Title: Transposition of European Commission Directive 2015/566 as regards to the quality and safety of imported tissues and cells **IA No:** 13002 **Lead department or agency:** Department of Health (DH) **Other departments or agencies:**	Impact Assessment (IA) **Date: 12/04/17** **Stage: Final** **Source of intervention:** EU **Type of measure:** Secondary legislation **Contact for enquiries:** DH Transplant Policy, Emma Wilbraham, emma.wilbraham@dh.gsi.gov.uk

Summary: Intervention and Options

RPC Opinion: GREEN

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, Three-Out?**	**Measure qualifies as Non-qualifying provision**
£-1.96m	£-0.91m	£0.11m	No	

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

In 2007, the UK transposed European Directive 2004/23/EC into UK law. This Directive sets quality and safety standards for human tissue and cells intended for human application. It aims to ensure that regardless of where human tissues and cells are procured or used within EU Member States they meet the same high quality and safety standards. The principle of ensuring consistently high quality and safety standards should also apply to any tissues or cells imported into the EU from non-EU countries. The Commission Directive 2015/566 introduces the mechanisms for assuring this.

What are the policy objectives and the intended effects?

The aim is to make transplanted human cells and tissues safer by tightening up controls especially on information and better traceability and accountability. The specific objective is to make the requirements of the Commission Directive operational in the UK.

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

Option 0 – Do nothing. The UK would continue to import tissues and cells under current regulations without implementing the additional requirements set out in the Directive. This option has not been considered because of the UK's legal obligation to transpose EU Directives.

Option 1 – Transpose European Directive 2015/566 by copy-out into UK regulations in order to meet the minimum requirements to comply i.e. no gold-plating.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** 05/2022

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** No	**Large** No
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** 0	**Non-traded:** 0	

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: 28/11/2017

Summary: Analysis & Evidence

Policy Option 1

Description:

FULL ECONOMIC ASSESSMENT

Price Base Year 2014	PV Base Year 2015	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: -1.01	**High:-** 2.91	**Best Estimate: -**1.96

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0.97		0.01	**1.01**
High	2.84		0.01	**2.91**
Best Estimate	1.91		0.01	**1.96**

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

The most substantial impacts are the estimated one-off costs of altering and authorising written agreements with Third Country suppliers. We expect 43 NHS organisations to bear financial costs of £1.05 million, and 65 private sector companies (all small or micro sized) to incur costs of £0.91 million.

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				
High				
Best Estimate				

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

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

There is currently a small risk that importation of inferior material could lead to harm to human health. The risk is possibly growing due to an increasing heterogeneity of cell and tissue sources. We are unable to estimate the benefit that implementing the new Directive would bring in terms of reducing the risk. However, we have estimated that in the UK the Directive would have to prevent between 1 and 4 deaths in order for the benefits to justify the costs.

Key assumptions/sensitivities/risks

Discount rate (%) 3.5

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			In scope of OITO?	Measure qualifies as
Costs: 0.11	**Benefits: 0**	**Net:** 0.11	No	NA

Abbreviations used in this Impact Assessment

3CS – 3rd Country Supplier - a tissue establishment or another body, established in a Third Country, which is responsible for the export to the EU of tissues and cells it supplies to an importing tissue establishment.

EU – European Union

EC – European Commission

HFEA - the Human Fertilisation & Embryology Authority, the UK Competent Authority that regulates use of gametes and embryos in fertility treatment and research

HTA - the Human Tissue Authority, The UK Competent Authority that regulates organisations that remove, store and use human tissue for research, medical treatment, post-mortem examination, education and training, and display in public.

IA – Impact Assessment

QALY – Quality Adjusted Life Year, a standardised measure of health that combines information on both the length and quality of life

RPC – The Regulatory Policy Committee. The body that provides the government with external, independent scrutiny of new regulatory and deregulatory proposals.

ITE – Importing Tissue Establishment. A public or private sector organisation that imports human tissues or reproductive cells into the UK, and is regulated in the UK either by the Human Tissue Authority or the Human Fertilisation & Embryology Authority

Evidence Base

1. This Final Impact Assessment includes assumptions that have been revised as a result of feedback from the public consultation that took place in March and early April 2017. Readers who wish to see how the original Consultation IA assumptions have changed may wish to refer directly to paragraphs 19 to 22.

Background

2. European Commission Directive 2015/566, implementing Directive 2004/23/EC as regards the procedures for verifying the equivalent standards of quality and safety of imported tissues and cells, was published in the Official Journal of the European Union on 9 April 2015. The UK, along with other Member States, is required to transpose the Directive into domestic law.
3. On 23 June, the EU referendum took place and the people of the United Kingdom voted to leave the European Union. The Government respected the result and triggered Article 50 of the Treaty on European Union on 29th March 2017 to begin the process of exit. Until exit negotiations are concluded, the UK remains a full member of the European Union and all the rights and obligations of EU membership remain in force. During this period the Government will continue to negotiate, implement and apply EU legislation.

The problem under consideration

4. In July 2007, the UK transposed European Directive 2004/23/EC[1] (referred to in this IA as the "mother Directive") into UK law. The mother Directive set quality and safety standards for human tissues and cells intended for human application. It has been instrumental in raising operating standards in the UK and across Europe, towards the aim of ensuring that regardless of where human tissues and cells are procured or used within the EU Member States, they meet the same high quality and safety standards.
5. These principles and standards should also apply to any tissue or cells imported into the EU from non-EU countries (described as "Third Countries"). Tissues and cells are moving more frequently and across a wider variety of international borders, making the need for equivalency in standards more important in order to mitigate future patient safety risks. The new Commission Directive 2015/566 (referred to in this IA as the "Import Directive") introduces the mechanisms for assuring equivalence of Third Country imports to EU standards.
6. Imports of tissues and cells from Third Countries are already tightly regulated in the UK by two Competent Authorities, the Human Tissue Authority (HTA) and the Human Fertilisation & Embryology Authority (HFEA). Following transposition of the 2004 Directive[2], both the HTA and the HFEA introduced regulatory controls to ensure that imported tissue and cells met the standards of the 2004 Directive and its supporting Commission Directives[3]. Any material that cannot meet these

[1] Directive 2004/23/EC of the European Parliament and of the Council of 31 March 2004 on setting standards of quality and safety for the donation, procurement, testing, processing, preservation, storage and distribution of human tissues and cells.

[2] The Directive and supporting Commission Directives were transposed into UK law in July 2007. For reproductive cells this was by means of the Human Fertilisation and Embryology (Quality and Safety) Regulation 2007 that amended the Human Fertilisation and Embryology Act 1990 to implement the provisions of the Directives. For all other human tissue and cells, the Directive were implemented by freestanding regulations: the Human Tissue (Quality and Safety for Human Application) Regulations 2007.

[3] Commission Directive 2006/17/EC implementing Directive 2004/23/EC of the European Parliament and Council as regards certain technical requirements for the donation, procurement and testing of human tissues and cells and Commission Directive 2006/86/EC implementing Directive 2004/23/EC of the European Parliament and Council as regards traceability requirements, notification of serious adverse reactions and events and certain technical requirements for the coding, processing, preservation, storage and distribution of human tissues and cells.

standards or where there are uncertainties about the standards applied in the Third Country exporting establishment cannot be imported for human application.

Policy objective

7. The ultimate aim is to make transplanted human cells and tissues safer by tightening up controls especially on information and better traceability and accountability. The specific objective is to make the requirements of the Import Directive operational in the UK.

Option 0 – Do nothing

8. To do nothing would mean that the Government does not take any measures to transpose the Directive, thereby maintaining the status quo. Although systems controlling imports are already in place and working effectively in the UK, additional steps will need to be taken to ensure full compliance with the Import Directive. The do nothing option would mean that the UK would be in breach of European law.

Option 1 – Implement measures set out in Commission Directive 2015/566

9. Option 1 constitutes the implementation of the Import Directive. Under this option, where given any flexibility on implementation, the UK has chosen the least burdensome option to business. Since the import of tissues and cells is already tightly regulated in the UK, there will only need to be a few changes to existing protocols to ensure the terms of the Import Directive are met in full.

10. The Directive means that importing tissue establishments (ITEs) in the UK will hold more quality and safety information about their suppliers and will require a greater depth of knowledge about international regulatory requirements. Tissue establishments will be required to provide this information to the HTA and HFEA as part of the licensing arrangements.

11. The Import Directive applies to all human tissues and cells intended for human application and manufactured products derived from human tissues and cells intended for human applications, where not covered by other Union legislation.

Exemptions and Definitions

12. The Directive does not apply to:
    - the import into the EU of tissues and cells authorised directly by authorities such as those distributed directly for immediate transplantation;
    - the import of tissues and cells which are directly authorised in case of emergencies;
    - blood and blood components; and
    - organs or parts of organs.

13. Member states are also allowed to exempt ‘one-off imports’ for named individuals from the requirements of the Directive. The use of this exemption is limited to situations where a person has had tissues or cells stored in a Third Country for their future use and wishes to have such tissues or cells imported into the Union on their behalf. ‘One-off imports’ should not take place on regular basis from the same Third Country supplier or for any given recipient.

14. A Third Country Supplier (3CS) refers to a tissue establishment or another body, established in a Third Country, which is responsible for the export to the EU of tissues and cells it supplies to an importing tissue establishment. In some circumstances, tissues are supplied by a clearing centre or

organ procurement organisation. However, the tissues can be supplied to the clearing centre by a number of different collecting centres. For the purposes of implementing the Import Directive, HFEA and HTA have confirmed that clearing houses and organ procurement organisations, rather than collecting centres, will be regarded as the 3CSs.

Competent Authorities

15. The use of tissues in the UK is licensed by two Competent Authorities (CA). The Human Tissue Authority (HTA) regulates organisations that remove, store and use human tissue. The Human Fertilisation and Embryology Authority (HFEA) oversees the use of gametes and embryos in fertility treatment and research.

16. Tissue establishments, with the exception of those in the reproductive sector, must apply for and be granted separate licenses by the HTA for specific activities. Therefore, those wishing to import tissues and cells must first hold an import licence from the HTA to do so. Applications for a licence require the tissue establishment to provide assurances on a range of issues, such as the quality and safety standards adopted by the 3CS.

17. In the reproductive sector, imports of gametes and embryos are governed by Directions rather than an establishment being specifically licenced for this purpose. The HFEA has issued a General Direction[4] on imports. If licenced establishments intending to import reproductive cells can meet the conditions in that Direction, including evidence of the quality and safety standards adopted by the 3CS, they do not need specific approval for the import. If any of the conditions in the General Direction cannot be met, establishments must apply to the HFEA for a Special Direction to authorise that specific import.

Assessment of the impact of Option 0 (Do nothing)

18. Option 0 is the counterfactual against which the incremental costs and benefits of Option 1 are measured. Therefore, by definition, no incremental costs are associated with Option 0. However, failure to adequately transpose the Directive would be contrary to European law. This would lead to infraction proceedings before the European Court of Justice (ECJ) resulting in substantial fines against the UK. It is not possible to predict the level of payments before any ECJ ruling as it will depend on the Courts assessment of the severity of the breach among other aspects.

Assessment of the impact of Option 1 (Implementation of the Import Directive)

Feedback from the consultation

19. In March and early April 2017, we conducted a public consultation on the transposition of the Import Directive. As part of this exercise, we targeted 11 importing tissue establishments (5 from the private sector) with telephone interviews. These 11 were chosen because they were regarded as being broadly representative of the establishments that will be significantly affected by the Directive.

20. The telephone interviews gained feedback on the assumptions behind the estimated cost impacts reported in the consultation IA. In particular, the interviews sought information on the assumptions that had been highlighted as needing verification in the RPC's "green rated" opinion on our Consultation IA.

[4] Under the Human Fertilisation and Embryology Act 1990, the HFEA has the power to issue Directions - or rules. General Directions apply to all treatment centres. Centres are required to comply with Directions; if a centre fails to do so this would amount to a breach of a statutory licence condition, which might lead to the variation, suspension or revocation of a clinic's licence.

21. In many instances, feedback from consultees and interviewees supported the assumptions made in the Consultation IA. However, there were a number of cases where the feedback prompted us to change our assumptions:

- The RPC asked us to check our estimates of familiarisation costs. While some stakeholders supported the consultation IA assumption about the time that stakeholders will take to become familiar with the new requirements, a majority felt that the assumption was an underestimate, particularly when taking into account the time taken for developing action plans. From suggestions given by interviewees, we therefore increased its assumption from between 2 and 5 days to between 5 and 15 days. Interviewees supported our original assumption about the cost per day of staff time. The revised familiarisation cost estimate is described in paragraphs 26 to 28.

- Most interviewees supported our original estimate of £2,000 for the cost of changing Standard Operating Procedures. However, a minority felt that £4,000 was a better assumption. The estimate has therefore now been expressed as a range from £2,000 to £4,000. The revised estimate is described in paragraph 29.

- The Consultation IA assumed that establishments would not experience recurrent costs. The RPC asked for this assumption to be verified. Several interviewees were concerned that complying with the Import Directive will create incremental on-site audits of third country suppliers. Our approach to estimating these incremental costs is described in paragraphs 38 to 45.

- The Consultation IA assumed that establishments regulated by the HTA hold between 3 and 10 supply agreements with Third Country Suppliers. While most interviewees agreed that this range represented reality, two reported that they held more. We therefore adopted the wider range of 3 to 15.

- Some public sector interviewees felt that our assumptions about the legal costs of amending supply agreements were too low because we had under-estimated the cost of lawyer fees. However, many of the private sector interviewees mentioned that agreement redrafting would be done in-house without external legal expertise. All the private sector interviewees felt that the original assumptions were either about right or too high. We have therefore adopted different legal costs for private sector vs public sector organisations. These new assumptions are described in paragraphs 30 to 37.

- The RPC noted that we had mentioned but not included the regulator costs in the Consultation IA. In the case of the HFEA, the incremental costs will be negligible and will not be passed on to establishments. In the case of the HTA, costs will be passed on in the form of marginally increased fees. These incremental costs are described in paragraphs 50 to 53.

22. The consultation process confirmed the Government's approach to transposition, which is by copy-out into UK regulations in order to meet the minimum requirements to comply i.e. no gold-plating. The Government will proceed with making the regulations and intends to complete the transposition by the parliamentary Summer Recess 2017.

Costs of Option 1

Tissue Establishments and Sector Information

23. The HTA regulates 145 tissue establishments (TEs) in the Human Application Sector. A subset of 41[5] of these establishments will be affected by the Import Directive. Of these, 22 are privately operated and the remaining 19 are NHS bodies. The HTA does not hold information on the number and sizes of organisations but we have been informed by industry sources that all of the privately operated TEs fall into the "small" business category.

24. The HFEA regulates 116 clinics in the UK. Based on 2014 data from importing centres, 67 clinics will be affected by the Import Directive. Of these, 43 are private sector organisations and the remaining 24 are NHS facilities. Information on the size of the private sector organisations is not held by the HFEA but the likelihood is that most, if not all, fall into the "small" category.

25. Table 1 provides a summary of the TEs affected. In total, there will be 108 TEs impacted by the Directive, 43 of which are NHS, and the remaining 65 are small private businesses. However, there are a number of exemptions to the Import Directive which might mean that TEs are affected to a greater or lesser extent.

Table 1: UK Tissue Establishments affected by the Import Directive

	NHS	Private	Total
HFEA regulated TEs	24	43	67
HTA regulated TES	19	22	41
Total TEs	**43**	**65**	**108**

Familiarisation

26. The Directive is a technical document that cannot be understood in a short period. We have therefore assumed each of the 108 ITEs will have to spend between 5 and 15 days[6] of staff time familiarising themselves with the requirements, even if they consequently discover that their activities are exempt from the Directive's requirements. We have assumed a full staff cost (salary and non-salary costs) per day of £263[7] for both NHS and private sector. These assumptions yield one-off estimated costs of between £56,000 and £169,000 for the NHS, and between £85,000 and £256,000 for the private sector.

27. Department of Health impact assessment guidance requires that the Quality Adjusted Life Year (QALY) opportunity cost should be used in the analysis of cost impacts on the NHS. Recent research indicates that at the margin, the NHS loses 1 QALY for every £15,000 it has to divert away from spending on curative treatment. The costs associated with complying with the Import Directive have a direct impact on the budget that is available for funding treatment.

28. The opportunity costs of the resources that the NHS spends on familiarising itself with the Import Directive can therefore be measured as being approximately between 4 and 11 QALYs.

---

[5] Figure from 2015. Numbers fluctuate but 2015 was reasonably representative.

[6] This assumption was increased after conversations with stakeholders during the public consultation. The original assumption was 2 to 5 days.

[7] Derived from ASHE (2014 provisional) SOC10 2462 "Quality Assurance and regulatory professional". We assumed 225 working days a year and added 30% to account for non-salary costs. This cost assumption was verified during the public consultation in March and April 2017

Changes to Standard Operating Procedures

29. We currently expect that all of the 108 TEs that familiarise themselves with the requirement will have to take further action. Feedback from the public consultation indicated that the costs of changing Standard Operating Procedures and Service Level Agreements, and training staff would be between £2,000 and £4,000[8]. The estimated costs are therefore between £86,000 and £172,000 for the NHS and between £130,000 and £260,000 for the private sector. The opportunity cost for the NHS is between 6 and 11 QALYs.

Third Party Agreements, Contracts, and Licensing

30. ITEs in the UK already have written agreements in place with suppliers. A lot of the information required by the Directive[9] is already encompassed by the information tissue establishments seek from 3CS to assure themselves of the quality and safety standards in operation at the exporting establishments. Similarly, we would already expect the agreements to document the operating standards and responsibilities, again meeting the requirements of the Directive[10]. However, all current agreements would need to be edited by all UK based establishments seeking authorisation to import tissues and cells.

31. During discussions with ITEs, we found that the change of third party agreements is the area which they feel will have the biggest impact. ITEs did not envisage there being significant issues in getting 3CS to agree to new terms of the Directive. It was felt that being able to import into the UK provides 3CS with the opportunity to expand business, and they would be likely to assist in the supply of information for written agreements.

32. The majority of imports of tissues and cells for use in the UK presently come from the US. Stakeholders suggest that in the US, the competent authority is well established with recognised standards, and multiple audits conducted by the FDA (Food and Drug Administration) throughout the year. Conversely, in some countries inspections by the regulator do not happen and there could be a reticence among some 3CS because local institutions do not require much of the information required by this Directive. There is a small risk that in extreme cases, termination of agreements might become necessary. However, this Import Directive would apply EU wide, so any supplier not willing to cooperate would not be able to supply any EU Member State. It is therefore unlikely that 3CS would refuse to provide the required information.

33. In Table 1, we reported our estimate that 108 TEs currently import tissues and cells. In discussions with TEs during the public consultation we found wide variation in the number 3CS that each TE deals with. Based on those discussions, we expect HTA regulated tissue establishments to currently have 3 to 15[11] agreements with 3CS. Reproductive cells are generally imported from a limited number of clinics outside the EU, and we have therefore maintained our assumption that each of these HFEA- regulated tissue establishments will have 2 to 3 agreements with 3CSs.

34. Feedback from the consultation interviews indicated that we had previously underestimated the legal costs to the public sector of amending the third party agreements. On the advice of the

[8] The consultation IA assumption was £2,000.

[9] Set out in Annex I and III of the Import Directive.

[10] Annex IV of the Import Directive.

[11] The original assumption in the Consultation IA was 3 to 10

interviewees, we have increased our estimate of public sector legal costs from £270 to £2,000 per third party agreement. Several private sector interviewees pointed out that they will redraft agreements in-house without using external legal expertise. All private sector interviewees either indicated that £270 per agreement was either about right or over-estimated their redrafting costs per agreement. In the interests of avoiding an under-estimate we have kept the original assumption of £270 for private sector ITEs.

35. Both public and private sector Interviewees otherwise generally gave their support for our original assumptions. We have therefore continued to assume that each agreement will require input from clerical staff[12] (1 day at £93 a day) and compliance or senior managers[6] (5 days at £263 a day). Consultation feedback supported our original assumption that the relevant staff costs (salary and non-salary costs) are the same for both the NHS and private sector.

36. Our revised assumptions yield an agreement amendment cost to the private sector of approximately £1,700, and a cost to the public sector of approximately £3,400. These assumptions yield one-off estimated costs of between £358,000 and £1,216,000 for the NHS, and between £255,000 and £769,000 for the private sector. The QALY opportunity cost to the NHS is between 24 and 81 QALYs.

37. Table 2 : Mid-point estimates for Third Party Agreements

	First year
NHS opportunity costs (QALYs)	52
Private sector costs	£512,000

Audits and Inspections

38. The Directive provides authority for the Competent Authorities to inspect both ITEs and 3CS, and for suppliers to allow Importing TEs to audit their records regularly. Both of the UK's Competent Authorities (HFEA and HTA) already have powers to inspect ITEs. Neither have the intention of inspecting 3CSs as part of their routine processes in future.

39. During the public consultation several ITEs expressed concern that, under the Directive, they might have to conduct additional audits of their 3CSs. We raised this concern with HTA, the Competent Authority that regulates these ITEs.

40. Under existing UK regulations, ITEs are already required to demonstrate that their 3CSs operate safety and quality standards that are equivalent to EU standards. The best practice means of doing this is through evidence that the ITE has audited its 3CSs. Such audits can be desk-based exercises, although where particular safety and quality risks exist, on-site audits are generally a more credible means of demonstrating equivalence. ITEs are required to demonstrate equivalency during regular inspections conducted by the UK's Competent Authorities, and so a mechanism for assuring equivalency already exists.

41. The Import Directive prescribes some circumstances in which an audit would be required. Although these prescriptive measures have not previously existed, Competent Authorities have had the option of denying an ITE permission to import from specific 3CSs that present safety and quality concerns. Although they use it sparingly, the Competent Authorities therefore already have a powerful means

[12] Derived from ASHE (2014 provisional) SOC10 4159 "Other Administrative Occupations N.E.C"

of persuading ITEs to conduct desk based and on-site audits where ITEs have been unable to provide evidence of equivalency through other means.

42. The HTA's expectation is that ITEs will have to conduct either no or very few additional on-site audits as a result of the transposition of the Import Directive. This expectation is borne out by the outcomes of HTA's inspections between 2012 and 2016. During this period, HTA inspectors found 6 shortfalls relating to ITEs' inability satisfactorily to demonstrate 3CS equivalence of standards. All of these shortfalls related to private sector ITEs. As an outcome, 3 ITEs introduced new audit measures. The other 3 were ultimately able to demonstrate equivalency through other means. This record demonstrates two features of the existing regulatory experience that will continue under the Import Directive. Firstly, shortfalls relating to an inability to demonstrate 3CS equivalence are relatively infrequent. Secondly, audits are already an established means of demonstrating equivalency once a shortfall has been found.

43. Nevertheless, we cannot be sure that no additional audits will be required as a result of the implementation of the Import Directive. Working from its inspection data, HTA has suggested that as a worst case scenario, every two years an additional private sector ITE might be required to implement a programme of on-site audits. Such programmes, we have assumed, would require an on-site audit every two years. The assumed pattern of additional audits is described in Table 3. We have assumed that the best case scenario is that no additional audits would be required.

44. Consultation feedback from ITEs revealed that the cost of an on-site audit varies depending on where audit has to take place. Costs range from £900 to £1,600, so we have taken £1,600 to illustrate the worst case scenario.

45. Table 3: Frequency and cost of additional private sector ITE audits of 3CS.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
No. of (on-site) Audits										
Best case	0	0	0	0	0	0	0	0	0	0
Worst case	1	0	2	0	3	0	4	0	5	0
Costs										
Best case	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Worst case	£1,600	£0	£3,200	£0	£4,800	£0	£6,400	£0	£8,000	£0

Record Keeping and Reporting

46. The Directive requires ITEs to keep records of the types and quantities of tissues and cells imported with their origin and destination. They will have to report any changes to their import activities, serious adverse events in 3CS, and any non-compliance findings.

47. ITEs already submit annual reports to the HTA on import activity and the HTA will make use of current activity data and minimise any data collection where possible.

48. For HFEA regulated TEs, even those clinics not importing from donor banks outside of the EU will need to register "one-off" imports that it makes. However, these imports are already recorded on the HFEA register through the Electronic Data Interchange system. The HFEA will make use of this activity data and minimise any data collection.

49. For both HTA and HFEA regulated ITEs, there will therefore be no incremental costs of recording keeping and reporting.

Competent Authority Responsibilities

50. For the HFEA, it is anticipated that processes would generally continue as they are, but updated to accommodate requirements in the Directive. In general, changes are anticipated to affect application forms, licensing procedures to be merged into existing systems, and new procedures for the HFEA inspection team to verify that the importing clinics meet requirements of the Directive. Incremental costs will be insignificant, and fees will not change as a result of the Directive.

51. HTA has identified the following additional activities that the Import Directive will require it to perform:

    - Changes to existing import licences
    - Dealing with in an increase of "shortfalls" found during inspections
    - General administrative work
    - On-going policy work

52. In performing these activities, HTA has estimated that it will bear an annual incremental staff cost of approximately £7,000. Because HTA is a government trading fund, it will be obliged to recover these incremental costs through fees charged to ITEs. The private sector will bear approximately £2,000 of the annual incremental costs, while the NHS will bear approximately £5,000. The opportunity cost to the NHS is less than 1 QALY.

53. Over the coming years HTA expects to operate within its current resources. It will therefore seek efficiencies in other fee areas across the Human Application sector to offset the fee increases made necessary by the Import Directive. The effect of this fee balancing is not included in this IA.

Summary Costs of Option 1

54. Table 4 summarises the opportunity costs impact of the Import Directive on the NHS. The first part collates the QALY impact information that appears in earlier sections of this IA. The second part reports the conversion of the QALY impact into monetary terms using DH's standard societal willingness to pay QALY valuation of £60,000.

Table 4: Summary of NHS Opportunity Costs

NHS Opportunity Cost	First year	Each subsequent year	10 year Present Value (1.5% discount rate)
QALY opportunity costs			
Lower estimate	34	0.2	35
Higher estimate	104	0.2	106
Midpoint estimate	69	0.2	70
£ Opportunity costs			
Lower estimate	£2,021,000	£9,000	£2,099,000
Higher estimate	£6,251,000	£9,000	£6,330,000
Midpoint estimate	£4,136,000	£9,000	£4,214,000

55. Table 5 reports the Import Directive cost impact on the private sector and the Equivalent Annual Net Cost to Business. Table 5 provides total summary costs. All costs are direct.

Table 5: Summary of Private Sector Costs

Private Sector Cost	First year	Second year	10 year Present Value (3.5% discount rate)	EANCB
Lower estimate	£472,000	£2,000	£490,000	£57,000
Higher estimate	£1,289,000	£2,000	£1,325,000	£154,000
Midpoint estimate	£881,000	£2,000	£907,000	£105,000

Table 6: Summary of NHS Opportunity Costs and Private Sector Costs

	First year	Second year	10 year Present Value (1.5 % and 3.5% discount rates)
Lower estimate	£2,494,000	£12,000	£2,588,000
Higher estimate	£7,540,000	£12,000	£7,655,000
Midpoint estimate	£5,017,000	£12,000	£5,122,000

Table 7: Summary of NHS and Private Sector Financial Costs

	First year	Second year	10 year Present Value (3.5% discount rates)
Lower estimate	£978,000	£5,000	£1,013,000
Higher estimate	£2,852,000	£5,000	£2,906,000
Midpoint estimate	£1,915,000	£5,000	£1,961,000

Benefits of Option 1

56. It is likely that the implementation of the Import Directive will provide only minimal increased benefit to patients in terms of quality and safety because existing arrangements largely fulfil the aims of Directive. The UK has not yet experienced any major incidents involving problems associated with the importation of tissues and cells. However, the growing complexity of global trade in human tissues and cells means that the risks could be growing.

57. Without knowing the future probability of a major incident occurring in the UK, the health and wider economic impacts that it would have, and the reduction in risk that implementing the Import Directive would bring, it is impossible to estimate the Import Directive's UK benefits. However, by making a number of assumptions, one can exemplify the health impact of a major incident. Let us assume that the incident causes the death of a person who is of the UK average age (37) and who enjoys the average health of a person of that age. The Department of Health has estimated that such a person could have expected to have enjoyed 30 more Quality Adjusted Life Years (QALYs) had death not occurred. DH has also estimated that society values a QALY at £60,000. Hence the cost to society of this premature death would be £1.8 million.

58. This figure suggests that implementing of the Import Directive in the UK would have to prevent between 1 and 4 such deaths over ten years in order to justify its costs[13]. We are not in a position to comment on the likelihood of this happening.

[13] To simplify this estimate, we have used discounted figures. We have also excluded the benefits that would accrue because GDP losses would be avoided.

59. The TEs that we have consulted were unable to identify any business benefits that compliance with the Import Directive will bring.

Rationale and evidence that justify the level of analysis used

60. For this Final IA, we have used consultation responses and worked with the UK competent authorities (HFEA and HTA), 6 NHS TEs and 5 ITEs to verify and improve the estimates that we presented in the Consultation IA. We have concentrated our resources on reviewing the estimates that the RPC specifically asked us to verify and any other estimates that contribute substantially to the overall cost burden. We have therefore spent the greatest proportion of our time checking our estimates of:

    - Familiarisation costs
    - Costs of changing Standard Operating Procedures
    - Recurrent costs for ITEs
    - The costs of amending supply agreements
    - The costs that the Competent Authorities will incur and pass on to ITEs

Sensitivity and Risk Analysis

61. In the Consultation IA, we noted that there was a risk that the legal interpretation of "Third Country Supplier" might mean that clearing centres or organ procurement organisations in third countries would not qualify as 3CSs. The danger was that if the hospitals supplying the clearing centres were deemed to be the 3CS then this would multiply costs to ITEs many times. We have now been able to confirm that clearing centres and organ procurement organisations may be regarded as the 3CS for the purposes of the Import Directive.

62. We have not been able to quantify the benefits of implementing the Import Directive. There is currently a small risk that importation of inferior material could lead to harm to human health. The risk is possibly growing due to an increasing heterogeneity of cell and tissue sources. We are unable to estimate the benefit that implementing the new Directive would bring in terms of reducing the risk. However, we have estimated that in the UK the Directive would have to prevent between 1 and 4 deaths in order for the benefits to justify the costs.

One in Two Out

63. We have estimated that the Equivalent Annual Net Cost to Business (EANCB) ranges from £57,000 to £154,000 (midpoint £105,000). However, transposition of EU policy and implementing the import Directive at a minimum cost to business (Option 1) exempts the Directive from OITO.

Wider Impacts

Small and micro businesses

64. We have been informed by private sector stakeholders that all the 65 private sector TEs who will be affected by the Import Directive fall into the small and micro business categories. Our estimates indicate that by far the greatest cost impact will be felt in terms of rewriting and authorising

agreements. We have estimated that the average cost for each of the TEs will range from £6,000 to £29,000.

65. The TEs that we have consulted suggested that the greatest disproportionate impact will be felt in terms of temporarily diverting specialist staff's time away from their daily activities towards understanding, planning and implementing the Import Directive. While larger organisations tend to employ staff who are specifically assigned tasks such as regulatory matters, quality control and compliance issues, smaller organisations do not have this luxury. In particular, there are likely to be smaller auditing teams. We have estimated that the one-off cost of familiarisation per company will be between £1,000 and £4,000, while the one-off cost of updating SOPs will be between £2,000 and £4,000.

66. We have not conducted a full Small and Medium Business Assessment (SaMBA) because EU Directives fall out of scope and we are not able to adapt the provisions depending on the type of business involved. However the Competent Authorities have discussed detailed operational aspects with the full range of TEs, including small businesses, to make sure the accompanying guidance fully reflects the way their business operates.

Competition assessment

67. Does the Directive:

1. Directly limit the number or range of suppliers?
No. The Directive places no direct limit on who can compete in the market

2. Indirectly limit the number or range of suppliers?
No. The Directive will treat all TEs equally, regardless of whether they are existing suppliers or new. The costs associated with the Directive do not pose a significant barrier to entry into the market.

3. Limit the ability of suppliers to compete?
No. The Directive places no controls on price, product characteristics, quality standards, innovation, geographical coverage, advertisement, production processes or organisational form.

4. Reduce suppliers' incentives to compete vigorously?
No. The Directive does not exempt suppliers from general competition law, introduce or amend intellectual property regime, require or encourage the exchange between suppliers, or publication, of information on prices, costs, sales or outputs, or increase the costs to customers of switching between suppliers.