

Title: Models for the future of the Public Forest Estate in England Lead department or agency: DEFRA and Forestry Commission England Other departments or agencies: Forestry Commission GB	Impact Assessment (IA)
	IA No: DEFRA 1254
	Date: 25/01/2011
	Stage: Consultation
	Source of intervention: Domestic
	Type of measure: Other
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Summary: Intervention and Options

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

This Impact Assessment (IA) evaluates the impacts of leasing, selling and/or transferring the public forest estate (PFE) in England to private and voluntary/charitable sector ownership and/or management. Woodlands provide multiple goods and services. Some of these goods and services are commercial and are provided through markets (e.g. timber, renewable energy), although the long-term returns from forestry can deter investment. Others are social and/or environmental (e.g. biodiversity, open access and landscape) with 'public good' characteristics and have been supported by government intervention through management of the public forest estate and through regulations and/or economic instruments applied to the private forest estate. This IA is an initial assessment and only a partial assessment of the potential costs and benefits has been possible at this stage. It is recommended that a full analysis is conducted of the costs and benefits of the proposed options.

What are the policy objectives and the intended effects?

The Government is committed to shifting the balance of power from 'Big Government' to 'big society' and ensuring that it is intervening in forestry in England only where appropriate and necessary. Part of the policy objective is to increase profitability of commercial woodlands and reduce net costs for running local and heritage woodlands whilst at the same time increasing public benefits through greater involvement of local communities and civil society bodies. The government will seek to protect and enhance biodiversity to contribute to a network of wildlife corridors, maintain public access for recreation and leisure, ensure the continuing role of the woodlands in climate change mitigation and adaptation, and protect nationally important landscapes.

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

Options have been applied to three areas of woodland that together are estimated to make up about 75% of the PFE:

- 1 – large scale, timber sites: a = leasing, b = open market sales, c = open market sales with extended CRoW access
- 2 – multi-purpose, environmental and community woodland sites: a = sale/lease (including under proposals for "community right to buy") to community or civil society, b = open market sale
- 3 – large-scale heritage sites: a = transfer to charitable organisations of ownership and/or management.

This is a preliminary analysis. Estimates of the costs and benefits are **incomplete** - the IA highlights where more evidence is sought during the consultation period. Options 1, 2 and 3 are applied to different areas of the PFE and, as such, are considered to be complementary. Options 1a, 2a and 3a are the preferred options at this stage. Each option is assessed against a baseline business as usual approach. Business as usual would involve continuing work to restructure the PFE to remove its deficit, as well as the sale of some woodlands to private ownership including 40000 hectares agreed under SR10.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** n/ap

What is the basis for this review? Not applicable. **If applicable, set sunset clause date:** n/ap

Are there arrangements in place that will allow a systematic collection of monitoring information for future policy review?

Not applicable

SELECT SIGNATORY Sign-off For consultation stage Impact Assessments:

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:



Date: 25th January 2011

Summary: Analysis and Evidence

Policy Option 1a

Description: Leasing to the private sector of large-scale commercial sites

Price Base Year 2010	PV Base Year 2011	Time Period Years 20	Net Benefit (Present Value (PV)) (£m)		
			Low: -	High: -	Best Estimate: -

COSTS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	7	10	40.0	593.8 ¹
High	12.6		51.2	763.4 ¹
Best Estimate	9.8		45.6	678.6 ¹

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

Leasing woodlands incurs transition costs to Government - here, the only transition costs estimated are a fixed rate for professional (e.g. land agent) fees. Average annual costs are the sum of gross costs to Government (paying for public good provision and loss of income from timber and recreation) and to buyers of purchasing and managing woodland - these costs are treated as transfers. It is not possible to evaluate all potential costs at this stage - further work will monetise costs where possible.

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

Transition costs of redundancy, TUPE and possible further professional fees have not been quantified. Other possible non-monetised costs include a loss of social and environmental (public) goods and costs to Government of support to deliver such goods if larger payments (than currently made to FC) are required for new owners to provide public goods. However, it is assumed that lease conditions will reduce such costs. A cut in forest management costs of 25% would be needed to generate a positive NPV (by offsetting professional (e.g. land agent fees) and lease management costs).

BENEFITS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	-	10	39.0	573.1 ¹
High	-		70.9	737.8 ¹
Best Estimate	-		44.6	655.5 ¹

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

Average annual benefits are the sum of gross benefits to Government (of receipts from leases (£140-£250m) and savings from no longer having to produce timber or recreational goods) and to buyers (of grants from Government and income from woodland). These benefits are treated as transfers from one sector to another. It has not been possible to evaluate all the potential benefits - further work will be carried out to monetise benefits where possible.

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

There is potential to attract new investment into the sector and seek efficiencies in timber production. If new owners were able to increase revenues by 13% by exploiting commercial opportunities, these would outweigh the cost of managing leases and of professional (e.g. land agent) fees, resulting in a positive NPV - in practice, a combination of reducing costs (as stated above) and increasing revenues would be more likely.

Key assumptions/sensitivities/risks

Discount rate (%)

3.5

Private sector provision may bring principal-agent problems where public goods and externalities are sought. Risks include lower than expected Government revenues (e.g. low and slow demand, lease conditions reducing prices), buyers requiring grants higher than the current cost of running the estate, costs of public goods being higher (due to dis-economies of scale, the need to generate profit not just break even), lessees unwilling to continue favourable contract terms with local processors leading to impacts on the rural economy. It is also uncertain whether lessees would encourage or restrict business opportunities on their land, although it may be reasonable to assume that lessees would want to exploit profitable business opportunities. Not all costs and benefits have been quantified - therefore, NPVs have not been given at this stage as they would not fully represent the potential impact of the options at this stage of the analysis.

Direct impact on business (Equivalent Annual) £m):			In scope of OIOO?	Measure qualifies as
Costs: n/a	Benefits: n/a	Net: n/a	No	NA

¹ This figure is a partial estimate

Summary: Analysis and Evidence

Policy Option 1b

Description: Open market sale of large scale commercial sites

Price Base Year 2010	PV Base Year 2011	Time Period Years 20	Net Benefit (Present Value (PV)) (£m)		
			Low: -	High: -	Best Estimate: -

COSTS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	-	10	-	-
High	-		-	-
Best Estimate	14		55.0	820.5 ²

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

Selling woodlands incurs transition costs to Government - here, only a fixed rate for professional (e.g. land agent) fees is quantified. Average annual costs are the sum of the gross costs to Government (of paying for public good provision and the loss of income from timber and recreation) and to buyers (of purchasing and managing land) - these costs are treated as transfers. It has not been possible to evaluate all the potential costs at this stage - further work will monetise costs where possible.

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

Transition costs of redundancy and TUPE have not been quantified. Other possible non-monetised costs include a reduction in social and environmental benefits (public goods) and increased costs to Government of providing support to deliver such benefits if larger payments (than currently made to FC) are required to incentivise new owners to provide public goods. A cut in forest management costs of 14% would be needed to generate a positive NPV (by offsetting professional (e.g. land agent fees) costs).

BENEFITS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	-	10	-	-
High	-		-	-
Best Estimate	-		55.0	808.5 ²

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

Average annual benefits are the sum of gross benefits to Government (of receipts from sales (£280m) and savings from no longer having to produce timber or recreational goods) and to buyers (of grants from Government and income from woodlands). These benefits are treated as transfers from one sector to another. It has not been possible to evaluate all the potential benefits at this stage - further work will be carried out to monetise benefits where possible.

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

There is potential to attract new investment into the sector and enhance efficiency in timber production. If new owners were able to increase revenues by 7% by exploiting commercial opportunities, this would outweigh the cost of professional (e.g. land agent) fees, resulting in a positive NPV - in practice, a combination of reducing costs (as stated above) and increasing revenues would be more likely.

Key assumptions/sensitivities/risks

Discount rate (%)

3.5

Private sector provision may bring principal-agent problems where public goods and externalities are sought. Risks include lower than expected Government revenues (e.g. due to low or slow demand), requiring grants higher than the current cost of running the estate, costs of public goods being higher (due to dis-economies of scale, the need to generate profit not just break even), sale contracts not stipulating public goods, buyers unwilling to continue favourable contract terms with local processors leading to impacts on the rural economy. It is also uncertain whether new owners would encourage or restrict business opportunities on their land, although it may be reasonable to assume that new owners would want to exploit profitable business opportunities. Not all costs and benefits have been quantified - therefore NPV figures have not been given at this stage as they would not fully represent the potential impact of the options at this stage of the analysis.

Direct impact on business (Equivalent Annual) £m):			In scope of OIOO?	Measure qualifies as
Costs: n/a	Benefits: n/a	Net: n/a	No	NA

² This figure is a partial estimate

Summary: Analysis and Evidence

Policy Option 1c

Description: Open market sale of large-scale commercial sites with extended CRoW provisions

Price Base Year 2010	PV Base Year 2011	Time Period Years 20	Net Benefit (Present Value (PV)) (£m)		
			Low: -	High: -	Best Estimate: -

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	7	10	39.0	579.1 ³
High	12.6		50.2	748.7 ³
Best Estimate	9.8		44.6	663.9 ³

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

Selling woodlands incurs transition costs to Government - here, only a fixed rate for professional (e.g. land agent fees) has been quantified. Average annual costs are the sum of the gross costs to Government (of paying for public good provision and the loss of income from timber and recreation) and to buyers (of purchasing and managing woodlands) - these costs are treated as transfers. It has not been possible to evaluate all the potential costs at this stage - further work will be carried out to monetise costs where possible.

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

Transition costs of redundancy and TUPE have not been quantified. Other possible non-monetised costs include a reduction in social and environmental benefits (public goods) and increased costs to Government of providing support to deliver such benefits if larger payments (than currently made to FC) are required to incentivise new owners to provide public goods. However, extended CRoW provisions would aim to maintain access benefits. A cut in forest management costs of 10% would be needed to generate a positive NPV (by offsetting professional (e.g. land agent) fees).

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	-	10	39.0	573.1 ³
High	-		50.2	737.8 ³
Best Estimate	-		44.6	655.5 ³

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

Average annual benefits are the sum of gross benefits to Government (of receipts from sales (£140-250m) and savings from no longer having to produce timber or recreational goods) and to buyers (of income from woodland and grants from government). These benefits are treated as transfers from one sector to another. It has not been possible to evaluate all the potential benefits - further work will be carried out to monetise benefits where possible.

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

There is potential to attract new investment into the sector and enhance efficiency in the timber industry. If new owners were able to increase revenues by 5% by exploiting commercial opportunities, this would outweigh the cost of professional (e.g. land agent) fees, resulting in a positive NPV – in practice, a combination of reducing costs (as stated above) and increasing revenues would be more likely.

Key assumptions/sensitivities/risks

Discount rate (%)

3.5

Private sector provision may bring principal-agent problems where public goods/externalities are sought. Risks include lower than expected Government revenues (e.g. low and slow demand, CRoW conditions reducing prices), buyers requiring grants higher than the current cost of running the PFE, costs of public goods being higher (due to diseconomies of scale, the need to generate profit), CRoW conditions insufficient to ensure all public goods, buyers unwilling to continue favourable contracts with local processors leading to rural economy impacts. It is uncertain whether buyers would encourage or restrict business opportunities on their land although it may be reasonable to assume that new owners would want to exploit profitable business opportunities. NPVs have not been given as not all costs and benefits have been quantified - therefore NPV figures would not fully represent the potential impact of the options at this stage of the analysis.

Direct impact on business (Equivalent Annual) £m):			In scope of OIOO?	Measure qualifies as
Costs: n/a	Benefits: n/a	Net: n/a	No	NA

³ This figure is a partial estimate

Summary: Analysis and Evidence

Policy Option 2a

Description: Sale and/or lease to community or civil society

Price Base Year 2010	PV Base Year 2011	Time Period Years 20	Net Benefit (Present Value (PV)) (£m)		
			Low: -	High: -	Best Estimate: -

COSTS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	-	10	-	-
High	-		-	-
Best Estimate	2.5		15.8	234.1 ⁴

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

There are transition costs to Government of selling and/or leasing the PFE – here, only a fixed rate for professional (e.g. land agent) fees has been quantified. Average annual costs are the sum of gross costs to Government (paying for public goods and loss of income from timber and recreation) and to buyers (of purchasing and managing land) – these costs are treated as transfers. It has not been possible to evaluate all the potential costs at this stage - further work will monetise costs where possible.

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

Transition costs of redundancy and TUPE, and any additional professional fees, have not been quantified. Other possible non-monetised costs include a reduction in social and environmental benefits (public goods) and increased costs to Government of providing support to deliver such benefits if larger payments (than currently made to FC) are required to incentivise new owners to provide public goods. A cut in forest management costs of 4% would be needed to generate a positive NPV (by offsetting professional (e.g. land agent) fees).

BENEFITS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	-	10	-	-
High	-		-	-
Best Estimate	-		15.8	231.9 ⁴

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

Average annual benefits are the sum of gross benefits to Government (of receipts from woodland sales (£50m) and savings from no longer having to produce timber or recreational goods) and to buyers (of grants from Government and income from woodland). These benefits are treated as transfers from one sector to another. It has not been possible to evaluate all the potential benefits - further work will be carried out to monetise benefits where possible.

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

Greater influence over woodland by local communities. Some local communities may generate greater public and business benefits from woodlands owned/managed by civil society and community organisations, and may benefit from volunteering. New owners could seek new funding not previously allowed under public ownership. If new owners were able to increase revenues by 8%, this would outweigh the cost of professional (e.g. land agent) fees, resulting in a positive NPV – in practice, a combination of reducing costs (as stated above) and increasing revenues would be more likely.

Key assumptions/sensitivities/risks	Discount rate (%)	3.5
<p>Private sector provision may bring principal-agent problems where public goods and externalities are sought. Risks include lower than expected Government revenues (e.g. low and slow demand reducing prices), buyers requiring grants higher than the current cost of running the estate, costs of public goods being higher (due to diseconomies of scale, the need to generate profit), sale contracts not stipulating public goods, buyers unwilling to continue favourable contracts with local processors leading to impacts on the rural economy. It is also uncertain whether new owners would encourage or restrict business opportunities on their land, although it may be reasonable to expect new owners to want to exploit new commercial opportunities. NPV have not been given as not all costs and benefits have been quantified - therefore NPV figures would not fully represent the potential impact of the options at this stage of the analysis.</p>		

Direct impact on business (Equivalent Annual) £m):			In scope of OIOO?	Measure qualifies as
Costs: n/a	Benefits: n/a	Net: n/a	No	NA

⁴ This figure is a partial estimate

Summary: Analysis and Evidence

Policy Option 2b

Description: Open market sale of community woodland

Price Base Year 2010	PV Base Year 2011	Time Period Years 20	Net Benefit (Present Value (PV)) (£m)		
			Low: -	High: -	Best Estimate: -

COSTS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	-	10	-	-
High	-		-	-
Best Estimate	2.5		15.8	234.1 ⁵

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

There are transition costs to Government of selling woodlands – here, only a fixed rate for professional (e.g. land agent) fees is quantified. Average annual costs are the sum of gross costs to Government (paying for public goods and loss of income from timber and recreation) and to buyers (of purchasing and managing land) – these costs are treated as transfers. It has not been possible to evaluate all the potential costs - further work will be carried out to monetise costs where possible.

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

Transition costs of redundancy and TUPE costs have not been quantified. Other possible non-monetised costs include a reduction in social and environmental benefits (public goods) and increased costs to Government of providing support to deliver such benefits if larger payments (than currently made to FC) are required to incentivise new owners to provide public goods. A cut in forest management costs of 4% would be needed to generate a positive NPV (by offsetting professional (e.g. land agent) fees).

BENEFITS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	-	10	-	-
High	-		-	-
Best Estimate	-		15.8	231.9 ⁵

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

Average annual benefits are the sum of gross benefits to Government (of receipts from woodland sales (£50m) and savings from no longer having to produce timber or recreational goods) and to buyers (of grants from Government and income from woodland). These benefits are a transfer from one sector to another. It has not been possible to evaluate all the potential benefits - further work will be carried out to monetise benefits where possible.

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

There is potential to attract new investment into the sector. If new owners were able to increase revenues by 8% by exploiting commercial opportunities, this would outweigh the cost of professional (e.g. land agent) fees, resulting in a positive NPV – in practice, a combination of reducing costs (as stated above) and increasing revenues would be more likely.

Key assumptions/sensitivities/risks

Discount rate (%) 3.5

Private sector provision may bring principal-agent problems where public goods and externalities are sought. Risks include lower than expected Government revenues (e.g. low and slow demand reducing prices), requiring grants higher than the current cost of running the estate, costs of public goods being higher (due to dis-economies of scale, the need to generate profit not just break even), sale contracts not stipulating public goods. It is also uncertain whether new owners would encourage or restrict business opportunities on their land, although it may be reasonable to assume that new owners would want to exploit profitable business opportunities. Net present values have not been given as not all costs and benefits have been quantified - therefore NPV figures would not fully represent the potential impact of the options at this stage of the analysis.

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs: n/a	Benefits: n/a	Net: n/a	No	NA

⁵ This figure is a partial estimate

Summary: Analysis and Evidence

Policy Option 3a

Description: Transfer to existing and/or new charitable organisations of large-scale heritage sites

Price Base Year 2010	PV Base Year 2011	Time Period Years 20	Net Benefit (Present Value (PV)) (£m)		
			Low: -	High: -	Best Estimate: -

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	-	10	-	-
High	-		-	-
Best Estimate	14		33.7	507.9 ⁶

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

There are transition costs to Government of transferring land – here, only a fixed rate for professional (e.g. land agent) fees has been quantified. Average annual costs are the sum of gross costs to Government (public good provision, loss of income from timber and recreation) and charitable bodies (provision of public goods, recreation and timber) – these costs are treated as transfers. It has not been possible to evaluate all potential costs - further work will monetise costs where possible.

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

Transition costs of redundancy and TUPE costs, and any additional professional fees, have not been quantified. Other possible non-monetised costs include a reduction in social and environmental benefits (public goods) and increased costs to Government of providing support to deliver such benefits if larger payments (than currently made to FC) are required to incentivise new owners to provide public goods. A cut in forest management costs of 6% would be needed to generate a positive NPV (by offsetting professional (e.g. land agent) fees).

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	-	10	-	-
High	-		-	-
Best Estimate	-		33.7	495.9 ⁶

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

Average annual benefits are the sum of gross benefits to Government (savings from no longer having to produce timber or recreational goods) and to buyers (of grants from Government and income from woodland). These benefits are treated as transfers from one sector to another. It has not been possible to evaluate all the potential benefits - further work will be carried out to monetise benefits where possible.

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

May include greater public good provision on land owned/managed by charitable organisations. Greater influence over woodland by interested parties. Multi-functional approach by the new organisations. The new bodies could seek new funding not previously allowed under public ownership and increased levels of volunteering. A 13% increase in revenues by exploiting commercial opportunities would outweigh professional (e.g. land agent) fees, resulting in a positive NPV – in practice, a combination of reducing costs (as stated above) and increasing revenues would be more likely.

Key assumptions/sensitivities/risks	Discount rate (%)	3.5
<p>Key risks include uncertain long-term costs for Government. Principal-agent problems may arise where public goods and externalities are sought, depending on how the charitable organisations are constituted. Charitable organisations may be unwilling to take on land, management and staff without adequate incentives. Grants may not secure the desired level of public benefits and therefore rates have to increase, particularly if the switch to smaller-scale operations incurs a loss of economies of scale. Net present values have not been given as not all costs and benefits have been quantified - therefore NPV figures would not fully represent the potential impact of the options at this stage of the analysis.</p>		

Direct impact on business (Equivalent Annual) £m):			In scope of OIOO?	Measure qualifies as
Costs: n/a	Benefits: n/a	Net: n/a	No	NA

⁶ This figure is a partial estimate

Enforcement, Implementation and Wider Impacts

What is the geographic coverage of the policy/option?			England		
From what date will the policy be implemented?			2011		
Which organisation(s) will enforce the policy?			n/a		
What is the annual change in enforcement cost (£m)?			n/a		
Does enforcement comply with Hampton principles?			Yes		
Does implementation go beyond minimum EU requirements?			N/A		
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)			Traded: See		Non-traded: annex 8
Does the proposal have an impact on competition?			No negative impacts		
What proportion (%) of Total PV costs/benefits is directly attributable to primary legislation, if applicable?			Costs: 0		Benefits: 0
Distribution of annual cost (%) by organisation size (excl. Transition) (Constant Price)	Micro n/a	< 20 n/a	Small n/a	Medium n/a	Large n/a
Are any of these organisations exempt?	No	No	No	No	No

Specific Impact Tests: Checklist

Set out in the table below where information on any SITs undertaken as part of the analysis of the policy options can be found in the evidence base. For guidance on how to complete each test, double-click on the link for the guidance provided by the relevant department.

Please note this checklist is not intended to list each and every statutory consideration that departments should take into account when deciding which policy option to follow. It is the responsibility of departments to make sure that their duties are complied with.

Does your policy option/proposal have an impact on...?	Impact	Page ref within IA
Statutory equality duties ⁷ Statutory Equality Duties Impact Test guidance	No	Annex 6
Economic impacts		
Competition Competition Assessment Impact Test guidance	No	Annex 6
Small firms Small Firms Impact Test guidance	No	Annex 6
Environmental impacts		
Greenhouse gas assessment Greenhouse Gas Assessment Impact Test guidance	Yes	Annex 6
Wider environmental issues Wider Environmental Issues Impact Test guidance	No	Annex 6
Social impacts		
Health and well-being Health and Well-being Impact Test guidance	No	Annex 6
Human rights Human Rights Impact Test guidance	No	Annex 6
Justice system Justice Impact Test guidance	No	Annex 6
Rural proofing Rural Proofing Impact Test guidance	Yes	Annex 6
Sustainable development Sustainable Development Impact Test guidance	No	Annex 6

⁷ Public bodies including Whitehall departments are required to consider the impact of their policies and measures on race, disability and gender. It is intended to extend this consideration requirement under the Equality Act 2010 to cover age, sexual orientation, religion or belief and gender reassignment from April 2011 (to Great Britain only). The Toolkit provides advice on statutory equality duties for public authorities with a remit in Northern Ireland.

Evidence Base (for summary sheets) – Notes

Use this space to set out the relevant references, evidence, analysis and detailed narrative from which you have generated your policy options or proposal. Please fill in **References** section.

References

Include the links to relevant legislation and publications, such as public impact assessments of earlier stages (e.g. Consultation, Final, Enactment) and those of the matching IN or OUTs measures.

No.	Legislation or publication
	CJC Consulting (2003) <u>Economic Analysis of Forestry Policy in England</u> , HMT and FC, http://www.defra.gov.uk/evidence/economics/rural/forestry/whole.pdf
	Christie, M. <i>et al.</i> (2006) <u>Valuing Forest Recreation</u> , report to the Forestry Commission
	The Economics of Ecosystems and Biodiversity (2009), TEEB for Policy Makers Summary: responding to the value of Nature. UNEP
	Eftec (2010), <u>The Economic Contribution of the Public Forest Estate in England</u> , Forestry Commission. (http://www.forestry.gov.uk/pdf/eng-pfe-econmicresearch-final.pdf/\$FILE/eng-pfe-econmicresearch-final.pdf)
	Forestry Commission (1998) <u>National Inventory of Woodland and Trees</u> http://www.forestry.gov.uk/pdf/frnationalinventory0001.pdf/\$FILE/frnationalinventory0001.pdf
	Forestry Commission (2009), <u>Forestry Statistics – Environment</u> , http://www.forestry.gov.uk/website/forstats2009.nsf/LUContents/AAB059DCBB5D12B78025735D0031F6C1
	Forestry Commission (2009), <u>Forestry Statistics – Environment</u> , http://www.forestry.gov.uk/website/forstats2009.nsf/LUContents/AAB059DCBB5D12B78025735D0031F6C1
	Forestry Commission (2010) <u>Forestry Statistics</u> www.forestry.gov.uk/statistics
	Forestry Commission Great Britain/England (2010), <u>Annual Report 2009-10</u> , London Stationary Office
	Hill, G. <i>et al.</i> (2003) <u>Forests Role in Tourism</u> , report to the Forestry Commission
	National Assessment of UK Forestry and Climate Change Steering Group (2010), <u>Combating Climate Change - A Role For UK Forests: Main Report, An Assessment of The Potential of The UK's Trees and Woodlands to Mitigate and Adapt to Climate Change</u> , TSO (The Stationery Office). http://www.tsoshop.co.uk/bookstore.asp?FO=1159966&Action=Book&ProductID=9780114973513&From=SearchResults
	Valatin, G & Coull, J. (2007) <u>Payments for Ecosystems Services – thoughts and findings and from the USA</u>
	Forestry Acts 1967, 1981 (As amended)
	Countryside Act 1968
	Regulatory Reform (Forestry) Order 2005

Evidence Base

Ensure that the information in this section provides clear evidence of the information provided in the summary pages of this form (recommended maximum of 30 pages). Complete the **Annual profile of monetised costs and benefits** (transition and recurring) below over the life of the preferred policy (use the spreadsheet attached if the period is longer than 10 years).

The spreadsheet also contains an emission changes table that you will need to fill in if your measure has an impact on greenhouse gas emissions.

Annual profile of monetised costs and benefits* - (£m) constant prices

Option 1a – Commercial woodland leases (central estimate)

	Y ₀	Y ₁	Y ₂	Y ₃	Y ₄	Y ₅	Y ₆	Y ₇	Y ₈	Y ₉	Y ₁₀	Y ₁₁	Y ₁₂	Y ₁₃	Y ₁₄	Y ₁₅	Y ₁₆	Y ₁₇	Y ₁₈	Y ₁₉
Transition	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0	0	0	0	0	0	0	0	0	0
Annual	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6
Total annual	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6
Transition	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6
Total annual	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6

Option 1b – Commercial woodland open market sale

	Y ₀	Y ₁	Y ₂	Y ₃	Y ₄	Y ₅	Y ₆	Y ₇	Y ₈	Y ₉	Y ₁₀	Y ₁₁	Y ₁₂	Y ₁₃	Y ₁₄	Y ₁₅	Y ₁₆	Y ₁₇	Y ₁₈	Y ₁₉
Transition	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0	0	0	0	0	0	0	0	0	0
Annual	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
Total annual	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
Transition	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
Total annual	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0

Option 1c – Commercial woodland with extended CRoW provisions

	Y ₀	Y ₁	Y ₂	Y ₃	Y ₄	Y ₅	Y ₆	Y ₇	Y ₈	Y ₉	Y ₁₀	Y ₁₁	Y ₁₂	Y ₁₃	Y ₁₄	Y ₁₅	Y ₁₆	Y ₁₇	Y ₁₈	Y ₁₉
Transition	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0	0	0	0	0	0	0	0	0	0
Annual	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6
Total annual	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6
Transition	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6
Total annual	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6

Option 2a – Community woodland with community sale

	Y ₀	Y ₁	Y ₂	Y ₃	Y ₄	Y ₅	Y ₆	Y ₇	Y ₈	Y ₉	Y ₁₀	Y ₁₁	Y ₁₂	Y ₁₃	Y ₁₄	Y ₁₅	Y ₁₆	Y ₁₇	Y ₁₈	Y ₁₉
Transition	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0	0	0	0	0	0	0	0	0	0
Annual	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8
Total annual	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8
Transition	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8
Total annual	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8

Option 2b – Community woodland open market sale

	Y ₀	Y ₁	Y ₂	Y ₃	Y ₄	Y ₅	Y ₆	Y ₇	Y ₈	Y ₉	Y ₁₀	Y ₁₁	Y ₁₂	Y ₁₃	Y ₁₄	Y ₁₅	Y ₁₆	Y ₁₇	Y ₁₈	Y ₁₉
Transition	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0	0	0	0	0	0	0	0	0	0
Annual	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8
Total annual	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8
Transition	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8
Total annual	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8

Option 3a – Heritage woodlands charitable organisation

	Y ₀	Y ₁	Y ₂	Y ₃	Y ₄	Y ₅	Y ₆	Y ₇	Y ₈	Y ₉	Y ₁₀	Y ₁₁	Y ₁₂	Y ₁₃	Y ₁₄	Y ₁₅	Y ₁₆	Y ₁₇	Y ₁₈	Y ₁₉
Transition	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0	0	0	0	0	0	0	0	0	0
Annual	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7
Total annual	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7
Transition	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7
Total annual	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7

* For non-monetised benefits please see summary pages and main evidence base section

Evidence Base (for summary sheets)

1. Problem under consideration

1.1 The Government is committed to shifting the balance of power from 'Big Government' to 'big society'. The consultation accompanying this Impact Assessment (IA) considers ways to shift this balance. Throughout this process, the Government is determined to secure the future provision of public benefits from the current public forest estate (PFE) in England.

1.2 The Government aims to ensure that it intervenes in forestry in England only where appropriate and necessary. Part of the policy objective is to increase profitability of commercial woodlands and reduce net costs for running local and heritage woodlands whilst at the same time increasing public benefits through greater involvement of local communities and civil society bodies. Specifically, the government will seek to protect and enhance biodiversity to contribute to a network of wildlife corridors across England, maintain public access for recreation and leisure, ensure the continuing role of the woodlands in climate change mitigation and adaptation and protect nationally important landscapes. The proposals examined in this IA are to lease, sell and/or transfer PFE woodlands over the next five to ten years to the private sector and civil society.

1.3 Three approaches are proposed for doing this (these are not mutually exclusive):

- Option 1 – Leasing of large scale commercial woodland
- Option 2 – Community/civil society right-to-buy of multipurpose, environmental and community woodland sites
- Option 3 – Transfer to charitable organisations of large scale heritage sites

1.4 The PFE is made up of 201,000ha of woodland and 57,000ha of other land (approximately 18% of woodland in England is in the PFE) and is the largest individual land holding in England (2% of land area). This IA is a broad assessment of the economic resource costs and benefits rather than purely an evaluation of financial flows between different organisations and sectors.

1.5 This IA does not examine the non-PFE roles of the Forestry Commission in England. These roles include regulatory functions (including the issuing of felling licences and enforcement of habitat regulations) and grant awarding functions through management of the Woodland Grant Scheme under the Rural Development Programme England (RDPE). In addition, substantial changes to the PFE in England could have significant implications for forestry in Scotland and Wales. However, further examination of this issue is beyond the scope of this Impact Assessment.

2. Background to forest policy

2.1 Forest policy has evolved significantly over the past century. Following WWI until the mid-20th century, the central purpose was to build up a strategic reserve of timber. Woodland cover at the end of WWI had fallen to around 5% in England. Substantial planting programmes until the 1980s have increased woodland cover in England to 8.7% (1,128,000ha). As the 20th century progressed, a reduced requirement for a reserve of timber¹, and increasing consumptive demands on the countryside by society, led to a broadening of forest policy objectives. The 1967 Forestry Act provided legislative changes to enable greater focus on recreational and environmental objectives. The Wildlife and Countryside Act 1981, and the 1985 “balancing duty”, put in place mechanisms to implement these objectives. By the early 1990s, multi-purpose forestry was firmly established as Government policy, based on the cornerstone of sustainable forest management. Since then, the range of objectives to which forestry contributes has increased further, including rural development (although this had also been the case as early as the 1920s), water, public health and quality of life in both rural and urban areas. During this time, increasing focus was attached to meeting social and environmental in addition to commercial objectives. In the past 10 years, there have been two further significant developments in forest policy. First, following devolution in the UK, England, Scotland and Wales each took responsibility for their own forest policy from 2003. This also applies to the ownership and management of the PFEs under each of the devolved administrations. Second, climate change has become a major priority; trees and woodlands (and wood fuel and wood products) offer a cost-effective mechanism for greenhouse gas (GHG) abatement and for adaptation to the impacts of a warming climate (Read et al. 2009).

2.2 In recent years, forest policy for England has been set out under a forestry strategy, amended periodically in line with policy developments. The Coalition Government, elected in May 2010, has applied a principle that Government should do only those things which only Government can do. Defra has examined whether parts of Defra network’s assets could be marketed or be run better through the voluntary or private sector, while protecting key Defra outcomes.

The Forestry Commission

2.3 The Forestry Commission (FC) was established in 1919 under the Forestry Act as a GB-wide body. It is a non-Ministerial Government Department headed by a Board of Commissioners² who run the PFE in England on behalf of the Secretary of State who owns it. The duties and powers of the Commissioners are governed by the Forestry Acts. The 1919 Act gave the FC powers to acquire land to plant woodlands and to pay private landowners to plant woodlands. As a cross-border body, the Forestry Commission is accountable to, and financed by the UK Government and the devolved administrations in Scotland and Wales. Funding through Defra is used to support FC England (including the PFE in England) and FC GB.

2.4 FC GB provides advice and support to the UK Government and the devolved administrations on subjects that have been reserved at a GB level or where ministers across England, Scotland and Wales have agreed that a function is best delivered at GB level. These include research (through the FC’s research agency, Forest Research), European and International Forestry Policy; setting and monitoring standards; safeguarding the health of trees and provision of evidence and information to support policy and operational delivery. The FC has also taken a cross-GB approach to much of its work on climate change although related policy and management is devolved.

2.5 FC England is responsible for advising Defra on the development of forestry policy in England. The work of the FC in England is overseen by the England National Committee, which has statutory responsibility devolved from the Forestry Commissioners.

2.6 Delivery is undertaken by FC England through:

- Managing the PFE through its agency Forest Enterprise England;
- Advice and partnership at local, regional and national level;
- Regulation of tree felling and Environmental Impact Assessments;
- Administration of forestry related grant schemes under the Rural Development Programme.

¹ The need for wood to provide pit-props for coal mines had been a significant factor in establishing a strategic reserve. In 1957, the Zuckermann Report concluded that nuclear weapons made it less likely that there would be a lengthy war for which industrial production would be fuelled by coal.

² Following the Forestry Devolution Review, different Commissioners are appointed to sit on the national committee in each country.

Forestry legislation

2.7 The Forestry Act 1967 (“the 1967 Act”) gives Ministers the power to acquire land suitable for afforestation and to place it at the disposal of the Commissioners. The Commissioners have the powers to manage that land for the purposes of forestry. They also have a number of overarching duties such as the promotion of the interests of forestry, the development of afforestation and the production and supply of timber and the provision of recreational facilities on the PFE. In addition to their role as managers of the PFE, the Commissioners have a number of regulatory functions; for example, the regulation of tree felling and the administration of woodland grant schemes. The 1967 Act currently limits the amount of the PFE that can be transferred out of public ownership, particularly through the duty on Ministers to have regard to the national interest in maintaining and expanding forestry resources. In order for the remainder to be transferred, the 1967 Act would need to be amended to enable the Commissioners to operate more flexibly by modifying and broadening their statutory functions; allowing them to delegate their statutory functions to other bodies, in particular, the forestry management functions; and allowing Ministers to delegate their statutory functions to the Commissioners. It is proposed that these changes will be taken forward via an Order made under the Public Bodies Bill (see below) once the Bill receives Royal Assent and commences.

2.8 In 2010, the Government introduced a Public Bodies Reform Bill to Parliament. The forestry clauses in the Bill would, if enacted, allow for substantial changes to the Forestry Act, including the future of the PFE in England.

3 The Public Forest Estate

3.1 Forest Enterprise England (FE) was set up as an Executive Agency on 1 April 2003 following the Forestry Devolution Review. The Agency is part of the Forestry Commission and its role is to manage the PFE. FE's role covers the provision of environmental, social and economic benefits from the forests that it manages. It employs about 850 staff in terms of FTEs on the PFE.

3.2 Approximately 80% of the PFE is owned as freehold, and the remainder as leasehold. It covers a wide range of woodland types and these have different emphases in terms of management objectives. These objectives have focused increasingly on the provision of social and environmental benefits (public goods), and has many highly valued sites in terms of biodiversity, recreation and landscapes. As well as commercial woodlands developed largely for timber production, there are major recreation sites offering specialist facilities (mountain-biking, horse-riding, visitor centres, wildlife observation), a much larger number of recreation sites without specialist facilities but with infrastructure such as car-parks and paths, and sites where nature conservation is of prime importance. It important to note the multi-purpose nature of individual sites; for example, specialist recreation takes place in forests where timber management is also important. No woodland is entirely of commercial value or of a single non-market value.

3.3 Since the 1980s, there have been ongoing programmes to dispose of woodland on the PFE, particularly those that offer commercial potential or that do not help to meet policy objectives. Some acquisitions have taken place at selected sites in support of policy objectives – particularly in urban and peri-urban areas. These have either been through purchase (in the minority of cases, using funding from the Capital Modernisation Fund) or through leasing of local authority woodlands (at their request). The overall pattern in recent years has been a substantial reduction in the size of the PFE – from 300,000 hectares in the early 1980s to 258,000 hectares in 2009 – with a greater focus on sites of high landscape, environmental and recreational value.

3.4 FE manages the PFE to internationally recognised standards, carrying out a wide range of activities requiring specialist expertise. This reflects the breadth of its management objectives and the diversity of woodland types on the PFE. The information in Box 1 describes the PFE and shows where differences exist (at an aggregate level) between the PFE and privately-owned woodlands.

Box 1 – Characteristics of the PFE in England

- The average size of woodlands on the PFE is considerably higher than in privately owned woodlands. Mean woodland size is 144.7 hectares on the PFE compared to 13.9 across all other woodlands (NIWT 1998).
- The PFE is managed for multiple objectives (including timber, recreation and biodiversity conservation). This contrasts with some non-FC woodlands, many of which are under very little management; although many other forest owners do manage under multiple objectives (EFTEC 2010).
- The PFE is nearly all covered³ by long-term Forest Design Plans based on consultation and examination of different factors affecting the potential for public benefits.
- FE is currently the largest producer of timber in England. As more of the private forest estate reaches maturity in the next 10 years, the private sector share of softwood availability is forecast to increase from 58% in 2007-11 and 2012-16 to 61% in 2017-21 and 65% in 2022-26. However, private forecast availability is different from actual production. In actual softwood production, the private sector contributes only about 34% (Forestry Commission 2010) because it harvests significantly less than the quantity that it could. The wood processing industry benefits from the fact that FE timber is placed on the market in a predictable way, as set out in published forecasts; this helps the industry plan new investment programmes.
- All of the PFE is certified under the Woodland Assurance Standard (which meets international certification standards under the Forest Stewardship Council and the Programme for the Endorsement of Forest Certification (PEFC)). Approximately, 15% of non-FC woodlands are certified (Forestry Commission 2010). While not having a significant effect on prices, certification has become increasingly important in securing access to some timber markets.
- The PFE has greater levels of public access. While covering 18% of woodland area in England, the PFE includes about 44% of accessible woodland and has over 40m visits each year⁴.
- The FC makes significant investments and expenditures on the PFE that may not be incurred by some other owners, particularly those who do not encourage public access or who do not manage their woodlands actively (EFTEC 2010).
- The PFE has many important sites for nature conservation. About 25% of the PFE (67,800 hectares) is designated as Sites of Special Scientific Interest (SSSIs), 98% of which are in target condition (favourable or recovering). Approximately 20% of the PFE is ancient woodland and a programme is ongoing to restore 36,000 hectares of PAWS⁵ across all England by 2015. The PFE also contains a significant areas classified as red squirrel reserves as well as 9,000ha of National Nature Reserve (NNR) land⁶.
- The PFE provides a disproportionate amount of the ecosystem services generated by woodlands in England. Ecosystem services on the PFE have recently been valued at around £600 million per year (EFTEC 2010). This figure has not been compared directly to the privately owned estate, but work based on Willis *et al.* (2003) estimated that the recreation, biodiversity, landscape and carbon sequestration value of the entire forest estate in England is £1,800 million per year (in 2008 prices). This would suggest that the PFE in England delivers in the region of a third of the ecosystem service benefits on just under one fifth of the total forest estate. All these estimates relate to ecosystem services which it has been possible, to date, to value in monetary terms. They do not cover all ecosystem services; others include, for example, benefits in water catchments. A systematic analysis is provided by EFTEC (2010).

³ About 4% is not covered by Design Plans, where it has been agreed with regulatory authorities that plans are not needed because no work that requires approval is proposed.

⁴ <http://www.forestry.gov.uk/website/forestry.nsf/byunique/inf-d-7rufp5>

⁵ PAWS – Plantations on ancient woodland sites

⁶ Forestry Commission (2009), Forestry Statistics – Environment,

<http://www.forestry.gov.uk/website/forstats2009.nsf/LUCContents/AAB059DCBB5D12B78025735D0031F6C1>

3.5 The PFE has broadened the range of activities that take place on its estate. In 2006, A Regulatory Reform (Forestry) Order (RRO) 2006 amended the Forestry Act 1967 and the Countryside Act 1968 to allow the Commissioners to provide facilities for tourism, recreation or sport on land placed at their disposal, in England, by the Secretary of State, and to charge in connection with those facilities. The RRO in 2006 also permitted the Commissioners to delegate their power to charge and makes any arrangements entered into between the Commissioners and another person (i.e. a “joint venture”). Activities (some of which are managed through joint ventures/leases) include:

- Visitor centres, cafes;
- Go-Ape (high wire forest adventure);
- Forest Holidays;
- Mountain bike hire and provision of mountain bike trails;
- Motor sport (rallies);
- Orienteering;
- Forest schools;
- Arboreta/forest gardens;
- Sales of Christmas trees and venison;
- Live music;
- Wildlife events (e.g. fungi forays, deer safaris, tree identification);
- Arts/craft events (e.g. bushcraft, willow weaving, coppicing); sculpture trails;
- Historic/archaeological walks.

3.6 The range of woodland types on the PFE means that different parts of the PFE may be attractive to different owners and suitable for different approaches for sale and/or transfer from public ownership; for example, those woodlands where a large proportion of benefits are currently non-marketable may be more suited to transfer to NGOs and community groups than to open market sales to purchasers with largely commercial objectives.

The current PFE business model

3.7 The timber operations on the FC estate return a net surplus, the size of which is determined in part by the timber prices. In 2009/10 Forest Enterprise England’s operating income was £54m with an operating expenditure of £53m resulting in £1m operating surplus (from 2009/10 accounts). With regards to recreation, conservation and heritage, Forest Enterprise England’s expenditure was £32m with an income of £15m. The net cost of recreation, conservation and heritage activities was therefore £17m. This is in line with economic theory that public benefits require government sector intervention for their provision.

3.8 FE relies primarily on revenues from the sale of timber and its leisure/recreational offering to cover its wider overall cost base. The deficit described above has been met in part in recent years by a programme of asset sales and ‘gap funding’ from Defra. A programme of restructuring is in place over several years to remove the deficit by reducing costs and maintaining revenue-earning activities.

3.9 The scale of the PFE provides opportunities for economies of scale, and offers greater certainty concerning the supply of timber and other goods and services. The PFE can also be managed flexibly to mitigate against risks, such as the spread of pests and diseases. The current approach to the management of the PFE is to encourage the development of private sector activity on its holdings. As a result, substantial business interests have developed on the PFE, in activities such as recreation, tourism and forest management.

3.10 Much of the management activity to support biodiversity goes beyond that which is required under legislation. As shown above, the entire PFE is certified under the Woodland Assurance Standard. The same approach applies to the provision of recreation facilities. The level and standard of recreational facilities provided on the PFE are significantly above that required under the CRoW Act.

4. Rationale for intervention

4.1 The underlying principle of the Coalition Government for any Government intervention is to ensure that Government does only what Government can do. With regard to forestry, it aims to maximise the benefits that civil society, businesses and individuals derive from England's woodlands. The proposals in the consultation document accompanying this IA are based on the premise that changing ownership and management of the PFE to the private, charitable and community sectors offers potential to achieve public benefits at lower cost and to generate investment and revenue-raising opportunities.

4.2 Government intervention in forestry can take different forms. It can encourage private sector behaviour in forestry that supports policy objectives. It can also manage woodlands directly where it has either direct ownership or control. Therefore, ownership and management of the PFE is one of a number of forms of Government intervention, others including regulation and the provision of incentives and information.

4.3 Recent analysis (CJC Consulting 2003) cites three main reasons why Government intervenes in forestry.

- I. International and EU obligations which require intervention by the Government.
- II. When market failures exist which prevent market mechanisms alone from being able to allocate resources in an economically efficient way to maximise net benefits to society. The key example is the provision of outputs that are public goods and/or externalities⁷.
- III. The requirements of Government policy agendas. Forestry could either be a mechanism to assist in delivering other policy objectives (for example, on sustainable development, rural development, urban regeneration, renewable energy or public health) or be a target of another policy objective (e.g. favourable condition of SSSIs).

International and EU obligations

4.4 England is subject to international and European obligations with regards to forestry – these include EC Directives on plant health, plant reproductive material, habitats, water, Environmental Impact Assessments, and the Rural Development Regulation. The European and Mediterranean Plant Protection Organisation and the International Plant Protection Convention also place obligations/requirements on countries in relation to plant health (e.g. plant pests and diseases).

Public goods and externalities

4.5 Public goods provided by forestry include open access and recreation, biodiversity, landscape benefits and other ecosystem services. Climate change mitigation and adaptation are also important objectives although the value of carbon can be captured more readily in markets than other social and environmental goods and services. Some carbon values are now being captured through woodland creation in the private sector but, not at this stage, on the PFE. Under the current plan for the PFE the value of the flow of benefits from the PFE is estimated to be around £600m per year (the associated costs are £44m per year resulting in a net benefit flow of just under £560m per year (EFTEC 2010)).

4.6 As well as regulation (e.g. the control of felling by the FC), direct provision (as on the PFE) and paying for their provision (e.g. under the woodland grant scheme), a further option for Government to provide public goods is to establish markets, for example in ecosystem services. Government has an important role in ensuring that such markets operate effectively. Work has been undertaken to investigate such opportunities. A study tour in 2007 examined current practice in the USA (see Valatin and Coull 2007). However, the extent to which different ecosystem services can be provided through market mechanisms varies. Some are pure public goods (e.g. biodiversity) while others (e.g. recreation) can be quasi-public goods and are, therefore, easier to capture in markets. At present, the development of markets for ecosystem services is generally at a relatively early stage although there are well-known examples that suggest further potential (see <http://www.defra.gov.uk/environment/policy/natural->

⁷ Public goods are goods that are non excludable (i.e. owners cannot stop others from consuming the good) and non rival (i.e. one person's consumption of a unit of the good does not prevent another person also consuming the same unit of that good). Markets may have difficulty supplying public goods because businesses are unable to prevent people enjoying the good for free and because one person's 'consumption' of the good does not stop someone else consuming it. Markets may also be inefficient where externalities occur whereby a particular activity produces costs or benefits that are not directly priced in the market – businesses, therefore, have no financial incentive to take account of this externality.

[environ/documents/payments-ecosystem.pdf](#)). Over time, this could provide an income source for owners for the provision of public goods.

Government policy agendas

4.7 Forestry contributes public benefits associated with other policy agendas. For example, physical activity through forest recreation can contribute to government objectives to increase the public's level of physical activity in order to reduce the burden on the NHS. Timber and woodfuel production can support objectives for renewable energy and a low carbon economy (in relation to timber framed buildings etc). In addition, the PFE is subject to policy interventions and restrictions with respect to issues such as biodiversity. For example, the PFE consists of 9,000ha of NNRs and 80,000ha of SSSIs and as such is subject to the policies related to these high biodiversity value designations.

Summary

4.8 Government intervention in forestry is required in order to comply with international policy, to provide public goods such as recreation and biodiversity and to contribute to wider policy agendas. Ownership and management of the PFE is one of a number of forms of Government intervention to date, others including regulation and the provision of incentives and information. This Impact Assessment examines the economic implications of proposals to switch the ownership and/or management of the PFE from the state to the private sector and civic society.

5. Policy Objective

5.1 The objective of the policy is to minimise the role of the state in forestry and woodland ownership and management and increase the role of the private sector and civil society whilst ensuring that woodlands continue to provide a wide range of public benefits and support and develop a competitive, thriving and resilient forestry sector.

5.2 The PFE is composed of over 1500 woodlands of varying sizes. Some sites will have few public benefits and others will be very important in terms of public benefits. The analysis in this Impact Assessment is based the assumption that the current level of public benefits will be maintained in line with the policy objective.

5.3 The following objectives of the Government underpin the proposals in this Impact Assessment. The government will seek:

- to protect and enhance biodiversity to contribute to a network of wildlife corridors across England;
- to maintain public access for recreation and leisure;
- to ensure the continuing role of the woodlands in climate change mitigation and adaptation;
- to protect nationally important landscapes.

5.4 The government will seek to achieve these objectives through a number of routes:

- the current woodland regulations (see annex 2);
- the sale of leases rather than freeholds; and,
- the involvement of charities and community groups.

6. Selection of Options

6.1 In developing the options for this IA, a range of potential approaches for reducing state ownership and management of woodlands was identified. These included continuing open market sales, establishing a new corporate vehicle (such as a Forestry Unit Trust), a charitable body or mutual body and joint ventures.

6.2 A shortlist of three potential models was subsequently selected (see para. 7.1). Analysis of the potential models by officials in DEFRA, HMT, FC and the Shareholder Executive, and of woodland character by the FC, concluded that there is no one-size-fits-all solution and that, therefore, different approaches would have to be applied on different parts of the PFE.

6.3 In order to establish how much woodland could be allocated to each of the options considered in this IA the FC conducted analysis of woodland character for all woodlands on the PFE (see Annex 4 for detail on methodology) using parameters such as future timber production, conservation designations and areas within National Parks, visitor numbers and proximity of population. This analysis divided the PFE into four broad woodland types:

- Large commercially valuable forests and woodlands which have commercial timber operations and can have other profitable non-timber activities, or the potential to develop them. These forests generally provide low to moderate levels of public benefits whose management is integrated with timber production.
- Small commercially valuable woodlands which typically have timber production potential and other commercial opportunities, such as sporting use. Levels of public benefits are generally low or moderate, but may include conservation features, such as ancient woodland sites, and informal use by local walkers, cyclists and horse riders.
- Multipurpose forests and woodlands which combine timber production with significant recreational facilities, high visitor numbers and high levels of biodiversity.
- The heritage and community forests and woodlands which provide high public benefits often associated with their particular landscape and biodiversity character, high levels of recreational access and active community involvement.

These woodland types were examined against the three categories of options (i.e. large commercial, community and heritage) to assess how much land could potentially be allocated to each of the options. As there are four woodland types above but three categories within which options are assessed there is considerable uncertainty about the area of woodland that is allocated to each category. However, for illustrative purposes in this IA, fixed percentages are used in the calculations.

7. Description of options

7.1 Proposals for three complementary approaches to disposing of the PFE are examined.

- (a) Transfer of large scale commercial timber sites to the private sector through long-term leases (e.g. 150 years) while retaining, as landlord, mechanisms to safeguard key public benefits.
- (b) Sale and/or lease (including under proposals for "community right to buy") to community or civil society of some multi-purpose, environmental and community woodland sites.
- (c) Transfer of ownership or management of remaining large scale heritage sites (e.g. the New Forest or Forest of Dean) to existing or new charitable Trusts to be run for their wide range of public benefits.

7.2 It is estimated that the three approaches above could be applied to about 75% of the PFE. The remaining 25% of the PFE is not examined in this IA for two reasons. First, 20% of PFE land is currently leased from freeholders and it is estimated that approximately half of those freeholders may be unwilling to see a change in ownership. Therefore, it is estimated that 10% of the current PFE will not be covered by the options set out above and would have to be retained. Second, SR10 announced proposals to dispose of 15% of the PFE and this area is also not examined in this IA.

7.3 Each method is assessed against a baseline 'business as usual' option and, for comparison, an open market sale option. Open market sales would extract the potential value of PFE woodlands for their timber and for wider social and environmental purposes. For example, potential markets in ecosystem services may attract interest from utility and other companies seeking to enhance water supplies.

8. Assumptions

- 8.1 The following assumptions have been made in carrying out the assessment of costs and benefits.
- 1) *Allocation of woodlands to different approaches to disposal.* For the purposes of the analysis, approximate proportions of the PFE have been applied to each proposal. However, there is potential for these proportions to change significantly, and they should be treated with caution.
 - 2) *Book Value of the Estate.* Book values are used as the basis for estimating potential revenues from disposals of some types of woodlands. However, for other types of woodland, the book value is effectively redundant, and reduced or even zero revenues have been assumed accordingly in some parts of the analysis. The approach taken is explained under each of the options in section 7.
 - 3) *Time frame.* The appraisal is run over 20 years for each model. The transition period is assumed to be 10 years. It is assumed that leases/sales/transfers take place evenly over 10 years.
 - 4) *Economic impacts.* The total net economic impacts of each option are identified. However, most of the costs and benefits are transfers between sectors (e.g. from the private sector to the Government) and do not directly generate an overall societal net cost or net benefit. Therefore, the costs and benefits are also set out as 'gross' impacts on different sectors (e.g. Government, buyers/lessees, the timber industry, civil society) in order to show changes in the distribution of costs and benefits.
 - 5) *Income generation.* Where woodlands are sold (to the private or civil society sector), it is assumed that new owners would exploit the same income-generating opportunities to provide public goods (i.e. £13.7m, equal to the FC's current income on recreation, conservation and heritage). It is assumed that the costs of providing these goods are equal to the revenues they generate. It is also assumed that new owners would continue to generate the same levels of timber revenue (currently £13.1m per year). Thus, the benefits (and costs) of providing timber and public goods are transferred from the Government to the private and/or civil society sectors. It is expected that some new owners may exploit additional commercial opportunities relating to these markets, but that others may not wish to enter either market and, therefore, withdraw the services/products or provide them over different timescales (e.g. selling timber earlier or later).
 - 6) *Eligibility for England Woodland Grant Scheme (EWGS).* The transfer of ownership from the public to the private sector means, under all options, that the estate is eligible for EWGS grants (under the Rural Development Programme for England) which potentially amount to £12m across the whole estate. It is assumed that any grants offered are taken up. This may not be the case as owners may feel the grant levels are not high enough or may not want to provide the public goods for which the grants are intended.
 - 7) *Protection of public goods.* It is assumed that the current regulatory regime for forestry continues. Therefore, land that moves to new owners would be subject to these regulations, ensuring the provision of a certain level of public good provision. More detailed information on the current regulatory regime can be found in Annex 2.
 - 8) *Cost of providing public benefits.*
 - a. It is assumed that additional grant payments are equal to the cost of providing public goods once income from recreation and RDPE grants have been subtracted
 - b. EWGS grants would not provide the same amount of public benefits as currently provided on the PFE. Therefore, additional funding above the £12m⁸ of EWGS grant would be needed to provide public goods at the current PFE levels.
 - c. In view of 8a, it is assumed that measures are taken to secure public goods above the level supported by the EWGS.
 - i. Where land is sold or transferred, it is assumed that additional incentive measures are put in place so that public benefits are maintained.
 - ii. Where woodlands are leased, it is assumed that lease conditions will require lessees to provide public goods in compliance with those conditions. This is

⁸ This estimate is based on an analysis by the Forestry Commission of the types of woodland on the PFE and the types and levels of grant payments for which they would be eligible.

assumed to remove some of the potential burden on the Government to pay for those public goods through grant support to the new owners.

- iii. It may be expected that charitable organisations may pursue objectives that support the provision of public goods. It has not been possible to make any assumptions about the monetary effect that this may have.
- 9) *Cost effectiveness.* It is assumed that the private sector is able to provide the same level of public goods at the same cost as FE. Therefore, if £29.3 million is spent currently on public goods on the PFE, £13.7m is received from recreational income and £12 million of EWGS grant funding would be available to the private and/or civil society sector following disposal of the PFE, then £3.6 million would be needed to fill the gap and maintain public benefits at their current level. This may not hold true if the efficiencies of public and private sector provision are different. For example, there is an arguable case that the PFE may benefit with regards to economies of scale when providing public goods, that private sector operators will apply particular focus to efficiency savings and that charities and community groups can utilise volunteering and donations etc. For example, The National Trust is a charity and is completely independent of Government, they rely for income on membership fees, donations and legacies, and revenue raised from their commercial operations. They have over 3.6 million members and 55,000 volunteers, more than 14 million people visit their pay for entry properties, while an estimated 50 million visit their open air properties. (from <http://www.nationaltrust.org.uk/main/w-trust/w-thecharity.htm>). However, information is not currently available on the relative economies of scale and efficiencies of the PFE and the new ownership and management models examined here. More detailed evidence on the provision of public benefits under all the models is required.
 - 10) *Market capacity.* Expert advice from private sector land agents indicates that the market for woodlands could absorb the sale of 10,000 hectares per year⁹ without flooding the market (and incurring sharp falls in prices). There is greater uncertainty about any market effects that may arise if larger leasing packages are put to the market although there is evidence of further demand for leasing of woodlands. Sale packages would be determined by experts in the FC and externally.
 - 11) *Tax implications.* No account has been taken at this stage of tax revenue implications for Government. It is possible that, where woodlands are sold, increased use would be made of tax allowances (e.g. Inheritance Tax exemptions) available to private sector owners. The transfer of the PFE to charitable bodies would also have tax implications.
 - 12) *GHG effects.* It is assumed that the capacity of woodlands to sequester and store carbon is similar across all options. This is because none of the options involves afforestation or deforestation, two activities that would have major carbon impacts. It is possible that there would be some variation in carbon impacts between different models assessed here because they would involve different management practices. However, it is not possible to assess these impacts at this stage without further detail on management practices under the different models. Further discussion of potential carbon impacts is provided in Annex 8.
 - 13) *Transition costs.* At this stage the only transition cost quantified is a fixed rate for professional (e.g. land agent) fees. This is charged at 5% of the value of the sale of the land. It is assumed that the entire 5% is the resource cost of this activity, however in reality some of this would be rent but it has not been possible to estimate this. All options will incur transition costs including staff redundancies, TUPE and in some cases additional legal costs. The cost will be highly dependent on the exact nature of the options undertaken, the number of transactions, the individual site etc. Further analysis is needed in order to establish these costs.
 - 14) *Net Present Values* – no net present values have been presented as not all costs and benefits have been quantified and therefore the NPV figures would not fully represent the potential impact of the options.

⁹ This is not above the 40000 hectares of sales agreed for SR10

9. Costs and benefits of each option (including administrative burden)

9.1 The options have cost and benefit implications – both transitory and ongoing - for the Government, the private sector, civil society (NGOs, community groups and the wider public), the environment and the rural economy. It has not been possible to quantify all costs and benefits at this stage and therefore quantified costs and benefits should be viewed as a partial assessment. In line with government objectives, it is assumed that public benefits are at least maintained.

9.2 Cost and benefits can be divided into three categories: those which can be quantified and monetised and have been for this IA; those which may be quantified and monetised but have not been for this IA and those for which quantification and monetisation is not possible.

Costs that have been monetised in this IA are:

- Some transition costs of implementing disposals (professional (e.g. land agent) and legal fees on lease/sale/transfer transactions);
- Ongoing costs of managing proposals after implementation (e.g. lease management costs);
- Costs to buyers of purchasing/leasing woodlands;
- Forest management operations (whether on publicly or privately owned land);
- Costs of providing public benefits (recreation, biodiversity).

Potential costs which may be monetised but have not yet been quantified include:

- Other transition costs (e.g. further legal and professional, administration, restructuring impacts shared services in Information Services, Human Resources, Finance);
- Staffing costs (see para 6.1, indent 10);

Benefits that have been monetised in this IA are:

- Sale and leasing revenues to Government
- Revenues from timber and other commercial activities, including recreation
- Benefits to owners of grants

Potential benefits which may be monetised but have not yet been quantified

- Increases in profitability for commercial woodland
- Increases in revenue raising capacity (e.g. from exploitation of commercial activities)
- Increases in efficiency (i.e. reduction in the cost of producing timber or public benefits with the same level of output)
- Public benefits (e.g. recreation, biodiversity, landscape, climate change mitigation/adaptation)
- Increases in volunteering, donations etc.

Benefits for which monetisation is not possible

- Increases in local community involvement

9.3 It has not been possible to assess any impact on the rural economy of the options. It is also difficult at this stage to assess the impacts of the proposals on cost effectiveness and efficiency. On the one hand, the scale of the PFE, and its associated planning capabilities and adaptability, suggest that it offers economies of scale which impact positively on its cost-effectiveness. On the other hand, private sector provision can also offer opportunities for efficiency gains on commercial activities and community and charities can draw on local resources for funding and volunteering etc. Stronger evidence on the relative cost-effectiveness of PFE and the private sector is required, taking into account spending on both commercial activities and public goods.

9.4 The cost-benefit analysis is applied separately to large scale commercial timber sites, high value local sites and large-scale heritage sites, as described in para. 6.3.

9.5 The methodology for allocating annual revenues and costs to different woodland types can be found in Annex 5.

Large scale commercial timber sites

9.6 Based on the analysis of the PFE described in para. 4.2, if there were in the region of 110,000 hectares of large scale commercial timber land, this would cover approximately 42% of the PFE. Three options are examined for these woodlands, and are compared to 'business as usual' on the PFE.

- leasing to private sector operators;
- open market sale; and,
- open market sale with expanded CRoW designation.

9.7 Under the 'business as usual' option, if the 110,000 hectares were retained in the PFE, it is estimated that these woodlands would cost £6.7 million per year to run and generate timber income of £10.5 million, and recreational income of £2.7 million per year.

Option 1a - Leasing

9.8 Long-term leases (possibly as long as 150 years) would be sold to the private sector, generating receipts for Government. Advice from market experts is that lease values are between 50% and 90% of freehold sale values. Lessees may include investors (e.g. pension funds), utility companies, the timber industry, and consortia of timber-dependent businesses.

9.9 The Government would set lease conditions for access and/or environmental management that go beyond the legislative minimum. These conditions would protect public benefits, for example by ensuring continued certification of timber supplies or ensuring mountain bikers, horse-riders or dog-walkers continue to enjoy access.

9.10 The lease conditions would aim to strike a balance between generating revenues and sustaining public benefits. Leases would be set up during the SR10 and SR15 periods, with parcels of land packaged together to maximise returns. Further expert advice will be required to draw up a detailed implementation plan.

9.11 It is estimated that the sale of leases would generate between £140 million and £250 million of revenues, of which about 5% would be paid in professional (e.g. land agent) fees (between £7 million and £12.5 million). It is anticipated that there would be residual ongoing costs of about £6 million a year, comprising about £5 million in grants and about £1 million a year in managing leases.

9.12 At present, it has not been possible to quantify and monetise all the potential costs and benefits of this option. Table 9.1 summarises the costs and benefits to government and buyers of this option for which monetisation and quantification has been possible at this stage. Scenario analysis using the data currently available suggests that a positive NPV would be achieved if either commercial opportunities could be exploited that generated at least a 13% increase in revenues or if efficiencies in forest management could be achieved that resulted in at least a 25% reduction in costs. In practice, a combination of efficiencies and revenue generation would be more likely. The detail of the data that have been used to produce this table can be found in annex 6.

Table 9.1 Summary costs and benefits of leasing large scale commercial woodland (£m)

	Government			Buyers			Total		
	low	medium	high	low	medium	high	low	medium	high
Costs									
Annual Transition	0.7	0.98	1.26	0	0	0	0.7	0.98	1.26
Avr. annual (ex transition)	19.2	19.2	19.2	20.7	26.3	31.9	40.0	45.6	51.2
Annual Total	19.9	20.2	20.5	20.7	26.3	31.9	40.7	46.5	52.4
Net Present Cost (NPC)							593.8	678.6	763.4
Benefits									
Average annual (ex transition)	20.7	26.3	31.9	18.2	18.2	18.2	39.0	44.6	70.9
Annual Total	20.7	26.3	31.9	18.2	18.2	18.2	39.0	44.6	70.9
Net Present Benefit (NPB)							573.1	655.5	737.8

Option 1b – Open market sale

9.13 The book value of this land is estimated to be £280m (based upon average market value of £2,500/ha for 110,000 ha). It is assumed under this option that the book value reflects the actual market value. It is also assumed that short term revenue receipts and sales would be maximised by packaging sales as appropriate. Buyers may include investors (e.g. pension funds), utility companies, the timber industry, and consortia of timber-dependent businesses. Approximately 5% of revenues would be paid in professional (e.g. land agent) fees, about £14 million.

9.14 As stated in assumption 5 (of section 6) (and detailed in Annex 2), the current regulatory framework would sustain a certain level of public benefit provision, although below the current level of provision on the PFE. It is assumed that grants available under the EWGS for these woodlands would amount to approximately £5 million¹⁰. Given that the current cost of running these woodlands is estimated to be £6.7 million, further funding would be needed to sustain the provision of public goods. For example, it is assumed that additional payments would be needed to incentivise new owners to maintain any access arrangements currently in place that are above that protected under CRoW. This additional funding is estimated to be £2.0 million per year to cover the difference between expenditure and revenues on recreation provision¹¹.

9.15 At present, it has not been possible to quantify and monetise all the potential costs and benefits of this option. Table 9.2 summarises the costs and benefits to government and buyers of this option for which monetisation and quantification has been possible at this stage. Scenario analysis using the data currently available suggests that a positive NPV would be achieved if either commercial opportunities could be exploited that generated at least a 7% increase in revenues or if efficiencies in forest management could be achieved that resulted in at least a 14% reduction in costs. In practice, a combination of efficiencies and revenue generation would be more likely. The detail of the data that have been used to produce this table can be found in annex 6.

Table 9.2 Costs and benefits of open market sale for commercial woodland (£m)

Costs	Government	Buyers	Total
Annual Transition	1.4	0	1.4
Average annual (ex transition)	20.2	34.7	55.0
Annual Total	21.6	34.7	56.4
Net Present Cost (NPC)			820.5
Benefits			
Average annual (ex transition)	34.7	20.2	55.0
Annual Total	34.7	20.2	55.0
Net Present Benefits (NPB)			808.5

Option 1c – Open market sale with extended CRoW designation

9.16 This option is the same as 1b but has extended CRoW designations. In order to prevent any loss of access to groups such as cyclists and horse riders, the current permissive access granted on this land under CRoW could be extended to cover wider access uses before sale, thus ensuring their provision following an open market sale. As for option 1b, eligibility for EWGS grant would be approximately £5 million but the extended CRoW designations is assumed to largely remove the need for further Government funding to support public goods, albeit that CRoW would only protect public goods relating to access. In effect, the £2 million of additional Government funding provided under option 1b would, under this option, have to be sourced by the new private sector owners.

¹⁰ Based on an assessment of grant eligibility by the FC

¹¹ This explains why £2.0 million rather than £1.7 million would be required.

9.17 This would protect existing access arrangements but is expected to reduce the price that buyers are willing to pay for woodlands. Expert advice from land agents is that an expanded CRoW designation could have a similar effect on prices as applying leasing conditions. Therefore, it is assumed that the sale value would be reduced by 50-90%, meaning that estimated receipts would be between £140 million and £250 million. Professional (e.g. land agent) fees of 5% would amount to £7-12.5 million.

9.12 At present, it has not been possible to quantify and monetise all the potential costs and benefits of this option. Table 9.3 summarises the costs and benefits to government and buyers of this option for which monetisation and quantification has been possible at this stage. Scenario analysis using the data currently available suggests that a positive NPV would be achieved if either commercial opportunities could be exploited that generated at least a 5% increase in revenues or if efficiencies in forest management could be achieved that resulted in at least a 10% reduction in costs. In practice, a combination of efficiencies and revenue generation would be more likely. The detail of the data that have been used to produce this table can be found in annex 6.

Table 9.3 Summary of costs and benefits of open market sale with extended CRoW provisions for commercial woodland (£m)

	Government			Buyers			Total		
	low	medium	high	low	medium	high	low	medium	high
Costs									
Annual Transition	0.7	0.98	1.26	0	0	0	0.7	0.98	1.26
Average annual (ex transition)	18.2	18.2	18.2	20.7	26.3	31.9	39.0	44.6	50.2
Annual Total	18.9	19.2	19.5	20.7	26.3	31.9	39.7	45.5	51.4
Net Present Cost (NPC)							579.1	663.9	748.7
Benefits									
Average annual (ex transition)	20.7	26.3	31.9	18.2	18.2	18.2	39.0	44.6	50.2
Annual Total	20.7	26.3	31.9	18.2	18.2	18.2	39.0	44.6	50.2
Net Present Benefits (NPB)							573.1	655.5	737.8

9.19 Table 9.4 shows the net present costs and benefits of the three options compared to business as usual. The table shows that benefits for CRoW and leasing are the same and that they are both lower than open market sale. This is because under CRoW and leasing the benefits to government are lower (as they receive a lower revenue from the sale than through the open market sale) and also because the buyer receives a lower level of grant from the government as the lease and CRoW mean they will provide the public benefit without government having to pay for it. Therefore, the total benefit is lower.

Table 9.4 Summary of options for the large scale commercial woodlands (£m)

	Net Present Cost			Net Present Benefit		
	low	medium	high	low	medium	high
Leases	593.8	678.6	763.4	573.1	655.5	737.8
Open Market Sale	n/a	820.5	n/a	n/a	808.5	n/a
Open Market Sale with extended CRoW provision	579.1	663.9	748.7	573.1	655.5	737.8

Community and small woodlands valued for their amenity, cultural or natural value

9.20 Based on the analysis of the PFE described in para. 4.2, if there were in the region of 20,000 hectares of community and small woodlands that are valued primarily for their amenity, cultural or environmental qualities, these would cover approximately 8% of the PFE. The book value of these woodlands is estimated to be about £50 million (based on an average market value of £2500 per hectare).

Two options are examined for these woodlands, and compared to a 'business as usual' approach on the PFE:

- community or civil society groups receive preference to buy (or lease) woodlands; and,
- open market sale.

9.21 *Under the 'Business as usual' option*, if these woodlands were retained in the PFE, it is estimated that they would cost £5.1 million per year to run and generate timber income of £0.7 million and recreational income of £2.1 million per year.

Option 2a – sale, lease or transfer to community and civil society groups

9.22 Community or civil society groups would be given a first option to buy (or lease) woodlands and be encouraged to submit bids under CLG's "community right to buy" proposals for sites that are made available under open market sales.

9.23 It is expected that this approach would yield receipts in the region of £50 million with approximately 5% (£2.5 million) being paid in professional (e.g. land agent) fees. Residual on-going costs to the exchequer are estimated to be about £3 million per year, associated with grant payments for the management of these woodlands. These grant payments plus the income from recreational activities equal the cost of managing these woodlands on the PFE which is about £5.1 million per year. Therefore, under the assumptions in this IA that income-generating opportunities would be continued by new owners/managers, no further grant payment would be required to ensure the provision of public goods in these woodlands.

9.24 This option applies to some of the most environmentally valuable sites for which there may be demand from NGOs and to some woodlands that have a high amenity and/or community value for which there may be demand from local communities. Further analysis (using responses from the public consultation) will be carried out to establish the eligibility criteria for such woodlands.

9.25 At present, it has not been possible to quantify and monetise all the potential costs and benefits of this option. Table 9.5 summarises the costs and benefits to government and buyers of this option for which monetisation and quantification has been possible at this stage. Scenario analysis using the data currently available suggests that a positive NPV would be achieved if either commercial opportunities could be exploited that generated at least an 8% increase in revenues or if efficiencies in forest management could be achieved that resulted in at least a 4% reduction in costs. In practice, a combination of efficiencies and revenue generation would be more likely. The detail of the data that have been used to produce this table can be found in annex 6.

Table 9.5 Summary of costs and benefits of community sale of community woodland (£m)

	Government	Buyers	Total
Costs			
Annual Transition	0.25	0	0.25
Average annual (ex transition)	5.7	10.1	15.8
Annual Total	6.0	10.1	16.0
Net Present Cost (NPC)			234.1
Benefits			
Average annual (ex transition)	10.1	5.7	15.8
Annual Total	10.1	5.7	15.8
Net Present Benefits (NPB)			231.9

Option 2b - Open Market Sale

9.26 The book value of these woodlands is estimated at around £50 million (based on an average market value of £2500 per hectare). It is assumed under this option that the book value reflects the actual market value. It is also assumed that short term revenue receipts and sales would be maximised by packaging sales as appropriate. Professional (e.g. land agent) fees of approximately 5% (£2.5 million) would be payable on the sales.

9.27 As mentioned in assumption 6 (section 6), the current regulatory framework would ensure a certain level of public benefit provision, although below the current level of provision on the PFE. It is assumed that, as recreational income of £2.1m and EWGS grants of about £3 million equal the cost of maintenance on the woodlands no further government grants are needed.

9.28 At present, it has not been possible to quantify and monetise all the potential costs and benefits of this option. Table 9.6 summarises the costs and benefits to government and buyers of this option for which monetisation and quantification has been possible at this stage. Scenario analysis using the data currently available suggests that a positive NPV would be achieved if either commercial opportunities could be exploited that generated at least a 8% increase in revenues or if efficiencies in forest management could be achieved that resulted in at least a 4% reduction in costs. In practice, a combination of efficiencies and revenue generation would be more likely. The detail of the data that have been used to produce this table can be found in annex 6.

Table 9.6 Costs and benefits of open market sale for community woodland (£m)

	Government	Buyers	Total
Costs			
Annual Transition	0.25	0	0.25
Average annual (ex transition)	5.7	10.1	15.8
Annual Total	6.0	10.1	16.0
Net Present Cost (NPC)			234.1
Benefits			
Average annual (ex transition)	10.1	5.7	15.8
Annual Total	10.1	5.7	15.8
Net Present Benefits (NPB)			231.9

9.29 Table 9.7 shows the net present costs and benefits for this option.

Table 9.7 Summary of options for the small valued woodlands

	Net Present Cost	Net Present Benefit
Community Sale	234.1	231.9
Open market sale	234.1	231.9

Large scale heritage sites

9.30 Based on the analysis of the PFE described in para. 4.2, if there were in the region of 65 000 hectares classified as large scale heritage sites, this would cover in the region of 25% of the PFE. These are woodlands with high public benefit values, based on their biodiversity and landscape attributes and on medium or high levels of access. They consist of large ancient forests such as the Forest of Dean, the New Forest and Sherwood Forest and other smaller woodlands, as well as other habitats such as the SSSI open heathland habitats in Dorset.

9.31 The book value of these woodlands is estimated to be about £220 million. Typically, these woodlands are expensive to manage in relation to any revenues from commercial activities due to the focus on providing public benefits.

9.32 Two options are examined for these woodlands, and compared to a 'business as usual' approach on the PFE:

- an option to transfer these woodlands to new or existing charitable organisations; and,
- open market sale.

9.33 Under the 'business as usual' option, if retained on the PFE, it is estimated that these woodlands would cost £16.9 million to manage, and generate timber receipts of £1.3 million per year and recreation receipts of £6.9 million per year.

Option 3a – Transfer to charitable organisations

9.34 Charitable organisations would be offered the opportunity to take ownership or management of these woodlands as national assets that provide high levels of public benefits. This option could be implemented forward in different ways, as shown in table 9.8.

Table 9.8 Advantages and disadvantages of transferring heritage woodlands to charitable organisations.

		Existing charitable organisations	New charitable organisations
Size of organisation	Trust for each wood	Advantages: may already have on the ground experience. Can be focused on achieving local needs. Disadvantages: may be costly as lose economies of scale and access to expertise.	Advantages: charity would be specific to local needs. Disadvantages: could be costly and lack economies of scale and expertise.
	One large	Advantages: may already have backroom process etc established. Disadvantages: no single existing charity may have the appetite or expertise to manage all heritage woodlands.	Advantages: could be established to ensure aims of government is achieved. Disadvantages: may be costly to establish and costly in the long term to government if funds cannot be raised from alternative sources.

9.35 It is assumed that a number of charitable organisations would own and run these woodlands. They could operate as companies limited by guarantee with charitable status and could have commercial trading arms to allow commercial activity to develop in support of public benefit activities. This approach

would allow a wide range of public, commercial and civic society organisations with an interest in the forest estate to be involved in the new body.

9.36 The Government would not receive any revenue from the transfer of the estate to the charitable trusts. It is assumed that professional (e.g. land agent) fees of 5% would be payable on the book value, about £11 million.

9.37 It is assumed that the charitable organisation would be eligible for and would apply for all grants under the EWGS. This would amount to about £4 million per year. However, this alone would not ensure the level of public goods provided under business as usual option. It may be expected that charitable organisations will pursue public good objectives but it is assumed here that this requires financing. For example, specific payments could also be made to the trusts for the provision of specific services or outcomes. It is likely that a mix of these measures would be needed and would, therefore, incur an ongoing cost to Government. This is estimated to be about £4.7 million in addition to EWGS grant payments.

9.38 The charitable organisations would, however, have the freedom/ability to raise revenue from other sources (such as borrowing money against assets for investment, using volunteers and raising charitable donations) and thus the level of payments required from the Government may be lower than under business as usual and/or the level of public benefits may be higher.

9.39 At present, it has not been possible to quantify and monetise all the potential costs and benefits for this option. Table 9.9 summarises the costs and benefits to government and buyers of this option for which monetisation and quantification has been possible at this stage. Scenario analysis using the data currently available suggests that a positive NPV would be achieved if either commercial opportunities could be exploited that generated at least a 13% increase in revenues or if efficiencies in forest management could be achieved that resulted in at least a 6% reduction in costs. In practice, a combination of efficiencies and revenue generation would be more likely. The detail of the data that have been used to produce this table can be found in annex 6.

Table 9.9 Summary of costs and benefits of transferring heritage woodland to charitable organisations (£m)

	Government	Buyers	Total
Costs			
Annual Transition	1.4	0	1.4
Average annual (ex transition)	16.9	16.9	33.7
Annual Total	18.3	16.9	35.1
Net Present Cost (NPC)			507.9
Benefits			
Average annual (ex transition)	16.9	16.9	33.7
Annual Total	16.9	16.9	33.7
Net Present Benefits (NPB)			495.9

Option 3b - Open Market sale

9.40 The book value of these woodlands is estimated at around £220 million (based on an average book value of the New Forest of £3350 per hectare applied to 65 000 hectares of forest). However, it is considered that these woodlands are “unsellable” at a political and practical level. This option can, therefore, be seen as unviable.

9.41 Table 9.10 summarises the net present cost and benefits of the charitable organisation option.

Table 9.10 Summary of options for large scale heritage woodlands

	Net Present Cost	Net Present Benefit
Charitable organisation	507.9	495.9

10. Summary of the advantages and disadvantages/risks of the options

10.1 A brief summary of the advantages and disadvantages/risks of the different options that may be anticipated is given below. The advantages and disadvantages of options to use long-term leases and open market sales could be applied to large-scale commercial woodlands and community woodlands. In addition, paragraph 8.2 sets out risks that may apply more widely across the proposed options.

i. Long-term leases

Advantages

- The Government would remain as landlord and attach conditions to lease agreements in order to protect public benefits
- There would be significant receipts for the Government
- Timber companies are likely to continue to manage forests sustainably and to maintain certification under UKWAS in order to ensure market access for timber
- Leasing would provide further opportunities for the private sector to bring an increased commercial focus to forest management, and develop new business activities on the land

Disadvantages and risks

- Leasing generates lower revenues than open market sale, particularly where additional conditions are attached.
- Lessees may be unwilling to take on leases with conditions (or without additional payment) – for example, concerning forest management practices and timber marketing
- There would be ongoing costs of managing leases that would be borne by the FC - management of leases would need to be tightly enforced to ensure that public benefits are protected

ii. Open market sales

Advantages

- Open market sales would be expected to generate higher revenues than other options
- The Government would be free from landlord costs (e.g. lease management)

Disadvantages and risks

- Public benefits (including some forms of access) may be put at risk unless sufficient funding is provided to new owners to cover associated management costs
- New owners may not take up EWGS, further reducing the level of public good provision
- Particularly difficult to provide sufficient protection for nationally important sites

iii. Open market sales with extended CRoW conditions

Advantages

- Access for horse-riding and mountain-biking could be protected

Disadvantages and risks

- Other public benefits would remain at risk unless sufficient funding is provided to new owners

iv. Sale, lease or transfer to community and civil society groups

Advantages

- Opportunities to increase community (“Big Society”) involvement in owning and managing woodlands
- Opportunities to increase benefits of woodlands to local communities

Disadvantages and risks

- Local groups may not have resources to purchase, lease or manage woodlands

v. Transfer to charitable organisations

Advantages

- Objectives of charitable organisations may be strongly aligned to environmental and social objectives, thereby securing the provision of public goods
- Charitable status would enable trusts to raise money from other sources
- Opportunities for volunteering

Disadvantages and risks

- Charitable organisations may not have the resources or capacity to take on and sustain the management of significant areas of woodland.

Wider risks and uncertainties

10.2 Some risks may apply across different methods of disposal of the PFE.

- *Principal-agent problem.* A switch from the PFE to other forms of ownership and management raises the issue of whether this will increase the Government's exposure to principal-agent problems. There is a risk for example that the objectives of new owners may differ from those of the Government with regard to the provision of public goods. Such problems may be reduced through mechanisms such as conditions attached to leases, sales and transfers.
- *Transition costs.* There is uncertainty about the level of transition costs that may be incurred. If a large number of transactions are required to complete the programme of disposals, these costs could rise significantly.
- *Supply and demand.* This IA has drawn on forestry market expertise in assessing the proposals. Advice from land agents and forestry companies indicates that there may be significant demand for land on the PFE, although two important points arise. First, the extent to which conditions attached to leases, sales or transfers may affect demand from the private sector is uncertain. Second, further information is needed on the potential demand and capacity of charitable organisations and local communities to acquire and manage PFE woodlands.
- *Entrepreneurship.* There is some uncertainty about the effects of PFE disposal on entrepreneurship. It is anticipated that new owners and managers of woodlands may be keen to exploit the commercial potential of their woodlands in relation to both timber and other activities. There is a risk that some owners may be unwilling to develop business opportunities on their land.
- *Economies of scale.* It is possible that sale/lease/transfer of the PFE could result in higher unit costs due to a loss of economies of scale. However, it may also be expected that management activities could be contracted out by new owners to companies with sufficient scale of resources to maintain such economies.
- *Legislation.* The options in this IA depend on proposed changes to the Forestry Act that are under scrutiny as part of the proposed Public Bodies Reform Bill. If these changes do not materialise, it may not be possible to implement the options as proposed.
- *State aids.* Where transfers to community, civil society and charitable organisations are proposed, there may be state aid considerations that need to be addressed before any transfer could proceed.

11. Conclusion

11.1 The Government is committed to shifting the balance of power from 'Big Government' to 'big society'. The consultation accompanying this IA considers ways to shift this balance. Throughout this process, the Government is determined to secure the future provision of public benefits from the public forest estate (PFE) in England.

11.2 The Government aims to ensure that it intervenes in forestry in England only where appropriate and necessary. Part of the policy objective is to increase profitability of commercial woodlands and reduce net costs for running local and heritage woodlands whilst at the same time increasing public benefits through greater involvement of local communities and civil society bodies. Specifically the government will seek to protect and enhance biodiversity to contribute to a network of wildlife corridors across England, maintain public access for recreation and leisure, ensure the continuing role of the woodlands in climate change mitigation and adaptation and protect nationally important landscapes. This will be achieved through the current woodland regulations, the sale of leases rather than freeholds and the involvement of charities and community groups.

11.3 Three approaches are proposed for achieving the governments objectives (these are not mutually exclusive):

- Option 1 – Leasing of large scale commercial woodland
- Option 2 – Community/Civil Society Right to Buy of multipurpose, environmental and community woodland sites
- Option 3 – Transfer to Charitable organisation of large scale heritage sites

11.4 This Impact Assessment (IA) is a preliminary analysis of the costs and benefits of these three models to lease and/or transfer of the PFE in England into private sector and civil society ownership and/or management. It has not been possible to estimate all costs and benefits at this stage and therefore the quantified analysis presented only reflects partial estimates. Further work will be carried out through the consultation period to try and fill these gaps.

11.5 The assumptions on which this IA are based mean that the majority of costs and benefits that have been quantified are transfers between different sectors (e.g. the private sector and Government) and, therefore, do not have net impacts on society. Scenario analysis of the partial costs and benefits estimated have indicated the gains in efficiency or additional revenues (e.g. exploiting commercial opportunities) required to deliver a positive NPV.

11.6 Further research and analysis is needed through the consultation period to investigate the full costs and benefits of these options. The current gaps in evidence may require significant further investigation. Further work will be needed to examine the following:

- Transition costs and staffing costs, including legal and negotiation costs that are particular to different approaches;
- Impacts on efficiency in forest management and on profitability and revenue generation from woodlands;
- Impacts on public benefits (e.g. recreation, biodiversity, landscape, climate change mitigation/adaptation);
- Impacts of increases in local community involvement in woodlands, and from increases in volunteering, donations etc.;
- Impacts on the rural economy; and
- Impacts on carbon sequestration (it is not anticipated that the options examined in this IA would have a significant impact on the capacity of the PFE for carbon sequestration and storage, although further examination of management practices under the different models would be needed in order to verify this).

11.7 The analysis in this IA should be regarded as a first step in understanding the economic implications of the proposed options. It is not a definitive analysis.

11.8 In summary, the costs and benefits quantified in this IA only represent a partial assessment of those anticipated. Further research will be carried out through the consultation period to enable a more complete assessment of the full range of costs and benefits of the proposed options.

ANNEXES

Annex 1 should be used to set out the Post Implementation Review Plan as detailed below. Further annexes may be added where the Specific Impact Tests yield information relevant to an overall understanding of policy options.

ANNEX 1: POST IMPLEMENTATION REVIEW (PIR) PLAN

A PIR should be undertaken, usually three to five years after implementation of the policy, but exceptionally a longer period may be more appropriate. If the policy is subject to a sunset clause, the review should be carried out sufficiently early that any renewal or amendment to legislation can be enacted before the expiry date. A PIR should examine the extent to which the implemented regulations have achieved their objectives, assess their costs and benefits and identify whether they are having any unintended consequences. Please set out the PIR Plan as detailed below. If there is no plan to do a PIR please provide reasons below.

<p>Basis of the review: [The basis of the review could be statutory (forming part of the legislation), i.e. a sunset clause or a duty to review, or there could be a political commitment to review (PIR)];</p> <p>This is a consultation stage IA, once options have been decided then a post implementation review plan will be established.</p>
<p>Review objective: [Is it intended as a proportionate check that regulation is operating as expected to tackle the problem of concern?; or as a wider exploration of the policy approach taken?; or as a link from policy objective to outcome?]</p> <p>To assess whether policy objectives are being met</p>
<p>Review approach and rationale: [e.g. describe here the review approach (in-depth evaluation, scope review of monitoring data, scan of stakeholder views, etc.) and the rationale that made choosing such an approach]</p> <p>Once options have been selected, a suitable approach will be developed</p>
<p>Baseline: [The current (baseline) position against which the change introduced by the legislation can be measured]</p> <p>The business as usual approaches examined in the IA</p>
<p>Success criteria: [Criteria showing achievement of the policy objectives as set out in the final impact assessment; criteria for modifying or replacing the policy if it does not achieve its objectives]</p> <p>Achieving policy objectives</p>
<p>Monitoring information arrangements: [Provide further details of the planned/existing arrangements in place that will allow a systematic collection of monitoring information for future policy review]</p> <p>n/a</p>
<p>Reasons for not planning a review: [If there is no plan to do a PIR please provide reasons here]</p> <p>n/a</p>

ANNEX 2 PUBLIC GOOD PROTECTION UNDER CURRENT REGULATION

All private woodland owners are subject to regulations set out in the legislation including the Forestry Act. Information on this legislation and how it can help maintain some of the public benefits is described in Table A2.1.

Table A2.1 Public good protection under current regulations

Benefit	Regulation
All public goods delivered by standing trees	<p>Felling of trees - All felling of trees in excess of 5 cubic metres per calendar quarter requires a felling licence to be issued from the FC¹.</p> <p>Clear-felling - standard requirement for the site to be restocked with a similar species or a more suitable one taking account of the needs of silviculture and the environment.</p> <p>Managers of larger woodlands are encouraged to produce long term management plans (similar to Forest Design Plans currently used by the PFE), with key bodies consulted on clear-felling proposals. Long term plans involve an expectation of community comment. The UK Forestry Standard² lays out the government's approach to sustainable forestry and all proposals are expected to be consistent with it.</p> <p>Proposals for deforestation (e.g. to convert woodland to open habitat) are subject to the Environmental Impact Assessment (Forestry) Regulations. Projects likely to have significant impact would require a full environmental statement to be prepared followed by a consultation period. Current policy is a strong presumption against conversion to other land uses due to the climate change impacts, except in cases of significant net biodiversity benefit.</p>
	<p>Development - Any proposals for development on the PFE would be subject to the Town and Country Planning process.</p>
Recreation /access	<p>The majority of the freehold areas of the PFE are dedicated in perpetuity for access on foot under the Countryside and Rights of Way Act (CRoW). The relevant 'Access Authority' (County Councils or National Park Authorities) is responsible for ensuring such access.</p> <p>Linear public rights of way such as footpaths and bridleways would have the same protection as currently under the Highways Acts, administered by the relevant highway authority.</p>
Biodiversity	<p>The designated SSSI protection overseen by Natural England as afforded by the Wildlife and Countryside Act 1981.</p> <p>Species of European importance - protection under the Conservation of Habitats and Species Regulations 2010. Rare or vulnerable species commonly found on the PFE such as osprey have protection during the breeding season under Schedule 1 of the Wildlife and Countryside Act.</p> <p>Badgers and their sets - specifically protected under the Protection of Badgers Act.</p> <p>General duty under Section 40 of the Natural Environment and Rural Communities Act 2006 on all public bodies "to have regard to the purpose of conserving of biodiversity in the exercise of their functions", and specifically to conserve species listed as being of 'national importance' (commonly known as 'priority species' and covered by Species Action Plans)- relevant if land passed to another public body such as a local authority.</p>
Cultural heritage	<p>English Heritage oversee the protection of Scheduled Ancient Monuments³. Consent is required for work on any designated monument</p>

¹ 5 cubic metres is equivalent to approximately 25 telegraph pole sized trees. There are various exemptions to need for felling licence such as any felling required to implement an approved planning permission.

² <http://www.forestry.gov.uk/ukfs>

³ Ancient Monuments and Archaeological Areas Act 1979.

ANNEX 3: ENGLAND WOODLAND GRANT SCHEME (RURAL DEVELOPMENT PROGRAMME FOR ENGLAND)

Transfer of the PFE to the private and voluntary sector would mean that the new owners would be eligible to apply for support from the Woodland Grant Scheme (EWGS) under the Rural Development Programme for England. This scheme assists private woodland owners with the cost of providing specific public benefits such as improving the condition of SSSIs or ancient woodland and providing public access. The budget available for forestry measures is currently around £30m per year and this includes funding for planting new woodlands.

It is estimated that the 'eligibility' of the PFE woodlands for EWGS grants could amount to around £12m per year. This based on a detailed analysis of woodland types, associated management costs and their grant eligibility. These payments may not be sufficient to secure the level of public goods currently provided on the PFE. For example, with regard to recreation, the EWGS provides support for 'basic level' access (e.g. towards costs of paths, stiles, information signs etc.) but is not set up to support higher level recreation such as the provision of infrastructure and interpretation associated with a more active 'welcome' or of specialist activities (e.g. designated mountain bike trails, children's play areas). With regard to biodiversity, there may also be a gap between what is currently provided on the PFE and what could be supported through the EWGS, particularly at non-designated sites where legislative drivers are less significant. On this evidence, it is expected that, under private and/or voluntary sector ownership and/or management, similar levels of funding to that currently allocated to management of the PFE would be needed in order to cover the costs of public good provision at the level currently seen on the PFE. This is a key assumption that is incorporated in the cost benefit analysis.

The additional burden of £12m on the annual budget for the English Woodland Grant Scheme⁴ could be dealt with in a number of ways. First, there could be a transfer of £12m of funding that is currently given to the FC in Grant in Aid to RDPE. Second, the RDPE budget could be held constant with more rationing of funds to address the increase in claims. For example, the currently available grants could be targeted more tightly or payment rates reduced. Alternatively, the balance of funding for new woodlands versus existing woodlands could be adjusted. Whichever mechanism were adopted, current recipients and future owners of PFE would receive a lower total value of payments and the level of public goods provided would be affected. Alternatively, the funding gap between current spending on public goods on the PFE and grant eligibility could be bridged.

It should be noted that the availability of EWGS funding would not ensure that the grants are taken up and desired public goods provided. There is a risk that new owners and managers would not wish to apply for grants, either because of the time involved in the application process and/or the size of payments available. It is possible that the size of grant payments would need to be increased in order to attract new owners (with the corresponding increase in costs to the government). This would be at odds with any attempt to ration grant payments (as described above).

The administration of EWGS grants would need to be monitored to assess take-up and progress in delivering desired outcomes. This would be an additional cost to government in addition to the actual costs of the grants and their administration.

It is not known to what extent the EWGS would influence the decisions of potential owners and how many would take up the scheme as it currently stands. At present, 66% of non-FC woodland in England is under the EWGS.

⁴ It should be noted that the funding arrangements for RDPE are dependent on the outcome of SR10

ANNEX 4: METHODOLOGY FOR DETERMINING THE CHARACTER OF PFE LAND

Two main sources of data have underpinned work to characterise the PFE in order to match potential methods of disposal to different areas of woodland. These are, first, the Portfolio Analysis of the PFE and, second, the Estates Database.

1. Portfolio Analysis

The Portfolio Analysis (PA) was developed during 2009 and reviews the entire PFE landholding in England. The complete PA is maintained on the FC IT system and is accessed through the Geographical Information System (GIS). This allows sophisticated analysis to be carried out as well as enabling the information to be viewed spatially and in relation to other external factors.

Each woodland block is scored against 36 separate criteria. Attributing scores to blocks primarily used existing data held about the estate from a variety of sources. Information from FC owned and maintained datasets was augmented by information from external sources, such as Natural England and English Heritage. Local staff also contributed to the scoring process, allowing factors such as the provision of recreation facilities to be included, despite there not being a central dataset recording this information.

Analysis of the scores achieved for each block enables an understanding of the contribution different areas of land make to the overall delivery of FC and wider Government objectives. A more detailed account of the methodology used for the PA can be supplied if necessary.

The PA is a very flexible tool and is able to be used to model a wide range of scenarios in order to understand how well the PFE is matched to current policy and delivery priorities. The full list of attributes is available upon request.

2. Estates Database

Local managers maintain and update an Estates Database which ensures ready access to local knowledge and expertise in relation to each woodland block. This includes information provided by stakeholders, for example priority species data from local Wildlife Trusts.

There is a set of established selection criteria used for identifying those blocks to be included in the disposals programme to ensure consistency and efficiency in meeting financial targets and long term objectives.

The results from the Portfolio Analysis were viewed in combination with the Estates Database and used to inform and assist decision making, ensuring high level analysis is properly supported with sound local knowledge.

Potential sale values are ascribed to each block of the PFE. These are very much average values across all types of tenure, but are fundamentally an assessment of current open market value made by appointed outside specialist forestry agents. These values are updated each year, and fully reassessed every 5 years. It is worth noting that there are strong variations between the Districts, picking up on variations between local markets. However, no allowance is made for leasehold tenure, restrictions in title, or potential sale difficulties.

All sales are subject to valuation and detailed assessment by an independent professional valuer and sales agent before being released to the market.

ANNEX 5: METHODOLOGY FOR ALLOCATING COSTS AND REVENUES ACROSS OPTIONS

The allocation of monetary costs and benefits is based on an assessment by FC staff of the likely distribution of these costs and benefits across different types of woodlands. The assessment is intended to be illustrative rather than definitive. A more definitive assessment would require considerable work to assess costs and benefits of operations within and across different forest districts.

Table A5.1 Allocation of monetary costs and benefits across the IA options

		Large-scale timber land leasing	Community & civil society buyers	Heritage sites	SR10	Retained leases
Proportion of estate⁵		42%	8%	25%	15%	10%
Costs (proportions)						
Conservation		20%	15%	50%	5%	10%
Recreation		20%	15%	50%	5%	10%
Forest management		20%	15%	50%	15%	10%
PFE costs (actual: £m/yr)						
Conservation	5.6	1.1	0.8	2.8	0.3	0.6
Recreation	23.7	4.7	3.6	11.9	1.2	2.4
Forest management	4.4	0.9	0.7	2.2	0.7	0.4
TOTAL		6.7	5.1	16.9	2.1	3.4
Benefits (proportions)						
Conservation		0%	0%	0%	0%	0%
Recreation		20%	15%	50%	10%	5%
Forest management		80%	5%	10%	3%	2%
Benefits (actual: £m/yr)						
Conservation	0	0	0	0	0	0
Recreation	13.7	2.7	2.1	6.9	1.4	0.7
Forest management	13.1	10.5	0.7	1.3	0.4	0.3

⁵ These proportions are for illustrative purposes only.

ANNEX 6: SPECIFIC IMPACT TESTS

Equalities Impact Assessment – this is published alongside the consultation document

Competition Impact Test

1. Directly limit the number or range of suppliers? No, currently the FC is the only supplier of goods from the PFE, this may remain as one supplier or the number of suppliers may increase.
2. Indirectly limit the number or range of suppliers? No, currently the FC is the only supplier of goods from the PFE, this may remain as one supplier or the number of suppliers may increase.
3. Limit the ability of suppliers to compete? No.
4. Reduce suppliers' incentives to compete vigorously? No.

Small Firms Impact Test

Does the proposal affect small business, their customers or competitors? No – this proposal does not impose additional burdens on businesses.

Greenhouse Gas Impact Test

It is assumed that the capacity of woodlands to sequester and store carbon is similar across all options, including business as usual. This is because none of the options involves afforestation or deforestation, two activities that would have major carbon impacts. It is possible that there would be some variation in carbon impacts between different models assessed here because they would involve different management practices. However, it is not possible to assess these impacts at this stage without further detail on management practices under the different models. More detail on GHG impacts is given in Annex 8.

Wider environmental Impacts Test

The aim of this policy is to:

- protect and enhance biodiversity to contribute to a network of wildlife corridors across England;
- maintain public access for recreation and leisure;
- ensure the continuing role of the woodlands in climate change mitigation and adaptation; and,
- protect nationally important landscapes.

Therefore it is assumed that there will be no environmental impacts, however risks in this area are discussed throughout the IA.

Health and Wellbeing Impact Test

There are potential health and wellbeing impacts should any options result in a significant reduction in recreational access to woodlands. However it is anticipated that there will not be significant impacts due to two reasons:

- 1) One of the policy objectives is to maintain access.
- 2) Should access be reduced it is likely that users would substitute their preferred woodland for other woodland or outdoor areas rather than stopping the activity altogether. Therefore their health and wellbeing is unlikely to be significantly affected.

This informs the answers given below.

1. Will your policy have a significant impact on human health by virtue of its effects on the following wider determinants of health? No

Income
Crime
Environment
Transport
Housing
Education
Employment
Agriculture
Social cohesion

2. Will there be a significant impact on any of the following lifestyle related variables? No

Physical activity
Diet
Smoking, drugs, or alcohol use
Sexual behaviour
Accidents and stress at home or work

Consider risk factors that influence the probability of an individual becoming more or less healthy.

3. Is there likely to be a significant demand on any of the following health and social care services? No

Primary care
Community services
Hospital care
Need for medicines
Accident or emergency attendances
Social services
Health protection and preparedness response

Consider the likely contacts with health and social service provision.

If the answer to two or more of these questions is YES you will need to carry out a full health impact assessment.

A health impact assessment is not needed for this IA.

Human Rights

Will the policy decision engage anyone's convention rights? No.

Justice System

Does the proposal affect the justice system? No.

Rural Proofing

At present it is not possible to assess whether there will be a rural impact of the proposed options as there is a slightly higher reliance on wood related business in rural areas compared to urban – see table below.

	Share of employment		Share of businesses	
	Rural	Urban	Rural	Urban
All businesses	16%	84%	25%	75%
Wood related	24%	76%	31%	69%

Local unit IDBR data 2008

One of the aims of the policy is to consider any potential impacts on the supply of home grown timber into the wood-processing industry, in particular during any transition period.

The following data was provided in September 2010

Business statistics: Inter-Departmental Business Register (ONS), 2008

The IDBR contains data for businesses which are **VAT or PAYE registered**.

'Businesses related to forestry' comprise those in the following industries:

- Silviculture and other forestry activities
- Support services to forestry
- Sawmilling and planing of wood
- Manufacture of veneer sheets and wood-based panels
- Manufacture of wooden containers
- Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials
- Manufacture of agricultural and forestry machinery
- Agents involved in the sale of timber and building materials
- Wholesale of wood, construction materials and sanitary equipment

Business statistics are presented based on enterprises or local units. An **enterprise** is a group of legal units under single ownership. Local details are of the headquarters of the company. A **local unit** is an individual site (for example a factory or particular shop) in an enterprise.

Size bands relate to BIS's classification of business size:

Micro =1 - 9 employees

Small =10 - 49 employees

Medium =50 - 249 employees

Large = 250 or more employees

Sole traders and partnerships = no employees

Defining rural

The Rural/Urban Definition, an official National Statistic introduced in 2004, defines the rurality of very small census based geographies. Areas forming settlements with populations of over 10,000 are urban, while the remainder are defined as rural town and fringe, village or hamlet and dispersed. The context of settlements is dependent on whether the wider area is defined as being 'sparsely' populated or not. This rural definition is very useful when analysing data at very small levels.

In England, 9.5 million people (19.3% of the population) live in rural areas, compared to 39.7 million (80.7%) in urban areas. Around 760,000 (1.5% of the population) live in sparse areas, the majority of which (c. 600,000 people, or 1.2% of the total English population) live in rural areas.

Enterprises⁶

	Number of businesses	Employment	Average turnover (000s)
Urban	6,330	116,960	3,539
Rural	4,020	30,940	1,193
Rural town - less sparse	870	8,040	1,406
Rural village - less sparse	1,580	11,650	1,214
Rural hamlet and isolated - less sparse	1,170	8,540	1,116
Rural town - sparse	80	390	617
Rural village - sparse	150	1,240	986
Rural hamlet and isolated - sparse	170	1,080	876
England	10,350	147,900	2,628

Number of businesses

	Micro	Small	Medium	Large	Sole Trader/ Partnerships
Urban	4,100	1,170	200	40	820
Rural	2,480	480	80	~	970
Rural town	610	150	20	~	120
Rural village	1,050	310	30	~	200
Rural hamlet and dispersed	820	230	30	~	170
England	6,580	1,650	280	40	1,790

Employment in businesses

	Micro	Small	Medium	Large	Sole Trader/ Partnerships
Urban	14,140	23,530	18,740	59,490	1,060
Rural	8,500	9,670	6,850	~	1,260
Rural town	2,070	150	1,780	~	2,440
Rural village	3,550	310	2,950	~	3,950
Rural hamlet and dispersed	2,880	230	2,120	~	3,280
England	22,630	33,200	25,590	~	2,320

Average turnover (£000s)

	Micro	Small	Medium	Large	Sole Trader/ Partnerships
Urban	620	3,910	17,980	323,010	180
Rural	550	3,360	12,500	~	180
Rural town	480	80	11,100	~	3,830
Rural village	540	80	14,320	~	3,300
Rural hamlet and dispersed	610	60	11,410	~	3,100
England	590	3,750	16,460	281,890	180

⁶ Where figures are based than fewer than 20 businesses, employment numbers are suppressed.

Local units

	Number of businesses	Employment
Urban	10,170	107,380
Rural	4,560	33,370
Rural town - less sparse	1,100	8,440
Rural village - less sparse	1,720	12,830
Rural hamlet and isolated - less sparse	1,270	8,860
Rural town - sparse	110	880
Rural village - sparse	170	1,150
Rural hamlet and isolated - sparse	190	1,220
England	14,730	140,750

Number of businesses

	Micro	Small	Medium	Large	Sole Trader/ Partnerships
Urban	6,300	2,750	290	10	820
Rural	2,750	740	90	~	970
Rural town	780	210	20	~	200
Rural village	1,110	290	40	~	450
Rural hamlet and dispersed	870	240	30	0	330
England	9,050	3,490	380	10	1,790

Employment in businesses

	Micro	Small	Medium	Large	Sole Trader/ Partnerships
Urban	25,300	52,020	24,030	~	1,060
Rural	9,880	14,150	7,350	~	1,260
Rural town	2,920	4,120	1,700	~	250
Rural village	3,810	5,570	3,610	~	590
Rural hamlet and dispersed	3,140	4,460	2,050	0	420
England	35,180	66,170	31,380	~	2,320

Sustainable Development

It is not possible at this stage to assess whether there would be any significant impacts on sustainable development. The complexity of the options means that it would be premature to attempt a definitive assessment until the *modus operandi* of the options is finalised in more detail.

ANNEX 7: COST BENEFIT METHODOLOGY

The majority of the costs and benefits examined in this IA are in fact transfers from one sector to another i.e. the cost of buying commercial land to a new owner is a benefit of revenue to the Government.

The following tables set out the costs and benefits to government and buyers that have been used in the cost benefit calculations for each of the categories of woodlands. These tables do not include the costs and benefits that it has not been possible to quantify.

Commercial Woodland

	Government	Buyer
Business as Usual		
Costs	Conservation, recreation and timber management = £6.7m	n/a
Benefits	Income from recreation and timber = £13.2m	n/a
Leases		
Costs	Professional (e.g. land agent) fees =£7-12.6m Ongoing costs of lease management =£1m Loss of income from recreation and timber = £13.2m RDPE = £5m	Purchasing land = £140 -252m Conservation, recreation and timber management = £6.7m
Benefits	Revenue from sale of land = £140 - 252m Reduced cost of conservation, recreation and timber management = £6.7m	Income from recreation and timber = £13.2m RDPE grant = £5m
Open Market Sale		
Costs	Professional (e.g. land agent) fees = £14m Loss of income from recreation and timber = £13.2 RDPE = £5m Other grants = £2.0m	Purchasing land = £280m Conservation, recreation and timber management = £6.7m
Benefits	Revenue from sale of land = £280m Reduced cost of conservation, recreation and timber management = £6.7m	Income from recreation and timber = £13.2m RDPE grant = £5m Other grant = £2.0m
Open Market Sale with CRoW provisions		
Costs	Professional (e.g. land agent) fees =£7-12.6m Loss of income from recreation and timber =£13.2m RDPE = £5m	Purchasing land = £140 -252m Conservation, recreation and timber management = £6.7m
Benefits	Revenue from sale of land = £140 - 252m Reduced cost of conservation, recreation and timber management = £6.7m	Income from recreation and timber = £13.2m RDPE grant = £5m

Community Woodlands

	Government	Buyer
Business as Usual		
Costs	Conservation, recreation and timber management = £5.1m	n/a
Benefits	Income from recreation and timber = £2.7	n/a
Community Purchase		
Costs	Professional (e.g. land agent) fees =	Purchasing land = £50m

	£2.5m Loss of income from recreation and timber = £2.7m RDPE = £3m	Conservation, recreation and timber management = £5.1m
Benefits	Revenue from sale of land =£50m Reduced cost of conservation, recreation and timber management = £5.1m	Income from recreation and timber = £2.7m RDPE grant = £3m
Open Market Sale		
Costs	Professional (e.g. land agent) fees =£2.5m Loss of income from recreation and timber =£2.7m RDPE = £3m	Purchasing land = £50m Conservation, recreation and timber management = £5.1m
Benefits	Revenue from sale of land = £50m Reduced cost of conservation, recreation and timber management = £5.1m	Income from recreation and timber = £2.7m RDPE grant = £3m

Heritage Woodlands

	Government	Buyer
Business as Usual		
Costs	Conservation, recreation and timber management = 16.9m	n/a
Benefits	Income from recreation and timber = £8.2m	n/a
Charity Organisation		
Costs	Professional (e.g. land agent) fees = £11m Loss of income from recreation and timber = £8.2m RDPE = £4m Other grants = £4.7m	Conservation, recreation and timber management = £16.9m
Benefits	Reduced cost of conservation, recreation and timber management = £16.9m	Income from recreation and timber = £8.2m RDPE grant = £4m Other grant = £4.7m

ANNEX 8 ASSESSMENT OF GHG EFFECTS

As set out in the Read Report (*Combating climate change – a role for UK forests*), forests and the forestry sector can help to reduce the UK's net greenhouse gas emissions (climate change mitigation) by (a) storing carbon in forests as they grow; (b) storing carbon in harvested wood products (c) reducing greenhouse gas emissions directly by woodfuel replacing fossil fuels in energy/heat production, and (d) reducing fossil fuel usage indirectly through timber products replacing high energy materials such as concrete and steel.

Climate change mitigation

Current position of the PFE

Approximately 86% of annual increment harvested in PFE woodlands, compared to 22% in privately owned woodlands. The amount of carbon sequestered in growing biomass in PFE woodlands is therefore relatively low compared with their area, amounting to some 250,000 tonnes CO₂ per annum (9% of England's forest carbon sink, 1.7% of the UK forest carbon sink and equivalent to less than 0.05% of total UK annual greenhouse gas emissions). However, the removal of a large proportion of annual increment in PFE woodlands results in a high level of potential climate change mitigation, through carbon storage in wood products and fossil fuel substitution.

Potential impacts of change in ownership

Given the relatively small proportion of UK woodlands that the public forest estate represents (8%), the potential impact on the ability of the UK to meet its challenging emissions reduction targets is likely to be limited. The high proportion of annual increment that is cut on the PFE (~86%) is unlikely to rise, given that the private sector as a whole only cuts 22% of annual increment. Felling license regulations, chain of custody requirements for public procurement and the imminent introduction of biomass sustainability criteria will also provide protection against unsustainable management practices degrading the amount of carbon stored in FC woodlands. Environmental Impact Assessment (Forest) regulations also provide protection against large-scale deforestation of woodlands after a change in ownership, which would have an impact on the UK's GHG inventory. If the level of harvesting in FC woodlands declined as a result of ownership, there would be an increase in the amount of carbon stored in those woodlands, but a corresponding reduction in the mitigation delivered through fossil fuel substitution. The overall impact would be a small increase in total climate change mitigation in the short term, but a small reduction in the longer term. The complex nature of the trade-offs between carbon storage, the potential for fossil fuel substitution and harvesting activity adds further weight to the conclusion that change in ownership of the PFE would have minimal impact on the ability of the UK to meet its greenhouse gas emissions reduction commitments.

There could be impacts on GHG mitigation if new owners or managers of woodlands adopted different management practices to those currently practised on the PFE. For example, shorter rotations could reduce sequestration in woodlands significantly due to trees being felled during or before a period of strong growth. However, earlier felling would also bring forward any carbon storage effects in wood products and substitution effects through avoiding the use of fossil fuel intensive materials. There are trade-offs here between sequestration in woodlands and carbon storage and/or substitution through the use of wood products. However, any loss in sequestration would be picked up in the LULUCF inventory whereas any gains in substitution would not (as these benefits would be reported under other sectors).

Climate change adaptation

Current position of the PFE

The public forest estate has, in the past, planted a limited range of species to maximise production (although there are exceptions to this general rule). This represents a risk to both climate resilience and pest and disease outbreaks (in common with most private sector woodlands). This issue has been recognised and the recently drafted 'Climate Change Action Plan for the Public Forest Estate' has species diversification as one of its key objectives. The Action Plan takes a 'non-risk averse approach', recognising that the public forest estate has an important role in testing alternative species and approaches to management at the forefront of climate change adaptation. Sourcing of UK-grown plant material is an issue at present, but is being addressed through centralised procurement through FC nurseries and their suppliers. Successful natural regeneration is a key process for adaptation in semi-natural woodlands. The large deer populations in England represent a significant barrier to natural regeneration and productivity. In general, deer populations are well managed across core FC forests, in

contrast to England as a whole, where measures such as the Deer Initiative are requiring a high level of resource input in those areas where they have been successful in securing effective deer management. Landscape-scale approaches to climate change adaptation on the public forest estate are beginning to be introduced – for example, FC's contribution to the 'Slowing the Flow' project that aims to provide flood protection for Pickering through woodland creation and land management, including in Dalby Forest.

Potential impacts of change in ownership

The co-ordinated approach to climate change adaptation across the public forest estate would, potentially be put at risk by a large scale change in ownership. Landscape-scale adaptation measures that are beginning to emerge could also be compromised, but these risks would be dependent on the nature of future ownership. The maintenance of a strong regulatory framework would also help to mitigate those risks through application of the UK Forestry Standard and its supporting Climate Change Guidelines. The capacity of FC to increase the level of engagement and achieve this outcome is questionable, but there are clear signs that the private sector wish to implement adaptation measures on the basis of firm advice and guidance being provided.

Key messages

- Large-scale change in ownership of the public forest estate are likely to have a minimal impact on the ability of the UK to meet its emissions reduction targets.
- Regulatory 'checks and balances' (Felling licence regulations, EIA (forestry) Regulations, biomass sustainability criteria, chain of custody requirements) are in place to protect against management practices degrading carbon stocks.
- The co-ordinated approach to implementing adaptation measures across the public forest estate would be put at risk through large-scale change in ownership, as would the role of FC woodlands in testing alternative species and approaches to management.
- Increased engagement with the private sector, providing advice on adaptation and ensuring application of the UKFS and its Climate Change Guidelines would help to mitigate this risk, but would be a significant challenge.