems as a means of managing GST.

Indications from the road transport industry are that to date very few of the smaller transport operators have opted for the Simplified Tax System. This may be due to a lack of awareness with respect to the option or a reluctance to modify systems already in place to manage GST and the requirement to use cash rather than accrual accounting for the calculation of GST.

The road transport sector comprises some 32,000 businesses, of which some three-quarters are owner-driver or 'micro-fleet' businesses. The proposed change to an effective life of fifteen years for trucks may encourage many smaller transport operators that meet the threshold criteria to opt for Simplified Tax System. Road transport business that are above the Simplified Tax System threshold are probably unlikely to restructure their businesses to try to meet these threshold requirements because of the complexity associated with making such a change.

The Simplified Tax System would allow these small businesses to effectively continue to utilise depreciation rates similar to those currently available for the entire road transport industry given the incentive of \$8,800 per truck.



## 7 The effective life review process

Under the uniform capital allowances regime, the Commissioner of Taxation progressively reviews, and makes updated determinations of the 'safeharbour' effective lives used to calculate deductions for depreciating assets. The Commissioner's Determinations must be based on an estimate of the period in years or fractions of years the asset can be used by any entity for a taxable purpose or for the purpose of producing exempt income. The Commissioner's reviews are based solely on the consideration of factors relating to an asset's effective life and do not take into account any wider policy implications. Therefore, the Commissioner's Determinations of effective lives do not address issues such as the impact on investment decisions or broader economic impacts.

In conducting its review of the effective life of assets, the ATO acknowledges that the physical life and effective life of an asset is not necessarily the same and that the effective life of an asset can be a period shorter than the physical life of the asset.

### Determination of effective life is in years

The Uniform Capital Allowance regime defines the effective life of assets in years. The Commissioner of Taxation is required to make a determination of the effective life of a depreciating asset by estimating the period (in years, including fractions of years) it can be used by any entity for a taxable purpose or for the purpose of producing exempt income or non-assessable non-exempt income.

The determination by the Commissioner is made:

(a) assuming it will be subject to wear and tear at a rate that is reasonable for the Commissioner to assume; and

(b) assuming it will be maintained in reasonably good order and condition; and

(c) having regard to the period within which it is likely to be scrapped, sold for no more than scrap value or abandoned.

The key point is that the Commissioner's determination of effective life is made in years rather than any other measure of asset use. The legislation does not allow the Commissioner flexibility to determine effective life by other methods.



# 8 Self-assessment of effective life

## Self-assessment option

Taxpayers have the option of self-assessing the effective life of a capital asset for the purpose of calculating the depreciation deduction allowable to them under the Uniform Capital Allowances regime. The taxpayer must notify the Commissioner of their choice to self-assess effective life on the Capital Allowances Schedule filed with their annual tax return.

In self-assessing effective life, taxpayers must estimate the total number of years (or fractions of years, if necessary) that the asset can be used for a taxable purpose or to produce exempt income by *any* entity. Therefore, the self assessed effective life must include the time over which the taxpayer is the holder of the asset, and the effective life that would remain if they dispose of the asset before it is fully exhausted.

This judgement must be made in light of the wear and tear that the taxpayer reasonably expects will be caused to the asset from their own use. If the taxpayer believes that their particular circumstances of use will reduce the total time the asset can be used to produce assessable or exempt income by them, or anyone who succeeds them in holding the asset, the effective life applied to the asset for taxation purposes can be revised down accordingly.

In addition, the taxpayer must make the assumption that the asset will be maintained in reasonably good order and condition throughout its total effective life. However, the taxpayer will not be required to extend the effective life they self assess if they expect the asset will undergo large-scale overhaul or refurbishment.

"Reasonability" in the Commissioner's view can be considered in light of a number of factors set out in Tax Ruling TR 2000/18, such as the physical life of the asset, manufacturers' specifications, retention period and conditions in any secondary markets. In TR 2000/18, the Commissioner states that the factors set out broadly approximate the factors a taxpayer would take into account if she or he were self assessing the effective life, the key difference being that the taxpayer takes account of their own particular circumstances whereas the Commissioner considers industry wide norms.

Theoretically, the main benefit of self-assessing effective life is that the taxpayer can set the effective life at a rate that is tailor-made for their circumstances. However, in practice self-assessment does not advantage all taxpayers, and in particular, will present a number of practical difficulties for smaller trucking companies and those operating in regional areas. This would include:

Increased compliance costs, as in practice the ATO requires taxpayers to substantiate a "reasonable basis" behind their decision to self assess effective life, although this does not need to be in any specific format;

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Increased exposure to ATO scrutiny should the self-assessed effective life depart from that prescribed by the Commissioner (which is likely to occur in the case of our clients, given the three-fold proposed increase in the effective life for trucks).

One of the possible methods for minimising risk exposure for taxpayers might be through the mechanism of private rulings. It is uncertain whether this approach will be possible or practical. A private ruling represents the Commissioner's opinion on the operation of a particular area of the taxation law, and cannot provide any guidance in respect of a question of fact. There are also the issues of needing different private rulings for different taxpayers, possibly with different effective life determinations for different vehicles. For administrative reasons alone, it is probably a course that the Commissioner would want to discourage.

### Difficulties with self assessment

The scope for self-assessment of effective life is theoretically available as an alternative to the 'safe harbour' of the Commissioners' proposed determination of an effective life of fifteen years for trucks.

However, the effective life adopted by a taxpayer must relate to the total estimated period the asset can be used by any entity for the purpose of producing assessable or exempt income. A key difficulty therefore exists in circumstances where the transport operator does not retain the truck for its full effective life. The first owner of the truck might assess that it has an effective life of seven years and claim depreciation at this rate. On disposal of the truck after five years the new owner would be faced with a truck that on the basis of the original owner's assessment had only two years effective life remaining, but on the Commissioner's proposed determination would have a further ten years effective life.

Suggested alternatives for self assessment of effective life might include units of use, such as kilometres travelled or fuel consumed. Many of these suggested self assessment alternatives would also require some foreknowledge of the entire usage of the vehicle, not just the original owner's use, but also that of future owners. The nature of the road transport industry is that truck ownership usually changes as trucks move through several stages of their lifecycle from high intensity use in the early years, less intensive use in subsequent years and finally to low intensity use in their final years.

Transport operators that retained ownership of the vehicle for its full effective life and wished to use other measures of effective life such as units of use based upon measures such as distance travelled might be able to substantiate their method of self assessment to the ATO. However the risk associated with such an approach would be with the taxpayer and given that the effective life of assets under the Uniform Capital Allowance regime is defined in years, there is a risk that the ATO would not accept estimates at variance with the Commissioner's determination.



#### Self assessment based upon measures other than effective life is unlikely to be a realistic option for the majority of road transport operators.

The fact that the Government has found it necessary to legislate for statutory caps on the effective life of capital assets in other industry sectors largely acknowledges that there are difficulties for taxpayers in using self assessment as an option, notwithstanding the size and sophistication of many of the taxpayers in those industry sectors.

## 9 Treatment of other industry sectors

The Government considered cases where significant increases in revised effective life determinations would have a significant effect on forthcoming investment projects with significant economic impacts, particularly in large capital intensive industries.

Following consideration of the broader national interest, the Government legislated for effective life statutory caps to ensure appropriate capital allowances deductions remained available for aeroplanes, helicopters, gas transmission and distribution assets, oil and gas production assets and assets used to manufacture condensate, crude oil, domestic gas, LNG or LPG.

Asset class	Former effective life or range (years)	ATO proposed effective life or range (years)	Statutory cap on effective life (years)		
Aeroplanes:					
– General use	8	20	10		
<ul> <li>Used predominantly for agricultural spraying or dusting</li> </ul>	4	10	8		
Helicopters:					
– General use	8	20	10		
<ul> <li>Used predominantly for mustering, or agricultural spraying or dusting</li> </ul>	4	10	8		
Gas transmission and distribution assets	20	5 - 50	20		
Oil and gas production assets except electricity generation assets and offshore platforms	10 - 20	5 - 30	15		
Offshore oil or gas platforms	20	5 - 30	20		
Assets (except electricity generation assets) used to manufacture condensate, crude oil, domestic gas, LNG or LPG, otherwise than at an oil refinery	13.3	10 - 30	15		

#### Table 9.1



The legislated caps on the effective life of these assets recognised that there were national interest issues that could not be addressed by the ATO under the Uniform Capital Allowance regime.

The Government acknowledged in the Explanatory Memorandum to Taxation Laws Amendment Bill No 4, 2002 that:

"It is therefore possible, even likely, that the Commissioner may determine significant increases in the 'safeharbour' life of assets where those increases could have significant adverse impacts on the affected industries with flow on implications to other sectors of the economy."

Assistant Treasurer and Minister for Revenue Senator Helen Coonan outlined the rationale for exceptions to the Uniform Capital Allowance regime for industries of national significance that can demonstrate competitive disadvantage.

Significantly, the Uniform Capital Allowance System removed accelerated depreciation and aligned depreciation rates with the income producing life of assets.

*Exceptions to the effective life rules have also been tightly targeted. These exemptions are directed solely to industries of national significance able to demonstrate a competitive disadvantage.* 

Of particular note to this audience, the Government has introduced statutory caps on the effective life of certain assets used in the oil and gas supply industry. This shortens the depreciation write-off periods of these assets, when compared to the Commissioner of Taxation's revised "safe harbour" effective lives of these assets.

Assistant Treasurer and Minister for Revenue, Senator Helen Coonan, APPEA Tax and Finance Conference, 29 August 2003

In legislating for effective life caps for certain assets in other industry sectors it is implicit that the alternative of self-assessment does not provide the same degree of certainty to taxpayers as the safe harbour afforded by the Commissioner's determination.

## 10 Treatment of trucks in other countries

The adoption of fifteen years effective life for trucks in Australia would be at considerable variance from the approach adopted in broadly similar economies. The cost of road transport in Australia will accordingly be higher and less competitive than those countries.

Table 10.1			
Country	Category	Effective Life	Depreciation Rate
Canada	Freight trucks acquired after December 6, 1991, that are rated higher than 11,788 kilograms	n/a	40%
Hong Kong	Plant and machinery	n/a	60% first year
Ireland	Road vehicles	n/a	20%
Malaysia	Motor vehicles, heavy machinery	n/a	20%
New Zealand	3.5 – 12 tonnes	12.5	10% SL or
	with loading		15% DMV
	without loading		12 % SL or 18% DMV
	> 12 tonnes	10	12.5% SL or
	old with loading		18% DMV
	new without loading		15% SL or 21.6% DMV
Singapore	> 3 tonnes	n/a	331/3%
United Kingdom	Applies to most assets	4	25%
United States	Light and heavy general purpose trucks	10 – 4	10% - 25%



# Appendix — calculations

#### PRIME MOVER: PRIME COST METHOD

VEHICLE COST	\$220,000				SALE VAL	UE	\$90,000	
DISCOUNT RATE	10%	· · · · ·						
EFFECTIVE LIFE OF	5	YEARS						
	Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Sale	PV
Prime Cost	20.0%	\$44,000	\$44,000	\$44,000	\$44,000	\$44,000		
WDV		\$176,000	\$132,000	\$88,000	\$44,000	\$0		
Tax Benefit @ 30%		\$13,200	\$13,200	\$13,200	\$13,200	\$13,200		
PV		\$13,200	\$12,000	\$10,909	\$9,917	\$9,016		\$55,000
Sale							\$90,000	
Profit / Loss on Sale							\$90,000	\$61,500
Balancing adjustment							-\$27,000	-\$18,450
Tax effect at PV								\$36,600
EFFECTIVE LIFE OF	15	YEARS						
	Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Sale	PV
Prime Cost	6.7%	\$14,667	\$14,667	\$14,667	\$14,667	\$14,667		
WDV		\$205,333	\$190,667	\$176,000	\$161,333	\$146,667		
Tax Benefit @ 30%		\$4,400	\$4,400	\$4,400	\$4,400	\$4,400		
PV		\$4,400	\$4,000	\$3,636	\$3,306.	\$3,005		\$18,300
Sale							\$90,000	
Profit / Loss on Sale							-\$56,667	-\$38,700
Balancing adjustment							\$17,000	\$11,610
Tax effect at PV		arte en la comunicación de	· · · · · · · · · · ·					\$29,900

#### PRIME MOVER: DIMINISHING VALUE METHOD

VEHICLE COST	\$220,000				SALE VAL	\$90,000		
DISCOUNT RATE	10.0%							
EFFECTIVE LIFE OF	5	YEARS						
	Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Sale	PV
Diminishing Value	30.0%	\$66,000	\$46,200	\$32,340	\$22,638	\$15,847		
WDV		\$154,000	\$107,800	\$75,460	\$52,822	\$36,975		
Tax Benefit @ 30%		\$19,800	\$13,860	\$9,702	\$6,791	\$4,754		
PV		\$19,800	\$12,600	\$8,018	\$5,102	\$3,247		\$48,800
Sale							\$90,000	
Profit / Loss on Sale							\$53,025	\$36,200
Balancing adjustment							-\$15,907	-\$10,860
Tax effect at PV								\$37,900
EFFECTIVE LIFE OF	15	YEARS						
	Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Sale	PV
Diminishing Value	10.0%	\$22,000	\$19,800	\$17,820	\$16,038	\$14,434		
WDV		\$198,000	\$178,200	\$160,380	\$144,342	\$129,908		
Tax Benefit @ 30%		\$6,600	\$5,940	\$5,346	\$4,811	\$4,330		
PV		\$6,600	\$5,400	\$4,418	\$3,615	\$2,958		\$23,000
Sale							\$90,000	
Profit / Loss on Sale							-\$39,908	-\$27,300
Balancing adjustment							\$11,972	\$8,190
Tax effect at PV								\$31,200



#### RIGID TRUCK: PRIME COST METHOD

VEHICLE COST	\$45,000						SALE VAL	UE	\$21,500	
DISCOUNT RATE	10%	• • • •								
EFFECTIVE LIFE OF	6.67	YEARS								
·	Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Sale	PV
Prime Cost	15.0%	\$6,750	\$6,750	\$6,750	\$6,750	\$6,750	\$6,750	\$4,500		
WDV		\$38,250	\$31,500	\$24,750	\$18,000	\$11,250	\$4,500	\$0		
Tax Benefit @ 30%		\$2,025	\$2,025	\$2,025	\$2,025	\$2,025	\$2,025	\$1,350		
discount rate		1.00	0.91	0.83	0.75	0.68	0.62	0.56		
PV		\$2,025	\$1,841	\$1,674	\$1,521	\$1,383	\$1,257	\$762		\$10,460
Sale									\$21,500	
Profit / Loss on Sale									\$21,500	\$14,680
Balancing adjustment									-\$6,450	-\$4,404
Tax effect at PV										\$6,060
EFFECTIVE LIFE OF	15	YEARS								
	Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Sale	PV
Prime Cost	6.7%	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000		
WDV		\$42,000	\$39,000	\$36,000	\$33,000	\$30,000	\$27,000	\$24,000		
Tax Benefit @ 30%		\$900	\$900	\$900	\$900	\$900	\$900	\$900		
discount rate		1.00	0.91	0.83	0.75	0.68	0.62	0.56		
PV		\$900	\$818	\$744	\$676	\$615	\$559	\$508		\$4,820
Sale									\$21,500	
Profit / Loss on Sale									-\$2,500	-\$1,710
Balancing adjustment									\$750	\$513
Tax effect at PV										\$5,330

#### RIGID TRUCK: DIMINISHING VALUE METHOD

VEHICLE COST	\$45,000						SALE VAL	UE	\$21,500	
DISCOUNT RATE	10.0%									
EFFECTIVE LIFE OF	6.67	YEARS								
	Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Sale	PV
Diminishing Value	22.5%	\$10,125	\$7,847	\$6,081	\$4,713	\$3,653	\$2,831	\$2,194		
WDV		\$34,875	\$27,028	\$20,947	\$16,234	\$12,581	\$9,750	\$7,557		
Tax Benefit @ 30%		\$3,038	\$2,354	\$1,824	\$1,414	\$1,096	\$849	\$658		
discount rate		1.00	0.91	0.83	0.75	0.68	0.62	0.56		
PV		\$3,038	\$2,140	\$1,508	\$1,062	\$748	\$527	\$372		\$9,390
Sale									\$21,500	
Profit / Loss on Sale									\$13,940	\$9,520
Balancing adjustment									-\$4,180	-\$2,856
Tax effect at PV										\$6,530
EFFECTIVE LIFE OF	15	YEARS								
	Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Sale	PV
Diminishing Value	10.0%	\$4,500	\$4,050	\$3,645	\$3,281	\$2,952	\$2,657	\$2,391		
WDV		\$40,500	\$36,450	\$32,805	\$29,525	\$26,572	\$23,915	\$21,523		
Tax Benefit @ 30%		\$1,350	\$1,215	\$1,094	\$984	\$886	\$797	\$717		
discount rate		1.00	0.91	0.83	0.75	0.68	0.62	0.56		
PV		\$1,350	\$1,105	\$904	\$739	\$605	\$495	\$405		\$5,600
Sale									\$21,500	
Profit / Loss on Sale									-\$23	-\$20
Balancing adjustment									\$7	\$6
Tax effect at PV										\$5,610