

<b>Title:</b> Changes to bus service registration requirements to improve competition in the bus market  <b>IA No: DfT00238</b>  <b>Lead department or agency:</b> Department for Transport  <b>Other departments or agencies:</b> Traffic Commissioners VOSA	<b>Impact Assessment (IA)</b>
	<b>Date:</b> 22 August 2013
	<b>Stage:</b> Consultation
	<b>Source of intervention:</b> Domestic
	<b>Type of measure:</b> Secondary legislation
<b>Contact for enquiries:</b> Nathan Cole, Department for Transport	

<b>Summary: Intervention and Options</b>	<b>RPC: GREEN</b>
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Cost of Preferred (or more likely) Option			
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB on 2009 prices)	In scope of One-In, Measure qualifies as One-Out?
£7.0m	-£9.7m	£0.938 <sup>1</sup>	Yes   In

**What is the problem under consideration? Why is government intervention necessary?**

The local bus market outside of London is deregulated, with competition expected to take place on bus routes. However, a Competition Commission inquiry found that there was insufficient competition in the local bus market, leading to adverse effects of competition (AEC) such as high fares and poor services. They found that existing rules for notifying the Traffic Commissioner of changes to local bus service registrations did not prevent AEC in the bus market. Specifically, the current rules allow incumbent bus operators to create overcapacity and manipulate timetables in response to a rival's entrance, inducing its exit from the market. This form of competition can act as a barrier to entry and expansion into a market. Additionally, the current short notice period local authorities receive when an operator cancels a service, means there is less competition in the tendering of replacement services. Government intervention is necessary to ensure that competition in the local bus market is fair and sustainable.

**What are the policy objectives and the intended effects?**

The policy aims to reduce the threat of post-entry anti-competitive behaviour by incumbent operators, which deters operators from entering and expanding into a market. The policy should therefore introduce greater competition into the local bus market that is likely to be sustained. An additional objective is to tackle the tight timescales currently faced by local authorities as a result of the current notice period of 56 days. Ensuring local authorities have sufficient time to procure replacement services should lead to a more competitive market for tenders.

**What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)**

The Competition Commission considered the need for regulation as part of its inquiry into the market for local bus services. It took evidence from a range of interested parties to consider what actions, if any, were needed. It concluded that the adverse effects on competition from predatory behaviour were significant enough to justify the introduction of regulation. After considering various forms of regulation, including introducing a new regulatory body to determine when an operator behaved inappropriately, the CC decided simple universal rules were the most effective way of addressing the adverse effect on competition. The following policy options will be considered in this Impact Assessment:

**Policy option 1** – Introducing regulations requiring operators to give local authorities 14 day notice of a local bus service registration before it is submitted to the Traffic Commissioner

**Policy option 2** – Extending the current 56-day notice period to 90 days for applications to vary bus services

**Policy option 3** – Extending the current 56-day notice period to 70 days for all bus service applications

**Policy option 4** – A combination of policy options 1 and 2

**Policy option 5** – A combination of policy options 1 and 3

Option 5 is the preferred option as we believe best balances the need to prevent AEC in the bus market, whilst not reducing market flexibility. Page 11 has more information on why this is the preferred option.

<sup>1</sup> EANCB calculation is outlined on page 22.

<b>Will the policy be reviewed?</b> It will be reviewed. <b>If applicable, set review date:</b> 10/2019					
Does implementation go beyond minimum EU requirements?			N/A		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	<b>Micro</b> No	<b>&lt; 20</b> Yes	<b>Small</b> Yes	<b>Medium</b> Yes	<b>Large</b> Yes
What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions? (Million tonnes CO <sub>2</sub> equivalent)			<b>Traded:</b> N/A	<b>Non-traded:</b> N/A	

***I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.***

Signed by the responsible Minister: \_\_\_\_\_ Baroness Kramer \_\_\_\_\_ Date: \_\_\_\_\_ 10/02/2014 \_\_\_\_\_

# Summary: Analysis & Evidence

# Policy Option 1

**Description:** Introducing regulations requiring operators to give local authorities 14 day notice of a local bus service registration before it is submitted to the Traffic Commissioner

## FULL ECONOMIC ASSESSMENT

Price Base Year 2012	PV Base Year 2013	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: 1.4	High: 7.8	Best Estimate: 6.6

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0	0.1	0.4
High	0	1.3	10.1
Best Estimate	0	0.3	2.6

### Description and scale of key monetised costs by 'main affected groups'

Operators are expected to incur additional costs as a result of this policy. Costs vary according to the proportion of the industry that has to run services for an additional 14 days beyond the point at which they would otherwise have been stopped. Operators who already inform the local authority 14 days earlier than already required are assumed not to incur costs as it is not necessary to continue services longer than planned. There will be some increased admin costs to bus operators from filling in an additional application to local authorities and to VOSA from checking this additional application has been made.

### Other key non-monetised costs by 'main affected groups'

The increase in the notification period will limit operators' commercial flexibility and ability to respond immediately to changing market conditions such as the introduction of a major employer along a route. This is not expected to be significant as the current regulations allowing short notice applications (where 56 days notice does not have to be given) cover most scenarios where flexibility is needed. Annex 2 covers the competition effects in more detail.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0	1.0	8.3
High	0	1.4	11.5
Best Estimate	0	1.2	9.3

### Description and scale of key monetised benefits by 'main affected groups'

The benefits of this policy accrue to bus users and local authorities. Local authorities receive benefits compared to the 'do nothing' scenario as the longer notice period allows LAs more time to plan the tendering of contracts to replace deregistered or reduced services, leading to more competitive tenders. Passengers value having access to up-to-date information at bus stops so they can plan their journeys. There is also a benefit from the reduced likelihood of long delays for passengers currently unaware of service changes resulting from out of date timetable information.

### Other key non-monetised benefits by 'main affected groups'

Operators benefit from reduced barriers to entry into the local bus market in the form of a lower threat of predation from incumbent operators. As a result, consumers will benefit from greater competition on commercial routes. Operators and local authorities also benefit from the opportunity to discuss the proposed changes for 14 days before they have to be registered with the traffic commissioner. This information sharing may result in LAs suggesting mutually beneficial changes to the proposed scheduling/registrations.

### Key assumptions/sensitivities/risks

Discount rate (%) 3.5

The assumptions used rely heavily on expert judgement and interpretation of limited data. The level of uncertainty is reflected in the range presented above, and the estimates are very sensitive to the proportion of routes that can be changed with 70 days notice at no extra cost (which for the central case has been assumed to be 91%) and the reduction in the price of emergency tenders (assumed to be 10%). The extent to which this option will be beneficial will depend on the effect of the longer notice period on competition in the bus market and local authorities' ability to use the longer notice period to drive down tendering costs.

## BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs: 0.3	Benefits: 0	Net: -0.3	Yes	IN

# Summary: Analysis & Evidence

# Policy Option 2

**Description:** Extending the current 56-day notice period to 90 days for applications to vary bus services

## FULL ECONOMIC ASSESSMENT

Price Base Year 2012	PV Base Year 2013	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: -0.9	High: 7.9	Best Estimate: 5.7

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0	0.0	0.0
High	0	1.5	11.7
Best Estimate	0	0.4	3.0

### Description and scale of key monetised costs by 'main affected groups'

Operators are expected to incur additional costs as a result of this policy when they apply to change an existing bus registration (the notice period for registrations and cancellations will remain at 56 days). Costs vary according to the proportion of the industry that has to run services for an additional 34 days beyond the point at which they would otherwise have been stopped. Operators who plan their registrations and inform the local authority 34 days earlier than already required are assumed not to incur costs.

### Other key non-monetised costs by 'main affected groups'

The increase in the notification period will limit operators' commercial flexibility and ability to respond immediately to changing market conditions such as the introduction of a major employer along a route. This is not expected to be significant as the current regulations allowing short notice applications (where 56 days notice does not have to be given) cover most scenarios where flexibility is needed. Annex 2 covers the competition effects in more detail.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0	1.0	7.9
High	0	1.4	10.8
Best Estimate	0	1.1	8.7

### Description and scale of key monetised benefits by 'main affected groups'

The benefits of this policy accrue to bus users and local authorities. LAs receive benefits compared to the 'do nothing' scenario as the longer notice period allows them more time to plan the tendering of contracts to replace reduced services, leading to more competitive tenders. Passengers value having access to up-to-date information so they can plan their journeys. There is also a benefit from the lower likelihood of long delays for passengers currently unaware of service changes resulting from out of date timetable information.

### Other key non-monetised benefits by 'main affected groups'

Operators benefit from reduced barriers to entry into the local bus market in the form of a lower threat of predation. As a result, consumers will benefit from greater sustained competition on commercial routes. Operators and local authorities also benefit from the opportunity to discuss the proposed changes for 34 days before they have to be registered with the traffic commissioner. This information sharing can result in mutually beneficial changes to the proposed changes.

<b>Key assumptions/sensitivities/risks</b>	<b>Discount rate (%)</b>	3.5
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The assumptions used rely heavily on expert judgement and interpretation of limited data. The level of uncertainty is reflected in the range presented above, and the estimates are very sensitive to the proportion of routes that can be changed with 90 days notice at no extra cost and the reduction in the price of emergency tenders. The extent to which this option will be beneficial will depend on the effect of the longer notice period on competition in the bus market and local authorities' ability to use the longer notice period to drive down tendering costs.

There is also a risk that operators will be able to game the rules to avoid compliance (i.e. by deregistering and immediately reregistering a route instead of applying to vary it), though this is unlikely to happen.

## BUSINESS ASSESSMENT (Option 2)

<b>Direct impact on business (Equivalent Annual) £m:</b>			<b>In scope of OIOO?</b>	<b>Measure qualifies as</b>
Costs: 0.4	Benefits: 0	Net: -0.4	Yes	IN

# Summary: Analysis & Evidence

# Policy Option 3

**Description:** Extending the current 56-day notice period to 70 days for all bus service applications

## FULL ECONOMIC ASSESSMENT

Price Base Year 2012	PV Base Year 2013	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: 1.6	High: 8.4	Best Estimate: 7.3

COSTS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0	0	0.0	0.0
High	0		1.3	10.5
Best Estimate	0		0.3	2.2

### Description and scale of key monetised costs by 'main affected groups'

Operators are expected to incur additional costs as a result of this policy. Costs vary according to the proportion of the industry that has to run services for an additional 14 days beyond the point at which they would otherwise have been stopped. Operators who already inform the local authority 14 days earlier than already required are assumed not to incur costs as it is not necessary to continue services longer than planned. Compared to policy option 2, this option affects all applications (i.e. registrations, variations and cancellations) rather than just variations, and extends the notice period from only 14 days as opposed to 34.

### Other key non-monetised costs by 'main affected groups'

The increase in the notification period will limit operators' commercial flexibility and ability to respond immediately to changing market conditions such as the introduction of a major employer along a route. It may also increase the period in which operators can defend their competitive positions against entrants. This is not expected to be significant as the current regulations allowing short notice applications (where 56 days notice does not have to be given) cover most scenarios where flexibility is needed. Annex 2 covers the competition effects in more detail.

BENEFITS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0	0	1.0	8.4
High	0		1.5	12.0
Best Estimate	0		1.2	9.5

### Description and scale of key monetised benefits by 'main affected groups'

The benefits of this policy accrue to bus users and local authorities. LAs receive benefits compared to the 'do nothing' scenario as the longer notice period allows them more time to plan the tendering of contracts to replace reduced services, leading to more competitive tenders. Passengers value having access to up-to-date information so they can plan their journeys. There is also a benefit from the lower likelihood of long delays for passengers currently unaware of service changes resulting from out of date timetable information. The benefits are likely to be higher than the benefits under option 2 as the regulations cover all services rather than just variations in service registrations.

### Other key non-monetised benefits by 'main affected groups'

The option is likely to reduce the possibility of predation by incumbent operators and unsustainable competition by preventing operators from making short-term tactical decisions. It would also lead to greater partnership between local authorities and operators as they have a longer period to discuss the effects of route changes.

<b>Key assumptions/sensitivities/risks</b>	<b>Discount rate (%)</b>	3.5
The assumptions used rely heavily on expert judgement and interpretation of limited data. The level of uncertainty is reflected in the range presented above, and the estimates are very sensitive to the proportion of routes that can be changed with 70 days notice at no extra cost and the reduction in the price of emergency tenders. The extent to which this option will be beneficial will depend on the effect of the longer notice period on competition in the bus market and local authorities' ability to use the longer notice period to drive down tendering costs.		

## BUSINESS ASSESSMENT (Option 3)

<b>Direct impact on business (Equivalent Annual) £m:</b>	<b>In scope of OIOO?</b>	<b>Measure qualifies as</b>
Costs: 0.3	Yes	IN
Benefits: 0		
Net: -0.3		

# Summary: Analysis & Evidence

# Policy Option 4

**Description:** Policy options 1 and 2 - Introducing regulations 14-day notice period to local authorities AND extending the current 56-day notice period to 90 days for applications to vary bus services

## FULL ECONOMIC ASSESSMENT

Price Base Year 2012	PV Base Year 2013	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: -14.1	High: 7.5	Best Estimate: 2.8

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0	0.4	3.6
High	0	3.9	31.6
Best Estimate	0	1.3	10.2

### Description and scale of key monetised costs by 'main affected groups'

Operators are expected to incur additional costs as a result of this policy. For service cancellations, costs vary according to the proportion of the industry that has to run services for an additional 14 days beyond the point at which they would otherwise have been stopped. For service reductions, operators will bear the cost of running services for an additional 48 days beyond the point at which they would otherwise have stopped. There will be some increased admin costs to bus operators from filling in an additional application to local authorities and to VOSA from checking this additional application has been made.

### Other key non-monetised costs by 'main affected groups'

The increase in the notification period will limit operators' commercial flexibility and ability to respond immediately to changing market conditions such as the introduction of a major employer along a route. This is not expected to be significant as the current regulations allowing short notice applications cover most scenarios where flexibility is needed. Annex 2 covers the competition effects in more detail.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0	1.4	11.1
High	0	2.2	17.6
Best Estimate	0	1.6	13.0

### Description and scale of key monetised benefits by 'main affected groups'

Local authorities benefit as the longer notice period allows them more time to plan the tendering of contracts to replace reduced services, leading to more competitive tenders. Passengers value having access to up-to-date information so they can plan their journeys. There is also a benefit from the lower likelihood of long delays for passengers currently unaware of service changes resulting from out of date timetable information. Overall benefits will be higher compared with that under policy options 1 and 2.

### Other key non-monetised benefits by 'main affected groups'

Operators benefit from reduced barriers to entry into the local bus market in the form of a lower threat of predation from incumbent operators. As a result, consumers will benefit from greater competition on commercial routes. Operators and local authorities also benefit from the opportunity to discuss the proposed changes for 14 days before they have to be registered with the traffic commissioner. This information sharing may result in LAs suggesting mutually beneficial changes to the proposed scheduling/registrations.

<b>Key assumptions/sensitivities/risks</b>	<b>Discount rate (%)</b>	3.5
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The assumptions used rely heavily on expert judgement and interpretation of limited data. The level of uncertainty is reflected in the range presented above, and the estimates are very sensitive to the proportion of routes that can be changed with 104 days notice at no extra cost and the reduction in the price of emergency tenders. The extent to which this option will be beneficial will depend on the effect of the longer notice period on competition in the bus market and local authorities' ability to use the longer notice period to drive down tendering costs.

There is also a risk that operators will be able to game the rules to avoid compliance (i.e. by deregistering and immediately reregistering a route instead of applying to vary it), though this is unlikely to happen.

## BUSINESS ASSESSMENT (Option 4)

<b>Direct impact on business (Equivalent Annual) £m:</b>			<b>In scope of OIOO?</b>	<b>Measure qualifies as</b>
Costs: 1.3	Benefits: 0	Net: -1.3	Yes	IN

# Summary: Analysis & Evidence

# Policy Option 5

**Description:** Policy options 1 and 3 - Introducing regulations 14-day notice period to local authorities AND extending the current 56-day notice period to 70 days for ALL bus service applications.

## FULL ECONOMIC ASSESSMENT

Price Base Year 2012	PV Base Year 2013	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: -14.2	High: 13.1	Best Estimate: 7.0

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0	0.1	0.6
High	0	4.7	37.7
Best Estimate	0	1.2	9.7

### Description and scale of key monetised costs by 'main affected groups'

Operators are expected to incur additional costs as a result of this policy. For services in areas that already have a 14-day notice period, the cost will be the loss from running services for an additional 14 days beyond the point at which they would otherwise have been stopped. For services in areas without a 14-day notice period, the cost will be borne for 28 days. There will be some increased admin costs to bus operators from filling in an additional application to local authorities and to VOSA to check this has taken place.

### Other key non-monetised costs by 'main affected groups'

The increase in the notification period will limit operators' commercial flexibility and ability to respond immediately to changing market conditions such as the introduction of a major employer along a route. It may also increase the period in which operators can defend their competitive positions against entrants. This is not expected to be significant as the current regulations allowing short notice applications cover most scenarios where flexibility is needed. Annex 2 covers the competition effects in more detail.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0	1.7	13.7
High	0	2.9	23.5
Best Estimate	0	2.1	16.6

### Description and scale of key monetised benefits by 'main affected groups'

The benefits of this policy accrue to bus users and local authorities. LAs receive benefits compared to the 'do nothing' scenario as the longer notice period allows them more time to plan the tendering of contracts to replace reduced services, leading to more competitive tenders. Passengers value having access to up-to-date information so they can plan their journeys. There is also a benefit from the lower likelihood of long delays for passengers currently unaware of service changes resulting from out of date timetable information.

### Other key non-monetised benefits by 'main affected groups'

Operators benefit from reduced barriers to entry into the local bus market in the form of a lower threat of predation from incumbent operators. As a result, consumers will benefit from greater competition on commercial routes. The option is also likely to reduce the possibility of predation by incumbent operators and unsustainable competition by preventing operators from making short-term tactical decisions. It would also lead to greater partnership between local authorities and operators as they have a longer period to discuss the effects of route changes.

<b>Key assumptions/sensitivities/risks</b>	<b>Discount rate (%)</b>	3.5
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The assumptions used rely heavily on expert judgement and interpretation of limited data. The level of uncertainty is reflected in the range presented above, and the estimates are very sensitive to the proportion of routes that can be changed with 84 days notice at no extra cost and the reduction in the price of emergency tenders. The extent to which this option will be beneficial will depend on the effect of the longer notice period on competition in the bus market and local authorities' ability to use the longer notice period to drive down tendering costs.

## BUSINESS ASSESSMENT (Option 5)

<b>Direct impact on business (Equivalent Annual) £m:</b>			<b>In scope of OIOO?</b>	<b>Measure qualifies as</b>
Costs: 1.2	Benefits: 0	Net: -1.2	Yes	IN

# Evidence Base (for summary sheets)

## Current Legislation

The arrangements for registration of local bus services are set out in the Transport Act 1985, Section 6 of The Transport Act 2000 and in the Public Service Vehicles (Registration of Local Services) Regulations 1986 (SI 1986/1671) as amended by SI 1988/1879, SI 1989/1064, SI 1994/3271, SI 2002/182 and SI 2004/10 in England and Wales.

The Vehicle & Operator Services Agency (VOSA) also produced the 'Local Bus Service Registration; Guide for Operators' (PSV 353A) in October 2008 which sets out the requirement for local bus service registration in England. One of the requirements is that an operator must give (in most cases) at least 56 days notice before the start of the service (the '56 day' rule). The 56 day period begins on the day the Traffic Commissioner accepts the registration. The same notification period applies if the operator intends to cancel or change particular services, although in specified exceptional circumstances, services can be registered, cancelled or changed with less than 56 days notice subject to the agreement of the Traffic Commissioner and Local Authorities (a 'short notice application').

The regulations require operators to provide the copy of the timetable they intend to operate to the Traffic Commissioner as part of their application. However, where the interval between journeys is less than 10 minutes, the service may be classified as 'frequent'. A timetable is not required where the service is regarded as 'frequent'.

A timetable for the process for registering/changing/cancelling a route is given:

- The operator informs the Traffic Commissioner and the local authority that they plan to introduce, vary or deregister a route, at least 56 days prior to commencement.
- When a route is being deregistered or reduced, the local authority spend approximately two weeks analysing the impact and determining if a replacement is necessary.
- When a replacement service is needed the authority will prepare an emergency contract and invite tendered bids to run the service.
- Once a contract has been tendered, information on changes to the service can be disseminated to passengers and to Traveline.

## Background / Problem under consideration

The local bus market outside of London has been deregulated since 1986 with approximately 80% of services operating commercially with the remainder being tendered by local authorities. Competition on commercial services is expected to take place 'on-the-road' where any bus operator can run a service on any route. Operators are expected to compete on fares and service quality. Competition on tendered services takes place 'off-the-road' with operators competing to win contracts to run services from local authorities.

The Office of Fair Trading (OFT) announced on 7 January 2010 that it would be referring local bus services to the Competition Commission (CC). The OFT said it had found evidence that limited competition between operators tended to result in adverse effects on competition (AEC) such as higher prices and lower quality for passengers.

The final report of the subsequent CC market investigation was published on 20 December 2011. In its report, the CC confirmed that there is a lack of sustained head-to-head competition between bus operators in many local markets and also a lack of potential competition. It gave the following main reasons:

- the relevant markets exhibit high levels of concentration e.g. there are only one or two dominant bus operators in many areas;
- where demand is sufficient to enable head-to-head competition, bus operators tend to compete for passengers on frequency – as people prefer to catch the first available bus – which can lead to instability and, ultimately, undesirable over-bussing ('bus wars') that causes a new operator to exit the market;

- there are particular barriers to both new entrants into the market and incumbents that wish to expand into new areas of the market – particularly large-scale expansion – including the threat of retaliatory and predatory behaviour, uncertain and potentially significant sunk costs of bringing a route to profitability, incumbent network advantages such as advantages for larger incumbents arising from an ability to offer more attractive multi-journey tickets than smaller operators, and difficulties accessing suitable bus stations; and
- operators avoiding competing with other operators in their core territories, leading to geographic market segregation.

The CC also found that competition for the tendering of supported local bus services in certain markets is prevented, restricted, or distorted by the way local transport authorities (LTAs) design tenders.

In the view of the CC, this lack of competition in the commercial and tendered market can result in a combination of higher fares, fewer services and lower quality services. The CC estimated that, overall, the annual detriment to consumers and taxpayers caused by the lack of competition identified is in the range of £115m to £305m.

## **Rationale for intervention**

It is the view of the CC that the adverse effects on competition from predatory behaviour, is significant enough to justify further government intervention. The local bus market suffers from retaliatory behaviour where incumbent bus operators respond to the entrance of a rival operator by charging excessively low fares (lower than their operating costs), or by creating overcapacity (through increasing frequency), in an attempt to force the rival's exit from the market. The incumbent and rival operators both incur short-term losses until one operator (usually the new entrant) exits the market. The incumbent may also change their timetable to ensure their buses arrive slightly before rival buses, capturing the majority of passengers.

The threat of post-entry retaliation is enough to deter operators from entering or expanding into new markets, and is therefore a barrier to entry. As a result, incumbent operators are able to charge high fares and provide poor services. On the rare occasion a new operator does attempt to compete, there is a short-period of very intense competition that is not sustained, which has a negative impact on passengers who experience service and price instability.

Additionally, local authorities have expressed concern that the current 56-day notice they receive when an operator decides to cancel or reduce a service, does not give them sufficient time to procure replacement services. Authorities have told us that the procurement process for emergency contracts can take between 4-6 weeks to complete. Where the procurement process takes longer, as a result of longer analysis periods or errors in operators' applications, bids can be more expensive and fewer operators may bid for the contract. Short bidding periods also mean that operators are more likely to submit maximum cost bids rather than seeking lower cost options by varying existing routes or taking revenue effects into account.

Government intervention is necessary to ensure that there is sufficient competition on both commercially-operated local bus routes and local authority-tendered routes.

## **Policy objective**

The main aim of the policy is to reduce the predatory behaviour by incumbent bus operators described above. This is intended to have two effects:

1. Increase competition within the local bus market by reducing entry barriers resulting from predatory behaviour.
2. Improve service and price stability, benefitting passengers who are negatively affected by unanticipated price changes and delays from out of date timetables.

An additional aim of the policy is to ensure that local authorities are able to make informed decisions about any replacement services which may be needed, to tender for them in good time to avoid any disruption to the service provided to passengers. The intended outcome is a more competitive tendering of replacement contracts leading to improved value for money and a better service from the point of view of passengers.

## **Description of options considered**

The CC considered various initial options to remedy the problem. A number of these were rejected by the CC and were not considered further. For example, it considered whether operators should be required to divest some local operations to introduce new competitors into the market. It also considered whether there should be caps on fares or minimum frequency requirements.

The CC's final recommendations were based around how operators are required to register their services. It also made recommendations (which are outside the scope of this impact assessment) about multi-operator ticketing and access to bus stations. In its response to the CC, the Department agreed to bring forward secondary legislation based on the CC's final recommendations in order to address the lack of competition identified in the tendered and commercial bus market and the detriment to taxpayers and passengers. The recommendations in relation to bus service registration are applicable only to England outside of London and Wales, with Scotland having differing registration requirements.

### **Using tailored rules to identify inappropriate behaviour**

The CC considered whether it would be possible to establish a set of rules that identified behaviour deemed inappropriate (and thus enabling sanctions if these rules are broken). However, the CC concluded that there was a significant risk of error in design and of implementation of the rules. As a result, this option was rejected.

### **Do nothing**

For the purposes of cost benefit analysis, policy options are considered against a 'do-nothing' scenario where the local bus market operates as it currently does without the implementation of any of the CC's recommended remedies. Under this scenario, operators must provide 56 days notice of a bus service application to the traffic commissioner. And in areas where local authorities have codes of conduct for service stability, the local authority will be notified of the application 14 days prior to its submission to the traffic commissioner.

### **Option 1 – Introducing regulations requiring operators to give local authorities 14 day notice of a local bus service registration before it is submitted to the Traffic Commissioner**

As an alternative to tailored rules, the CC considered a set of universal rules that would discourage inappropriate behaviour. The first of these is a provision to require bus operators to give 14 days notice to a local authority within the area a bus service is being registered, changed or cancelled, before the application is submitted to the Traffic Commissioner.

At present, local authorities are informed of changes to local bus service registrations at the same time as the Traffic Commissioner, 56 days in advance of any changes coming into effect. Local transport authorities (LTAs) have expressed concern that this timescale does not give them sufficient time to procure replacement services which may be required and to update the information they provide to passengers.

### **Option 2 – Extending the current 56-day notice period to 90 days for registrations to vary bus services**

Another recommendation of the CC is to require bus operators to give a minimum of 90 days notice (increased from the current 56 days) to the Traffic Commissioner of a change to an existing service registration;

### **Option 3 – Extending the current 56-day notice period to 70 days for all bus service registrations**

Option 3 would entail amending The Public Service Vehicles (Registration of Local Services) Regulations 1986 so that operators were required to give Traffic Commissioners at least 70 days notice before the start/variation/termination of the service. The differences with option 1 are that any interested party (including other bus operators) would have an additional 14 days notice of planned changes to services giving them a longer time period in which to react. However, the local authority would not necessarily have an opportunity to talk to the bus operator before the application to the Traffic Commissioner is made.

### **Option 4 (Policy options 1 and 2) – Introducing regulations requiring operators to give local authorities 14 days notice of a local bus service registration before it is submitted to the**

## **Traffic Commissioner and extending the current 56-day notice period to 90 days for all bus service registrations**

Option 4 would combine the measures in options 1 and 2 so that bus operators give 14 days notice to a local authority within the area in which a bus service is being registered, changed or cancelled, before the application is submitted to the Traffic Commissioner, and also give a minimum of 90 days notice (increased from the current 56 days) to the Traffic Commissioner of a change to an existing service registration.

## **Option 5 (Policy options 1 and 3) - Introducing regulations requiring operators to give local authorities 14 days notice of a local bus service registration before it is submitted to the Traffic Commissioner and extending the current 56-day notice period to 70 days for all bus service registrations**

Option 5 would combine the measures from options 1 and 3 so that bus operators give 14 days notice to a local authority within the area a bus service is being registered, changed or cancelled, before the application is submitted to the Traffic Commissioner, and also give a minimum of 70 days notice (increased from the current 56 days) to the Traffic Commissioner of a new registration, variation or deregistration.

## **Summary and preferred option with description of implementation plan**

In its remedies, the Competition Commission proposed four changes as set out below to the bus service registration requirements to address the AEC which its inquiry had identified. The first two of these remedies have been considered in this Impact Assessment along with variants of those options, whilst the second two will be considered in subsequent impact assessments:

1. Require bus operators to give 14 days notice to a local authority within whose area a bus service is being registered, changed or cancelled, before the application is submitted to the Traffic Commissioner;
2. Require bus operators to give a minimum of 90 days notice (increased from the current 56 days) to the Traffic Commissioner of a change to an existing service registration;
3. Restrict changes to any registration application during any notice period except by making a short-notice application and align the reasons for making short notice applications with those in Scotland;
4. Require bus operators to specify the frequency of services currently registered as 'frequent' (those with six or more journeys per hour).

The changes are required to ensure that there is fair and open competition in the bus market for operators of all sizes. Changes to regulations are necessary because the registration process is set out in legislation. It would not be appropriate to waive the requirements for small businesses as the regulations are necessary to allow fair competition between operators of all sizes and provide safeguards to passengers and local authorities.

The remedies are intended to work together as a package and we therefore intend to introduce them at the same time, in October 2014.

Our preferred option is policy option 5 as we believe it is the option that adequately balances providing a notice period long enough to improve competition, whilst not excessively reducing commercial flexibility. Although our preferred option does not have the highest NPV<sup>1</sup>, nor is it the option recommended by the Competition Commission<sup>2</sup>, we believe it is likely to be the most successful at reducing predatory behaviour in the local bus market. A summary of the competition impacts of the five policy options can be found on the following page.

Compared with policy option 3, option 5 is more effective at reducing predatory behaviour by making it more difficult for operators to make frequent changes and allowing new entrants to run services for longer before an incumbent can react. Compared with policy option 4, option 5 has similar competition benefits but lower costs to businesses and higher overall NPV.

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<sup>1</sup> Policy option 3 has the highest NPV

<sup>2</sup> Policy option 4 was the recommendation from the Competition Commission

## Summary of key non-monetised impacts of bus registration policy options

As the policy options are intended to reduce predatory behaviour and improve competition within the local bus market, a lot of the key impacts are non-monetised. Therefore, this table below provides a summary of the key non-monetised impacts of the policy options to help better compare them. A more detailed description of both monetised and non-monetised impacts can be found on the following pages.

	Policy option 1	Policy option 2	Policy option 3	Policy option 4	Policy option 5
Description	14-day pre-notification period for LTAs	56 > 90 day notice period to TC for <b>variations</b> to bus service registration changes	56 > 70 day notice period to TC for <b>all</b> bus service registration changes	14-day pre-notification period for LTAs 56 > 90 day notice period to TC for <b>variations</b> to bus service registration changes	14-day pre-notification period for LTAs 56 > 70 day notice period to TC for <b>all</b> bus service registration changes
Benefits	New entrants can run services for 14 days without the threat of predation	New entrants can run services for 34 days without the threat of predation	New entrants can run services for up to 14 days without the threat of predation	New entrants can run services for 48 days without the threat of predation	New entrants can run services for between 14 and 28 days without the threat of predation
	Changes are less frequent	Operators can not make frequent changes	Changes are less frequent	Operators can not make frequent changes	Operators can not make frequent changes
	Partnership between operators and LTAs			Partnership between operators and LTAs	Partnership between operators and LTAs
Costs	Operators have to wait 14 days before cancelling a service		Operators have to wait 14 days before cancelling a service	Operators have to wait 14 days before cancelling a service	Operators have to wait 28 days before cancelling a service
	Operators have to wait 14 days before varying a service	Operators have to wait 34 days before varying a service	Operators have to wait 14 days before varying a service	Operators have to wait 48 days before varying a service	Operators have to wait 28 days before varying a service
		Difficulty ensuring that operators don't play the system		Difficulty ensuring that operators don't play the system	
	Could discourage operators from trialling new routes	Could discourage operators from trialling new routes	Could discourage operators from trialling new routes	Could discourage operators from trialling new routes	Could discourage operators from trialling new routes
NPV	6.6	5.7	7.3	2.8	7.0

## Monetised and non-monetised costs and benefits

More details of the assumptions used to calculate costs and benefits can be found in Annex 3.

### Option 1 – Introducing regulations requiring operators to give local authorities 14 day notice of a local bus service registration before it is submitted to the Traffic Commissioner

In calculating the costs and benefits of this policy we focus on services that are deregistered or varied leading to a reduction in service. There are three main groups affected by this policy: bus operators, bus passengers and local authorities.

#### Monetised costs<sup>1</sup>

##### *Cost of increased administration for bus operators and VOSA:*

Under this option, bus operators would have to provide local authorities, at the 70 day point, with a full working draft of the application they would eventually submit to the Traffic Commissioners. Operators would then confirm the application at the 56 day point when it is submitted to the Traffic Commissioners. Assuming that collating and sending this information takes about 30 minutes per application this would cost the operator an additional £6.82 per application<sup>2</sup>. Furthermore it is assumed that these additional administrative costs only apply to the 44% of routes not already covered by the Code of Conduct on Service Stability or supported by local authorities.

VOSA (on behalf of the Traffic Commissioner) would also need to check with LTAs to ensure the pre-notification policy is being adhered to. The difference in the number of full time equivalents (FTE) required to process applications between Scotland (which already has a 14-day LTA notification policy) and the rest of Great Britain was used to calculate the estimated cost of administration for VOSA. As VOSA is a trading fund, these extra costs would ultimately be passed onto bus operators. The increased administration to operators and VOSA implies additional costs of £0.6m PV over ten years<sup>3</sup>.

##### *Cost of running services for two weeks:*

Operators will only incur additional costs for operating routes if the decision to withdraw services is currently implemented within 70 days. For operators whose lead times are longer than 70 days it is assumed that they can notify local authorities at the 70 day point at no additional operating cost. The annual cost is estimated at £0.19 million per annum<sup>4</sup>. This was calculated separately for deregistered routes and those routes experiencing a reduction in service.

**Table 1 – Calculation of additional running costs to operators**

	Deregistered routes	Routes experiencing a service reduction
Number of routes affected	2,013	1,031
Proportion of routes not short notice and unable to give 70 days notice without costs	8% <sup>5</sup>	8%
Average vehicle km per route over two weeks	3,836 <sup>6</sup>	1,918
Net loss per vehicle km	£0.27	£0.27
<b>Total cost</b>	<b>£154,340</b>	<b>£39,515</b>
	<b>£193,854</b>	

The PV of costs over the ten year period is £2.0m.

<sup>1</sup> All costs include a Market Cost Adjustment (MCA) Factor of 19%

<sup>2</sup> Based on the average hourly wage for administrative and secretarial occupations of £11.47 - Source: Annual Survey of Hours and Earnings 2012, ONS

<sup>3</sup> On the basis of 15,423 applications per annum (average for 2010/11 and 2011/12) - Source: Traffic Commissioner's Annual Report 2011/12

<sup>4</sup> This was calculated as the product of:

- The number of routes deregistered or reduced in service
- The proportion of applications that are not short notice applications
- The proportion of operators unable to give 70 days notice without incurring costs
- The average vehicle kilometres per route in a two week period
- The net loss per vehicle kilometre on affected routes

<sup>5</sup> Based partly on DfT assumptions and analysis of VOSA data

<sup>6</sup> Analysis of DfT Statistics and data from Traffic Commissioner's Annual Report 2011/12

**Table 2 – Summary of costs of option 1 over 10 years (present value, 2012 prices and values)**

	<b>Bus operators</b>
Administrative burdens	£0.6m
Net cost of running services for two weeks	£2.0m
<b>Total</b>	<b>£2.6m</b>

Non-monetised costs

*Reduced commercial flexibility*

The increase in the total notice period (70 days) could potentially limit operators' commercial flexibility and their ability to respond quickly to market conditions. It is possible that the increased costs resulting from running services for longer may make some operators wary of trialling new services and this may act as a barrier to entry to the market. However the use of short-notice applications, which can be used under certain circumstances, may reduce the effect on commercial flexibility. This is discussed in more detail in the Competition Specific Impact Test in Annex 2.

Monetised Benefits

Local authorities would have a more realistic opportunity to consider arrangements for any alternative services. The proposal would build on the principle of partnership between local authorities and bus operators by allowing local authorities to have discussions with operators<sup>7</sup>. Where this is not possible, having a longer time to procure service replacements is likely to reduce the cost of procurement, through extra time to collect bids for an emergency tender and more time for operators to consider lower cost options for their bids.

***Benefits to Local Authorities - Cost of running services for two weeks and reduced tender costs:***

Some of the commercial routes that are cancelled or reduced by bus operators will subsequently be replaced by local authorities as tendered services if they are deemed essential. As these services will be run for 2 weeks longer than they currently are, local authorities will save by not having to tender these services for those two weeks. It is assumed that 21% of routes will be protected by local authorities in this way and that the contract prices are equivalent to the losses incurred by bus operators currently operating the affected routes. The savings to local authorities is £0.24 million per annum<sup>8</sup>.

Giving authorities a longer notice period when a route needs to be replaced with a tendered contract can be used to increase the length of time allowed to collect bids and to consider lower cost options for supplying the contracted service (e.g. adding additional stops on existing routes). Industry sources suggest that emergency tenders cost 40% more than standard tenders as a result of the longer periods and therefore lowered risks associated with long term contracts and tendering under the European rules process. In the absence of any firm evidence on what proportion of this premium could be eliminated by increasing the notice period, we have assumed that this option would result in a 10% decrease in the cost of emergency tenders used to replace deregistered services. This is based on judgement and should be considered indicative. The sensitivity of the results to this assumption is discussed in Annex 3. Reductions in tender costs are assumed to deliver savings of £0.52m per annum to local authorities<sup>9</sup>. The PV of savings to local authorities over the ten year period is £7.8m.

***Benefits to passengers - Up to date timetable information and reduced delays:***

There have been numerous studies which indicate that passengers value up to date and accurate timetable information. By providing local authorities with longer notice of service changes, it is likely that there will be an improvement in the accuracy of timetable information for two reasons. Firstly, it is more likely that any service changes resulting from emergency tenders can be provided to Traveline with at least 14 days notice. Secondly, the increased notification period will give local authorities a longer period

<sup>7</sup> Anecdotally, the experience in Scotland is that negotiations can result in operators adjusting services so that the need to procure separate replacement services through the tendering process does not necessarily arise.

<sup>8</sup> This was calculated as the product of:  
 - Number of reduced/cancelled services (as above) x  
 - Fortnightly vehicle mileage (as above) x  
 - Cost per vehicle mile (as above) x  
 - Percentage of routes retained by local authorities (21%)

<sup>9</sup> Total cost of emergency tenders (£5,400,000-£240,000) x Reduction in tender costs (10%) – adjusted to include MCA factor, discounted to 2013.

in which to make sure any timetable information they provide (e.g. booklets) are amended and up to date. The value of up to date information is estimated at £0.03 million per annum<sup>10</sup>.

It is assumed that as a result of an improvement in the accuracy of timetable information fewer passengers will suffer delays e.g. as a result of turning up for a bus which no longer operates. The value of reduced delays is estimated at £0.1 million per annum<sup>11</sup>. The PV of benefits for passengers over the ten year period is £1.5m.

**Table 3 – Summary of benefits of option 1 over 10 years (present value, 2012 prices and values)**

Bus passengers	Local authorities	Total
£1.5m	£7.8m	£9.3m

Note: numbers may not sum due to rounding.

### Non monetised benefits

The Competition Commission (CC) concluded that there would be benefits from providing LTAs with information about forthcoming registration applications. Because of LTAs' local knowledge, it was felt they could apply a wider perspective to service changes. The CC consider that giving extra visibility to LTAs as part of the registration process could discourage anticompetitive reactions to a new entrant on a route by the incumbent operator. This remedy would encourage information sharing and dialogue between LTAs and operators, consistent with the partnership working approach supported by the Government and set out in its policy paper 'Green Light for Better Buses'.

#### *Lower barriers to entry and greater partnership between LTAs and operators*

A 14-day pre-notification policy to LTAs would give entrants into a bus market at least 14 days to operate before a reaction from incumbents, as the information would be kept confidential. This would reduce the threat of predation on the part of the incumbent and lead to more sustainable competition between the two operators. It would also enable LTAs who have local knowledge to notify Traffic Commissioners of any potential predatory behaviour, thus allowing LTAs to provide a useful monitoring role.

Additionally, this measure is likely to encourage information sharing and dialogue between bus operators and local authorities. In its response to the CC's report on provisional remedies, Centro, the Passenger Transport Executive (PTE) for the West Midlands, described the benefits it got from voluntary pre-notification. Centro explained that it was able to analyse and comment on the implications of a registration change before it was lodged, allowing it to discuss possible compromises with the operator concerned to mitigate any adverse effects from the proposed change. In any event, it allowed Centro more time to prepare its response.

#### *Reduced administration costs for cross-border services*

An effective 70 day notification period for local authorities (i.e. 56 days plus 14 days additional notice for local authorities) was introduced in Scotland in 2001. Aligning notice periods for local authorities with the situation in Scotland should simplify administrative arrangements for operators running cross border services. The Scottish regulations require an operator to 'inform' a local authority of any proposed application. In 2007, the Scottish Traffic Commissioner wrote to bus operators to clarify what material she expected them to provide to a local authority, so that in practice the operator must now submit a copy of the complete draft application. This impact is most probably small as there are unlikely to be many cross-border services and the existing differences between administrative arrangements are not excessively dissimilar.

<sup>10</sup> The value of up to date information for passengers is estimated as follows:

- Total number of routes currently changed without 70 days notice (4,021) x
- Increase in accuracy of timetable information as a result of longer notice period (2%) x
- Number of passengers per route in two week period (5,457) x
- Value of up to date timetable information (9.2p - average of range found Bascombe et al 2004 in 2012 prices)

<sup>11</sup> The value of reduced delay to passengers is calculated as follows:

- Total number of routes currently changed/cancelled without 70 days notice (4,021) x
- Increase in accuracy of timetable information as a result of longer notice period (2%) x
- Number of passengers per route in two week period (5,457) x
- Percentage of journeys delayed due to incorrect timetable information (10%) x
- Average delay to passengers (0.25 hours) x
- Penalty attached to delay (multiply delay by 3)
- Value of time (£6.01 – WebTAG 3.5.6)

## Option 2 – Extending the current 56-day notice period to 90 days for registrations to vary bus services

The analytical model used to value the costs and benefits of this proposal is largely the same as option 1. However, this variant has a number of important differences with option 1 influencing the overall assessment of costs and benefits.

### Monetised costs

#### *Cost of running services for longer:*

Bus operators wanting to reduce operations will be required to run services for an extra 34 days rather than 14 days in option 1. As a result, fewer operators will be able to adapt to the new rules compared with option 1, and will therefore incur greater costs. However, a key difference here compared to option 1 is that the new rules apply only to changes in service registrations and therefore requirements on bus operators wanting to cancel services will remain unchanged.

In addition, some local authorities may have a Code of Conduct on Service Stability (CoCSS) that requires operators to notify LTAs 14 days before making an application to the Traffic Commissioner. This would mean some operators would be giving up to 104 days notice in total, increasing the costs of running services for an extra 14 days. However, other local authorities may currently have a CoCSS but may decide it is no longer necessary given the new notice period. It is assumed that 20% of LTAs would have a Code of Conduct on Service Stability in addition to a 90-day notification period to TCs<sup>12</sup>.

The total annual cost of running services for longer is £0.3m, with a present value cost of £3.0m over a ten year period.

#### *Administration costs:*

Compared with the 'do nothing' scenario, there would be no additional administration costs to bus operators and VOSA as operators would not have to send material to local authorities in advance of the formal application.

**Table 4 – Summary of costs of option 2 over 10 years (present value, 2012 prices and values)**

	Bus operators
Net cost of running services for two weeks	£3.0m

### Non-monetised costs

#### *Reduced commercial flexibility:*

The increase in the total notice period could potentially limit operators' commercial flexibility and their ability to respond quickly to market conditions, in a similar manner as under policy option 1. This is discussed in more detail in the Competition Specific Impact Test in Annex 2.

#### *Possibility of gaming:*

The increased notice period for service changes only, could possibly lead to gaming as bus operators attempt to avoid the new rules. Bus operators may decide to cancel a service and register a new, slightly altered version (giving only 56 days notice), rather than register for a change in service (giving 90 days notice). This could mean more uncertainty and delays for passengers as a result of frequently changing bus route details. The possibility of gaming is discussed further in the Risk and Assumptions section.

### Monetised benefits

#### **Benefits to Local Authorities - Savings from not running services and reduced tender costs:**

The 90 day notice period would lead to greater savings to local authorities from shorter emergency service contracts (of up to 34 days) and more time to prepare for emergency tenders. However, this will only have an effect on reduced (rather than cancelled) services.

<sup>12</sup> This assumption has been made based on an analysis of local authority responses to the CC's proposed remedies, which suggests most would be satisfied with a 90 day notice period. Sensitivity analysis on the precise figure used has shown a very small effect on the NPV (i.e. doubling the proportion of LTAs who would have a CoCSS in addition to the 90-day notice period from 20% to 40%, reduces the NPV by 4%).

It is also assumed that the 90 day notice period would lead to an overall 10% reduction in the cost of emergency contracts as the longer notice period will allow local authorities organise the tender process. The better organisation of tenders would lead to more competitive tenders and as a result, lower costs<sup>13</sup>.

**Benefits to passengers** - *Up to date timetable information and reduced delays to passengers:*

The calculation of the benefits from reduced delays and up-to-date information remains unchanged from option 1. However, these benefits will only apply to changed services as opposed to changes and cancellations.

**Table 5 – Summary of benefits of option 2 over 10 years (present value, 2012 prices and values)**

Bus passengers	Local authorities	Total
£1.1m	£7.5m	<b>£8.7m</b>

Note: numbers may not sum due to rounding.

Non-monetised benefits

The CC found that the barrier to entry and expansion associated with the expected nature of competition against a new entrant following its entry into the market acted as a significant factor in deterring head to head competition. By increasing the time that it takes for an incumbent to respond to a new entrant or expanding operator, this barrier to entry should be reduced. If an incumbent operator takes an aggressive, short term response to deter competition, they would need to maintain it for a longer period. The CC concluded that this would reduce the incumbent operator's ability and incentive to engage in 'tit-for-tat' competition. This will increase the strength of potential competition and encourage entrants and incumbents to maintain a good service, as well as encouraging them to make sensible decisions about new services or changes to services.

The CC found that the ability to make a short-notice application to the Traffic Commissioner was an important means to minimise the scope for any adverse effects that might be associated with the longer notice periods set out in options 1 and 2. On occasion, operators will need to vary a service more quickly than even the existing time period of 56 days, for example, when roadworks affect the punctuality of a service. Research by Passenger Focus has shown that punctuality and reliability are the most important issues for passengers using a bus service.

*Lower barriers to entry*

As the new notice period applies only to changes in services rather than registrations and cancellations, new entrants will be able to operate in a market for 34 days without the threat of a 'tit-for-tat' reaction or predatory behaviour by the incumbent operator. This will lower the barrier to entry into the bus market by reducing the potential for losses from predation and should lead to more sustained 'head-to-head' competition along bus routes. The impact of this option on competition is discussed in more detail in the competition impact test in Annex 2.

*Greater partnership between operators and local authorities*

This option would give local authorities a longer time period within which they can discuss potential service changes with other bus operators (it is assumed in option 1 that local authorities would not discuss the service changes with other operators during the 14 day notice period).

**Option 3 – Extending the current 56-day notice period to 70 days for all bus service registrations**

The analytical model used to value the costs and benefits of this proposal is largely the same as options 1 and 2. However, this variant has a number of important differences with options 1 and 2 influencing the overall assessment of costs and benefits. In particular, the notice period extension to 70 days applies to **all services** rather than just changed services (like in option 2). Also, the Traffic Commissioner is notified at the 70 day point rather than the 56 day point (like in option 1). This means that bus operators only have to make a single application (to the Traffic Commissioner) rather than two applications (to the local authority and TC).

Monetised costs

*Cost of running services for longer:*

<sup>13</sup> The 10% reduction in costs for the 34 extra days notice in option 2 is the same as option 1 despite the longer notice period, as the option only applies to variations in services rather than all services.

Some local authorities may have a Code of Conduct on Service Stability (CoCSS) that requires operators to notify LTAs 14 days before making an application to the Traffic Commissioner. This would mean some operators would be giving up to 84 days notice in total, increasing the costs of running services for an extra 14 days. However, other local authorities may currently have a CoCSS but may decide it is no longer necessary given the new notice period. It is assumed that 20% of LTAs would have a Code of Conduct on Service Stability in addition to a 70-day notification period to TCs.

*Administration costs:*

There will be no administration costs to bus operators and VOSA in this option.

**Table 6 – Summary of costs of option 3 over 10 years (present value, 2012 prices and values)**

	Bus operators
Net cost of running services for two weeks	£2.2m

Non-monetised costs

*Reduced commercial flexibility:*

There will be reduced commercial flexibility in a similar manner as found under option 1. This is discussed in more detail in the Competition Specific Impact Test in Annex 2.

Monetised benefits

***Benefits to Local Authorities - Savings from not running services and reduced tender costs:***

The 70 day notice period would lead to savings to local authorities from shorter emergency service contracts and more time to prepare for emergency tenders. The savings to local authorities will be largely unchanged from option 1. Although the benefits apply to more services than under option 2, the benefits from reduced emergency tender costs will be greater in option 2 due to the longer notice period.

***Benefits to passengers - Up to date timetable information and reduced delays to passengers:***

It is assumed that the benefits from up-to-date information and reduced delays will be unchanged from option 1.

**Table 7 – Summary of benefits of option 3 over 10 years (present value, 2012 prices and values)**

Bus passengers	Local authorities	Total
£1.5m	£8.0m	<b>£9.5m</b>

Note: numbers may not sum due to rounding.

Non-monetised benefits

*Greater partnership between operators and local authorities*

This option would give local authorities a longer time period within which they can discuss potential service changes with other bus operators similar to that under option 2.

**Option 4 – A combination of policy options 1 and 2. Introducing regulations requiring operators to give local authorities 14 day notice of a local bus service registration before it is submitted to the Traffic Commissioner AND extending the current 56-day notice period to 90 days for registrations to vary bus services**

The analytical model used to calculate the costs and benefits of option 4 is largely the same as the one used previously.

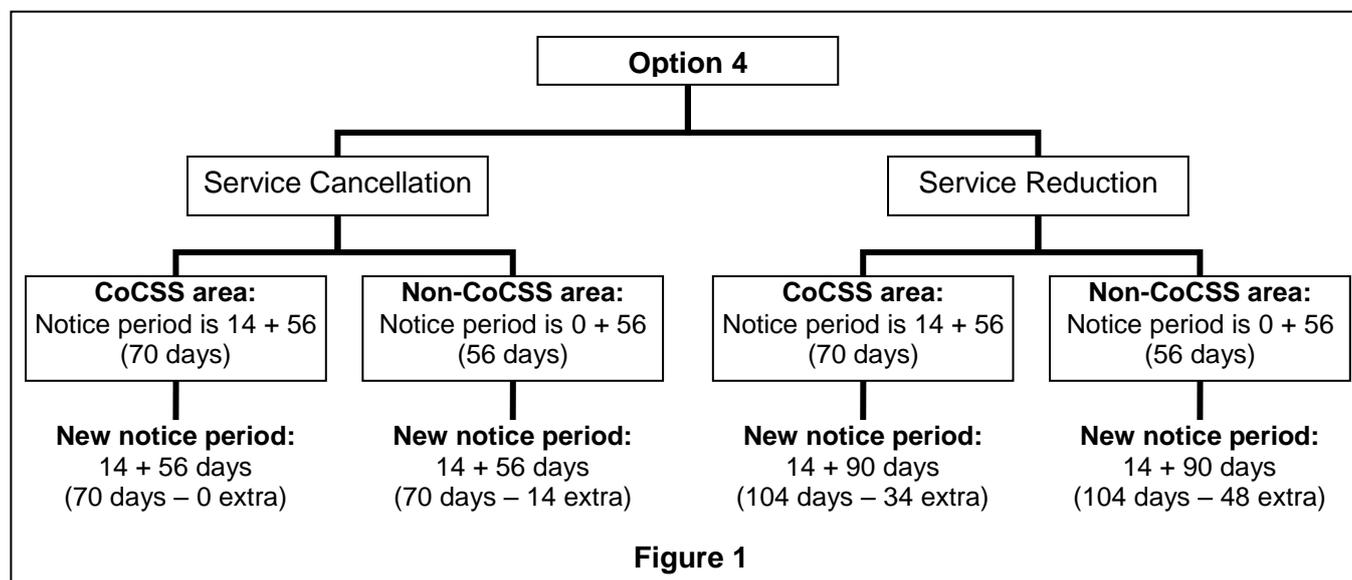
Monetised costs

*Cost of running services for longer:*

Bus operators wanting to reduce operations will be required to run services for a longer period, though the precise length of this will depend on a number of factors outlined in Figure 1 and below.

1. **For applications to reduce a service**, if an operator runs a service in an area that already has a 14 day pre-notification policy, then they will be required to operate services for 34 days extra.

2. **For applications to reduce a service**, an operator in a non-CoCSS area (i.e. without a 14-day pre-notification policy) will be required to operate services for 48 extra days (14 days notice to LAs plus 34 days extra notice to TCs).
3. **For applications to cancel a service**, an operator in a CoCSS area will not have to run services for any longer than they currently are.
4. **For applications to cancel a service**, an operator in a non-CoCSS area will have to run services for 14 extra days.



As the notice period becomes longer, fewer operators will be able to adapt to running the services for longer without incurring a cost. DfT analysis based on the number of services who already provide 104 days notice and the length of lead periods, suggests that 61% of operators (mainly the larger ones) will be able to adapt to 104 days notice without extra cost<sup>14</sup>.

The total annual cost of running services for longer is £0.9m, with a present value cost of £9.6m over a ten year period.

*Cost of increased administration for bus operators and VOSA:*

Operators will experience increased administration costs as they will have to make a second application to local authorities at the 104 day point. VOSA will also bear a cost as they will have to check whether this application has been made. The NPV of this is expected to be £0.6m over ten years.

Non-monetised costs

*Reduced commercial flexibility:*

This will be similar to option 1 and is discussed in more detail in the Competition Specific Impact Test in Annex 2.

*Possibility of gaming:*

The increased notice period for service changes only, could possibly lead to gaming as bus operators attempt to avoid the new rules, as in option 2. Bus operators may decide to cancel a service and register a new, slightly altered version (giving only 70 days notice), rather than register for a change in service (giving 104 days notice). This could mean more uncertainty and delays for passengers as a result of frequently changing bus route details. The possibility of gaming is discussed further in the Risk and Assumptions section.

**Table 8 – Summary of costs of option 4 over 10 years (present value, 2012 prices and values)**

<sup>14</sup> For the low case, this proportion is 37% and for the high case it is 79%.

	<b>Bus operators &amp; VOSA</b>
Administrative burdens	£0.6m
Net cost of running services for longer	£9.6m
<b>Total</b>	<b>£10.2m</b>

### Monetised benefits

#### **Benefits to Local Authorities - Savings from not running services and reduced tender costs:**

As bus operators will be required to run services for longer before cancelling them, local authorities will save from not having to run them for that period should they decide to tender a replacement service. The assumptions underpinning the analysis remain the same as the previous policy options. The only difference is the number of days of savings local authorities will benefit from.

As 56% of local authorities are assumed to have a CoCSS, it is assumed that this proportion of services will be in a local authority where a CoCSS exists. As a result, 56% of reduced services will require an operator to run services for 34 extra days (thus saving LAs the cost of running services for those 34 days), with the remainder of reduced services requiring the operator to run services for 48 days. For cancelled services, the number of days saved is 14 days and 0 days for areas without a CoCSS and with a CoCSS respectively. The total annual benefit to local authorities of operators running services for longer is £0.5m.

It is assumed that local authorities will experience a 12.5% reduction in the cost of emergency tenders due to the longer notice period. Although the notice period for varied services is significantly longer, we believe the marginal reductions in cost will reduce as the notice period gets longer. The total annual benefit to local authorities from reduced tendering costs is £0.6m

The present value of savings to local authorities is £11.5m over a ten year period.

#### **Benefits to passengers - Up to date timetable information and reduced delays to passengers:**

It is assumed that the benefits from up-to-date information and reduced delays will be unchanged from option 1. The value of up-to-date information and reduced delays is worth £1.5m over a ten year period.

### Non-Monetised benefits

#### *Lower barriers to entry and greater partnership between LTAs and operators*

Policy option 4 would give entrants the same benefits as both options 1 and 2, which is to give entrants into a bus market at least 48 days to operate before a reaction from incumbents. This would reduce the threat of predation on the part of the incumbent and lead to more sustainable competition between the two operators. It would also enable LTAs who have local knowledge to notify Traffic Commissioners of any potential predatory behaviour, thus allowing LTAs to provide a useful monitoring role.

Additionally, this measure is likely to encourage information sharing and dialogue between bus operators and local authorities.

**Table 9 – Summary of benefits of option 4 over 10 years (present value, 2012 prices and values)**

Bus passengers	Local authorities	<b>Total</b>
£1.5m	£11.5m	<b>£13.0m</b>

### **Option 5 – A combination of policy options 1 and 3. Introducing regulations requiring operators to give local authorities 14 day notice of a local bus service registration before it is submitted to the Traffic Commissioner AND extending the current 56-day notice period to 70 days for all bus service applications**

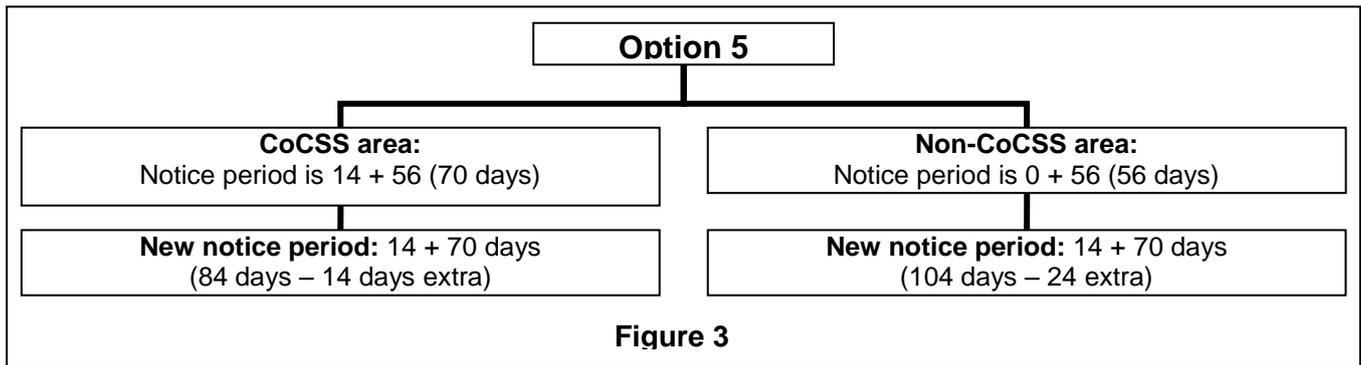
The analytical model used to calculate the costs and benefits of option 4 is largely the same as the one used previously.

### Monetised costs

#### *Cost of running services for longer:*

Bus operators wanting to reduce operations will be required to run services for a longer period, though the precise length of this will depend on a number of factors outlined below.

1. If an operator runs a service in an area that already has a 14 day pre-notification policy, then they will not be required to run services for any longer than they currently do.
2. If an operator in a non-CoCSS area (i.e. without a 14-day pre-notification policy) will be required to operate services for 28 extra days (14 days notice to LAs plus 14 days extra notice to TCs).



As the notice period becomes longer, fewer operators will be able to adapt to running the services for longer without incurring a cost. DfT analysis based on the number of services who already provide 84 days notice and the length of lead periods, suggests that 76% of operators (mainly the larger ones) will be able to adapt to 84 days notice without extra cost<sup>15</sup>.

The total annual cost of running services for longer is £0.9m, with a present value cost of £9.0m over a ten year period.

*Cost of increased administration for bus operators and VOSA:*

Operators will experience increased administration costs as they will have to make a second application to local authorities at the 104 day point. VOSA will also bear a cost as they will have to check whether this application has been made. The NPV of this is expected to be £0.6m over ten year period.

**Table 10 – Summary of costs of option 5 over 10 years (present value, 2012 prices and values)**

	<b>Bus operators &amp; VOSA</b>
Administrative burdens	£0.6m
Net cost of running services for longer	£9.0m
<b>Total</b>	<b>£9.6m</b>

Non-monetised costs

*Reduced commercial flexibility:*

This will be similar to option 1 and is discussed in more detail in the Competition Specific Impact Test in Annex 2.

Monetised benefits

**Benefits to Local Authorities - Savings from not running services and reduced tender costs:**

As bus operators will be required to run services for longer before cancelling them, local authorities will save from not having to run them for that period should they decide to tender a replacement service. The assumptions underpinning the analysis remain the same as the previous policy options. The only difference is the number of days of savings local authorities will benefit from.

As 56% of local authorities are assumed to have a CoCSS, it is assumed that this proportion of services will be in a local authority where a CoCSS exists. As a result, 56% services will require an operator to run services for 14 extra days (thus saving LAs the cost of running services for those 14 days), with the remainder of services requiring the operator to run services for 28 days. The total annual benefit to local authorities of operators running services for longer is £0.8m.

As in option 2, it is assumed that local authorities will experience a 15% reduction in the cost of emergency tenders due to the longer notice period. Importantly, it is assumed that any extension in the notice period from 84 days leads to no extra reduction in cost, as local authorities have extracted all the

<sup>15</sup> For the low case, this proportion is 52% and for the high case it is 100%.

benefit possible from more time to organise tenders. The total annual benefit to local authorities from reduced tendering costs is £0.7m.

The present value savings to local authorities is £15.2m over a ten year period.

**Benefits to passengers** - Up to date timetable information and reduced delays to passengers:

It is assumed that the benefits from up-to-date information and reduced delays will be unchanged from option 1. The value of up-to-date information and reduced delays is worth £1.5m over a ten year period.

Non-Monetised benefits

*Lower barriers to entry and greater partnership between LTAs and operators*

Policy option 5 would give entrants the same benefits as option 1, which is to give entrants into a bus market at least 14 days to operate before a reaction from incumbents. This would reduce the threat of predation on the part of the incumbent and lead to more sustainable competition between the two operators. It would also enable LTAs who have local knowledge to notify Traffic Commissioners of any potential predatory behaviour, thus allowing LTAs to provide a useful monitoring role.

Additionally, this measure is likely to encourage information sharing and dialogue between bus operators and local authorities.

**Table 11 – Summary of benefits of option 5 over 10 years (present value, 2012 prices and values)**

Bus passengers	Local authorities	Total
£1.5m	£15.2m	<b>£16.6m</b>

**Equivalent Annual Net Cost to Business (EANCB) Calculation**

The annual cost to business has included all the costs to businesses and the cost to VOSA, which as a trading fund, is likely to pass on the extra costs to their customers (bus operators). As the monetised direct benefits accrue to local authorities and passengers only, it is not included in the EANCB calculation.

The EANCB was initially calculated with 2012 price base year and a 2013 present value base year, using the technical annex of BIS' *One-In, One-Out (OIOO) Methodology* handbook:

$$EANCB = \frac{PVNCB}{a_{t,r}} = \frac{£9.66m}{8.608} = £1.12m,$$

$$\text{where } a_{t,r} = \frac{1+r}{r} \left[ 1 - \frac{1}{(1+r)^t} \right] = \frac{1+3.5\%}{3.5\%} \left[ 1 - \frac{1}{(1+3.5\%)^{10}} \right] = 8.608$$

The EANCB figures on each policy option are given with 2012 as the price base year and 2013 present value base year.

In the summary sheet, the EANCB for policy option 5 was adjusted to a 2009 price base year and 2012 present value base year as directed in the aforementioned handbook:

$$EANCB_{(2009Price,2010PV)} = \frac{EANCB_{(2012Price,2013PV)}}{(1+3.5\%)^3 \times (1.079)} = \frac{£1.12m}{1.109 \times 1.079} = £0.938m$$

## **Risks and assumptions**

### **Risk of gaming in options 2 and 4**

Options 2 and 4 would introduce a different notice period for applications to vary a bus service as opposed to applications to introduce or withdraw a bus service. The timescale for a variation would be longer at 90 days, plus a further 14 day pre-application period of notice to local authorities. The timescale for introducing or withdrawing a service would be 56 days, plus the 14 day pre-application period.

With options 2 and 4, because the notice period for a variation is longer than for new or withdrawn services, there is a risk that operators may try and circumvent the procedure by making an application to withdraw one route and register another in its place so that changes take effect more quickly.

For example, route xx1 operates between Anytown and Newtown and the operator wishes to run the service via High Street in future rather than Station Road at present. Making this change as a variation would take 104 days (14 days + 90 days). However, the operator may decide to apply to withdraw the existing service running via Station Road (14 days + 56 days) and make an application to operate a replacement service between the same points but via High Street (14 days + 56 days). By making an application to withdraw the existing service and introduce a replacement at, or around, the same time, the operator would effectively reduce the notice period by up to 34 days negating the benefits of the longer notice period.

The Senior Traffic Commissioner has undertaken to produce a Code of Conduct for Bus Operators, dealing with issues such as cheap exclusion, under which any attempt to circumvent notice periods would be regarded as a breach, leaving the operator open to sanction. It is assumed that any attempt at circumvention could be picked up during the pre-notification period by the relevant local authority who could notify the Traffic Commissioners that the Code of Conduct was being breached. It is also highly likely that competing operators would highlight that the Code of Conduct had been breached and that the operator had tried to obtain an unfair advantage. These risks already exist in Scotland where different registration arrangements are in place for variations as opposed to new and withdrawn services and are not perceived to be a problem.

### **Uncertainty of assumptions**

The assumptions used in the evidence base rely heavily on expert judgement and interpretation of the limited available data. The level of uncertainty is reflected in the range presented above and the estimates are particularly sensitive to the proportion of routes that can be changed with 70-104 days notice at no additional cost, the loss incurred by an operator for running a route over a longer time period, and the reduction in the price of emergency tenders. The extent to which this option will be beneficial overall will depend on local authorities' willingness to use the longer effective notice period to drive down the cost of tenders and to ensure timetable information is accurate. The lower (higher) bound for the NPV is estimated by combining the high (low) cost and benefit scenarios as these estimates use the same underlying assumptions.

A detailed explanation of the assumptions used and sensitivity analysis can be found in Annex 3.

## **Annexes**

### **Annex 1: Post Implementation Review (PIR) Plan**

We will include a clause in the amended regulations to review the effect of the changes to the bus service registration requirements after five years (October 2019). This is in accordance with the Government's broader policy on reviewing new regulation. The Government has undertaken to include clauses in new regulations so that regulatory measures are reviewed regularly to ensure that they are still needed and are not imposing disproportionate burdens.

The Department will carry out a review of these Regulations and set out the conclusions of the review in a report which will be published. The report will set out the objectives which the changes established by the Regulations to the regulatory system were intended to achieve, assess the extent to which those objectives have been achieved, and whether they remain appropriate and, if so, the extent to which they could be achieved with a system that imposes less regulation.

## **Statutory equality duties**

These proposals are intended to increase competition in the bus market and are partial remedies against the estimated £305million cost to consumers of a lack of competition. Lengthening the registration time should provide more consistency for passengers and increased competition may have the effect of reducing fares. The proposals are not considered to have a negative effect on any particular group but are considered to have a positive impact for all passengers. A high proportion of bus users come from the higher age groups and young people as well as those without access to a car. These groups are expected to benefit from the proposals.

## **Economic impacts**

### **Competition Assessment**

Options 1 to 5 all aim to increase competition in the local bus market by reducing barriers to entry enabling more competition in the tendering of emergency replacement services:

- Options 1 to 5 will allow bus operators entering or expanding into a market to run services for at least 14 days without the threat of predation. As potential entrants no longer have an expectation of predation, their expected costs from entering a market are lower. This encourages more entrants into a market and encourages incumbents to expand, increasing head-to-head competition that is likely to be sustained.
- Options 1 to 5 all reduce the ability of operators to make frequent and rapid changes to service frequencies and/or fares in response to the entrance of a new operator. This discourages operators from making short-term tactical decisions that constitute predatory behaviour, and instead encourages longer-term sustained competition.
- All the options also give local authorities more time to prepare for emergency replacement tenders after the cancellation or reduction of a service. The greater preparation time should enable more bidders to pursue tenders, increasing competition and reducing the price paid by LTAs

However, options 3 and 5 could also potentially limit the level of competition by raising barriers to entry. There are two concerns:

- The costs of running services for an additional two weeks as a result of extending the current notice period to 70 days are considered as a potential liability associated with commencing a route. These liabilities could potentially discourage operators from trialling new services (i.e. limit innovation) and reduce new entry to markets. However, these costs are likely to be heavily discounted at the time a decision is made to enter the market as not all routes will need to be operated for an additional two weeks and other operators will discount the possibility of withdrawing the route in the future. For these reasons we think the impact of this potential future liability will be fairly limited.
- The increase in the formal notice period to 70 days would give incumbent operators increased opportunity to respond to the threat of new entry e.g. by reducing prices. This might be viewed by potential entrants as reducing the probability of successful entry into the market.

There is a risk of gaming in options 2 and 4, because the notice period for a variation would be longer than for new or withdrawn services. Operators might try and circumvent the procedure by making an application to withdraw one route and register another in its place so that changes take effect more quickly. Although the Traffic Commissioners indicated in their response to the CC that it would be difficult for them themselves to identify such game-playing, it is highly likely that competing operators would highlight that an operator had tried to obtain an unfair advantage. Any attempt at circumvention could be also picked up during the pre-notification period by the relevant local authority.

### **Small Firm Assessment**

There are no plans to exempt small operators. Our understanding is that where voluntary schemes currently exist, it is often the case that only the larger bus operators participate. This might indicate that making the policy compulsory would impact on smaller operators more as they are likely to find the policy costly. However, the policy will not affect all small operators. The majority run only tendered services and do not make decisions on where to run commercial routes. DfT statistics suggest that 9% of

tendered kilometres are run by small size operators compared to just 3% of commercial kilometres which are operated by small operators.

## **Environmental impacts**

### **Greenhouse gas assessment**

These proposals are not intended to have any effect on the number of bus services and therefore we do not anticipate any effect on greenhouse gas emissions.

### **Wider environmental issues**

As above

## **Social impacts**

### **Health and well-being**

Having reviewed the screening questions for the Health Impact Assessment we have concluded that there is no need for a full assessment to be carried out.

### **Human rights**

We do not consider that these proposals will impact on human rights legislation.

### **Justice system**

These proposals do not create any new sanctions or amend existing ones so we do not consider there to be an impact on the justice system.

## **Sustainable development**

We do not consider these proposals to impact on sustainable development.

## Annex 3: Analytical framework and detail of cost and benefit calculations

### Analytical framework

The analytical framework developed to assess the options considers the impacts on:

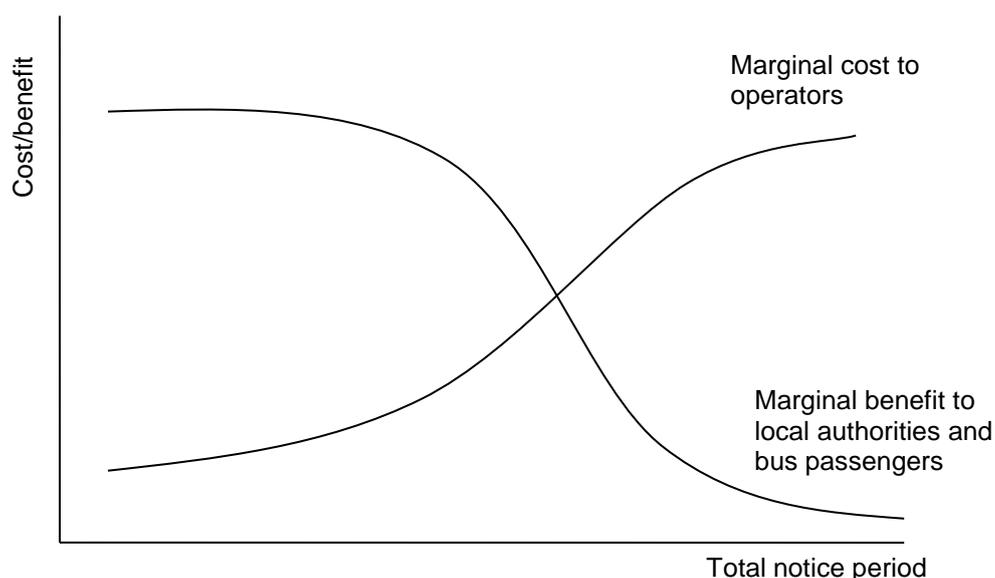
- Bus operators from having to run services over a longer period before making changes or terminating a route<sup>16</sup>.
- Local authorities who have a longer time period in which to determine whether they want to protect the affected routes and if so, options for achieving this. They also benefit from reduced costs as they run supported services for two fewer weeks as a result of the longer effective notice period.
- Passengers who indirectly benefit as a result of the improved accuracy of bus timetable information and a reduced probability of turning up for a bus at the wrong time.

**Note:** Although the effects of the options on competition are expected to be significant, it is a second order effect and it is not possible to meaningfully monetise without making a series of unjustifiable assumptions. Therefore, competition effects have been excluded from the quantitative analysis.

Our understanding of the bus market suggests that the additional costs to operators for each days notice period is not constant but increases as the notice period rises. A very short notice period would impose few costs on operators as in practice there will be a delay between them making a decision to change a service and implementing that change (e.g. to implement new driver rotas, secure new leases etc). However, as the notice period increases operators face additional opportunity costs as they are required to maintain loss making services. The reverse is true for local authorities and passengers. The benefits they get from each days notice period is initially high as they have little time to plan and secure alternative provision or travel opportunities. As the notice period increases there are more alternatives for local authorities (e.g. tender with other operators at lower cost) and passengers (e.g. arrange a lift share to work) so the benefit of each additional days notice declines.

This conceptual framework suggests that there is an optimal notice period in which the additional benefits to local authorities and passengers are comparable with the marginal costs to operators (see figure 1). Unfortunately there is insufficient information to calculate the optimal notice period with precision. Therefore, the choice of notice periods has been informed by discussions with local authorities and bus operators and by the experience of the Scottish government.

**Figure 1 – Balance between costs to operators and benefits to local authorities and passengers**



<sup>16</sup> The proposed options would also apply to the introduction of new services. Increasing the notice period for new services could mean that operators miss out on 14 days of profit. However, the analytical approach used for this Impact Assessment implicitly includes these opportunity costs when considering the costs on bus operators of maintaining existing services for an additional two weeks.

Whilst the evidence base is insufficiently developed to calculate the optimal notice period with precision, it has been possible to estimate the benefits and costs of a longer notice period to operators, local authorities and bus passengers. This analysis is described in the following sub-sections.

## Assumptions

The assumptions used to inform each of these costs and benefits is set out in the following sub-sections. Given that a number of these assumptions are subject to a high level of uncertainty we have also produced a number of sensitivity tests to illustrate the likely range of possible outcomes.

### *The proportion of applications to vary a route which represent a reduction in service*

The majority of applications are for variations to services – there were an average of 3,012 registrations cancelled between 2010/11 and 2011/12 and 8,514 variations to existing registrations in England and Wales (source: Traffic Commissioners' Annual Report 2011/12). In order to calculate the costs and benefits of this policy, it is necessary to estimate how many applications for variations represent a reduction in service levels. Our understanding based on discussions with industry experts is that a majority of registrations are likely to be neutral in terms of service levels, made up of minor retimings, changes to odd journeys, or to the minutes past the hour that a service runs. We assume that 20% of variations result in a significant reduction in service levels ( $20\% * 8,514 = 1,031$ ).

### *The percentage of operators able to give 70 or 90 days notice of intention to deregister or reduce service levels without experiencing additional costs*

Extending the effective notice period for bus operators doesn't necessarily mean that they need to run services for two weeks longer than originally planned. A large proportion of routes are operated by the major bus companies and typically they will periodically assess service changes across geographical areas encompassing a number of routes. Anecdotal evidence from the industry is that this process is completed a number of weeks before the current 56 day notice period.

Firm evidence on the proportion of operators able to give 70 days notice without experiencing additional costs is difficult to obtain. Data obtained by VOSA relating to applications between July 2011 and July 2012 indicated that for applications that did not request a short notice dispensation or start date as soon as possible (10,594 applications out of 17,751), the average application lead time was 62. However, this data is likely to understate the proportion of operators able to provide 70 days notice as some operators will hold back telling the Traffic Commissioners once they have firmly decided to introduce, change or withdraw a service.

In coming to a central case assumption about the proportion of operators that could provide 70 days notice without additional costs we have made the following assumptions:

### Options 1 and 3

- All operators in Passenger Transport Executive (PTE) areas are covered by the Code of Conduct on Service Stability and make service changes on fixed dates during the year. It is assumed that all services in these areas (33% of vehicle miles in England and Wales excluding London) can provide 70 days notice without additional costs as the Code of Service Stability recommends that operators give local authorities 11 weeks notice of service changes.
- All services supported by local authorities outside PTE areas can provide 70 days notice as they are provided under contract with known expiry dates (15% of vehicle miles in England and Wales excluding London).
- 15% of commercial services not in PTE areas (8% of vehicle miles in England and Wales excluding London) provide advance notice either through the Code of Conduct on Service Stability or the terms of Voluntary Partnership agreements. (This is based on our judgement.)
- For the central case, it is assumed 83% of remaining commercial services (36% of vehicle miles in England and Wales excluding London), will be able to provide advance notice without incurring additional costs. This is largely based on a combination of our judgement and the proportion of applications to the Traffic Commissioner that already provide over 70 days notice. In the low case, using stricter judgements, the percentage is assumed to be 60% (26% of vehicle miles in England and Wales excluding London). For the high case, the percentage is assumed to be 100%.

Therefore, in the central case we assume that 92% (33% + 15% + 8% + 36%) of operators could provide 70 days notice without incurring additional costs. In calculating benefits to passengers we assume that

56% of operators currently do provide 70 days notice (33% + 15% + 8%). In the low and high cases, 83% and 100% of operators respectively, would be able to provide 70 days notice without incurring additional costs.

Under option 3, it is also assumed that 10% of LTAs will continue to have a Code of Conduct of Service Stability. As a result, of the 57% of services that are currently operated under a CoCSS, 10% will run for 14 extra days (from 70 to 70+14) whilst the other 90% will see no change. The remaining 43% will all run for 14 extra days (from 56 to 70).

## Option 2

Under option 2, bus operators would be required to provide a total of up to 34 days extra notice, though only for applications to vary a service.

- According to VOSA records, 14% of applications currently give an equivalent of 90+ days notice<sup>17</sup>
- In the central case, it is assumed that of the remaining 86% of applications, 67% will be able to have lead in times large enough to avoid incurring extra costs. In the low case, this is 38% and in the high case it is 100%
- It is also assumed that 10% of LTAs will continue to have a Code of Conduct of Service Stability. As a result, of the 57% of services that are currently operated under a CoCSS, 90% will run for 20 extra days (from 56+14 to 90) and 10% will run for 34 extra days (from 56+14 to 90+14). The remaining 43% will all run for 34 extra days (from 56 to 90).

Therefore in the central case, we assume 71% of operators will be able to provide extra notice without incurring additional costs, compared with 47% in the low case and 100% in the high case. Of these 50% of operators will need to run services for 20 extra days and 50% of operators will need to run services for 34 extra days.

## Options 4 and 5

Under option 4, bus operators would be required to provide a total of up to 104 days notice, though only for applications to vary a service, whereas with option 3, bus operators would be required to give up to 84 days notice for all services.

- According to VOSA records, 10% of applications currently give an equivalent of 104+ days notice and 16% of applications currently give an equivalent of 84+ days notice.
- Under the central case of option 4, it is assumed that of the remaining 90% of applications, 57% will be able to have lead in times large enough to avoid incurring extra costs. In the low case, this is 30% and in the high case it is 77%. This means in total:
  - Low case – 37% of services are not incurring costs
  - Central case – 61% of services are not incurring costs
  - High case – 79% of services are not incurring costs
- Under the central case of option 5, it is assumed that of the remaining 84% of applications, 72% will have lead in times large enough to avoid incurring extra costs. In the low case, this is 42% and in the high case it is 100%. In total:
  - Low case – 52% of services are not incurring costs
  - Central case – 76% of services are not incurring costs
  - High case – 100% of services are not incurring costs

*The loss per km an operator makes on a route before deciding that a service needs to be stopped or reduced*

Operators will decide to reduce or deregister a route when it stops being profitable in the medium term. The Office of Fair Trading's review of a request by FirstGroup PLC for a variation to the undertakings given following its acquisition of the Scottish passenger rail franchise (provisional decision, 3 August 2010) provides some detail on average losses on bus routes which the operator is seeking to vary. The report states:

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<sup>17</sup> Where two application have given 73 days notice (56+17 days), this is considered the equivalent of one 90 day notice and one 56 day notice (56 days and 56+34 days).

*“For all the Relevant Controlled Routes subject to the Proposed Withdrawals, between 2003/04 and 2008/09... total revenues increased by less than only [0–10] per cent but were more than offset by a significant increase ([20–35] per cent) in variable costs.”*

The Public Transport Statistics Great Britain: 2011 Edition Supplement gives the operating cost of bus services in English non-PTE areas of £1.52 per kilometre. Our central estimate of the loss an operator makes on a route that will be deregistered or reduced is assumed to be 17.5% on this value (the mid point of a scenario such as 0% increase in revenue and 35% increase in costs). This gives a cost of £0.27 per kilometre in our central scenario. This is the value per km that the proportion of the market that finds the introduction of this policy costly will face as a result of the policy being introduced.

In our high estimate, the loss sustained by operators before a route is determined unprofitable is assumed to be 35% of cost i.e. £0.53 per kilometre. In the low scenario, we assume 10% of costs are not covered by passenger revenues. This gives a cost of £0.15 per km. This differs from the range used to estimate the central case as a rational operator would be indifferent between retaining and withdrawing a service with 0% losses. Therefore, a positive loss figure of 10% has been applied.

*The proportion of routes being deregistered or reduced which the local authority retains and sends to tender*

When an authority receives information on an application to deregister or reduce a route, they will analyse whether or not the route needs replacement. It has not been possible to find any direct estimates of the proportion of routes retained by local authorities using this mechanism. However, using data from ATCO (source: Local Authority Bus Contracts - Price, Expenditure and Competition Survey) and making assumptions about the average length of emergency contracts (13 weeks) we have estimated that local authorities retain 21% of services which are withdrawn (this figure is rounded down). This was estimated as follows:

Vehicle kilometres replaced by local authority (20,300,752)

- Current cost of emergency contracts (£5.4 million)<sup>18</sup> divided by
- Cost per vehicle kilometre of tendered routes (£0.27)

Vehicle kilometre reduced by bus operators (96,317,428)

- Total number of routes reduced or withdrawn (3,863) multiplied by
- Weighted average vehicle km per route per week (1,918): multiplied by
- 13 weeks

Proportion of vehicle kilometres replaced by local authorities (21.1%)

- Vehicle kilometres replaced by local authority (20,300,752) divided by
- Vehicle kilometre reduced by bus operators (96,317,428)

*The reduction in cost of emergency tenders used to replace deregistered or reduced services as a result of the additional notice*

Giving authorities a longer notice period when a route needs to be replaced with a tendered contract can be used to increase the length of time allowed to collect bids and to consider lower cost options for supplying the contracted service (e.g. adding additional stops on existing routes). Industry sources suggest that emergency tenders cost 40% more than standard tenders as a result of the longer periods and therefore lowered risks associated with long term contracts and tendering under the European rules process. In the absence of any firm evidence on what proportion of this premium could be eliminated by increasing the notice period, we have assumed that options 1, 2 and 3 would result in a 10% decrease in the cost of emergency tenders used to replace deregistered services. Option 4 is assumed to result in a 12.5% decrease in the cost of emergency tenders and option 5 in a 15% cost reduction. This is based on judgement and should be considered indicative.

*The benefit of up to date information*

This is calculated as 9.2p per passenger journey (average of range found Bascombe et al 2004 in 2012 prices).

*Average vehicle km per route over two weeks*

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<sup>18</sup> ATCO Price, Expenditure and Competition Survey

This has been estimated by dividing the total vehicle km in England and Wales excluding London (1.7 billion; source: DfT Bus Statistics: Table BUS0203, 2012) by the total number of live bus registrations in England and Wales excluding London and the South East (17,416; source: Traffic Commissioners' Annual Report 2011/12) and dividing the result by 26<sup>19</sup>. It is further assumed that routes experiencing a reduction in services will lose half of existing passenger kilometres.

#### *Percentage of passenger delayed due to incorrect timetable information*

It is assumed that frequent passengers will find out about service changes even if they are not advertised e.g. through the bus driver. Infrequent passengers are unlikely to find out about service changes in this way. DfT analysis of the National Travel Survey indicates that 10% of journeys are made by people making less than one bus trip per week.

#### *Number of passengers per route in two week period*

This has been estimated by dividing the total number of bus journeys in England and Wales excluding London (2.4 billion; source: DfT Bus Statistics: Table BUS0103, 2012) by the total number of live bus registration in England and Wales excluding London and the South East (17,416; source: Traffic Commissioners' Annual Report 2011/12) and dividing the result by 26. This results in a total of 5,457.

#### *Average delay to passengers*

It is assumed that those passengers delayed by a change to the timetable will incur a 15 minute delay. This is half the headway of a half-hourly service. Half-hourly is the average frequency of service.

#### *Penalty attached to delay*

Unanticipated delay for rail is weighted at 3 times the value of standard travel time because of the uncertainty and anxiety caused (source: WebTag 3.5.7). Studies reported in *The Demand for Public Transport (TRL, 2004)* indicate that a similar penalty could apply to buses.

#### *Value of time*

A conservative approach in which the non-work "other" value of travel time savings was applied to all bus passengers (WebTag 3.5.6). This was uplifted to current prices and values using the procedure set out in WebTag. This results in a value of £6.01.

#### *Sensitivity tests*

In order to appraise this policy it has been necessary to make a number of assumptions based on incomplete data and judgement. The table below shows how changes in each assumption affect the NPV of the policy option 1.

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<sup>19</sup> Figure is divided by 26 to give a figure for fortnightly average vehicle kilometres

**Table 12 – Sensitivity of NPV to changes in assumptions<sup>1</sup>**

Assumption	Option 1		Option 2		Option 3	
		Change in NPV		Change in NPV		Change in NPV
The percentage of operators able to give 70 days (i.e. 56 + 14 days) notice without experiencing additional costs.	From 91% to 83% (assume fewer bus operators are able to adapt to the new notice period)	-38%	From 71% to 47% (assume fewer bus operators are able to adapt to the new notice period)	-43%	From 71% to 47% (assume fewer bus operators are able to adapt to the new notice period)	-39%
The loss per km an operator makes on a route before deciding that a service needs to be stopped or reduced.	From 27p loss to 15p (10% of operating cost)	-1%	From 27p loss to 15p (10% of operating cost)	7%	From 27p loss to 15p (10% of operating cost)	-1%
The reduction in cost of emergency tenders used to replace deregistered or reduced services as a result of the additional 14 days.	From 10% to 12.5%	19%	From 10% to 12.5%	23%	From 10% to 12.5%	17%
The proportion of routes being deregistered or reduced which the local authority retains and sends to tender.	From 21% to 15% (budget cuts may mean that LTAs are unable to tender as many replacement services)	-8%	From 21% to 15% (budget cuts may mean that LTAs are unable to tender as many replacement services)	-9%	From 21% to 15% (budget cuts may mean that LTAs are unable to tender as many replacement services)	-9%
The percentage of routes for which it is not possible to disseminate information in a timely manner.	From 2% to 1%	-13%	From 2% to 1%	-12%	From 2% to 1%	-12%
The percentage of passengers who face delayed journeys as a result affected by information that is not disseminated in a timely manner.	From 10% to 0%	-22%	From 10% to 0%	-20%	From 10% to 0%	-20%
The proportion of applications to vary a route that represent a reduction in service.	From 20% to 50% (it is plausible that up to 50% of variation applications lead to a reduction in services)	-10%	From 20% to 50% (it is plausible that up to 50% of variation applications lead to a reduction in services)	-47%	From 20% to 50% (it is plausible that up to 50% of variation applications lead to a reduction in services)	-10%

The assessment of this policy is extremely sensitive to the assumptions made within it particularly the number of operators able to give 70-90 days notice without experiencing additional costs. The extent to which this policy will benefit society is therefore highly dependent on the assumptions made. However, we are fairly confident that the overall assessment is reasonable given that most respondents to the original consultation did not believe that the Competition Commission's preferred option (option 4) would lead to large scale costs or benefits.

<sup>1</sup> Sensitivity tests are pivoted from the central case.