

Title: Revision of fees for UK National Listing and UK Plant Breeders Rights

IA No: DEFRA1438

Lead department or agency:

Defra

Other departments or agencies:

Food and Environment Research Agency (Fera)
 Environmental Policy Branch, Department of Agriculture and Rural development Northern Ireland
 Agriculture and Rural Development Division, Scottish Government
 Sustainable Futures, Welsh Government

Impact Assessment (IA)

Date:

Stage: Consultation

Source of intervention: Domestic

Type of measure: Secondary legislation

Contact for enquiries: Andy Mitchell
 Tel: 0300 060 0762

andrew.mitchell@defra.gsi.gov.uk

Summary: Intervention and Options

RPC Opinion: AMBER

Cost of Preferred (or more likely) Option

Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB on 2009 prices)	In scope of One-In, One-Out?	Measure qualifies as
-£2.69m			No	NA

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

EU and international obligations require a statutory framework for registration of new crop varieties (The Seeds (National Lists of Varieties) Regulations 2001) and for Plant Breeders' Rights. These services, coordinated by Fera, assure quality attributes of marketed varieties, drive improvement of agricultural crops and protect the intellectual property rights of breeders who invest resources in developing new varieties. It is government policy to recover the costs of statutory services, but current fees do not do this, resulting in a subsidy to the agricultural industries and a financial cost to the taxpayer. Government intervention is necessary to remove the subsidy and it is intended to increase fees to achieve full cost recovery (FCR).

What are the policy objectives and the intended effects?

The objective of this policy is to remove the subsidy for National Listing (NL) and Plant Breeders' Rights (PBR) statutory services without compromising implementation of the legislation or the ability of plant breeding companies to develop improved varieties and support Government's objective for sustainable food production and the environment. The intended effect is a more efficient use of public resources by transferring the full cost of service provision from the general taxpayer to the direct beneficiaries of the service and to achieve FCR, in line with Government policy (Managing Public Money (2009) HM Treasury).

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

1. Do nothing (No change to current partial cost recovery).
2. Increase fees to achieve FCR for NL and PBR services implemented during 2014.
3. Phased introduction of fee increases to achieve FCR by 2016.

Option 3 is the preferred option since it will give businesses time to adapt to the significant fee increases and to work with, Defra, Fera, Devolved Administrations and delivery partners to develop more efficient processes and further reduce the final cost to be recovered. Fera has already achieved significant cost reductions through its government industry taskforce since the start of this fees review.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** 11/2017

Does implementation go beyond minimum EU requirements?			No		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	Micro Yes	< 20 Yes	Small Yes	Medium Yes	Large Yes
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)			Traded: NS		Non-traded: NS

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 SELECT SIGNATORY: _____ Date: _____

Summary: Analysis & Evidence

Policy Option 1

Description: Do nothing (No change to current partial cost recovery).

FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period Years	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	High: Optional	Best Estimate: £0m

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional	Optional	Optional
High	Optional	Optional	Optional
Best Estimate	£0m	0	0

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

- This option maintains the existing fee levels and resulting partial recovery of the cost of service provision. The taxpayer will continue to subsidise the service at £0.34m per annum.

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

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional	Optional	Optional
High	Optional	Optional	Optional
Best Estimate	£0m	0	0

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

- Businesses using the service will continue to have access to a subsidised service of £0.34m per annum.

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

Key assumptions/sensitivities/risks Discount rate (%) 3.5

Key Assumption: Service cost calculations for 2014 are based on the assumption that the number of applications for NL/PBR will remain at or close to 2012 levels. **Key Risk:** Fera is required to make substantial cuts in the cost to Defra of its statutory services under the Comprehensive Spending review. If FCR is not achieved, the main risk is that cuts would be required to: (1) the coverage and speed of the NL/PBR service, with impacts on business users and/or (2) cuts elsewhere in Fera's statutory programme.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:	In scope of OIOO?	Measure qualifies as
Costs: 0 Benefits: 0 Net: 0	No	NA

Summary: Analysis & Evidence

Policy Option 2

Description: Introduction of fee increases to achieve Full Cost Recovery for National Listing and Plant Breeders' Rights services, with implementation during 2014.

FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	High: Optional	Best Estimate: - £2.44
COSTS (£m)					
		Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)	
Low		Optional	Optional	Optional	
High		Optional	Optional	Optional	
Best Estimate		£0m	£0.34m	£2.94m	
Description and scale of key monetised costs by 'main affected groups' <ul style="list-style-type: none"> This option introduces FCR from service users in 2014. Total PV of the costs to industry (10 years) = £2.94m. This cost will be borne by the plant breeding industry and its customers. The annual cost to business will be no more than about £0.35m. 					
Other key non-monetised costs by 'main affected groups'					
BENEFITS (£m)					
		Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)	
Low		Optional	Optional	Optional	
High		Optional	Optional	Optional	
Best Estimate		£0m	£0.34m	£2.94m	
Description and scale of key monetised benefits by 'main affected groups' <ul style="list-style-type: none"> Total PV of the benefit to the taxpayer (10 years) = £2.94m. The main beneficiary of this option will be the taxpayer who will benefit from a cost transfer to the industry of £0.34m per annum. 					
Other key non-monetised benefits by 'main affected groups'					
Key assumptions/sensitivities/risks				Discount rate (%)	3.5
Key Assumption: Cost base and fees needed to achieve FCR assume no reduction in business volume. Key Risks: (1) Without FCR Fera will not be able to maintain its statutory services within its reduced funding under the Comprehensive Spending Review. (2) Reduced demand for NL/PBR service as plant breeders reduce applications or apply in EU countries with significant state subsidy. This carries risks for Fera and its service delivery partners, whose businesses would be damaged if reductions in work are significant. (3) Small plant breeding companies, or breeding programmes for some crops, may become uneconomic, affecting the development of varieties for UK conditions.					

BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs: £0.34m	Benefits: £0m	Net: -£0.34m	No	NA

Summary: Analysis & Evidence

Policy Option 3

Description: Phased introduction of fee increases to achieve FCR by 2016.

FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	High: Optional	Best Estimate: £0m
COSTS (£m)		Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)	
Low	Optional		Optional	Optional	
High	Optional		Optional	Optional	
Best Estimate			£0.32*m	£2.69m	
<p>Description and scale of key monetised costs by 'main affected groups' Phased FCR from 2014 - 2016, during which time further efficiencies will be sought to minimise/avoid the later stage increases necessary to achieve FCR from 2016.</p> <ul style="list-style-type: none"> • Total PV of the cost to industry (10 years) = £2.69m. Annual cost to business of the service will be £0.171m in 2014, £0.256m in 2015 and a maximum of £0.342m in 2016 and onwards, depending on the efficiencies achieved. • Total PV of the cost to the taxpayer (10 years) = £0.254m due to continued subsidisation by the taxpayer for the first 2 yrs. <p>See section 10.4 for more information. *Average Annual cost for main affected group (industry) = £0.316m</p>					
Other key non-monetised costs by 'main affected groups'					
BENEFITS (£m)		Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)	
Low	Optional		Optional	Optional	
High	Optional		Optional	Optional	
Best Estimate	£0m		£0.32m	£2.69m	
<p>Description and scale of key monetised benefits by 'main affected groups'</p> <ul style="list-style-type: none"> • Total PV of the benefit to the taxpayer (10 years) = £2.69m. Annual benefit to the taxpayer will be £0.171m in 2014, £0.256m in 2015 and £0.342m per annum from 2016 onwards. • Total PV of the benefit to industry (10 years) = £0.254m. Industry will benefit from the continued subsidy of £0.171m in 2014 and £ 0.09m in 2015. • See section 10.4 for more information. *Average Annual benefit for main affected group (taxpayer) = £0.33m. 					
Other key non-monetised benefits by 'main affected groups'					
Key assumptions/sensitivities/risks				Discount rate (%)	3.5
<p>Key Assumption: Cost base and fees needed to achieve FCR assume no reduction in business volume.</p> <p>Key Risk: As Option 2 regarding the impact on the UK plant breeding industry and agriculture, but at a lower level because the phasing provides time for industry to adapt and Fera, the Devolved Administrations to work in partnership with industry to find further cost efficiencies in the service.</p>					

BUSINESS ASSESSMENT (Option 3)

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs: £0.34m	Benefits: £0.25m	Net: -£0.29m	No	NA

Evidence Base (for summary sheets)

References

No.	Legislation or publication
1	The Seeds (National Lists of Varieties) Regulations 2001 (SI no. 3510) (as amended) http://www.legislation.gov.uk/ukxi/2001/3510/contents/made
2	The Plant Varieties Act 1997 (and associated regulations) http://www.legislation.gov.uk/ukpga/1997/66/contents
3	Economic Impact of Plant Breeding in the UK http://www.bspb.co.uk/documents/BSPB%20impact%20final%20report.pdf
4	The Future of Food and Farming: Challenges and Choices for Global Sustainability, Foresight Programme http://www.bis.gov.uk/assets/bispartners/foresight/docs/food-and-farming/11-546-future-of-food-and-farming-report.pdf
5	Council Directive 2002/53/EC on the common catalogue of varieties of agricultural plant species http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32002L0053:en:NOT
6	Council Directive 2002/55/EC on the marketing of vegetable seed http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32002L0055:en:NOT
7	International Convention for the Protection of New Varieties of Plants, revised 1991 http://www.upov.int/en/publications/conventions/1991/act1991.htm

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Evidence Base (for summary sheets)

This Consultation Impact Assessment (IA) seeks to identify and develop the options open to Government to ensure that the provision of services for National Listing and Plant Breeders' Rights achieves, as far as possible, full cost recovery (FCR). Through the associated consultation exercise, stakeholders are invited to provide additional relevant evidence, in particular concerning the impact of achieving full cost recovery, and to provide a constructive challenge for the information presented by Fera.

1. Background

National Listing

- 1.1 National Listing (NL) is required by European Council Directives 2002/53/EC and 2002/55/EC and is a prerequisite for marketing new varieties of the main agricultural and vegetable species. It is implemented through UK regulations ensuring that a variety cannot be marketed unless it is new and, for agricultural species, an improvement on varieties already available. To be listed, a variety must be distinct from existing varieties, uniform and stable (DUS) and, for agricultural varieties, show an overall improvement in performance or 'value for cultivation or use' (VCU).
- 1.2 The UK National List testing system is administered jointly by Defra and the Food and Environment Research Agency (Fera) and the Devolved Administrations of Northern Ireland, Scotland and Wales, acting as the National Authorities. A joint committee manages the testing system and makes listing decisions, working with a wide range of service delivery partners. For most crops, NL testing takes two years, although some vegetable species can be tested in a single year and herbage crops take three to four years.
- 1.3 The testing process is summarised in Annex 2. Fera receives applications and organises DUS and VCU testing, decision making and formal publication. There are currently about 400 applications for National Listing each year, with a total of about 830 UK candidate varieties undergoing DUS testing and 145 candidate varieties being tested for other Member States (Annex 3). Applicants range from large international companies to micro businesses.
- 1.4 DUS tests, which require comparison between the candidate variety and existing varieties in a variety collection, are carried out in the UK by AFBI (Agri-Food and Biosciences Institute, Belfast), NIAB (National Institute of Agricultural Botany, Cambridge) and SASA (Science and Advice for Scottish Agriculture, Edinburgh). See Annex 4 for the main responsibilities. DUS tests for some crops are carried out by other Member States, e.g. France for forage maize, and in return the UK organisations test on behalf of some other Member States, notably for herbage.
- 1.5 Since April 2006, almost all VCU crop trials, associated testing and provision of data to Fera have been organised by the British Society of Plant Breeders (BSPB, a not-for-profit organisation managed by a board of executives from its member companies). Herbage trials in Northern Ireland and Scotland are organised by AFBI and SASA respectively and potato trials are organised by SASA. BSPB's role is through a formal agreement, monitored by the National Authorities, as allowed by relevant legislation. Applicants pay BSPB directly for this work, which means that the cost of these VCU trials, estimated to be £1.4m, is outside the scope of this Impact Assessment.
- 1.6 DARD and Scottish Government provide financial support for the National List testing system which is not recovered. This is mainly for additional herbage and cereals VCU trials, associated data analysis, and the provision of technical experts. Scottish Government wishes to recover some of these costs while DARD does not plan to do so.
- 1.7 The cost of disease resistance testing for National Listing is estimated as £0.45m, funded by Defra and Scottish Government as public good and not within the scope of this Impact Assessment.

Plant Breeders' Rights

- 1.8 Plant Breeders' Rights (PBR) are a form of intellectual property protection designed specifically for new varieties of plants. They entitle the holder to control production and sale of reproductive material of the protected variety, either directly or through licences, and to collect royalties. For the main agricultural species in the UK, BSPB acts on behalf of its members and issues sub-licences to seed producing companies, who pay a royalty on seed sold. For some species, the legislation allows collection of royalties on farm saved seed (seed produced by a farmer from his crops and used on his own holding), which BSPB also organises on behalf of its members. PBR royalties are the main return on investment in plant breeding and are re-invested for continued development of new varieties.
- 1.9 To be eligible for PBR a variety must be 'novel', which in practice means not previously marketed, and DUS. PBR is available for all species of plants and therefore has wider coverage than National Listing, in particular it is extensively used for ornamental species such as roses. For species where National Listing is required, the same DUS test can be used for both purposes. Fera administers the UK PBR system, recovering costs through administration and DUS fees. The relevant legislation is the Plant Varieties Act 1997, which implements the UK's obligations under the 1991 International Convention for the Protection of New Varieties of Plants (UPOV). The introduction of EU wide PBR in 1996, managed by the Community Plant Variety Office (CPVO), has led to a low level of applications for UK PBR.

Cost reductions

- 1.10 Fera has delivered significant cost savings, reducing its costs for overall management of NL and PBR from £0.65m in 2011/12 to £0.35m in 2013/14. It is continuing to explore further opportunities for streamlining in discussion with stakeholders, mainly through the National List taskforce, a Government-business partnership whose key aim is supporting the drive for cost efficiency. The taskforce first met on 10 May 2012 and has had eleven meetings to date.

AFBI has significantly reduced the cost of its herbage DUS testing, from £0.34m in 2010/11 to an estimated £0.30m in 2013/14.

2. Problem under consideration

- 2.1 The issue under consideration is achieving full cost recovery for National Listing and Plant Breeders' Rights services. The current fees structure was introduced in 2006 (Annex 5) following a major review of the testing system. This addressed some significant cost issues and moved the overall scheme close to FCR. Inflationary increases were applied in 2008 in anticipation of this full review by Fera. Some elements have maintained FCR, mainly DUS testing of oilseed rape and sugar beet, and the three most significant areas of under recovery are:
- i. Handling of applications, official supervision and management of the National List system where costs have become more transparent since the formation of Fera in 2009.
 - ii. DUS testing of herbage and some minor agricultural crops, notably field beans.
 - iii. Independent data review for VCU decisions.
- 2.2 Fees would normally be reviewed annually to achieve full cost recovery where possible. Fera has calculated current costs and assessed where shortfalls or over recovery are taking place. Annex 6 shows projected costs and income under the current fee structure and the increased income needed to achieve full cost recovery.
- 2.3 A move to immediate full cost recovery would result in some very significant fee increases to business users (Annex 6). The most obvious examples would be a 137% increase in the administration fee (from £365 to £866 for National Listing) and increases of between 65 and 200% in VCU technical management fees payable over the testing period. There would also be some significant increases in DUS test fees: 137% for field beans (from £1,070 to £2,540), 39%

for roses (from £1,000 to £1,390 for each year of testing), 36% for chrysanthemums (from £1,300 to £1,765), 22% for field peas (from £1,140 to £1,394), and 21% for herbage (from £650 to £788). Further detail is given in discussion of the various options in Section 6 and in Annex 7 which compares total fees payable to achieve NL or PBR.

3. Rationale for intervention

- 3.1 The services identified in Section 2.1 and provided for by UK National Authorities are not charged at full cost. Therefore, the Government is currently subsidising these activities.
- 3.2 The estimated total recoverable cost, shown in Annex 6, is £1.588m with a deficit of £0.342m. An estimated total of £1.246m is currently recovered.
- 3.3 It is Government policy to charge full cost for publicly provided services where feasible¹. Charging for the full cost of these services is in line with government and departmental policies and will relieve the taxpayer of the subsidy costs. Transferring the public subsidy cost of this service to the users, who benefit directly from the service, will allow more efficient use of public resources and enable lower public expenditure and borrowing.

4. Policy objective

- 4.1 The aim of introducing full cost recovery for National Listing and Plant Breeders' Rights services is to remove the financial cost to the taxpayer by transferring the costs to those who benefit from the service. The intention is to achieve this without compromising innovation in plant breeding or the development of improved agricultural varieties suited to UK conditions.

5. Description of options considered

- 5.1 Three options have been considered for delivering the policy objective of making services for National Listing and Plant Breeders' Rights cost neutral for Government:
 - **Option 1: Do nothing (No change to current partial cost recovery).** Under this option, fees would be maintained at current levels, but would not achieve full cost recovery.
 - **Option 2: Introduction of fee increases to achieve full cost recovery for National Listing and Plant Breeders' Rights services, with implementation during 2014.** This option would deliver the Government's objective of full cost recovery but with significant immediate cost increases for the plant breeding industry.
 - **Option 3: Phased introduction of fee increases to achieve Full Cost Recovery by 2016.** This option would deliver the Government's objective of full cost recovery proportionately and over a longer period than Option 2. The main unrecovered costs are Fera's costs for processing applications, managing the testing system and official supervision, and AFBI's costs for DUS testing of herbage. These costs have already been significantly reduced since the start of this fees review (see 1.10 above) and the objective of phasing is to constrain the fee increases needed to achieve FCR in 2016, by Fera and the Devolved Administrations continuing to work with industry to develop more cost-effective practices. The costs and benefits of further changes, including transition costs, cannot be monetised at this stage are therefore not part of this Impact Assessment. It is the subject of a separate review already underway, where any further efficiencies identified could lessen future fee increases. However, they would be very unlikely to reduce costs by the magnitude needed to achieve FCR under the current fees or do so within a timeframe meeting Fera's business needs. For this reason, the proposal is to start increasing fees before implementing further cost reductions.

¹ HM Treasury, *Managing Public Money*, Chapter 6: fees, Charges and Levies

6. Costs and benefits for each option (including administrative burden)

6.1 The costs, current level of recovery, and fees for the first three options are summarised in Annex 6. Annex 7 illustrates how costs to achieve National Listing (excluding VCU trials costs) would change under Options 2 and 3. Annex 8 profiles costs through the testing process.

6.2 Option 1: Do nothing (No change to current partial cost recovery)

6.2.1 Benefits:

- Businesses using the service continue to gain access to a subsidised service.
- No adverse effects on the economic status of plant breeding companies and their customers and consequently no impact on the continued development of varieties suited for UK agriculture now and in the longer term.

6.2.2 Costs:

- Failure to meet Government objective of full cost recovery, effectively subsidising a commercial sector where there is insufficient justification for doing so.
- The annual cost to Government (and taxpayer) will be £0.342m.

6.3 Option 2: Introduction of fee increases to achieve full cost recovery for National Listing and Plant Breeders' Rights services, with implementation during 2014

6.3.1 Benefits:

- Self-funded services with costs borne by those who benefit directly rather than the Government and taxpayer.

6.3.2 Costs:

- Additional cost to plant breeding companies of no more than £0.342m per annum.

The impacts of Option 2 are described below, with the individual fees and costs shown in Annex 6, and the impact on costs for applicants to achieve National Listing shown in Annexes 7 and 8.

6.3.3 DUS Testing

- For winter oilseed rape, the combined DUS and reference variety fee would decrease by 15%, from £1,565 to £1,325 for each year of testing. This is a result of technical innovations and business efficiency by the contractor and the spreading of reference variety costs over a significantly increased number of varieties and parent lines.
- For field beans, the combined DUS and reference variety fee would increase by 137%, from £1,070 to £2,540. This is because of the small number of varieties tested and consequently high unit costs for reference varieties.
- DUS testing fees for cereals, vegetable peas, other vegetables tested by SASA, field peas, swede and potatoes would increase in the range of 13% to 26%.
- Roses, chrysanthemums and other ornamentals DUS testing fees would increase in the range of 23% to 39% to recover the full cost of testing and reference varieties.
- For ryegrasses and clover, DUS testing and annual fees would increase by 21%. This is based on AFBI's target of reducing costs to £300,000 in 2013/2014.

6.3.4 VCU Technical Management Fee

- The current VCU technical management fee varies between crops (see Annex 5) and recovers about half the total cost of £0.110m. For example, cereals have a single fee of £200 whereas winter oilseed rape has a fee of £60 for each year of testing. The proposal is for a standard fee of £165 per year of testing for all crops. This would give increases of 65 to 200% in fees payable for two (three for herbage) years of testing.
- Fera believes this approach would more accurately reflect the costs for the different crop groups and standardisation will simplify invoicing. This is an area with opportunities to significantly reduce costs and is being discussed by the industry/government taskforce.

6.3.5 Fera's Administration and Management of the Testing System

- The more specific and transparent analysis of Fera's own costs for managing NL and PBR applications and the testing system, recovered through the administration fee, identified much higher costs at the start of the review than previously recognised. However, Fera has reduced its costs over the last two years from £0.65m to £0.35m in 2013/2014 (Annex 5). This compares with an estimated £0.146m income from administration fees, based on 400 applications. Fera has followed Defra and Treasury advice to identify all of its business costs which should be recovered. These are primarily the direct costs (e.g. salaries, ERNIC, superannuation, accommodation, travel and subsistence, consumables) with proportionate overheads (e.g. HR, finance, IT and senior management costs etc)². The administration fee would increase by 137% to fully recover Fera's costs.
- For conservation varieties and vegetable varieties marketed specifically to gardeners, the proposal is to leave administration fees unchanged at £175 and £100 respectively. Applications for these types are simpler to handle since no testing is involved and relatively few are received, making costs difficult to estimate. Any under-recovery will be met by the National Authorities.

6.3.6 Scottish Government

- Scottish Government estimates the cost of its support for National Listing as £0.257m a year (see paragraph 1.6). It wishes to recover its technical support cost of £0.007m from 2016, which would be most easily done through the administration fee.

6.4 Option 3: Phased introduction of fee increases to achieve Full Cost Recovery by 2016

This option introduces full cost recovery phased from 2014 to 2016. During this time further efficiencies will be sought, mainly through Fera's government/industry taskforce, to minimise the later stages of increases needed for full cost recovery from 2016 onwards.

6.4.1 Benefits:

- Self-funded services by 2016 with costs borne by the applicant rather than the Government and taxpayer.
- Plant breeding companies would have more time to adapt, which will be of particular benefit to small businesses.
- Would allow cost recovery issues in different fee areas to be addressed, achieving full cost recovery in Year 1 for DUS testing and VCU data review, while phasing cost recovery for administration fees and Scottish Government's additional financial support.

6.4.2 Costs:

² Chapter 6.2 How to calculate fees, Managing Public Money (2009), HM Treasury

- Depending on the level of efficiencies achieved, the net additional cost to businesses will be £0.171m in 2014, up to £0.256m in 2015 and a maximum of £0.342m in 2016.
- Continued cost to Government until the third year of the proposed phased recovery of £0.171m in 2014 and £0.086m in 2016.

The impacts of Option 3 are described below, with the individual fees, cost increases and impact on fee income shown in Annexes 6, 7 and 8.

6.4.3 DUS Testing

- For DUS testing and reference collection costs, the proposal under Option 3 is to continue the current mixture of arrangements introduced at the request of stakeholders in 2006. This retains separate DUS test and annual fees for herbage, potatoes, swede and turnip rape. For all other crops where there are currently separate DUS test and reference collection fees, these would be combined into a single fee to simplify invoicing. (Turnip rape is not included in the tables because of the very low number of applications).
- The proposal is to revise all DUS test fees in 2014 to achieve full cost recovery.
- For DUS tests carried out by authorities in other EU countries (mainly maize, spring oilseed rape, linseed, rye and triticale), Fera will continue to invoice applicants for the fees in Euros charged by these authorities.

6.4.4 VCU Technical Management

- The proposal for VCU technical management fees under Option 3 is immediate full cost recovery, the same as for Option 2 described in paragraph 6.3.4 above.

6.4.5 Fera's Administration and Management of the Testing System

- Fera's proposal for Option 3 is to increase NL and PBR administration fees (currently £365 and £350 respectively) in stages to £616, £741 and £866 in 2014, 2015 and 2016. See Annex 6. This would recover 50% of the current shortfall in 2014, 75% in 2015 and achieve FCR in 2016.
- For conservation varieties and vegetable varieties marketed specifically to gardeners, the proposal is to leave administration fees unchanged at £175 and £100 respectively, as for Option 2.

6.4.6 Scottish Government

- Under Option 3, Scottish Government's costs for technical support for maintenance of protocols and decision making for most crops (£0.007m) would not be recovered until 2016.

7. Administrative burdens

- 7.1 No increase is anticipated in the administrative burden for businesses or Government for Options 1 and 2 because the underlying process is unchanged. For Option 3, invoicing will be simplified by the revised fees structure, reducing the administrative burden for applicants and Fera.

8. Pre-Consultation Workshops

- 8.1 Workshops with representative stakeholders were held on 19 May, 23 August and 7 December 2011 as part of consultation to inform the development of this impact assessment and public consultation documents. The workshops were attended by industry organisations (Agriculture and Horticulture Development Board, Agricultural Industries Confederation, British Society of Plant Breeders, National Farmers Union, Scottish Farmers Union, and Scottish Grass Levy

Steering Group), plant breeding and seed companies, delivery partners (AFBI, NIAB and SASA), and the Devolved Administrations of Northern Ireland, Scotland and Wales. The workshops included a review of the risks and wider impacts associated with the policy options.

- 8.2 The outcome of the workshops held on 19 May and 7 December 2011 was that stakeholders broadly agreed the risks identified.
- 8.3 The workshop held on 23 August 2011 was a more detailed explanation of the NL application process to identify potential efficiencies and consider how transfer to industry might happen.
- 8.4 The workshop held on 7 December 2011 was requested by the Scottish Government to discuss cost implications with Scottish stakeholders, particularly potato breeders and Scotland's herbage seed industry.
- 8.5 The separate review to reduce the cost of National List testing has included a meeting on 17 November 2011 where BSPB outlined proposals, developed jointly with the Agricultural Industries Confederation and National Farmers Union, to change the National List testing system to reduce costs. The review has continued through Fera's National List taskforce, a Government-business partnership whose key aim is supporting the drive for further cost-efficiencies. The taskforce first met on 10 May 2012 and has had eleven meetings to date. Defra, Fera and the Devolved Administrations have now concluded that the industry proposal for BSPB to manage NL applications should not be considered further, at least until negotiations on proposals for new EU legislation are finished. However, the taskforce's discussion of the industry proposal has resulted in Fera's reduced costs, summarised in paragraph 1.10.

9. Risks and Assumptions

9.1 Risks

- 9.1.1 Without full cost recovery, Fera may not be able to maintain its statutory services within its reduced funding under the Comprehensive Spending Review.
- 9.1.2 If full cost recovery is implemented, increased costs for the plant breeding industry may reduce its profitability, with a long term impact on breeding of varieties suited to UK agronomic conditions and market requirements. The estimated annual £40m royalty income is inelastic and increases in costs for plant breeding companies may affect continued investment. For a number of reasons unrelated to regulatory costs, the last 20 years have seen a reduction in the number of companies in the UK, through mergers and takeovers including with larger companies from other EU countries. This has reduced the number of breeding programmes, ended programmes for some species, and increased reliance on selection of lines from continental European programmes. There is a risk that increased fees will continue this trend.
- 9.1.3 Fera believes that the above risk for the plant breeding industry is largely managed through the cost reductions already achieved and Option 3 and its phased introduction of FCR. The exception is winter field beans, where remaining UK breeding is small and likely to be vulnerable to increased costs. The increase required for FCR for field beans is large in percentage terms (137%), but the current under-recovery is small at £14,000 (see Annex 6). Defra would be interested in proposals for alternative solutions to this issue.
- 9.1.4 Increased fees may reduce demand for National Listing such that full costs are not recovered in the short term. Plant breeding companies may reduce the number of applications or apply for listing in other EU countries where governments provide significant subsidy.
- 9.1.5 There is a risk that AFBI will not be able to reduce the cost base of its operations and achieve its target for cost reduction.

9.2 Assumptions

- 9.2.1 The estimates of costs and fee income are based on the assumption that the number of applications for National Listing and Plant Breeders' Rights will not be reduced significantly by the fee increases proposed in Options 2 and 3.
- 9.2.2 A move to illegal activity or non-payment of fees is unlikely. Administration fees are paid with applications and DUS test and VCU technical management fees are paid when testing starts.

10. Direct costs and benefits to business calculations

- 10.1 Annual profiles of monetised costs and benefits for businesses in £m at constant prices are given in 10.3 and 10.4.
- 10.2 Total annual costs based on the difference between the current state (Option 1 'Do nothing' with a total net shortfall in 2014 of £0.342m) and future state if Option 2 or 3 is implemented. Annex 6 summarises the costs and fees of each option.

10.3 Option 2: Introduction of fee increases to achieve full cost recovery for National Listing and Plant Breeders' Rights services, with implementation during 2014

Direct costs and benefits to businesses under Option 2										
£m	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Transition costs	0	0	0	0	0	0	0	0	0	0
Annual recurring cost	0.342	0.342	0.342	0.342	0.342	0.342	0.342	0.342	0.342	0.342
Total annual costs	0.342	0.342	0.342	0.342	0.342	0.342	0.342	0.342	0.342	0.342
Transition benefits	0	0	0	0	0	0	0	0	0	0
Annual recurring benefits	0	0	0	0	0	0	0	0	0	0
Total annual benefits	0	0	0	0	0	0	0	0	0	0

Option 2 introduces Full Cost Recovery from year 1 (2014) of £0.342m.

Total cost to industry over a 10 year period = £3.42m. Applying a discount rate of 3.5 % to the total costs over a 10 year period results in present value of £2.94, as presented in the analysis and evidence section, page 4.

10.4 Option 3: Phased introduction of fee increases to achieve Full Cost Recovery by 2016.

Direct costs and benefits to businesses under Option 3										
£m	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Transition Costs	0	0	0	0	0	0	0	0	0	0
Annual recurring cost	0.171	0.256	0.342	0.342	0.342	0.342	0.342	0.342	0.342	0.342
Total annual costs	0.171	0.256	0.342	0.342	0.342	0.342	0.342	0.342	0.342	0.342
Transition benefits	0	0	0	0	0	0	0	0	0	0
Annual recurring benefits	0.171	0.086	0	0	0	0	0	0	0	0
Total annual benefits	0.171	0.086	0	0	0	0	0	0	0	0

Option 3 phases introduction of Full Cost Recovery over three years.

Year 1 (2014) increases overall fee income by £0.171m. Industry will continue to benefit from £0.171m in subsidy.

Year 2 (2015) increases overall fee income by a further £0.086m resulting in a net fee increase of £0.256m from 2014 level. Industry will continue to benefit from £0.086m in subsidy.

From Year 3 (2016) increases in overall fee income will achieve Full Cost Recovery. This is represented as the current shortfall of £0.342m in the annual profile.

Total cost to industry over a 10 year period = £3.16m. Applying a discount rate of 3.5% to the total costs over a 10 year period results in a total cost of £2.69m as presented in analysis and evidence section, page 5.

11. Wider impacts

11.1 Statutory equality duties

National Listing is intended primarily for varieties for commercial agricultural and horticultural production. The proposed fee increases equally affect all individuals and businesses involved in activities covered by the policy. Given the objectives of the EU legislation, to protect buyers of marketed varieties, drive improvement in varieties, and provide intellectual property rights, no significant negative impact on protected social groups is anticipated.

11.2 Competition Impact Assessment

11.2.1 Implementation of Options 2 and 3 would affect a number of different sectors within plant breeding, all of which are already subject to regulatory controls that may, in themselves, inhibit competition to some extent.

11.2.2 We do not anticipate that implementation of Option 3 will result in any significant restriction in competition in any particular market. However, this may be a concern for stakeholders and evidence of impact will continue to be sought during the consultation.

11.3 Small firms impact assessment

11.3.1 Many of the companies in this sector are specialist small to medium sized enterprises (SMEs), although they account for a relatively small proportion of applications. Most of the companies making larger numbers of applications are small UK subsidiaries of international companies. This makes the small firms impact assessment difficult, since a significant impact on the viability of these companies risks a decision by the parent company to withdraw from the UK market.

11.3.2 Previous consultations indicated that SMEs, in common with the majority of consulted businesses, preferred to see fees that did not place them at competitive disadvantage with their competitors in other Member States.

11.3.3 Fee increases may have a disproportionate impact on small and micro businesses if the fees are a higher proportion of their costs. However, fees per application are the same regardless of business size, giving a direct relationship between costs and the number of applications made by a business. The impact will be less for Option 3, phased FCR. This is another area where Fera would welcome further evidence from the industry.

11.4 Greenhouse gas assessment

11.4.1 Options 2 and 3 would not be expected to result in changes in emissions of greenhouse gases.

11.5 Wider environmental issues assessment

11.5.1 The policy options will have no significant impacts on wider environmental issues. It will not be vulnerable to the affects of climate change, have no financial, environmental or health impact on waste management, air quality, pollution or flood risk, biodiversity or noise levels.

11.6 Health and well-being assessment

11.6.1 The policy options will not directly affect health or well-being and will not cause inequalities.

11.7 Human rights assessment

The policy is consistent with the Human Rights Act 1998.

11.8 Justice assessment

The policy options do not create new criminal sanctions or civil penalties

11.9 Rural proofing assessment

Conditions apply equally to all individuals and businesses using the services covered by the proposal. There should be no equity issues arising from the location of individuals or businesses.

11.10 Sustainable development assessment

The proposal contributes to the Government's sustainable development principle of achieving a sustainable economy by transferring the full cost of NL/PBR services from the taxpayer to businesses using the service, thus enabling more efficient allocation of public money.

12. Summary and preferred option with description of implementation plan

- 12.1 The UK plant breeding sector is dominated by multinational companies and their subsidiaries. The total income from royalties on protected varieties is estimated at £40m with annual benefits to the downstream economy of £2,300m. This makes the increase of £0.342m in fee income to achieve FCR a small proportion of the value of plant breeding, and therefore in principle, overall cost recovery should be achievable. However, the plant breeding industry cannot easily capture value beyond the sale of seed and will find it difficult to increase royalty income to cover the cost of increased fees. Consultation with the industry suggests significant risks associated with immediate implementation of FCR for some small businesses, minor crops and their niche markets. If realised, this could affect the diversity of UK adapted varieties available to farmers and potentially some sectors of food production.
- 12.2 Fera's preferred option is Option 3, targeted at reducing this risk while removing the financial cost to the taxpayer of service provision. Full cost recovery would be phased from 2014 to 2016, giving businesses time to adapt to the increases and Fera time to work with stakeholders, delivery partners and Devolved Administrations to reduce costs further and constrain later stages of fee increases. A separate review process is underway, as described in paragraphs 1.10 and 8.5, to reduce costs by changing the way work is done and to achieve efficiencies.
- 12.3 Options for de-regulation have been discounted because of the need to comply with EU legislation and international conventions. Our understanding is that stakeholders wish to retain a proportionate regulatory system.
- 12.4 Under Option 3, fees per application for NL/PBR administration costs rise from £365 (£350 for PBR) to £616, £741 and £866 over the period from 2014 to 2016.
- 12.5 FCR fees for VCU technical management will be introduced in 2014 through standardisation of the fee structure to £165 for each year of testing. This will give increases of 65 to 200% in fees payable for two (three for herbage) years of testing, depending on the crop.
- 12.6 FCR fees for DUS testing will be introduced in 2014. Most fees will be streamlined, reducing administration costs for applicants and Fera, and will be more closely aligned with contractors' costs. For herbage, potatoes, swede and turnip rape the current separate DUS test and annual fees will be retained.
- 12.7 DUS fees for most crops increase in the range of 13 to 39%. For field beans, the increase is 137%. DUS fees for sugar beet and winter oilseed rape reduce by 11 and 15% respectively.
- 12.8 Through consultation, our intention is to collect more evidence to gain a better understanding of the impact of the proposed charges. Our plan would be to introduce fee increases in April 2014 under Option 2 or staged increases in April 2014, 2015 and 2016 under Option 3.

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.

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)];

The Food and Environment Research Agency will monitor annually the impact on applications for National Listing and Plant Breeders' Rights and will meet regularly with its delivery partners and stakeholder organisations. It will undertake annual stakeholder satisfaction surveys, with the first to take place in 2015 after the introduction of increased fees. The first report on results and outcomes of this monitoring activity will be published in October 2016, with monitoring repeated in 2017 and a second interim report published. A final report on the effects of the increased charges will be published in November 2019, five years after the introduction of the new fees. Consideration will be given at each stage as to whether action is required to amend implementation.

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?]

This review will assess the impact of the policy objective of full cost recovery on:

1. Delivery of UK's objectives for plant varieties and seeds
2. Ability to recover the full costs of the service
3. Patterns of usage
4. The effects of any unforeseen or unintended consequences.

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]

The approach will be an annual review of stakeholders' views and assessment of the monitoring data. This will inform an assessment of the benefits gained by the policy in achieving full cost recovery against the costs imposed on businesses and the wider policy objectives for varieties and seeds.

Baseline: [The current (baseline) position against which the change introduced by the legislation can be measured]

Baseline data will be derived from pre-implementation period April 2013 to April 2014.

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]

Full cost recovery for the National Listing and Plant Breeders' Rights Service during 2014 (Option 2) or 2016 (Option 3).

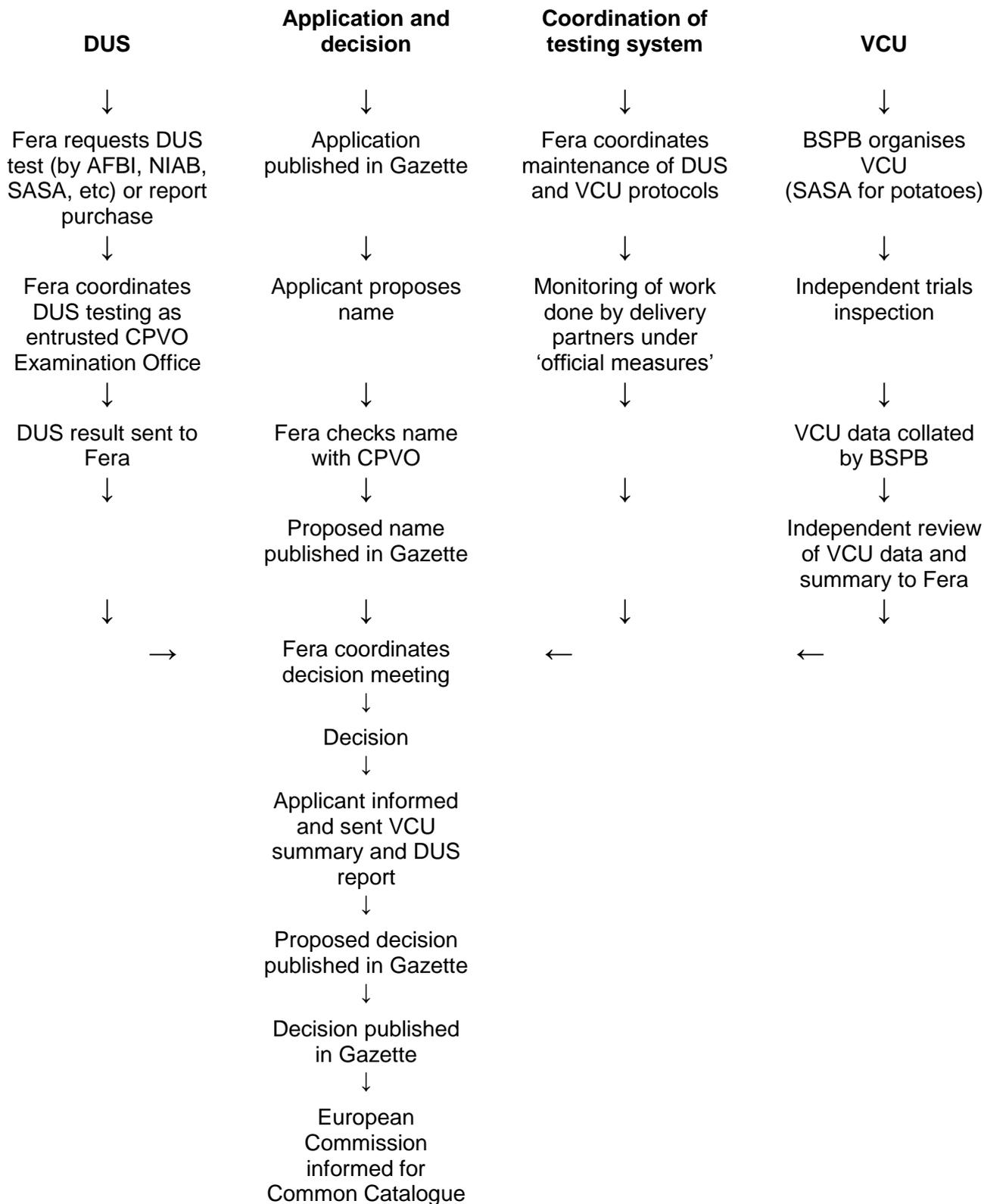
Monitoring information arrangements: [Provide further details of the planned/existing arrangements in place that will allow a systematic collection of monitoring information for future policy review]

1. Delivery of UK's objectives for plant varieties and seeds – Fera will evaluate the impact of increased fees on NL/PBR applications, the number of new varieties reaching the market, and the range of crops involved.
2. Whether full costs of the NL/PBR service continue to be recovered – by monitoring fee income and costs.
3. Patterns of usage – Fera will evaluate the information used for 1. above.
4. Any unforeseen or unintended consequences – Fera will use information from its delivery partners, stakeholder organisations and customer satisfaction surveys to look for unforeseen consequences.

Reasons for not planning a review: [If there is no plan to do a PIR please provide reasons here]

Annex 2. Summary of National Listing Process

Application for National Listing made to Fera



Annex 3. Business volumes for National Listing and Plant Breeders' Rights in 2011/12

	No. varieties and lines in UK DUS testing					No. applications			*DUS for other MSs
	Yr 1	Yr 2	Yr 3	Yr 4	Total	NL	PBR	Total	
Cereals	150	88	10	NA	248	150	16	166	2
WOSR	160	105	5	NA	270	74	8	82	NA
Sugar beet	50	47	12	NA	109	50	0	50	NA
Herbage	35	45	40	25	145	26	6	32	139
Vegetable peas	4	7	NA	NA	11	4	0	4	4
Other vegetables tested by SASA	5	0	NA	NA	5	5	0	5	0
Potatoes	7	9	NA	NA	16	7	3	10	NA
Field peas	8	4	NA	NA	12	8	0	8	NA
Field beans	7	3	NA	NA	10	7	0	7	0
Maize	Not tested in UK					32	0	32	NA
SOSR, Linseed, Soya	Not tested in UK					11	0	11	NA
Vegetables	Not tested in UK					12	0	12	NA
Ornamentals	8	0	NA	NA	8	NA	8	8	0
Total	433	312	67	25	837	385	41	426	145

* Number of varieties in testing

Annex 4. Main responsibilities for DUS testing and VCU trials.

Organisation	DUS testing	VCU testing
AFBI	Perennial ryegrass and white clover	Herbage in Northern Ireland
BSPB	-	All crops except herbage in Northern Ireland and Scotland and potatoes
NIAB	Wheat, barley, oats, winter oilseed rape, sugar beet, field beans, ornamental species	-
SASA	Vegetables, field peas, potatoes	Herbage in Scotland and potatoes
Other Member States	Maize, spring oilseed rape, linseed, rye, triticale	-

AFBI Agri-Food and Biosciences Institute, Belfast

BSPB British Society of Plant Breeders

NIAB National Institute of Agricultural Botany, Cambridge

SASA Science and Advice for Scottish Agriculture, Edinburgh

Annex 5. Current fees for National Listing and Plant Breeders' Rights

1. Agricultural and vegetable crops – fees in £

	Adminis- tration fee	DUS test fee Year 1	Ref variety fee Year 1	DUS test Year 2 etc	Ref variety fee Year 2 etc	Annual charge	* VCU technical managem- ent fee
Crops DUS tested in the UK							
Wheat, barley, oats	365	600	55	600	55	n/a	200 ¹
WOSR and forage rape	365	820	745	665	745	n/a	60 ²
Field beans	365	800	270	800	270	n/a	100 ²
Sugar beet	365	280	70	280	70	n/a	60 ²
Fodder beet	365	640	n/a	640	n/a	175	60 ²
Potatoes	365	400	n/a	400	n/a	190	110 ¹
Ryegrasses and white clover	365	650	n/a	650	n/a	365	300 ¹
Fodder turnip rape & swede	365	800	n/a	800	n/a	175	100 ²
Oilseed turnip rape	365	900	n/a	900	n/a	175	100 ²
Field pea	365	850	290	850	290	n/a	100 ²
Vegetable pea	365	750	350	750	350	n/a	n/a
Other veg tested by SASA	365	800	350	800	350	n/a	n/a
Crops DUS tested by other Member States. Applicants are invoiced the costs charged by other Member States. The administration fee and VCU technical management fee is given below.							
Rye	365		n/a		n/a	n/a	100 ²
Triticale	365		n/a		n/a	n/a	100 ²
Maize	365		n/a		n/a	n/a	60 ²
Linseed	365		n/a		n/a	n/a	100 ²
SOSR	365		n/a		n/a	n/a	60 ²
Veg not tested by SASA	365		n/a		n/a	n/a	n/a
Other grasses and clovers	365		n/a		n/a	n/a	300 ¹
Other agricultural crops	365		n/a		n/a	n/a	100 ²

* Not applicable to National List applications for amenity grasses or any application for Plant Breeders' Rights.

¹ Single payment with the year 1 DUS test fee. ² Payment for each year of VCU testing.

2. Ornamental species – fees in £ Usually a single year of DUS testing

	Administration fee	DUS test fee (per year)
Chrysanthemum	350	1300
Rose	350	1000
Other Decorative Variety	350	1200

- 3. Conservation varieties of agricultural species** Administration fee of £175.
 Conservation varieties of vegetable species Administration fee of £175
 Amateur vegetable varieties Administration fee of £100

4. Miscellaneous fees – National Listing

Application for the substitution of a name in a National List	£30
On delivering representations in writing	£30
On requesting to be heard by the Ministers	£60

5. Miscellaneous fees – Plant Breeders' Rights

On delivering representations in writing	£30
On requesting a hearing before the Controller	£65
On making application for a compulsory licence	£65

Annex 6a. Costs and fees and their impact on cost recovery in 2014, 2015 and 2016
Options 1 and 2

		2014	2014	Option 1			Option 2			
		estimated	estimated	Recovery	No change	Annual	Immediate full cost recovery			
		cost	income	£k	Fee ¹	fee	Fee ¹	%	Annual	%
		£k	£k				change	change	fee	change
DUS testing	Cereals	195	164	-31	655	-	780	19	-	-
	Winter oilseed rape	370	420	50	1,565	- ²	1,325	-15	-	-
	Sugar beet	31	35	4	350	-	310	-11	-	-
	Herbage ³	300	248	-52	650	365	788	21	442	21
	Vegetable peas	11	8	-2	1,100	-	1,334	21	-	-
	Other veg tested by SASA	7	5	-1	1,150	-	1,294	13	-	-
	Potatoes	37	30	-7	400	190	451	13	212	12
	Field peas	17	13	-4	1,140	-	1,394	22	-	-
	Field beans	25	11	-15	1,070	-	2,540	137	-	-
	Swede	7	7	0	800	175	1,010	26	180	3
	Roses	8	6	-2	1,000	-	1,390	39	-	-
	Chrysanthemums	53	39	-14	1,300	-	1,765	36	-	-
	Other ornamental plants	65	53	-12	1,200	-	1,480	23	-	-
VCU Technical Management ⁴		108	62	-46	200	-	165	Note 4	-	-
Fera's administration ⁵		346	146	-200	365	-	866	137	-	-
Scottish Government ⁶	Technical support	7	0	-7	-	-	-	-	-	-
Total		1,588	1,246	-342						

¹ Combined DUS test fee, and where applicable, reference variety fee. Annual fee shown separately where relevant (herbage, potatoes, swede).

² DUS fee for year 1. Current DUS fee for year 2 plus reference variety fee is £1,410.

³ Based on AFBI's target for cost reduction. If this is not achieved, further fee increases will be necessary.

⁴ The current technical management fee varies between crops, with cereals used as an example here. The proposal is for a standard fee of £165 per year of testing for all crops. This would give increases of 65 to 200% in fees payable for two (three for herbage) years of testing.

⁵ For conservation varieties and amateur vegetables, fees will be unchanged at £175 and £100 respectively.

Current fee for Plant Breeders' Rights is £350.

⁶ Scottish Government is not seeking to recover its costs until the end of the phasing period.

Annex 6b. Costs and fees and their impact on cost recovery in 2014, 2015 and 2016

Option 3 Phased full cost recovery ¹

		Fee £			Change from current fee %			Cost recovery £k		
		2014	2015 ⁶	2016 ⁶	2014	2015 ⁶	2016 ⁶	2014	2015	2016
DUS testing	Cereals	780			19			FCR	FCR	FCR
	Winter oilseed rape	1,325			-15			FCR	FCR	FCR
	Sugar beet	310			-11			FCR	FCR	FCR
	Herbage ²	788			21			FCR	FCR	FCR
	Annual fee	442			21			FCR	FCR	FCR
	Vegetable peas	1,334			21			FCR	FCR	FCR
	Other veg tested by SASA	1,294			13			FCR	FCR	FCR
	Potatoes	451			13			FCR	FCR	FCR
	Annual fee	212			12			FCR	FCR	FCR
	Field peas	1,394			22			FCR	FCR	FCR
	Field beans	2,540			137			FCR	FCR	FCR
	Swede	1,010			26			FCR	FCR	FCR
	Annual fee	180			3			FCR	FCR	FCR
	Roses	1,390			39			FCR	FCR	FCR
	Chrysanthemums	1,765			36			FCR	FCR	FCR
Other ornamental plants	1,480			23			FCR	FCR	FCR	
VCU Technical Management		165			Note 3			FCR	FCR	FCR
Fera's administration ⁴		616	741	866	69	103	137	-100	-50	FCR
Scottish Government	Technical support	No fee	No fee	18 ⁵	No fee	No fee	-	-7	-7	FCR

- ¹ Option 3 proposes full cost recovery (FCR) for DUS and technical management in 2014 and phasing FCR for Fera's administration costs over three years (recovering 50% of current shortfall in 2014, 75% in 2015 and 100% in 2016). Scottish Government is not seeking to recover its costs until 2016. Fera's government/industry taskforce is working on options to further reduce costs which if successful will be reflected in changes to fees.
- ² Based on AFBI's target for cost reduction. If this is not achieved, further fee increases will be necessary.
- ³ Current technical management fee varies between crops. Cereals given as an example. Proposal is a standard fee of £165 per year of testing for all crops, giving increases of 65 to 200% in fees payable for two (three for herbage) years of testing.
- ⁴ For conservation varieties and amateur vegetables, fees will be unchanged at £175 and £100 respectively.
- ⁵ Scottish Government's technical support costs would be added to Fera's administration fee, giving a total fee of £884.
- ⁶ No further changes in DUS or technical management fees except for inflationary increases or reductions through technical and business efficiencies.

**Annex 7a. Comparison of total fees payable to achieve National Listing (PBR for ornamentals) with the current fees, and under Options 2 and 3¹
Option 2 and Option 3 in 2014**

Crop	Total fees payable to achieve National Listing (PBR for ornamental species)															
	Option 1 - current fees					Option 2 - immediate FCR					Option 3 in 2014 - phased FCR					
	Ad min	² DUS test	⁴ Ref vars	VCU TM	Total	Ad min	² DUS test	⁴ Ref vars	VCU TM	Total	% chnge	Ad min	^{2&4} DUS	VCU TM	Total	% chnge
Cereals	365	1,200	110	200	1,875	866	1,094	466	330	2,756	47	616	1,560	330	2,506	34
WOSR	365	1,485	1,490	120	3,460	866	1,064	1,586	330	3,846	11	616	2,650	330	3,596	4
WOSR hybrid³	365	4,455	4,470	120	9,410	866	3,192	4,758	330	9,146	-3	616	7,950	330	8,896	-5
Sugar beet	365	840	210	120	1,535	866	747	183	330	2,126	39	616	930	330	1,876	22
Herbage	365	2,600	2,555	300	5,820	866	3,152	3,094	495	7,607	31	616	6,246	495	7,357	26
Vegetable peas	365	1,500	700	NA	2,565	866	1,868	800	No fee	3,534	38	616	2,668	NA	3,284	28
SASA - other veg	365	1,600	700	NA	2,665	866	1,788	800	No fee	3,454	30	616	2,588	NA	3,204	20
Potatoes	365	800	1,330	110	2,605	866	902	1,484	330	3,582	38	616	2,386	330	3,332	28
Field peas	365	1,700	580	200	2,845	866	2,188	600	330	3,984	40	616	2,788	330	3,734	31
Field beans	365	1,600	540	200	2,705	866	980	4,100	330	6,276	132	616	5,080	330	6,026	123
Swede	365	1,600	1,225	200	3,390	866	2,020	1,260	330	4,476	32	616	3,280	330	4,226	25
Roses	350	1,000	NA	NA	1,350	866	1,390	NA	NA	2,256	67	616	1,390	NA	2,006	49
Chrysanthemums	350	1,300	NA	NA	1,650	866	1,765	NA	NA	2,631	59	616	1,765	NA	2,381	44
Other ornamentals	350	1,200	NA	NA	1,550	866	1,480	NA	NA	2,346	51	616	1,480	NA	2,096	35

¹ Does not include the cost of VCU testing which applicants pay directly to BSPB

² 2 years DUS except for sugar beet and herbage (3 years for most varieties) and roses, chrysanthemums and other ornamentals (1 year)

³ 2 way hybrid with DUS test of hybrid and 2 parent lines

⁴ Herbage, potatoes and swede reference collection costs recovered through annual fee for each year variety is on NL, estimated to be for 7 years.

**Annex 7b. Comparison of total fees payable to achieve National Listing (PBR for ornamentals) with the current fees, and under Options 2 and 3¹
Option 3 in 2015 and 2016**

Crop	Option 1 ⁵	Option 3 in 2015 - phased FCR					Option 3 in 2016 - phased FCR				
	Total	Admin	^{2&4} DUS	VCU TM	Total	% change	Admin	^{2&4} DUS	VCU TM	Total	% change
Cereals	1,875	741	1,560	330	2,631	40	884	1,560	330	2,774	48
WOSR	3,460	741	2,650	330	3,721	8	884	2,650	330	3,864	12
WOSR hybrid³	9,410	741	7,950	330	9,021	-4	884	7,950	330	9,164	-3
Sugar beet	1,535	741	930	330	2,001	30	884	930	330	2,144	40
Herbage	5,820	741	6,246	495	7,482	29	884	6,246	495	7,625	31
Vegetable peas	2,565	741	2,668	NA	3,409	33	884	2,668	NA	3,552	38
Other veg tested by SASA	2,665	741	2,588	NA	3,329	25	884	2,588	NA	3,472	30
Potatoes	2,605	741	2,386	330	3,457	33	884	2,386	330	3,600	38
Field peas	2,845	741	2,788	330	3,859	36	884	2,788	330	4,002	41
Field beans	2,705	741	5,080	330	6,151	127	884	5,080	330	6,294	133
Swede and turnip rape	3,390	741	3,280	330	4,351	28	884	3,280	330	4,494	33
Roses	1,350	741	1,390	NA	2,131	58	866	1,390	NA	2,256	67
Chrysanthemums	1,650	741	1,765	NA	2,506	52	866	1,765	NA	2,631	59
Other ornamentals	1,550	741	1,480	NA	2,221	43	866	1,480	NA	2,346	51

¹ Does not include the cost of VCU testing which applicants pay directly to BSPB

² 2 years DUS except for sugar beet and herbage (3 years for most varieties) and roses, chrysanthemums and other ornamentals (1 year)

³ 2 way hybrid with DUS test of hybrid and 2 parent lines

⁴ Herbage, potatoes and swede reference collection costs recovered through annual fee for each year variety is on NL, estimated to be for 7 years.

⁵ See Annex 7a for breakdown.

Annex 8. Fee profiles for current fees, Option 2 (immediate FCR) and Option 3 (phased FCR) years of phasing

		Cost £				
		Option 2		Option 3	Option 3	Option 3
		Option 1 No change	Immediate FCR	2014	2015	2016
CEREALS						
Year 1	Administration fee	365	866	616	741	884
	DUS test fee	600	547	780	780	780
	DUS reference variety fee	55	233	NA	NA	NA
	VCU technical management fee	200	165	165	165	165
	Sub-total year 1	1,220	1,811	1,561	1,686	1,829
Year 2	DUS test fee	600	547	760	760	760
	DUS reference variety fee	55	233	NA	NA	NA
	VCU technical management fee	NA	165	165	165	165
	Sub-total year 2	655	945	925	925	925
	Total	1,875	2,756	2,486	2,611	2,754
WINTER OILSEED RAPE						
Year 1	Administration fee	365	866	616	741	884
	DUS test fee	820	532	1,325	1,325	1,325
	DUS reference variety fee	745	793	NA	NA	NA
	VCU technical management fee	60	165	165	165	165
	Sub-total year 1	1,990	2,356	2,106	2,231	2,374
Year 2	DUS test fee	665	532	1,325	1,325	1,325
	DUS reference variety fee	745	793	NA	NA	NA
	VCU technical management fee	60	165	165	165	165
	Sub-total year 2	1,470	1,490	1,490	1,490	1,490
	Total	3,460	3,846	3,596	3,721	3,864
WINTER OILSEED RAPE HYBRID						
Year 1	Administration fee	365	866	616	741	884
	DUS test fee	2,460	1,596	3,975	3,975	3,975
	DUS reference variety fee	2,235	2,379	NA	NA	NA
	VCU technical management fee	60	165	165	165	165
	Sub-total year 1	5,120	5,006	4,756	4,881	5,024
Year 2	DUS test fee	1,995	1,596	3,975	3,975	3,975
	DUS reference variety fee	2,235	2,379	NA	NA	NA
	VCU technical management fee	60	165	165	165	165
	Sub-total year 2	4,290	4,140	4,140	4,140	4,140
	Total	9,410	9,146	8,896	9,021	9,164
SUGAR BEET						
Year 1	Administration fee	365	866	616	741	884
	DUS test fee	280	249	310	310	310
	DUS reference variety fee	70	61	NA	NA	NA
	VCU technical management fee	60	165	165	165	165
	Sub-total year 1	775	1,341	1,091	1,216	1,359
Year 2	DUS test fee	280	249	310	310	310
	DUS reference variety fee	70	61	NA	NA	NA
	VCU technical management fee	60	165	165	165	165
	Sub-total year 2	410	475	475	475	475
Year 3	DUS test fee	280	249	310	310	310
	DUS reference variety fee	70	61	NA	NA	NA
	VCU technical management fee	NA	NA	NA	NA	NA
	Sub-total year 3	350	310	310	310	310
	Total	1,535	2,126	1,876	2,001	2,144

Annex 8 continued

		Cost £				
		Option 2		Option 3	Option 3	Option 3
		Option 1 No change	Immediate FCR	2014	2015	2016
HERBAGE						
Year 1	Administration fee	365	866	616	741	884
	DUS test fee	650	788	788	788	788
	DUS reference variety fee	NA	NA	NA	NA	NA
	VCU technical management fee	300	NA	NA	NA	NA
	Sub-total year 1	1,315	1,654	1,404	1,529	1,672
Year 2	DUS test fee	650	788	788	788	788
	DUS reference variety fee	NA	NA	NA	NA	NA
	VCU technical management fee	NA	165	165	165	165
	Sub-total year 2	650	953	953	953	953
Year 3	DUS test fee	650	788	788	788	788
	DUS reference variety fee	NA	NA	NA	NA	NA
	VCU technical management fee	NA	165	165	165	165
	Sub-total year 3	650	953	953	953	953
Year 4	DUS test fee	650	788	788	788	788
	DUS reference variety fee	NA	NA	NA	NA	NA
	VCU technical management fee	NA	165	165	165	165
	Sub-total year 4	650	953	953	953	953
Year 5	Annual fee	365	442	442	442	442
Year 6	Annual fee	365	442	442	442	442
Year 7	Annual fee	365	442	442	442	442
Year 8	Annual fee	365	442	442	442	442
Year 9	Annual fee	365	442	442	442	442
Year 10	Annual fee	365	442	442	442	442
Year 11						
etc	Annual fee	365	442	442	442	442
Total		5,820	7,607	7,357	7,482	7,625
VEGETABLE PEAS						
Year 1	Administration fee	365	866	616	741	884
	DUS test fee	750	934	1,334	1,334	1,334
	DUS reference variety fee	350	400	NA	NA	NA
	VCU technical management fee	NA	NA	NA	NA	NA
	Sub-total year 1	1,465	2,200	1,950	2,075	2,218
Year 2	DUS test fee	750	934	1,334	1,334	1,334
	DUS reference variety fee	350	400	NA	NA	NA
	VCU technical management fee	NA	NA	NA	NA	NA
	Sub-total year 2	1,100	1,334	1,334	1,334	1,334
Total		2,565	3,534	3,284	3,409	3,552
OTHER VEGETABLES TESTED BY SASA						
Year 1	Administration fee	365	866	616	741	884
	DUS test fee	800	894	1,294	1,294	1,294
	DUS reference variety fee	350	400	NA	NA	NA
	VCU technical management fee	NA	NA	NA	NA	NA
	Sub-total year 1	1,515	2,160	1,910	2,035	2,178
Year 2	DUS test fee	800	894	1,294	1,294	1,294
	DUS reference variety fee	350	400	NA	NA	NA
	VCU technical management fee	NA	NA	NA	NA	NA
	Sub-total year 2	1,150	1,294	1,294	1,294	1,294
Total		2,665	3,454	3,204	3,329	3,472

Annex 8 continued

		Cost £				
		Option 1	Option 2	Option 3	Option 3	Option 3
		No change	Immediate FCR	2014	2015	2016
POTATOES						
Year 1	Administration fee	365	866	616	741	884
	DUS test fee	400	451	451	451	451
	DUS reference variety fee	NA	NA	NA	NA	NA
	VCU technical management fee	110	165	165	165	165
	Sub-total year 1	875	1,482	1,232	1,357	1,500
Year 2	DUS test fee	400	451	451	451	451
	DUS reference variety fee	NA	NA	NA	NA	NA
	VCU technical management fee	NA	165	165	165	165
	Sub-total year 2	400	616	616	616	616
Year 3	Annual fee	190	212	212	212	212
Year 4	Annual fee	190	212	212	212	212
Year 5	Annual fee	190	212	212	212	212
Year 6	Annual fee	190	212	212	212	212
Year 7	Annual fee	190	212	212	212	212
Year 8	Annual fee	190	212	212	212	212
Year 9 etc	Annual fee	190	212	212	212	212
	Total	2,605	3,582	3,332	3,457	3,600
FIELD PEAS						
Year 1	Administration fee	365	866	616	741	884
	DUS test fee	850	1,094	1,394	1,394	1,394
	DUS reference variety fee	290	300	NA	NA	NA
	VCU technical management fee	100	165	165	165	165
	Sub-total year 1	1,605	2,425	2,175	2,300	2,443
Year 2	DUS test fee	850	1,094	1,394	1,394	1,394
	DUS reference variety fee	290	300	NA	NA	NA
	VCU technical management fee	100	165	165	165	165
	Sub-total year 2	1,240	1,559	1,559	1,559	1,559
	Total	2,845	3,984	3,734	3,859	4,002
FIELD BEANS						
Year 1	Administration fee	365	866	616	741	884
	DUS test fee	800	490	2,540	2,540	2,540
	DUS reference variety fee	270	2,050	NA	NA	NA
	VCU technical management fee	100	165	165	165	165
	Sub-total year 1	1,535	3,571	3,321	3,446	3,589
Year 2	DUS test fee	800	490	2,540	2,540	2,540
	DUS reference variety fee	270	2,050	NA	NA	NA
	VCU technical management fee	100	165	165	165	165
	Sub-total year 2	1,170	2,705	2,705	2,705	2,705
	Total	2,705	6,276	6,026	6,151	6,294

Annex 8 continued

		Cost £				
		Option 1	Option 2	Option 3	Option 3	Option 3
		No change	Immediate FCR	2014	2015	2016
SWEDE						
Year 1	Administration fee	365	866	616	741	884
	DUS test fee	800	1,010	1,010	1,010	1,010
	DUS reference variety fee	NA	NA	NA	NA	NA
	VCU technical management fee	100	165	165	165	165
	Sub-total year 1	1,265	2,041	1,791	1,916	2,059
Year 2	DUS test fee	800	1,010	1,010	1,010	1,010
	DUS reference variety fee	NA	NA	NA	NA	NA
	VCU technical management fee	100	165	165	165	165
	Sub-total year 2	900	1,175	1,175	1,175	1,175
Year 3	Annual fee	180	180	180	180	180
Year 4	Annual fee	180	180	180	180	180
Year 5	Annual fee	180	180	180	180	180
Year 6	Annual fee	180	180	180	180	180
Year 7	Annual fee	180	180	180	180	180
Year 8	Annual fee	180	180	180	180	180
Year 9 etc	Annual fee	180	180	180	180	180
	Total	3,425	4,476	4,226	4,351	4,494
ROSES						
Year 1	Administration fee	350	866	616	741	866
	DUS test fee	1,000	1,390	1,390	1,390	1,390
	DUS reference variety fee	NA	NA	NA	NA	NA
	VCU technical management fee	NA	NA	NA	NA	NA
	Total	1,350	2,256	2,006	2,131	2,256
CHRYSANTHEMUMS						
Year 1	Administration fee	350	866	616	741	866
	DUS test fee	1,300	1,765	1,765	1,765	1,765
	DUS reference variety fee	NA	NA	NA	NA	NA
	VCU technical management fee	NA	NA	NA	NA	NA
	Total	1,650	2,631	2,381	2,506	2,631
OTHER ORNAMENTALS						
Year 1	Administration fee	350	866	616	741	866
	DUS test fee	1,200	1,480	1,480	1,480	1,480
	DUS reference variety fee	NA	NA	NA	NA	NA
	VCU technical management fee	NA	NA	NA	NA	NA
	Total	1,550	2,346	2,096	2,221	2,346