Title: Airports Slot Allocation (Amendment)	Impact Assessment (IA)				
Airports Slot Anocation (Amendment) Regulations 2011 Lead department or agency: Department for Transport Other departments or agencies:	IA No: DfT 00112				
	Date: 24/06/2011				
	Stage: Final				
	Source of intervention: Domestic				
	Type of measure: Secondary legislation				
	Contact for enquiries:				
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Summary: Intervention and Options

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

The London 2012 Olympics is expected to attract a substantial number of extra flights to the South East of England, which already has severely congested airspace and airports. To cope with this increased demand and prevent disruption to existing services the Government announced that airport slot coordination would temporarily be extended for the Games period. However due to the large number of airports to be included in the scheme, and the short time available before the Games, there is a substantial risk that preparations would not be completed in time; the congestion-limiting benefits of the extension of slot coordination would not be realised. There would be significant disruption to existing and expected air services, resulting in delays to passengers and substantial costs to airlines and airports.

What are the policy objectives and the intended effects?

The objective is to amend the Airports Slot Allocation Regulations 2006 to ensure that the announced temporary extension of slot coordination to airports in the South East of England for the Games period works effectively to enable the available airspace and airport capacities to be used in the most efficient way. This will ensure that the expected increase in air traffic can be effectively accommodated without causing disruption to existing services. The aim is for the temporary extension of airport coordination to limit delays to passengers, disruption and cost to businesses, and the reputational damage to the UK that would occur as a result of severely congested airspace and airports. Successful extension to coordination would also allow businesses to maximise their commercial benefits from the UK's hosting of the 2012 Olympics.

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

It has been announced that slot coordination will be temporarily extended to all airports listed at Annex 2 for the period of the Games. As such, this impact assessment considers two options for the successful delivery of this measure:

Base case: Extend coordination without amendment to the Airports Slot Allocation Regulations 2006. This option would not allow the temporary extension of coordination to operate effectively, and there would be resultant substantial risks of severe passenger delays and high costs to business becauase of disruption to air services.

Preferred Option: Extend coordination with amendment to the Airports Slot Allocation Regulations 2006. This is the preferred option as it would ensure that the policy objectives are met - the additional flights will be accommodated by airspace and airport capacities, with the minimum possible disruption to services.

Will the policy be reviewed? It will be reviewed. If applicable, set review date: 10/2012				
What is the basis for this review? Not applicable. If applicable, set sunset clause date: 12/2	2012			
Are there arrangements in place that will allow a systematic collection of monitoring Yes information for future policy review?				

<u>SELECT SIGNATORY Sign-off</u> For final proposal stage Impact Assessments:

I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) the benefits justify the costs.

Signed by the responsible Minister: P. Hammond Date: 30th June 2011

Summary: Analysis and Evidence

Description:

Preferred Option: Extending coordination with amendment to the Regulations

Price Base	PV Bas	ase Time Period			Net Ber	nefit (Present Val	ue (PV)) (£m)		
Year 2011	Year 2	2011	Years 1	Low: N	w: N/A High: N/A		Best Estimate: 11.	1	
COSTS (£r	n)		Total Tra (Constant Price)			Average Annual n) (Constant Price)	-	tal Cost Int Value)	
Low			N/A			0.050		0.048	
High			N/A			0.150		0.145	
Best Estimat	е		N/A			0.131		0.126	
Airport Coordination Limited's (ACL) best estimate of the cost of the preferred option is around £130,000 with the range between £50,000 and £150,000. These costs will be split proportionately by charging each coordinated airport a fee based on the number of coordinated flights flown. The total number of flights for the Games period is estimated at 102,415. On this basis the fees charged should lie in the range between £0.49p and £1.46p per aircraft movement. More information from paragraph 38. Other key non-monetised costs by 'main affected groups' N/A									
BENEFITS	(£m)		Total Tra (Constant Price)	insition Years		Average Annual n) (Constant Price)		Benefit nt Value)	
Low			N/A			8.3		8.0	
High			N/A			15.6		15.1	
Best Estimat	е		N/A			11.6		11.2	
 Description and scale of key monetised benefits by 'main affected groups' The measure will help minimise addition disruption and delay at airports during the Games. Air traffic control services (NATS) have estimated the amount of delay the prefered option (extended airport coordination) could avoid - around 1 and a half minutes as a best estimate. The monetatary benefit of avoiding this delay is caluclated by using: (a) estimates of the direct costs to airlines of delay (namely staff and fuel costs) and (b) estimates of the value of passengers place on longer journey times. More information from paragraph 42 Other key non-monetised benefits by 'main affected groups' Some 550,000 overseas visitors are expected for the Games and the majority will arrive by air. The proposal will also help to preserve the UK's reputation for holding successful international events. There is also a benefit to airports and to the economy in general from being able to accommodate extra flights into and out of the UK. 									
Key assumptions/sensitivities/risks Discount rate (%) 3.5% Assumptions outlined at paragraphs 33 to 54, include: - the cost of extending coordination in the base case and preferred option; - the numbers of flights to be coordinated; - - the amount of aircraft delay avoided by successful implementation of extended coordination; - the value of the delay avoided to airlines and passengers (which in turns depends on estimates of the numbers of passengers per flight and whether passengers are travelling for business or leisure.									
Direct impac Costs: N/A	t on bus	1	(Equivalent An r efits: N/A	Annual) £m): In scope of OIOO? Measure qua Net: N/A No NA					

Enforcement, Implementation and Wider Impacts

			-			
What is the geographic coverage of the policy/option?	England					
From what date will the policy be implemented?			01/08/2011			
Which organisation(s) will enforce the policy?	Secretary of State for Transport					
What is the annual change in enforcement cost (£m)?			0			
Does enforcement comply with Hampton principles?		Yes				
Does implementation go beyond minimum EU requirem		N/A				
What is the CO_2 equivalent change in greenhouse gas (Million tonnes CO_2 equivalent)	Traded:Non-tradedN/AN/A		raded:			
Does the proposal have an impact on competition? Yes						
What proportion (%) of Total PV costs/benefits is directl primary legislation, if applicable?	ole to	Costs: N/A		Ben N/A	efits:	
				Large 80		
Are any of these organisations exempt?	No	No	No	No		No

Specific Impact Tests: Checklist

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

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

Does your policy option/proposal have an impact on?	Impact	Page ref within IA
Statutory equality duties ¹	No	
Statutory Equality Duties Impact Test guidance		
Economic impacts		
Competition Competition Assessment Impact Test guidance	Yes	15
Small firms Small Firms Impact Test guidance	Yes	15
Environmental impacts		
Greenhouse gas assessment Greenhouse Gas Assessment Impact Test guidance	No	
Wider environmental issues Wider Environmental Issues Impact Test guidance	No	
Social impacts		
Health and well-being Health and Well-being Impact Test guidance	No	
Human rights Human Rights Impact Test guidance	No	
Justice system Justice Impact Test guidance	No	
Rural proofing Rural Proofing Impact Test guidance	No	
Sustainable development	No	
Sustainable Development Impact Test guidance		

¹ Public bodies including Whitehall departments are required to consider the impact of their policies and measures on race, disability and gender. It is intended to extend this consideration requirement under the Equality Act 2010 to cover age, sexual orientation, religion or belief and gender reassignment from April 2011 (to Great Britain only). The Toolkit provides advice on statutory equality duties for public authorities with a remit in Northern Ireland.

Evidence Base (for summary sheets) – Notes

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

References

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

No.	Legislation or publication
1	The Airports Slot Allocation Regulations 2006 http://www.legislation.gov.uk/uksi/2006/2665/pdfs/uksi_20062665_en.pdf
2	CAA statistics: terminal passenger and aircraft movements <u>http://www.caa.co.uk/default.aspx?catid=80&pagetype=88&sglid=3&fld=2010Annual;</u> and punctuality <u>http://www.caa.co.uk/docs/80/punctuality/2010/2010_Annual_Summary_Analysis.csv</u>
3	Atkins report 'Air Traffic Review and Airport Capacity Assessment associated with the London 2012 Olympics and Paralympics', completed in 2010 (not currently published)
4	Evaluating the true cost to airlines of one minute of airborne or ground delay', University of Westminster, 2004, http://westminsterresearch.wmin.ac.uk/17/1/Cook%2CTanner%2CAnderson_2004_final.pdf
5	DfT transport appraisal guidance on values of time, Unit 3.5.6 at http://www.dft.gov.uk/webtag/documents/expert/unit3.5.6.php#012

+ Add another row

Evidence Base

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

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

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

	Y ₀	Y ₁	Y ₂	Y ₃	Y_4	Y ₅	Y ₆	Y ₇	Y ₈	Y۹
Transition costs	0	0								
Annual recurring cost	0	0.13								
Total annual costs	0	0.13								
Transition benefits	0	0								
Annual recurring benefits	0	11.6								
Total annual benefits	0	11.6								

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



Evidence Base (for summary sheets)

Background information on level 3 coordination

- 1. Once an airport has been designated as level 3 fully coordinated, in order to land at or take off from that airport during the periods for which it is fully coordinated, it is necessary for an air carrier to have a slot allocated in advance by the coordinator. This process of coordination and slot allocation is designed to achieve the maximum utilisation of scarce airport capacity, by ensuring that airports and NATS have advanced knowledge of expected air traffic movements. Having an advanced plan of air traffic movements allows for the maximum possible airspace and airport capacity to be utilised. Non-coordinated airports receive ad-hoc bookings from air carriers, often at short notice, which does not allow for an efficient use of capacity.
- 2. There are currently five UK airports which are level 3 slot coordinated (Heathrow, Gatwick, Stansted, Manchester and London City). These airports have been designated as level 3 coordinated due to the high demand for their severely limited capacity. At these airports the slots (permission given for an aircraft to arrive or depart at a particular time on a particular day) are allocated by the coordinator, Airport Coordination Limited (ACL). The process of allocating slots in advance allows for the most efficient use of the scarce airport capacity, so that the airport can operate the maximum possible number of air traffic movements (take off or landing by an aeroplane).
- 3. ACL is an independent organisation which provides data collection, schedules facilitation and slot allocation services at UK airports and elsewhere, in accordance with national and European Regulations and the IATA Worldwide Scheduling Guidelines. ACL is a non-profit making organisation and only earns sufficient revenue to cover its annual operating costs. In order to recover its costs, ACL usually negotiates individual contracts with each of its airports.
- 4. Under the procedures set out in Airports Slot Regulations 2006, airports which are designated as level 3 coordinated need to agree and declare their relevant available capacity, taking account of advice from National Air Traffic Services (NATS) on airspace capacity, and appoint an independent slot coordinator to allocate that capacity between applicants in a neutral, non-discriminatory and transparent way in accordance with the provisions of the relevant regulations. Any appointed coordinator must be approved by the Secretary of State for Transport.
- 5. Under the Airports Slot Allocation Regulations 2006 the managing body of any airport designated as coordinated is required to ensure that a coordination committee is set up to carry out the functions set out in Article 5 of Regulation 95/93, including providing advice to the coordinator, mediating between interested parties, and the development of local guidelines on the allocation of slots and monitoring of their use.
- 6. Under existing arrangements the managing body at each currently coordinated airport determines the parameters for slot allocation biannually, taking account of all relevant technical, operational and environmental constraints. The determination of the parameters and the methodology used are first discussed in detail with the airport's own coordination committee before a "declaration" of capacity is made by the managing body. The process of declaring available capacity is a collaborative one between the airport operator, the coordination committee, ACL and NATS.
- 7. All aircraft operators wishing to use level 3 coordinated airports are required to have pre-booked take-off and landing slots allocated by the coordinator (ACL).

Problem under consideration

The 2012 London Olympics

8. The Olympic Games will take place in London between 27 July and 12 August 2012. The Atkins report 'Air Traffic Review and Airport Capacity Assessment Associated with the London 2012 Olympics and Paralympics'¹ (the Atkins Report), which was commissioned by the Department for Transport in September 2009, estimates that the Games could attract 500,000 overseas spectators, some 50,000 overseas 'Games Family' visitors (athletes, media officials and marketing partners), and 150 heads of State. The vast majority of these visitors are likely to travel to London by air.

¹ The 'Air Traffic Review and Airports Capacity Assessment Associated with the London 2012 Olympics and Paralympics' report by Atkins has not been published, but is available from the Department for Transport on request.

- 9. The Atkins Report was commissioned to estimate the likely demand for additional aircraft movements during the Games period, categorised by type of flight and aircraft size, and to compare this with an assessment of the airport capacity that was likely to be available within reasonable travelling distance of London. The Report was completed in March 2010.
- 10. This study suggested most visitors will travel by scheduled services, but during the period of the Games there are also likely to be an extra 700 commercial charter flights, and a total of over 10,000 business jet flights and 240 governmental flights.

Airspace and airport capacity

- 11. The airspace over South East England is extremely congested, and there is limited available airport capacity. This can make both airports and airspace particularly vulnerable to disruption in the event of unusual or unplanned demands on the system.
- 12. In broad terms, the Atkins study found that the estimated level of additional air traffic demand could be accommodated, but only if the capacity available at a wide range of airports across the South East Region were used, and only if new measures were introduced to control the flow of aircraft into the system, especially at peak periods. The study noted that very little, if any, additional capacity is likely to be available at Heathrow and Gatwick during the Games period, and that there are a limited number of alternative airports available for larger aircraft in South East England. At the same time, there is a wide range of airports and airfields across the Region able to accommodate business jets and other smaller aircraft. But the report emphasised that the available capacity within easy reach of London is limited and will need to be utilised efficiently. Aircraft parking availability and airspace flow rates were identified as particular constraints on capacity at individual airports.
- 13. The study provides the best overall estimate available of likely demand on UK airports and airspace during the Games period. However there remains a high degree of uncertainty about what the actual demand will be. While previous events provide some guide, all Games are different, and London will present some unique challenges and opportunities for air travel. It is a common experience from past Games that the arrival and departure patterns of participants tend to remain uncertain or subject to change until very close to the event. Those intending to charter or operate private flights will be encouraged to make their arrangements as early as possible, but even so a substantial degree of uncertainty will remain, and some flexibility will therefore need to be factored into capacity planning.
- 14. Unlike many host cities, aviation facilities and services in and around London are in the main provided by the private sector on a commercial basis. The successful staging of the Games will rely in part on the ability of the aviation industry, operating within a market-based system, to be able to cope with the expected increase in air traffic, without causing disruption to existing services. But the Games offer an important business opportunity for many private companies within the sector, both immediately and as regards future business development. At the same time, these companies operate within a complex regulatory framework set down at local, national and EU levels. That regulatory framework, which includes the EU Slots Regulation and the UK Airports Slot Allocation Regulations 2006, also imposes strict limitations on the ways in which Government can intervene in the commercial provision of those services.
- 15. Protecting "business as usual" for the aviation industry during the Olympics has to be a primary objective for all concerned. Avoiding disruption to the plans of other air travellers during what will be the height of the summer holiday season is an important objective in its own right. And maintaining the smooth running of existing scheduled air services, particularly during the peak periods of demand, will also be a crucial factor in the successful staging of the Games themselves, since these services are expected to carry more than 80% of overseas Olympics and Paralympics visitors to and from the Games.
- 16. At the same time, ways need to be found to accommodate the additional air traffic that the Games are expected to generate, including private flights and corporate/business aviation. This too is important to the successful staging of the Games, as well as helping to maximise potential commercial benefits to the aviation sector and to the wider UK economy from hosting the event.

Rationale for intervention

- 17. Temporary airspace changes are currently being developed by NATS, which it is hoped will generate additional capacity and resilience in managing increased air traffic flows. However, these measures will not in themselves serve to control overall levels or patterns of demand for access to airspace over South East England during the Games period. With this in mind, the Government believes that special measures will be necessary during the Games period both to protect business as usual and to ensure efficient use of the available airport and airspace capacity across South East England Games-related demand can be accommodated.
- 18. Taking advice from the Atkins study, and following widespread support for the proposal in the targeted consultation (completed January 2011), the decision has been taken to temporarily extend coordination to all airports in the South East of England which are capable of accepting air traffic with the potential to impact on controlled airspace over the South East during the Games period (listed at Annex 2). The Atkins Report only recommended the extension of coordination to airports in the South East of England, as this was the limit of anticipated extra demand for the Olympic period. The list at Annex 2 was formed through discussions with NATS and ACL, and public consultation.
- 19. Whilst the current regulations provide the power for the Secretary of State to coordinate airports, additional powers are required to ensure that the scheme functions effectively. There is very little time available before the slot booking schedules open for the period of temporary coordination for the 2012 Olympic Games, and there is a significant risk that the preparatory work to temporarily coordinate thirty six new airports might not be completed in time.
- 20. The specific risks are:
- ACL would not have enough time to negotiate contracts with each of the thirty six newly coordinated airports. ACL is a non-profit organisation which needs to recover its costs from providing coordination. Without a mechanism for recovering their costs, ACL would not be able to provide coordination services.
- Each airport is currently required to organise its own coordination committee. This would not only be
 unduly burdensome and time consuming for each of the airports, but could lead to each airport
 making capacity declarations that could not be supported by the available total airspace capacity.
 Without a coordinated approach to capacity declarations, the benefits of extending coordination would
 not be realised.
- Even with the Single Coordination Committee, airports may make capacity declarations that are not supportable by the available airspace capacity. This would negate the disruption-limiting benefits of extending coordination.
- 21. These specific risks mean that it is likely that without further action, the announced period of temporary coordination for the period of the Olympics would not work effectively to minimise the disruption to air services. Considering the significant increase in expected traffic over the Games period, and the severe capacity limitations for airspace and airports in the South East of England, there would be substantial disruption to existing and new air services that would lead to delays for passengers and costs for airports and airlines, as they would be required to organise alternative flights, or provide refunds and/or compensation to passengers. There would also be significant detriment to the UK's reputation for the successful hosting of events.

Policy objectives

- 22. The overall policy objective is to contribute to the successful staging of the Games through the delivery of efficient air services, as well as helping to maximise potential commercial benefits to the aviation sector and to the wider UK economy from hosting the event.
- 23. The specific policy objective is to ensure that the temporary extension of airport coordination for the Games period works effectively to allow the maximum airspace capacity to be used in the most efficient way. This would ensure that the maximum number of flights could be accommodated by the available airspace and airports' capacities: and that there would be minimal disruption and cost to 'business as usual' operations as a result of delay caused by congestion. It would also allow

aviation businesses to gain maximum commercial benefit from the UK's hosting of the 2012 Olympic Games.

24. Protecting "business as usual" for the aviation industry during the Olympics is a primary objective for all concerned. Avoiding disruption to the plans of other air travellers during what will be the height of the summer holiday season is an important objective in its own right. And maintaining the smooth running of existing scheduled air services, particularly during the peak periods of demand, will also be a crucial factor in the successful staging of the Games themselves, since these services are expected to carry more than 80% of overseas Olympics and Paralympics visitors to and from the Games.

Options considered

25. After the completion of the Atkins Report, the first stage of the process to ensure that the expected increased in flights to the UK during the Games could be accommodated, was to complete a targeted consultation on possible options. This consultation considered four proposals for utilising the maximum available airspace capacity during the Games period:

1) Maintain the status quo.

2) Adopt a voluntary approach to managing flights during the Games period. ACL would provide advice to airports and air carriers, and recommend flight times that would fit into the available capacity.

- 3) Government to direct certain flights to particular airports.
- 4) Temporarily extend airport slot coordination to airports in the South East of England.
- 26. The Atkins Report recommended that temporary extension of coordination (option 4) was required to deliver the most efficient use of scarce airport capacity during the high demand period of the Games. This option also received strong support from the targeted consultation, as it is the best option for ensuring that the maximum number of flights can be accommodated within the available capacity, whilst protecting existing air services from disruption. As temporary extension to airports can be carried out under existing legislation, it was announced that the airports at Annex 2 would be temporarily coordinated for the period of the 2012 Olympic Games.
- 27. After it was announced that coordination would be temporarily extended to the airports at Annex 2, two options were considered for implementing this measure effectively, and it is these two options that this Impact Assessment assesses. An alternative to regulation the base case: extending coordination without amending the regulations was considered. This option was rejected, as it was considered that there were substantial risks that due to significant time constraints, the extension of coordination would not be implemented effectively and the option would not deliver the disruption-limiting benefits of temporary coordination. There would be significant risks of congestion, resulting in disruption to existing services and delays to passengers. The costs of implementing the 'base case' would also be significantly higher than those for the preferred option.

Base case – To carry out the announced temporary extension to coordination with no amendment to the Regulations

- 28. As the Government has already announced that coordination will be temporarily extended to all relevant airports in the South East of England for the period of the Games, the base case would be to extend coordination without any amendments to the Airports Slot Allocation Regulations 2006. This option would expose the airspace management scheme to substantial risks and it is likely that extended coordination would not be successfully delivered. This would result in serious delays and disruptions to air services during the period of the 2012 Olympics. The main risks are:
 - Individual airports would be left to declare their own capacity. This could result in an unsustainable situation where proposed capacity determinations could not be supported by the available airspace due to airspace constraints or possible impacts on other airports. The lack of a synchronized approach would mean that the maximum available airspace and airport capacity would not be utilised, causing disruption and delays.
 - Each airport would form its own coordination committee. It is proposed that thirty six new airports would be temporarily coordinated, and it would be problematic and unnecessarily burdensome for the airports to establish and operate this number of new committees. It would be difficult to manage any potential interactions between such a large number of individual committees.

- Each airport would appoint its own coordinator. For the scheme to be a success it is important that the same coordinator is appointed for all of the temporarily coordinated airports.
- ACL (the coordinator) normally prescribes fees in contracts that have been negotiated with individual airports. ACL would not be able to manage the large number of new parallel contract negotiations. ACL's legal advisers would not be able to support the large number of parallel contract negotiations. This process would also affect ACL's other airport contract negotiations. ACL normally undertakes re-contracting negotiations with existing customers and manages to process the contracts at a rate of approximately two per quarter. Therefore at the same rate to establish contracts with all of the new airports would take over four years.
- ACL believe that without amendments to the Regulations, they would not be able to complete the necessary work in time for the opening of the slot application schedules in September 2011.
- 29. Temporary extension of coordination to the airports listed at Annex 2 without amendments to the Regulations poses such substantial risks to the overall Government objectives of maintaining business as usual and delivering a satisfactory experience to visitors, that this option would not be viable. Considering ACL's view that under the base case it would not be possible to complete the required preparatory work in time, and the other problems outlined above, it was concluded that the base case would not provide the opportunity for the extension of coordination to deliver the desired benefits to air service during the Games. There are substantial risks that the anticipated extra flights to the UK for the Games would not be able to be accommodated effectively by the available airspace and airport capacities. There would be significant congestion within the airspace and at airports, leading to disruption to existing and new air services which would result in delays to passengers and considerable costs to businesses (from offering alternative flights and providing refunds and/or compensation to passengers).

Option 1 (Preferred) – To carry out the announced extension to coordination with amendments to the Regulations

- 30. Extend coordination to the airports listed at Annex 2 and amend the Airports Slot Allocation Regulations 2006. This is the preferred option as it would provide the highest level of protection for 'business as usual' operations, whilst ensuring that the maximum possible number of extra flights could be accommodated by the available airspace and airports capacities, and at the lowest cost to business. It would ensure that a consistent, harmonised approach is taken across all airports included in the scheme, and allow for management of interactions between them. This option would limit the possibility of disruption and delay (and the consequential costs) to the aviation industry and to passengers. It would also allow aviation businesses to maximise their commercial gains from the UK's hosting of the 2012 Olympic Games. The preferred option avoids delay by enabling extended coordination to be implemented successfully through the following means:
 - The Secretary of State for Transport would be able to modify the temporarily coordinated airports' individual capacity declarations if it was considered that their declaration would not be possible to sustain due to airspace constraints or impacts on other airports. This power would be used as a last resort, as it is anticipated that such matters would be resolved through the coordination committee. This measure would limit congestion and disruption to air services by ensuring that the total number of slots allocated to airports by ACL does not exceed that which can be accommodated by the available airspace.
 - A single coordination committee could be established to provide a consistent and harmonised approach across all of the temporarily coordinated airports. For newly coordinated airports this would reduce the burden of having to set up individual committees, and it would facilitate the process of declaring individual airport capacities by allowing integrated discussion.
 - The Secretary of State would appoint ACL as coordinator to all temporarily coordinated airports. ACL has substantial experience and is the only approved coordinator in the UK.
 - ACL would be permitted to charge a fee to the temporary coordinated airports. This would allow
 the costs of temporary coordination to be split proportionally between the airports, based on the
 number of coordinated slots flown. Airports would only pay for the slots that they use. This
 measure is necessary to allow ACL to recover their costs for providing temporary coordination
 services. There is not time for ACL to negotiate individual contracts with each of the thirty six
 newly coordinated airports (their usual method for recovering costs), and without being able to
 recover their costs, ACL would not be able to provide coordination services.

- 31. The amendments to the Regulations will be made in August 2011. This is necessary as some of the powers are required before the start of the Games period. The system for airlines to book slots at the temporary coordinated airports opens on 1 September 2011, so the coordination system must be functional by this date. There is a need for ACL to be appointed as coordinator for all temporarily coordinated airports as soon as possible, so that they can provide training for airport operators on how to use the slot allocation system. The Single Coordination Committee needs to be established as soon as possible so that individual airports' capacity declarations can be agreed, in order to allow NATS to finalise their airspace management plan. For the same reason, there is need for the Secretary of State for Transport to have early power to amend airports' declared capacity if necessary, to ensure that there are no conflicting capacity declarations that would cause problems for the overall airspace capacity plan.
- 32. Whilst the airports listed at Annex 2 (that are not already coordinated) will be designated as coordinated in August 2011, slots will only be allocated for the period between 21 July 2012 and 15 August 2012. During this period, airlines will be required to have pre-booked a slot if they intend to land at one of the airports included in the scheme. The fees payable by airport operators to ACL for each coordinated slot flown, only apply between 21 July and 15 August 2012. This period of slot allocation begins before and ends after the opening and closing ceremony of the Games. The dates for slot allocation were agreed after seeking views in a targeted consultation, and discussions with ACL, NATS and the Civil Aviation Authority. It was concluded that the slot allocation period should be wider than the Games period, in order to accommodate the extra demand for air services from visitors and participants who would arrive before and depart after the end of the Games.

Costs and benefits

Base Case Costs and Benefits

33. The costs of the preferred option have been estimated by ACL to be between £50,000 and £150,000. ACL have also estimated the additional costs that would be involved in the base case (in addition to those in the prefer option) as follows:

For the 36 separate Coordination committees required ACL Organising and attending all meetings - 1 manager + 1 executive on	
the ACL headcount	£75,000
ACL travel cost	£16,000
NATS based on 72 person days	£43,200
ACL contract negotiations with each airport- 2 days per airport at the MD	
rate	£119,000
Legal fees for 36 contracts	£180,000
Total	£433,200

- 34. The costs are significantly higher than the preferred option because ACL would be required to negotiate individual contracts with each airport that has been designated as coordinated. There would also be separate coordination committees which would use up more staff hours than one coordination committee in the preferred option. The costs would fall on the airports and it is likely they would be passed onto the airlines, other airport users and, ultimately, onto passengers.
- 35. However, the likelihood is that the base case is undeliverable. ACL consider that there is not enough time to negotiate individual contracts with the thirty six newly coordinated airports.
- 36. The expected benefits (and costs) of the base case are uncertain because of the risk that it is undeliverable. If the base case was successful the benefits would be the same as in the preferred option. For the best estimate of base case benefits the benefits of the preferred option could be reduced in proportion to the probability of the base case being successful. However, the probability of the base case being successful is considered to be near or at zero ACL believe that they would not be able to complete coordination in time (see paragraph 30, bullet 4) making the base case is not deliverable. Therefore, we have assumed that the costs and the benefits of the base case are zero.
- 37. If the potential costs and benefits of the base case were included in the analysis of options (putting deliverability to one side for a moment), they would improve the case for the preferred option relative to the base case. This is because the base case benefits would be no greater than those in the preferred option, while the corresponding costs would greatly exceed those of the preferred option.

Preferred Option Costs

38. The costs of the preferred option have been estimated by ACL to be between £50,000 and £150,000, with a best estimate of £131,405. These include extended working hours and use of software to match flight plans with allocated airport slots. The "DFS software" is so named since it comes from the German equivalent of NATS - Deutsche Flugsicherung (DFS). In the most recent detailed estimate by ACL, the costs are expected to be as follows (taken as the best estimate):

Staff costs	£16,165
Training costs	£9,000
Set up costs	£9,240
DFS software	£87,000
Contingency	£10,000
Total	£131,405

39. ACL provided a more detailed breakdown of the costs:

- Staff costs ACL is extending its working hours from 5 days per week Monday to Friday 0830-1700 to 7 days per week 24 hours coverage. This roster will require additional staff to cover the roster with all the training and time leading up to the games. Staff will be paid shift pay to cover the change to their working hours and the unsocial hours a 24/7 roster generates.
- Training costs all the airports will be training staff to operate the On Line Coordination software, the training costs are calculated at the rate ACL would normally charge to run the 15 courses they expect to run.
- Set up costs are to cover the visits being undertaken at this time by ACL with Atkins to the 40 airports on the list at Annex 2. These visits are to prepare the airports for the temporary coordination process and to begin discussions on possible capacity declarations.
- DFS software refers to set up costs and the software licence required to use the software developed by the German equivalent to NATS (DFS). It also involves software development within the ACL Coordination software SCORE. The DFS software will be used to match flight plan submissions with allocated slots.
- Contingency to cover any additional costs.
- 40. Based on data in the Atkins report, ACL have estimated the total number of flights they may need to coordinate over the Olympic period at 102,414, as follows:

Scheduled flights	84,736
Charter flights	6,738
Cargo and mail flights	1,311
Business Aviation	9,295
Positioning flights	335
Total	102,415

41. ACL plan to charge airports for the cost of coordination by splitting the total cost proportionately based on the number of coordinated movements operated at each airport listed at Annex 2 (expected to total 102,415 movements). The £50,000 to £150,000 cost estimate equates to a per air traffic movement (ATM) charge between £0.49p and £1.46p per ATM. The best estimate for the total cost of £131,415 equates to a charge per ATM of £1.28p. It is likely that these costs will be passed from airports onto airlines, other airports users and, ultimately, onto passengers. Example of cost pass through in the industry includes research that, on average, airlines pass through 100% of cost increases to passengers

(<u>http://www.vivideconomics.com/docs/Vivid%20Econ%20Aviation%20Tickets.pdf</u>, *A Study to Estimate Ticket Price Changes for Aviation in the EU ETS*, Vivid Economics (for Defra and DfT), November 2007).

Preferred Option Monetised Benefit - reduced delay

42. Airspace in the South East of England is congested and without the temporary extension to airport coordination additional (uncoordinated) flights entering that airspace during the Games period could cause considerable delay. The Atkins report (cited at para 8) concluded that Olympic air traffic could be accommodated but only with extended coordination, "Without control of the arrival and departure profile of flights severe bottle necks may appear generating delays for all flights, potentially impacting the wider European central flow management operation." The following paragraph provides views from the aviation industry on the possible scale of the impacts. The basis for our estimate of the monetary benefit of avoiding delay is then outlined, starting with an explanation of NATS estimates of delay minutes avoided in the preferred option.

Industry views of the cost of delay

43. In the responses to the initial targeted consultation, one airline said that the gridlock in airspace and at airports that they would expect to result from not successfully extending coordination would cost them approximately £10 million per day. Other airlines did not quantify potential costs but two airlines said they expect significant costs to arise from not having a successful temporary coordination scheme. Another airline recognised that although they may receive additional revenue this may be cancelled out by increased costs caused by delay. One airport suggested that as the proposed scheme would provide for an efficient management of airspace, they would expect to benefit from an extra £1 million income. There was also concern from some that delay would lead to ongoing costs of as repeat business may be harmed.

NATS delay minutes estimates

- 44. The monetised estimate of benefits starts with an estimate from NATS of the potential delay minutes (to aircraft movements) avoided in the preferred option compared to the base case. NATS best estimate for total minutes delay avoided is 168,000 minutes with a low estimate of 126,000 and a high estimate of 224,000.
- 45. NATS analysis of delay is that, on average, every 10 flights in excess of capacity per hour causes around 500 minutes delay; this relationship informs the estimates.
- 46. It is anticipated that all of the additional delay referred to in each scenario (below) is avoidable through successful implementation of extended coordination.

Low estimate of delay minutes

47. NATS have simulated delay in an uncoordinated scenario where the currently uncoordinated airports around London have peaks in demand above capacity between 7-9am and 5-7pm. NATS estimate that 30 flights will be delayed in the first hour of the peak and 60 in the second hour. The delayed flights are moved to the subsequent hour (9-10am and 7-8pm) by which time it is assumed spare capacity will be available. 90 flights both morning and afternoon are assumed to be delayed for an average of 50 minutes each, a daily total of 9000 minutes delay. This estimate includes delay at the previously uncoordinated airports and in two new Olympic airspace sectors. NATS assume that this delay is likely to occur for 14 days over the Olympic period, giving a total low estimate of 126,000 minutes ATM delay.

Best estimate of delay minutes

48. In addition to the low estimate, NATS best estimate is that the additional uncoordinated Olympic flights would also impact on airspace sectors handling normal daily airline traffic, including traffic to the larger airports. NATS estimate that an additional 60 flights could be affected in this way giving a total best estimate of ATM delay of 168,000 minutes. This equates to an average additional delay of 1 minute 38 seconds for every flight that ACL plan to coordinate during the Olympic Games period (102,415 movements). By way of context, in 2010 average delay was around 23 minutes per flight at Gatwick, 21 at Luton, 16 at Heathrow, 15 at Stansted and 10 at London City. See CAA punctuality statistics at http://www.caa.co.uk/docs/80/punctuality/2010/2010_Annual_Summary_Analysis.csv.

High estimate of delay minutes

49. NATS also consider a high delay scenario with an additional one hour peak in demand over capacity resulting in an addition 80 flights delayed (40 flights delayed at the previously uncoordinated airports and in two new Olympic airspace sectors, 40 in other airspace sectors).

Over the busiest 14 days of the Olympics this gives a total high estimate of 224,000 minutes ATM delay.

50. With extended coordination it is anticipated all of the additional delay referred to in each scenario (above) is avoidable through matching flight plans to declared airspace and airport capacities.

Estimating the monetary benefit of avoiding delay

51. Our estimate of the monetary benefit of avoiding delay in the preferred option has two elements:

i) the direct value to airlines / aircraft operators of avoiding delay; and

- ii) the value to passengers of avoiding delay and longer journey times.
- 52. A report for the Performance Review Commission ('Evaluating the true cost to airlines of one minute of airborne or ground delay', University of Westminster, May 2004) estimated a delay per minute per air traffic movement of £57 to airlines / aircraft operators (72 Euros in 2002 converted to £45.30 at 2002 exchange rates, up rated to 2011 prices), http://westminsterresearch.wmin.ac.uk/17/1/Cook%2CTanner%2CAnderson 2004 final.pdf. This estimate of the benefit to airlines from avoiding a minute delay includes fuel and staff costs.
- 53. The second element of the estimate of monetised benefits relates to value passengers put on avoiding delay and longer journey times for passengers. DfT provides transport appraisal guidance on values of time at http://www.dft.gov.uk/webtag/documents/expert/unit3.5.6.php#012. For this analysis the 2002 values in unit 3.5.6 been up rated to 2011 values and prices, giving an average value of working time per person of £35.80 per hour, non-working value of £5.90. It should be noted that webtag does not contain values of time specifically for air passengers, the values used are average values for all transport users. The non-working time is based on willingness to pay studies evaluating how much people are willing to pay to reduce journey times. The working time value is based on the cost to employers of an hours unproductive travel time. CAA statistics show that 22% of passengers travel for business purposes. Therefore, an average aviation passenger value of time of £12.50 has been adopted for this analysis (22% at £35.80 and 78% at £5.90).
- 54. The table below calculates the total benefit of avoiding the aircraft delay estimates from NATS. The best estimate of the cost the delay that the preferred option is expected to avoid in other words the benefit of the preferred option is £11.6 million. With a low scenario estimate of £8.3 million and a high scenario estimate of £15.6 million.

	(i) Aircraft delay (minutes)	(ii) Average passengers per aircraft	(iii) Passenger delay (hours) (i) x (ii)	(iv) Airline cost (£ million) (i) x £57	(v) Value of passenger time (£ million) (iii) x £12.50	(vi) Total Cost (£ million) (iv) + (v)
(a) Low	126,000	42	88,200	7.2	1.1	8.3
(b)	42,000	105	73,500			
(c) Central (a + b)	168,000	58	161,700	9.6	2.0	11.6
(d)	28,000	42	19,600			
(e)	28,000	105	49,000			
(f) High (c + d + e)	224,000	62	230,300	12.8	2.9	15.6

Notes on the table above:

i) Aircraft delay - estimate provided by NATS. Increments (b), (d) and (e) are used to provide separate information on flights going to different airports which are likely to be of different average sizes with different average numbers of passengers.

ii) Average passengers per ATM (air traffic movements). Increments (b) and (e) included flights using all airports. 105 was the average number of passengers per aircraft movement (ATM) for all UK reporting airports in 2010 from CAA statistics (see

http://www.caa.co.uk/default.aspx?catid=80&pagetype=88&sglid=3&fld=2010Annual Table 4 and Table 9). Increments (a) and (d) include flights to the 36 airports which would be coordinated in the preferred option but are not currently coordinated. Our estimate for the average number of passengers per ATM at these airports is 42. We have statistics for 10 of the larger of the 36 airports (averaging 85 passengers per movement). Based on estimates of the numbers of flights

each uncoordinated airport could accommodate we assume that the smaller 26 airports not reported in CAA statistics could, in total, accommodate the same number of flights that the larger 10 airports currently accommodate. We assume that the size of the aircraft and numbers of passenger at the 26 smaller airports are much smaller - averaging just 2 passengers per flight. This gives an average estimate of 42 passengers per flight. Increments (c) and (f) combine numbers of flights with averages of 42 passengers and 105 passengers.

(iii) Passenger delay hours = (i) aircraft delay minutes multiplied by (ii) average passengers per aircraft divided by 60.

(iv) Airline benefit (\pounds million) = (i) aircraft delay minutes multiplied by \pounds 57 cost per aircraft per minute delay, the source of the \pounds 57 is explained in paragraph 52.

(v) Value of passenger time (\pounds million) = (iii) Passenger delay hours multiplied \pounds 12.50 average value of passenger time per hour, explained at paragraph 53.

Preferred Option Non-monetised benefits

55. Some 550,000 overseas visitors are expected for the Games and the majority will arrive by air. The proposal will also help to preserve the UK's reputation for holding successful international events. There is also a benefit to airports and to the economy in general from being able to accommodate extra flights into and out of the UK.

Risks and assumptions

56. Assumptions outlined at paragraphs 33 to 54, include:

- the cost of extending coordination in the base case and preferred option;
- the numbers of flights to be coordinated;
- the amount of aircraft delay avoided by successful implementation of extended coordination;
- the value of the delay avoided to airlines and passengers which in turns depends on assumptions for the number of passengers per flight and the journey purpose of those passengers (leisure or business).

Implementation plan

57. The Airports Slot Allocation (Amendment) Regulations 2011 would replace the existing Airports Slot Allocation Regulations 2006. It is proposed that the new Regulations would come into force in August 2011. The single coordination committee would then be established, so that preparations for the Games period could commence as soon as possible with a view in particular to opening slot bookings in autumn 2011.

48. The Airports Slot Allocation (Amendment) Regulations 2011 would cease to have an effect on 31 December 2012.

Annexes

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

Annex 1: Post Implementation Review (PIR) Plan

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

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)];

Although the proposed Regulations are temporary and will cease to have an effect on the 31 December 2012, the success or otherwise of the proposed arrangements as a means of mitigating the perceived risks will be reviewed after the Games.

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?]

The review will be part of a wider assessment and lessons learnt exercise regarding the handling of arrivals and departures for the Games

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] Desk study, involving consultation of stakeholders and use of actual data.

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

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]

Coordination process implemented effectively and seen to contribute to maintenance of smooth running of aviation during the Games period.

Monitoring information arrangements: [Provide further details of the planned/existing arrangements in place that will allow a systematic collection systematic collection of monitoring information for future policy review] ACL, NATS and airports will be able to supply full data on aircraft movements

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

Annexes

Annex 1 – Specific Impact Tests

Competition Assessment

58. The Office of Fair Trading have prepared four filter questions as an initial means of assessing the impact of a policy on competition, which are discussed below in relation to the amendment to the Slot Allocation Regulations.

Does the policy directly limit the number or range of suppliers?

59. The policy does not directly impact on the range of suppliers.

Does the policy indirectly limit the number or range of suppliers?

60. The fee structure has been designed not to disproportionately burden smaller airports. The costs of implementing wider coordination will be split proportionately amongst all coordinated airports according to levels of usage during the Games period. It is recognised that some of the larger airports will not be able to receive additional traffic due to their own capacity constraints, however they have been treated proportionately in terms of fees as they will indirectly benefit from protecting against the risk of flow management or airspace closures due to overcrowding.

Will the policy limit the ability of suppliers to compete?

61. The policy is intended to create a level playing field for airports to be included in the scheme. Fees will be split fairly amongst South East airports, based on the number of movements flown. Airports will be allowed to propose their own capacity constraints, which will be considered collectively by the members of the single coordination committee. The Secretary of State will be able to act as final arbiter should agreement not be reached.

Will the policy reduce suppliers' incentives to compete vigorously?

62. It is not anticipated that the policy will reduce suppliers' incentives to compete vigorously.

Small Firms Assessment and the Micro Business Moratorium

- 63. It is anticipated that the policy will have a positive impact on small firms. The overall policy will reduce uncertainty about demand and help ensure orderly arrivals and departures of aircraft at all airports during the Games period. The proposed fee requirements do not impose disproportionate burdens on the small airports to be included in the scheme, compared to the larger airports. The cost of widening temporary coordination will be divided amongst the airports based upon the number of coordinated slots flown. Small firms will be able to compete equally for trade.
- 64. The fee structure recognises that while some of the larger airports may not receive additional traffic, they stand to benefit from a better-managed airspace.

Micro Business Moratorium

65. It is difficult to provide an accurate estimate of the costs that the preferred option would impose on micro businesses. The costs will be divided proportionately between airports, as ACL will charge a fee (between £0.49 and £1.46) to airports for each coordinated slot flown. The number of slot coordinated air traffic movements for each airport has not yet been decided, as this would be confirmed and declared by the Single Coordination Committee. However using existing data for the airports that they already coordinate, NATS' work on airspace modelling and early capacity indications from some airports, ACL have estimated how the estimated 102, 415 flights over the Games period will be divided amongst the airports:

Heathrow	36.3%
Gatwick	22.6%
Luton	8.9%
Stansted	15.6%
London	
City	5.3%
others	11.3%

- 66. On this estimation, 11.3% of the total number of air traffic movements for the 26 days of temporary coordination will be assigned to the 35 airports, other than Heathrow, Gatwick, Luton, Stansted and London City, listen at Annex 2. Therefore 11.3% of the estimated £131,415 costs (£14,850) will be split between these 35 airports too. It is not known how many, if any, of these 35 airports would qualify as micro businesses, but it is likely to be a small number. Many of the 'other' airports are larger airports that would not qualify as micro businesses, and would accept a higher proportion of the slot coordinated flights, and therefore the costs. The micro business airports would accept a lower proportion of the 11.3% of slot coordinated flights assigned to the 'other' airports (ie, less than 1/35 of 11.3% of 102, 415 flights). There would therefore be relatively low cost for micro businesses.
- 67. It is not possible to exempt micro businesses from the amendments to the Regulations. The success of the temporary extension of coordination for accommodating the expected increase in air traffic movements, whilst protecting existing air services from disruption, relies on full compliance to provide benefits to all parties. As such, should the awaited final guidance on the Micro Business Moratorium reveal that there will be no exemptions for short term regulations, such as those proposed here, a waiver will be sought for the proposed temporary amendments to the Airports Slot Allocation Regulations 2006.

One in One out

56. This measure is out of scope of 'One In, One Out' as it is a temporary measure'

Equalities Impact Assessment

68. An Equalities Impact Assessment screening proforma was completed for the policy (below), and it was found that the proposed temporary amendments to the Airports Slot Allocation Regulations 2006 would have no adverse impact on any of the equalities groups. A full Equalities Impact Assessment was not considered to be necessary.

EqIA Scr	eening	g Proto	orma					
Name of the function, policy or strategy - Allocation Regulations 2006	ŀ	Amendments to the Airports Slot						
Current or Proposed: Proposed								
Person completing the assessment: Geo Date of assessment: 04/05/11	orge C	larkso	on					
Purpose of the function, policy or strateg that the temporary extension of coordina the period of the 2012 Olympics operates	tion of	f airpo						
Questions - Indicate Yes, No or Not Known for each group				and			Transgender	

| Is there any indication or evidence that different
groups have different needs, experiences,
issues or priorities in relation to the particular
policy? | No |
|---|----|----|----|----|----|----|----|----|
| Is there potential for, or evidence that, this
policy may adversely affect equality of
opportunity for all and may harm good relations
between different groups? | No |
| Is there any potential for, or evidence that, any
part of the proposed policy could discriminate,
directly or indirectly? (Consider those who
implement it on a day to day basis)? | No |
| Is there any stakeholder (staff, public, unions)
concern in the policy area about actual,
perceived or potential discrimination against a
particular group(s)? | No |
| Is there an opportunity to better promote
equality of opportunity or better community
relations by altering the policy or working with
other government departments or the wider
community? | No |
| Is there any evidence or indication of higher or lower uptake by different groups? | No |
| Are there physical or social barriers to
participation/access (e.g. language, format,
physical access/proximity)? | No |

If you have answered "no" to all the questions, an EqIA is not required.

If your answer is "**yes**" or "**not known**" to any of these questions then consider the proportionality aspect in terms of providing a lower standard of service or offering a service on different terms than you would to other people. After considering the proportionality aspects you will need to decide whether an Initial Equality Impact Assessment is needed.

Annex 2

Airports to be temporarily coordinated for the period of the 2012 Olympics

Biggin Hill

Birmingham

Blackbushe

Bournemouth

Cambridge

Chalgrove

Coventry

Cranfield

Damyns Hall

Denham

Dunsfold

Duxford

Elstree

Fairoaks

Farnborough

Goodwood Lee-on-Solent Leicester Luton Lydd (London Ashford) Manston Northampton (Sywell) Northolt North Weald Old Sarum Oxford Peterborough (Conington) Redhill Rochester Shoreham Southampton Southend Stapleford Thruxton White Waltham Wycombe