



Department
for Transport



Appraisal of Sustainability: (Non-technical summary, Main report and Appendices)

Change Log

June 2018

Changes made between October 2017 versions and 5 June 2018 versions (corrected on 23 July 2018)

Document	Paragraph	Old Text	Revised Text
A-11 Historic Environment	11.12.8	The loss of non-designated assets and potential unrecorded archaeological remains (numbers unknown) within the Land Take Study Area for all three schemes is also likely. Fifty-five non-designated assets and 12 archaeological notification areas are present at LGW-2R. One-hundred and fifty-three non-designated heritage assets are present at LHR-ENR and 257 at LHR-NWR, which again is the highest number of negative effects.	The loss of non-designated assets and potential unrecorded archaeological remains (numbers unknown) within the Land Take Study Area for all three schemes is also likely. Thirty-Five non-designated assets and 12 archaeological notification areas are present at LGW-2R. Seventy-Four non-designated heritage assets are present at LHR-ENR and 167 at LHR-NWR, which again is the highest number of negative effects.

Changes made between October 2017 versions and 5 June 2018 versions

Document	Paragraph	Old Text	Revised Text
Non-Technical Summary	Front	Appraisal of Sustainability: Revised Draft Airports National Policy Statement	Appraisal of Sustainability: Airports National Policy Statement
Non-Technical Summary	Front	October 2017	June 2018
Non-Technical Summary	Cover Sheet	Crown copyright 2017	Crown copyright 2018
Non-Technical Summary	Cover Sheet	ISBN 978-1-84864-195-2	ISBN 978-1-84864-201-0

Non-Technical Summary	Contents Page	The revised draft Airports National Policy Statement	The Airports National Policy Statement
Non-Technical Summary	1.1	The Government believes there is a need for increased airport capacity in the South East of England by 2030. It has produced a revised draft Airports National Policy Statement, which sets out why the increased capacity is needed and how it will be achieved.	The Government believes there is a need for increased airport capacity in the South East of England by 2030. It has produced the Airports National Policy Statement, which sets out why the increased capacity is needed and how it will be achieved.
Non-Technical Summary	1.3	Legislation requires that these documents must be accompanied by an Appraisal of Sustainability of the policy set out in the National Policy Statement. The Appraisal of Sustainability will assess the potential environmental, economic and social impacts of the proposed policy in the National Policy Statement, and may incorporate other assessments required as a matter of law (for example a Strategic Environmental Assessment, a Habitats Regulations Assessment or an Equalities Impact Assessment) or policy (for example a UK government impact assessment or health impact assessment).	Legislation requires that these documents must be accompanied by an Appraisal of Sustainability of the policy set out in the National Policy Statement. The Appraisal of Sustainability will assess the potential environmental, economic and social impacts of the proposed policy in the National Policy Statement, and may incorporate other assessments required as a matter of law (for example a Strategic Environmental Assessment, a Habitats Regulations Assessment or an Equality Assessment) or policy (for example a UK Government Impact Assessment or Health Impact Analysis).
Non-Technical Summary	1.4	This revised non-technical summary is intended to summarise the key findings of the Appraisal of Sustainability for the revised draft Airports National Policy Statement. The revised Appraisal of Sustainability non-technical summary is comprised of the following sections:	This non-technical summary is intended to summarise the key findings of the Appraisal of Sustainability for the Airports National Policy Statement. The Appraisal of Sustainability non-technical summary is comprised of the following sections:

Non-Technical Summary	1.4	The revised draft Airports National Policy Statement, which sets out scope of the revised draft Airports National Policy Statement and relationship to other documents;	The Airports National Policy Statement, which sets out scope of the Airports National Policy Statement and relationship to other documents;
Non-Technical Summary	1.7	The Appraisal of Sustainability is a strategic level assessment. It is based on the contents of the revised draft Airports National Policy Statement. The Appraisal of Sustainability considers alternatives to the Government's preferred scheme as set out in the revised draft Airports National Policy Statement, including the outline masterplans supplied to the Airports Commission for the three shortlisted schemes.	The Appraisal of Sustainability is a strategic level assessment. It is based on the contents of the Airports National Policy Statement. The Appraisal of Sustainability considers alternatives to the Government's preferred scheme as set out in the Airports National Policy Statement, including the outline masterplans supplied to the Airports Commission for the three shortlisted schemes.
Non-Technical Summary	2.4	A draft Airport National Policy Statement and supporting draft Appraisal of Sustainability (including topic level appendices) were published on 2 February 2017 and a 16 week public consultation launched. On publishing the draft Airports National Policy Statement, the Government made a commitment to continue updating its evidence base on airport capacity, including revised passenger demand forecasts and the impacts of publication of the Government's Air Quality Plan (the UK plan for tackling roadside nitrogen dioxide concentrations). In order to provide clarity, the Government has revised the draft Airports National Policy Statement and some of the other documents which were	A draft Airports National Policy Statement and supporting draft Appraisal of Sustainability (including topic level appendices) were published on 2 February 2017 and a 16 week public consultation launched. On publishing the draft Airports National Policy Statement, the Government made a commitment to continue updating its evidence base on airport capacity, including revised passenger demand forecasts and the impacts of publication of the Government's Air Quality Plan (the UK plan for tackling roadside nitrogen dioxide concentrations). In order to provide clarity, the Government updated the draft Airports National Policy Statement and some of the other documents which were published alongside it, on the basis of these changes to the evidence base

		published alongside it, on the basis of these changes to the evidence base and as a result of initial consideration of the responses to the February consultation and other broader Government policy changes which have arisen during this period.	and as a result of initial consideration of the responses to the February consultation and other broader Government policy changes which arose during that period.
Non-Technical Summary	2.5	N/A	The revised draft Airports National Policy Statement and Appraisal of Sustainability were published on 24 October 2017 and an 8 week consultation was undertaken.
Non-Technical Summary	2.6	N/A	The Government has reissued final versions of the Airports National Policy Statement and Appraisal of Sustainability following the further consultation. This final version of the Appraisal of Sustainability addresses any further changes identified through consideration of the consultation responses.
Non-Technical Summary	5 (Title)	The revised draft Airports National Policy Statement	The Airports National Policy Statement
Non-Technical Summary	5.1	The revised draft Airports National Policy Statement sets out:	The Airports National Policy Statement sets out:
Non-Technical Summary	5.1	The Government's draft policy on the need for new airport capacity in the South East of England by 2030;	The Government's policy on the need for new airport capacity in the South East of England by 2030;
Non-Technical Summary	5.1	The matters that an applicant will need to address when it brings forward an application for development consent to which the draft Airports National Policy	The matters that an applicant will need to address when it brings forward an application for development consent to which the Airports National Policy Statement applies, for example in

		Statement applies, for example in relation to providing mitigation to address the impacts of the development.	relation to providing mitigation to address the impacts of the development.
Non-Technical Summary	5.2	The revised draft Airports National Policy Statement is also related to other policies at a national level. These include:	The Airports National Policy Statement is also related to other policies at a national level. These include:
Non-Technical Summary	6.1	The revised Appraisal of Sustainability is comprised of 12 topics, which represent key areas likely to be affected by additional airport capacity. The appraisal assesses the impacts of the three schemes against objectives for each topic, for example maximising economic benefits and minimising noise.	The Appraisal of Sustainability is comprised of 12 topics, which represent key areas likely to be affected by additional airport capacity. The appraisal assesses the impacts of the three schemes against objectives for each topic, for example maximising economic benefits and minimising noise.
Non-Technical Summary	6.2	The objectives contained in the Appraisal of Sustainability framework are set out below. More detail regarding the Appraisal of Sustainability framework and the appraisal questions can be found in the revised Appraisal of Sustainability report.	The objectives contained in the Appraisal of Sustainability framework are set out below. More detail regarding the Appraisal of Sustainability framework and the appraisal questions can be found in the Appraisal of Sustainability report.
Non-Technical Summary	Table row title (after para 6.2)	Resources	Resources and Waste
Non-Technical Summary	6.4	The revised Appraisal of Sustainability considers the impacts for sustainability objectives during construction and during operation and has assumed that the additional airport capacity will be:	The Appraisal of Sustainability considers the impacts for sustainability objectives during construction and during operation and has assumed that the additional airport capacity will be:

Non-Technical Summary	6.5	The promoters of all three shortlisted schemes continued to refine their schemes following the formal submission of scheme designs to the Airports Commission in May 2014 and in discussion with the Government. These refinements were not captured within the Airports Commission's appraisals, but the refinements up to when the Government stated its preference in October 2016 have been assessed as part of the schemes considered within the revised Appraisal of Sustainability.	The promoters of all three shortlisted schemes continued to refine their schemes following the formal submission of scheme designs to the Airports Commission in May 2014 and in discussion with the Government. These refinements were not captured within the Airports Commission's appraisals, but the refinements up to when the Government stated its preference in October 2016 have been assessed as part of the schemes considered within the Appraisal of Sustainability.
Non-Technical Summary	6.7	The purpose of the revised Appraisal of Sustainability is to assess the performance of the shortlisted schemes under each of the 12 topics listed in the table demonstrating the headline impacts of expansion via a Northwest Runway scheme at Heathrow Airport. Where possible positive or negative effects are identified, the revised Appraisal of Sustainability sets out the action ('supporting measures') which Government will require the applicant to take forward in order to enhance or mitigate impacts, for example furthering economic benefits by asking the airport operator to commit to increasing the uptake of apprenticeships.	The purpose of the Appraisal of Sustainability is to assess the performance of the shortlisted schemes under each of the 12 topics listed in the table demonstrating the headline impacts of expansion via a Northwest Runway scheme at Heathrow Airport. Where possible positive or negative effects are identified, the Appraisal of Sustainability sets out the action ('supporting measures') which Government will require the applicant to take forward in order to enhance or mitigate impacts, for example furthering economic benefits by asking the airport operator to commit to increasing the uptake of apprenticeships.
Non-Technical Summary	6.9	The revised draft Airports National Policy Statement contains Government policy in relation to mitigation and sets out the matters which any applicant bringing forward an application to which the Airports	The Airports National Policy Statement contains Government policy in relation to mitigation and sets out the matters which any applicant bringing forward an application to which the Airports National Policy Statement applies will need to

		National Policy Statement applies will need to address.	address.
Non-Technical Summary	6.11	Detailed information on Heathrow Airport with two runways today (the baseline), impacts of the Heathrow Northwest Runway scheme, and supporting measures can be found in the relevant topic assessments at Appendix A of the revised Appraisal of Sustainability. A similar assessment of the alternative schemes to the preferred scheme, the Gatwick Second Runway Scheme and the Extended Northern Runway scheme, has been carried out. A full breakdown of the assessment and the comparative merits of each scheme can be accessed in the revised Appraisal of Sustainability report, including sensitivity analysis based upon different future economic scenarios to present a full range of impacts.	Detailed information on Heathrow Airport with two runways today (the baseline), impacts of the Heathrow Northwest Runway scheme, and supporting measures can be found in the relevant topic assessments at Appendix A of the Appraisal of Sustainability. A similar assessment of the alternative schemes to the preferred scheme, the Gatwick Second Runway Scheme and the Extended Northern Runway scheme, has been carried out. A full breakdown of the assessment and the comparative merits of each scheme can be accessed in the Appraisal of Sustainability report, including sensitivity analysis based upon different future economic scenarios to present a full range of impacts.
Non-Technical Summary	Footnote 23	(SoNA)	(SoNA)
Non-Technical Summary	Table (following 6.11), Water, column 2, bullet 1	At least 12km of watercourse would need to be diverted or realigned including major diversions of the Colne Brook and the Poyle Channel	At least 12km of watercourse would need to be diverted or realigned including major diversions of the Colne Brook

Non-Technical Summary	7.2	<p>We believe that people rightly need certainty, so this process is designed for speed without losing fairness. The Government has set out why it believes the UK needs a Northwest Runway scheme at Heathrow Airport, and the evidence for that decision. The public and Parliament are now being consulted. Once views from this consultation have now been taken into account, a final Airports National Policy Statement and Appraisal of Sustainability will be laid in Parliament. There will then be the opportunity for a vote in the House of Commons, ensuring that all MPs, representing all parties, have a say in this matter of vital national interest.</p>	<p>We believe that people rightly need certainty, so this process is designed for speed without losing fairness. The Government has set out why it believes the UK needs a Northwest Runway scheme at Heathrow Airport, and the evidence for that decision. The public and Parliament were consulted in February and October 2017. The Airports NPS has been laid before Parliament for a debate and a vote in the House of Commons. If the NPS is approved, the Secretary of State will then decide whether it should be designated and will make an oral or written statement confirming this decision. If designated, the NPS would provide the primary basis for decision making on development consent applications for a Northwest Runway at Heathrow Airport and would be an important and relevant consideration in respect of applications for new runway capacity and other airport infrastructure in London and the South East of England.</p>
Non-Technical Summary	7.3	<p>It will then a matter for an applicant to submit an application for development consent in accordance with the policy contained in the Airports National Policy Statement. Such an application is also subject to consultation and discussion with communities, and then a formal planning inquiry overseen by the Planning Inspectorate follows. The Planning Inspectorate will then recommend to the Secretary of State whether or not development consent should be granted.</p>	<p>It is then a matter for an applicant to submit an application for development consent in accordance with the policy contained in the Airports National Policy Statement. Such an application is also subject to consultation and discussion with communities, and then a formal planning inquiry overseen by the Planning Inspectorate follows. The Planning Inspectorate will then recommend to the Secretary of State whether or not development consent should be granted. The Secretary of State will make a final decision on whether to grant or refuse</p>

		The Secretary of State will make a final decision on whether to grant or refuse development consent.	development consent.
Main report	Front	APPRAISAL OF SUSTAINABILITY: REVISED DRAFT AIRPORTS NATIONAL POLICY STATEMENT	APPRAISAL OF SUSTAINABILITY: AIRPORTS NATIONAL POLICY STATEMENT
Main report	Front	OCTOBER 2017	JUNE 2018
Main report	Cover Sheet	APPRAISAL OF SUSTAINABILITY: REVISED DRAFT AIRPORTS NATIONAL POLICY STATEMENT	APPRAISAL OF SUSTAINABILITY: AIRPORTS NATIONAL POLICY STATEMENT
Main report	Cover Sheet	Date: October 2017	Date: June 2018
Main report	Contents Page	2. Draft Airports NPS	2. Airports NPS
Main report	Contents Page	7.2 HOW THE AOS WAS TAKEN INTO ACCOUNT IN DEVELOPING THE DRAFT NPS	7.2 HOW THE AOS WAS TAKEN INTO ACCOUNT IN DEVELOPING THE NPS
Main report	Contents Page	8.1 DEVELOPMENT OF THE REVISED DRAFT AIRPORTS NPS	8.1 DEVELOPMENT OF THE AIRPORTS NPS
Main report	Contents Page	TABLE 7 1 RELATIONSHIP BETWEEN DRAFT NPS AND AOS	TABLE 7 1 RELATIONSHIP BETWEEN THE AIRPORTS NPS AND AOS
Main report	1.1.2	DfT has commissioned WSP to prepare this Revised Appraisal of Sustainability (AoS) to inform government of the economic, social and environmental effects of schemes to increase aviation capacity. The AoS will also inform and assess the development of a National Policy Statement (Draft NPS) on	DfT commissioned WSP to prepare this Appraisal of Sustainability (AoS) to inform government of the economic, social and environmental effects of the schemes to increase aviation capacity. The findings of the AoS have informed and influenced the Airports National Policy Statement (NPS), including the need for measures to avoid or

		Airports.	mitigate effects of the construction of a new runway at a project level.
Main report	1.1.3	The AoS sets out the Government's assessment of the Heathrow Northwest Runway scheme, and considers alternatives. We want to hear your views on the AoS, please see the consultation document www.gov.uk/dft/heathrow-airport-expansion for further details.	The AoS sets out the Government's assessment of the Heathrow Northwest Runway scheme, and considers alternatives.
Main report	1.2.7	A draft Airport NPS and supporting AoS were published on 2 February 2017 and a 16 week public consultation was launched. On publishing the draft Airports NPS, the Government made a commitment to continue updating its evidence base on airport capacity, including revised passenger demand forecasts and the impact of publication of the final Air Quality Plan (the UK plan for tackling roadside nitrogen dioxide concentrations). In order to provide clarity, the Government has revised the draft Airports NPS and some of the other documents which were published alongside it, on the basis of these changes to the evidence base and as a result of initial consideration of the responses to the February consultation and other broader Government policy changes which have arisen during this period.	The draft Airports NPS and supporting AoS were first published on 2 February 2017 and a 16 week public consultation was launched. On publishing the draft Airports NPS, the Government made a commitment to continue updating its evidence base on airport capacity, including revised passenger demand forecasts and the impact of publication of the final Air Quality Plan (the UK plan for tackling roadside nitrogen dioxide concentrations). In order to provide clarity, the Government subsequently updated the draft Airports NPS and some of the other documents which were published alongside it, on the basis of these changes to the evidence base and as a result of initial consideration of the responses to the February consultation and other broader Government policy changes which arose during that period. The Revised draft Airports NPS and AoS were published on 24 October 2017, and an 8 week consultation was undertaken.

Main report	1.2.8	N/A	Parliamentary scrutiny took place between October 2017 and March 2018, with the Transport Committee (TC) publishing a report with recommendations. The Government has then published final versions of the Airports NPS and AoS following consideration of responses to the October consultation and recommendations in the TC report. This final version of the AoS addresses any further changes identified through this consideration.
Main report	1.3.1	The Draft Airports NPS sets out:	The Airports NPS sets out:
Main report	1.3.1	The Government's draft policy on the need for new airport capacity in the South East of England;	The Government's policy on the need for new airport capacity in the South East of England;
Main report	1.3.1	Particular considerations relevant to a development consent application to which the Draft Airports NPS relates.	Particular considerations relevant to a development consent application to which the Airports NPS relates.
Main report	1.3.3	Once the Draft NPS is designated, the Secretary of State will use it as the primary basis for making decisions on any development consent application for a new Northwest Runway at Heathrow Airport, which is the Government's preferred scheme. The preferred scheme has a runway length of at least 3,500m and enables at least 260,000 additional Air Transport Movements (ATMs) . It will also have effect in relation to terminal infrastructure associated with the Heathrow Northwest Runway scheme and the reconfiguration of terminal facilities in the	Once the NPS is designated, the Secretary of State will use it as the primary basis for making decisions on any development consent application for a new Northwest Runway at Heathrow Airport, which is the Government's preferred scheme. The preferred scheme has a runway length of at least 3,500m and enables at least 260,000 additional Air Transport Movements (ATMs) . It will also have effect in relation to terminal infrastructure associated with the Heathrow Northwest Runway scheme and the reconfiguration of terminal facilities in the area between the two existing runways at Heathrow Airport Under section 104 of the Planning Act, the

		area between the two existing runways at Heathrow Airport Under section 104 of the Planning Act, the Secretary of State must decide the application in accordance with any relevant NPS unless he or she is satisfied that to do so would:	Secretary of State must decide the application in accordance with any relevant NPS unless he or she is satisfied that to do so would:
Main report	1.4.5	By law, before designating an Airports NPS an AoS must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Draft Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the draft Airports NPS, including the outline masterplans supplied to the Airports Commission for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation package put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that wherever possible significant effects are avoided, reduced or offset.	By law, before designating an Airports NPS, an AoS must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the Airports NPS, including the outline masterplans supplied to the Airports Commission for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation package put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that wherever possible significant effects are avoided, reduced or offset.
Main report	Table 1-1 Row 1, Column 2	The Draft Airports NPS is summarised in Section 2. A review was undertaken for the Scoping Report of other relevant plans, policies and programmes and is summarised in Section 4. A summary of draft policy and legislation	The Airports NPS is summarised in Section 2. A review was undertaken for the Scoping Report of other relevant plans, policies and programmes and is summarised in Section 4. A summary of policy and legislation relevant to each topic is provided in Appendix A.

		relevant to each topic is provided in Appendix A.	
Main report	Table 1-1 Row 3, Column 2	The baseline for each topic in Appendix A describes the environmental characteristics of the three alternative schemes, including the scheme which is the subject of the Draft NPS.	The baseline for each topic in Appendix A describes the environmental characteristics of the three alternative schemes, including the scheme which is the subject of the NPS.
Main report	Table 1-1 Row 5, column 2	<p>The topics in Appendix A include a review of draft policy and legislation which has been taken into account by the assessment of the Draft NPS.</p> <p>The scoping report also undertook a full review of policies, plans and programmes which may affect the Draft Airports NPS (Appendix A of the Scoping Report). Section 4.3 summarises the key sustainability themes and objectives.</p>	<p>The topics in Appendix A include a review of policy and legislation which has been taken into account by the assessment of the NPS.</p> <p>The scoping report also undertook a full review of policies, plans and programmes which may affect the Airports NPS (Appendix A of the Scoping Report). Section 4.3 summarises the key sustainability themes and objectives.</p>
Main report	2 (Title)	DRAFT AIRPORTS NPS	AIRPORTS NPS
Main report	2.1.1	This section of the report sets out the background to the Draft NPS and its main objectives.	This section of the report sets out the background to the NPS and its main objectives.
Main report	2.1.3	Since this time, Government has reviewed the analysis which underpins the recommendations. A Draft NPS has been prepared to support the delivery of new aviation capacity in the UK.	Since this time, Government has reviewed the analysis which underpins the recommendations. The NPS has been prepared to support the delivery of new aviation capacity in the UK.
Main report	2.3.1	The Draft Airports NPS sets out:	The Airports NPS sets out:

Main report	2.3.1	The Government's draft policy on the need for new airport capacity in the South East of England;	The Government's policy on the need for new airport capacity in the South East of England;
Main report	2.3.1	Particular considerations relevant to a development consent application to which the Draft Airports NPS relates.	Particular considerations relevant to a development consent application to which the Airports NPS relates.
Main report	2.3.2	It sets out planning policy in relation to applications for any airport expansion. The proposed scheme will be classified as a NSIP and will need to submit an application to obtain a Development Consent Order (DCO) from the Secretary of State. The Draft NPS provides the basis for the examination of the application and decisions by the Secretary of State.	It sets out planning policy in relation to applications for any airport expansion. The proposed scheme will be classified as a NSIP and will need to submit an application to obtain a Development Consent Order (DCO) from the Secretary of State. The NPS provides the basis for the examination of the application and decisions by the Secretary of State.
Main report	2.3.12	A Draft Airports NPS and supporting AoS were published on 2 February 2017 and a 16 week public consultation was launched. On publishing the Draft Airports NPS, the Government made a commitment to continue updating its evidence base on airport capacity, including revised passenger demand forecasts and the impact of publication of the final Air Quality Plan (the UK plan for tackling roadside nitrogen dioxide concentrations). In order to provide clarity, the Government has revised the Draft Airports NPS and some of the other documents which were published alongside it, on the basis of these changes to the evidence base and as a result of initial consideration of the responses to the	The draft Airports NPS and supporting AoS were first published on 2 February 2017 and a 16 week public consultation was launched. On publishing the draft Airports NPS, the Government made a commitment to continue updating its evidence base on airport capacity, including revised passenger demand forecasts and the impact of publication of the final Air Quality Plan (the UK plan for tackling roadside nitrogen dioxide concentrations). In order to provide clarity, the Government subsequently updated the draft Airports NPS and some of the other documents which were published alongside it, on the basis of these changes to the evidence base and as a result of initial consideration of the responses to the February consultation and other broader Government policy changes which arose during

		February consultation and other broader Government policy changes which have arisen during this period.	that period. The Revised draft Airports NPS and AoS were published on 24 October 2017, and an 8 week consultation was undertaken.
Main report	2.3.13	N/A	Parliamentary scrutiny took place between October 2017 and March 2018, with the Transport Committee (TC) publishing a report with recommendations. The Government has then published final versions of the Airports NPS and AoS following consideration of responses to the October consultation and recommendations in the TC report. This final version of the AoS addresses any further changes identified through this consideration.
Main report	2.3.14	More information is provided in the Draft NPS and Section 7.2 of this AoS.	More information is provided in the NPS and Section 7.2 of this AoS.
Main report	Title (ahead of 2.3.15)	ASSESSMENT PRINCIPLES WITHIN THE DRAFT NPS	ASSESSMENT PRINCIPLES WITHIN THE NPS
Main report	2.3.15	There is a presumption in favour of granting development consent for the airports NSIP covering the LHR-NWR scheme within the needs case established in this Draft NPS, provided it adheres to the detailed policies and protections set out in the Draft NPS, and the legal constraints contained within the Planning Act 2008. However, in	There is a presumption in favour of granting development consent for the airports NSIP covering the LHR-NWR scheme within the needs case established in this NPS, provided it adheres to the detailed policies and protections set out in the NPS, and the legal constraints contained within the Planning Act 2008. However, in considering any proposed development, the

		considering any proposed development, the Examining Authority and the Secretary of State would need to weigh its adverse impacts against its benefits, taking into account:	Examining Authority and the Secretary of State would need to weigh its adverse impacts against its benefits, taking into account:
Main report	2.3.16	Section 4 of the Draft NPS sets out the general assessment principles which will apply to the scheme. These include:	Section 4 of the NPS sets out the general assessment principles which will apply to the scheme. These include:
Main report	Title (ahead of 2.3.17)	SPECIFIC IMPACTS AND REQUIREMENTS WITHIN THE DRAFT NPS	SPECIFIC IMPACTS AND REQUIREMENTS WITHIN THE NPS
Main report	2.3.17	Chapter 5 of the Draft NPS focuses on the impacts of the potential development and how these impacts should be mitigated. It sets out the approach, mitigation and decision making in relation to a number of topics, many of which are related to sustainability and are considered within this AoS:	Chapter 5 of the NPS focuses on the impacts of the potential development and how these impacts should be mitigated. It sets out the approach, mitigation and decision making in relation to a number of topics, many of which are related to sustainability and are considered within this AoS:
Main report	3.2.2	Further information relating to the development of the appraisal framework is provided in Section 4. Responses from the consultation bodies are set out in Appendix C. A separate document has been produced to show how comments have been addressed and is published as part of the draft Airports NPS consultation.	Further information relating to the development of the appraisal framework is provided in Section 4. Responses from the consultation bodies are set out in Appendix C. Should the Airports NPS be designated, a Post Adoption Statement will be published to show how environmental considerations and consultation responses have been taken into account.

Main report	3.2.4	It should be noted that in addition to the statutory scoping stage described above, the development of the AoS has been overseen by a Steering Group set up by DfT. In addition to policy leads within DfT, the Steering Group comprised representatives from other Government Departments (Department for Environment, Food & Rural Affairs (Defra), Department for Business, Energy and Industrial Strategy (BEIS), Department for Communities and Local Government (DCLG)) and Agencies in an advisory capacity (Environment Agency , Natural England, Historic England, Public Health England). Engagement with the Steering Group has been undertaken throughout the process, from scoping to subsequent assessment and reporting set out below.	It should be noted that in addition to the statutory scoping stage described above, the development of the AoS has been overseen by a Steering Group set up by DfT. In addition to policy leads within DfT, the Steering Group comprised representatives from other Government Departments (Department for Environment, Food & Rural Affairs (Defra), Department for Business, Energy and Industrial Strategy (BEIS), Ministry of Housing, Communities and Local Government (MHCLG) and Agencies in an advisory capacity (Environment Agency , Natural England, Historic England, Public Health England). Engagement with the Steering Group has been undertaken throughout the process, from scoping to subsequent assessment and reporting set out below.
Main report	3.3.1	The Draft NPS references the Government's current policy on wider aviation issues, which is currently set out in the 2013 Aviation Policy Framework (APF) . The APF sets out the high level objectives and policies for aviation and its role in driving growth, creating jobs and facilitating trade whilst at the same time addressing a range of local environmental impacts. The framework and high level priorities for the sector set out in the APF include:	The NPS references the Government's current policy on wider aviation issues, which is currently set out in the 2013 Aviation Policy Framework (APF) . The APF sets out the high level objectives and policies for aviation and its role in driving growth, creating jobs and facilitating trade whilst at the same time addressing a range of local environmental impacts. The framework and high level priorities for the sector set out in the APF include:
Main report	3.3.1	The implications for planning, including the possibility of this Draft NPS in response to a	The implications for planning, including the possibility of this NPS in response to a

		recommendation from the AC.	recommendation from the AC.
Main report	3.3.2	A further APF objective is to ensure that the UK's air links continue to make it one of the best connected countries in the world, including increasing our links to emerging markets so that the UK can compete successfully for economic growth opportunities. The Draft Airports NPS, which sets out Government's draft policy on capacity expansion via its preferred airport scheme, supports this objective.	A further APF objective is to ensure that the UK's air links continue to make it one of the best connected countries in the world, including increasing our links to emerging markets so that the UK can compete successfully for economic growth opportunities. The Airports NPS, which sets out Government's policy on capacity expansion via its preferred airport scheme, supports this objective.
Main report	3.3.4	The AoS has therefore not undertaken an assessment of the objectives of the APF as these are outside of the scope of influence of the Draft Airports NPS.	The AoS has therefore not undertaken an assessment of the objectives of the APF as these are outside of the scope of influence of the Airports NPS.
Main report	3.3.5	Section 4 of this report describes the process undertaken to determine 'reasonable alternatives' to the Draft Airports NPS. These are referred to as 'schemes' within the AoS.	Section 4 of this report describes the process undertaken to determine 'reasonable alternatives' to the Airports NPS. These are referred to as 'schemes' within the AoS.
Main report	3.3.6	An appraisal of likely significant effects has been undertaken for all the schemes and the preferred scheme. The assessment of the scheme alternatives is based on proposals submitted to the AC and government and is presented in Appendix A and summarised in section 6 of this report. The preferred scheme selected for the Draft Airports NPS is assessed in section 7 and is based on the contents the Draft Airports NPS.	An appraisal of likely significant effects has been undertaken for all the schemes and the preferred scheme. The assessment of the scheme alternatives is based on proposals submitted to the AC and government and is presented in Appendix A and summarised in section 6 of this report. The preferred scheme selected for the Airports NPS is assessed in section 7 and is based on the contents the Airports NPS.

Main report	3.3.9	The Draft Airports NPS sets the framework for the development of a major infrastructure project and will influence other plans and programmes, specifically local land use plans and local transport plans. The Draft Airports NPS provides the opportunity to integrate environmental considerations into the decision-making process and to address environmental problems. The Draft Airports NPS is linked to the implementation of European legislation such as Emissions Trading Scheme, Habitats Directive; Waste, Water and Air Quality Directives. These are discussed in the assessment in relation to the relevant topic.	The Airports NPS sets the framework for the development of a major infrastructure project and will influence other plans and programmes, specifically local land use plans and local transport plans. The Airports NPS provides the opportunity to integrate environmental considerations into the decision-making process and to address environmental problems. The Airports NPS is linked to the implementation of European legislation such as Emissions Trading Scheme, Habitats Directive; Waste, Water and Air Quality Directives. These are discussed in the assessment in relation to the relevant topic.
Main report	3.3.18	Monetisation of impacts has not been undertaken, with the exception of economic benefits. It is acknowledged that monetary values were applied to some sustainability effects within the AC's work alongside the Business Case. However, this AoS has been undertaken separately from the business case. The AoS allows comparison of significant effects as defined by the SEA Regulations for all topics across schemes. It enables non-monetary effects to be taken into account in decision-making for the Draft Airports NPS.	Monetisation of impacts has not been undertaken, with the exception of economic benefits. It is acknowledged that monetary values were applied to some sustainability effects within the AC's work alongside the Business Case. However, this AoS has been undertaken separately from the business case. The AoS allows comparison of significant effects as defined by the SEA Regulations for all topics across schemes. It enables non-monetary effects to be taken into account in decision-making for the Airports NPS.
Main report	3.3.24	Mitigation measures for the Draft Airports NPS could include ²² :	Mitigation measures for the Airports NPS could include ²² :
Main report	3.3.24	Inclusion of new provisions or changes to draft policy wording;	Inclusion of new provisions or changes to policy wording;

Main report	3.3.29	During this stage, measures to monitor the predicted significant environmental effects and any uncertainties which have been identified through the AoS are proposed. Monitoring needs to consider the baseline and the beneficial, cumulative, secondary and synergistic effects over the draft policy's lifespan.	During this stage, measures to monitor the predicted significant environmental effects and any uncertainties which have been identified through the AoS are proposed. Monitoring needs to consider the baseline and the beneficial, cumulative, secondary and synergistic effects over the policy's lifespan.
Main report	3.3.30	The information used for a strategic level assessment needs to be appropriate to the contents and level of detail in the Draft Airports NPS and therefore is largely desk-based and less detailed than the information required to determine a planning application. The information used is sufficient to identify significant effects to support decision-making and adoption of the proposed Draft Airports NPS.	The information used for a strategic level assessment needs to be appropriate to the contents and level of detail in the Airports NPS and therefore is largely desk-based and less detailed than the information required to determine a planning application. The information used is sufficient to identify significant effects to support decision-making and adoption of the proposed Airports NPS.
Main report	Table 3-5, Column 2, Row: Inner Thames Estuary	The environmental impacts study was published for consultation on 4/07/2014, and the remaining 3 studies in relation to surface access impacts, socio-economic impacts and operational feasibility and attitudes to moving to a new airport on 10/07/2014. Consultation closed 08/08/2014 and a decision was issued 02/09/2014 not to add the inner Thames estuary airport proposal to the shortlist of schemes for providing new airport capacity by 2030 ²⁵ .	The environmental impacts study was published for consultation on 04/07/2014, and the remaining 3 studies in relation to surface access impacts, socio-economic impacts and operational feasibility and attitudes to moving to a new airport were published on 10/07/2014. Consultation closed on 08/08/2014 and a decision was issued on 02/09/2014 not to add the inner Thames estuary airport proposal to the shortlist of schemes for providing new airport capacity by 2030 ²⁵ .
Main report	Table 3-5, Column 2, Last row	Consultation on this AoS and the Draft Airports NPS will be undertaken as part of the AoS process.	Consultation on this AoS and the Airports NPS was undertaken as part of the AoS process: for the Draft Airports NPS, February to May 2017

			and the Revised Airports NPS, October to December 2017.
Main report	3.6.1	Stage E promotes and undertakes the monitoring of potential significant effects and uncertainties of the implementation of the draft policy with the purpose of identifying unforeseen adverse effects at an early stage and being able to undertake appropriate remedial action. Monitoring is proposed in Table 7-4 in Section 7 and Next Steps to implementation set out in Section 8.	Stage E promotes and undertakes the monitoring of potential significant effects and uncertainties of the implementation of the policy with the purpose of identifying unforeseen adverse effects at an early stage and being able to undertake appropriate remedial action. Monitoring is proposed in Table 7-4 in Section 7 and Next Steps to implementation set out in Section 8.
Main report	4.5.4	Climate change - Adaptation to the effects of climate change including water scarcity and flooding has been assessed within the water topic. Mitigating the effects of climate change, including minimising greenhouse gas emissions and in particular, carbon, has been assessed in the Carbon topic. In addition, topics have taken into account the effects of climate change as part of future baseline and issues. For example, biodiversity considers the effects of climate change on ecosystems such as species adaptation and composition. In addition, the Draft Airports NPS acknowledges that climate change, including extreme weather and heatwaves, will need to be taken into account through the development and consenting of airport infrastructure.	Climate change - Adaptation to the effects of climate change including water scarcity and flooding has been assessed within the water topic. Mitigating the effects of climate change, including minimising greenhouse gas emissions and in particular, carbon, has been assessed in the Carbon topic. In addition, topics have taken into account the effects of climate change as part of future baseline and issues. For example, biodiversity considers the effects of climate change on ecosystems such as species adaptation and composition. In addition, the Airports NPS acknowledges that climate change, including extreme weather and heatwaves, will need to be taken into account through the development and consenting of airport infrastructure.

Main report	5.5.4	The three schemes which are considered within this AoS are those assessed by the Airport Commission. The shortlisted scheme promoters continued to refine their schemes following the formal submission of scheme designs in May 2014 to the AC. Further variations to the scheme designs were captured by government and the scheme promoters in the form of a Statement of Principles (SoP) for each scheme . These SoP present variations to the proposals that were assessed by the AC and therefore to the scheme design originally assessed within AoS. These SoPs set out the proposed schemes which have been considered prior to the publication of the Draft Airports NPS.	The three schemes which are considered within this AoS are those assessed by the Airport Commission. The shortlisted scheme promoters continued to refine their schemes following the formal submission of scheme designs in May 2014 to the AC. Further variations to the scheme designs were captured by government and the scheme promoters in the form of a Statement of Principles (SoP) for each scheme . These SoP present variations to the proposals that were assessed by the AC and therefore to the scheme design originally assessed within AoS. These SoPs set out the proposed schemes which have been considered prior to the publication of the Airports NPS.
Main report	5.5.8	As the design of a preferred scheme progresses subsequent to the Draft Airports NPS, further variation of the scheme design are anticipated. These may seek to avoid, reduce or offset negative impacts and enhance positive impacts and would be assessed through the EIA process.	As the design of a preferred scheme progresses subsequent to the Airports NPS, further variation of the scheme design are anticipated. These may seek to avoid, reduce or offset negative impacts and enhance positive impacts and would be assessed through the EIA process.
Main report	5.5.21	However, the final package of road and rail surface access improvements has not yet been determined. The Draft Airports NPS acknowledges that surface access improvements are required to support expansion. Nonetheless, the AoS acknowledges that significant effects are likely to arise as a result of proposed	However, the final package of road and rail surface access improvements has not yet been determined. The Airports NPS acknowledges that surface access improvements are required to support expansion. Nonetheless, the AoS acknowledges that significant effects are likely to arise as a result of proposed surface access transport improvements both for the purposes of

		<p>surface access transport improvements both for the purposes of addressing background transport demand but also for supporting airport expansion, and the assessment undertaken by the AC has considered this. The AoS therefore includes the assessment the surface access transport improvements proposed by the AC to support airport expansion and tests variations to surface access in Appendix D.</p>	<p>addressing background transport demand but also for supporting airport expansion, and the assessment undertaken by the AC has considered this. The AoS therefore includes the assessment the surface access transport improvements proposed by the AC to support airport expansion and tests variations to surface access in Appendix D.</p>
Main report	Table 5-4, Column 3, Row 7	Higher capacity @ M4 J4a	Higher capacity at M4 J4a
Main report	Table 6-1 Appraisal Question 1	Will it lead to impact on sensitive views and their settings?	Will it lead to impact on sensitive views?

Main report	6.3.1	<p>Housing – Each scheme will result in the relocation of housing, which may have a negative effect on community viability. LGW-2R is expected to require the relocation of 168 residential properties, LHR-NWR the relocation of 783 residential properties and LHR-ENR the relocation of 242 residential properties. Each of the three schemes will also result in the loss of community facilities, which could also have a negative effect on community viability. In the case of LGW-2R, four children’s nurseries or crèches, two places of worship, Trent care home, one charity facility, Crawley Rugby club, Public Rights of Way (PRoW) and part of Rowley Wood are also likely to be lost. In the case of LHR-ENR, the loss of the Punch Bowl pub and industrial / employment land is expected, in addition to noise implications for Pippins primary school. In the case of LHR-NWR, Harmondsworth primary school is expected to be lost, along with Harmondsworth Community Hall, Sipson Community Centre, Heathrow Special Needs Centre in Longford, nursery schools in Longford and Sipson, the White Horse pub in Longford, and a number of recreational facilities and spaces such as Sipson Recreation Ground. Although some mitigation is provided in terms of financial compensation and other measures, each of the three schemes is likely to result in a</p>	<p>Housing and community facilities – Each scheme will result in the relocation of housing and industrial/employment land, which may have a negative effect on community viability. LGW-2R is expected to require the relocation of 168 residential properties, LHR-NWR the relocation of 783 residential properties and LHR-ENR the relocation of 242 residential properties. Each of the three schemes will also result in the loss of community facilities, which could also have a negative effect on community viability. In the case of LGW-2R, four children’s nurseries or crèches, two places of worship, Trent House care home, one charity facility, Crawley Rugby Club, Public Rights of Way (PRoW) and part of Rowley Wood are also likely to be lost. In the case of LHR-ENR, the loss of three pubs, public rights of way, cycle paths, recreational space and open space is expected, in addition to noise implications for Pippins primary school. In the case of LHR-NWR, Harmondsworth Primary School is expected to be lost, along with Harmondsworth Community Hall, Sipson Community Centre, Heathrow Special Needs Centre in Longford, nursery schools in Longford and Sipson, the White Horse and Kings Arms pubs in Longford, public rights of way, cycle paths, and a number of recreational facilities and spaces such as Sipson Recreation Ground. Although some mitigation is provided in terms of financial compensation and other measures, each of the three schemes is likely to result in a substantial loss of housing and community</p>
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		substantial loss of housing and community facilities that cannot be reversed. Furthermore, for both Heathrow schemes, cumulative effects may be experienced by the community as a result of infrastructure projects such as Crossrail. As a result, the overall effects on community viability caused by loss of housing and community facilities as a result of each scheme are considered to be significant negative.	facilities that cannot be reversed. Furthermore, for both Heathrow schemes, cumulative effects may be experienced by the community as a result of infrastructure projects such as Crossrail. As a result, the overall effects on community viability caused by loss of housing and community facilities as a result of each scheme are considered to be significant negative.
Main report	Table 6-4, row 3	Passenger and staff surface access 9.6 9.6 7.6 7.6 9.1 9.1	Passenger and staff surface access 9.7 9.7 8.1 8.1 9.5 9.5
Main report	Table 6-4, row 7 (total)	Total 14.8 14.8 19.9 19.9 23.1 23.1	Total 14.9 14.9 20.3 20.3 23.6 23.6
Main report	7.1.1	This section assesses the proposed Draft NPS in addition to the preferred scheme for Airport expansion. It then proposes a number of mitigation and monitoring measures for significant effects.	This section assesses the Airports NPS in addition to the preferred scheme for Airport expansion. It then proposes a number of mitigation and monitoring measures for significant effects.
Main report	7.2	HOW THE AOS WAS TAKEN INTO ACCOUNT IN DEVELOPING THE DRAFT NPS	HOW THE AOS WAS TAKEN INTO ACCOUNT IN DEVELOPING THE NPS

Main report	7.2.1	The work undertaken by the AC including the Sustainability Appraisal for each scheme and the recommended mitigation formed the basis for the development of the Draft NPS. The Draft NPS was then developed alongside the AoS in relation to key areas set out in Table 7-1 below.	The work undertaken by the AC including the Sustainability Appraisal for each scheme and the recommended mitigation formed the basis for the development of the NPS. The NPS was then developed alongside the AoS in relation to key areas set out in Table 7-1 below.
Main report	7.2.2	The assessment is an iterative process where drafts of the AoS have informed the Draft NPS and as the Draft NPS has developed it has informed the AoS assessment. The Steering Group have also provided feedback which has been taken into account throughout the development of the AoS. This has also informed the Draft NPS.	The assessment is an iterative process where drafts of the AoS have informed the NPS and as the NPS has developed it has informed the AoS assessment. The Steering Group have also provided feedback which has been taken into account throughout the development of the AoS. This has also informed the NPS.
Main report	Table 7-1, Title	Relationship between Draft NPS and AoS	Relationship between the Airports NPS and the AoS
Main report	Table 7-1 Column 2, Heading	Draft NPS	NPS
Main report	Table 7-1 Column 1, Row 1	Scoping: Identification of PPPs and sustainability issues (summarised in Section 2 of the AoS).	Scoping: Identification of plans, policies and programmes (PPP) and sustainability issues (summarised in Section 2 of the AoS).
Main report	Table 7-1, Column 1, Row 2	Development of the policy and alternatives schemes (summarised in Section 5 of the AoS).	Development of the policy and reasonable alternatives (summarised in Section 5 of the AoS).

Main report	Table 7-1, Column 1, Row 3	Evaluation of the likely effects of the policy and alternative schemes (summarised in Sections 6 and 7 of the AoS).	Evaluation of the likely effects of the reasonable alternatives and preferred scheme (summarised in Sections 6 and 7 of the AoS).
Main report	Table 7-1, Column 2, Row 1	Introductory sections of sustainability topics in Section 5 of the Draft NPS set out key sustainability issues and relationship with policy and/or key environmental legislation.	Introductory sections of sustainability topics in Chapter 5 of the Airports NPS set out key sustainability issues and relationship with policy and/or key environmental legislation.
Main report	Table 7-1, Column 2, Row 2	Section 2 of the Draft NPS sets out the need for the policy and Section 3 sets out the preferred policy alternative.	Chapter 2 of the Airports NPS sets out the need for the policy and Chapter 3 sets out the justification for the preferred scheme.
Main report	Table 7-1, Column 2, Row 3	Section 5 of the Draft NPS describes the main impacts of the policy.	Chapter 3 of the NPS summarises the environmental, health and community impacts of alternative schemes. Chapter 5 of the Airports NPS describes the main impacts of the policy.
Main report	Table 7-1, Column 2, Row 4	Section 5 of the Draft NPS sets out policy relating to the applicants assessment and mitigation considered.	Chapter 5 of the Airports NPS sets out policy relating to the applicant's assessment and mitigation considered.
Main report	7.2.3	The Draft Airports NPS sets out:	The Airports NPS sets out:
Main report	7.2.3	The Government's draft policy on the need for new airport capacity in the South East of England;	The Government's policy on the need for new airport capacity in the South East of England;
Main report	7.2.4	The Governments draft policy on the need for new capacity is set out in Section 2 of the Draft NPS and preferred scheme is set out in Section 3 of the Draft NPS. Section 5 of the Draft NPS sets out general impacts and requirements including mitigation measures, many of which have been identified through the AoS process (Table 7-1).	The Government's policy on the need for new capacity is set out in Section 2 of the NPS and preferred scheme is set out in Section 3 of the NPS. Section 5 of the NPS sets out general impacts and requirements including mitigation measures, many of which have been identified through the AoS process (Table 7-1).

Main report	7.3.1	<p>On 25 October 2016, the Government announced that its preferred scheme to meet the need for new airport capacity in the South East of England was a Northwest Runway at Heathrow Airport. The Government believes that the LHR-NWR scheme, of all the three shortlisted schemes, is the most effective and most appropriate way of meeting the requirement for additional capacity in the South East in a way in which best meets the needs case and maintains the UK's hub status. . A range of factors have been taken into account. These are set out in Section 3 of the Revised Draft NPS and summarised below:</p>	<p>On 25 October 2016, the Government announced that its preferred scheme to meet the need for new airport capacity in the South East of England was a Northwest Runway at Heathrow Airport. The Government believes that the LHR-NWR scheme, of all the three shortlisted schemes, is the most effective and most appropriate way of meeting the requirement for additional capacity in the South East in a way in which best meets the needs case and maintains the UK's hub status. A range of factors have been taken into account. These are set out in Section 3 of the NPS and summarised below:</p>
Main report	7.3.1	<p>Domestic connectivity– At an expanded Heathrow there would be more additional passengers from outside of London and the South East forecast to make one way international journeys (5.9m at LHR-NWR compared with 4.6m at LHR-ENR and 3.8m at LGW-2R). This means that more passengers from across the UK are likely to benefit from lower fares and access to important international markets from the airport. An expanded Heathrow would offer 14 domestic routes for Heathrow, compared to the eight routes currently in operation. This compares to 12 domestic routes for Gatwick, compared to the six currently offered.</p>	<p>Domestic connectivity– At an expanded Heathrow there would be more additional passengers from outside of London and the South East forecast to make one way international journeys (5.9m at LHR-NWR compared with 4.6m at LHR-ENR and 3.8m at LGW-2R). This means that more passengers from across the UK are likely to benefit from lower fares and access to important international markets from the airport. Heathrow Airport has pledged that expansion could increase domestic routes at Heathrow to 14, compared to the eight routes currently in operation. This compares to 12 domestic routes for Gatwick, compared to the six currently offered.</p>

Main report	7.3.1	<p>Financeability; While the LGW-2R would be significantly cheaper than the two schemes at Heathrow, with the LHR-NWR the most expensive of the three shortlisted schemes, all three are private sector schemes which the Government believes would be financeable without Government support. The level of debt and equity required for the LGW-2R scheme would be significantly lower than for the Heathrow schemes, but the AC noted that the LGW-2R scheme would have comparatively higher demand risk, which is harder for Government to mitigate. Both Heathrow schemes build on a strong track record of proven demand that has proven resistant to economic downturns.</p>	<p>Financeability; While the LGW-2R would be significantly cheaper than the two schemes at Heathrow, with the LHR-NWR the most expensive of the three shortlisted schemes, all three are private sector schemes which the Government found to be financeable without Government support. Since then, the Government has conducted further assurance work on the financeability of HAL's scheme and concluded that, so far as can be assessed at this early stage of the process, HAL appears in principle to be able to privately finance expansion without Government support. The level of debt and equity required for the LGW-2R scheme would be significantly lower than for the Heathrow schemes, but the AC noted that the LGW-2R scheme would have comparatively higher demand risk, which is harder for Government to mitigate. Both Heathrow schemes build on a strong track record of proven demand that has proven resistant to economic downturns.</p>
Main report	7.3.1	<p>Local environmental impacts. Airports can have negative as well as positive impacts, and these must be weighed against the strategic and economic benefits. All three schemes will have significant impacts on the environment and local community; in particular, noise is a significant issue for communities at both Heathrow and Gatwick. Gatwick has a less adverse impact than either scheme at Heathrow, primarily because of its more rural location and with</p>	<p>Local environmental impacts. Airports can have negative as well as positive impacts, and these must be weighed against the strategic and economic benefits. All three schemes will have significant impacts on the environment and local community; in particular, noise is a significant issue for communities at both Heathrow and Gatwick. Gatwick would have a lower level of adverse effects relating to noise and air quality than either scheme at Heathrow, primarily because of its more rural location and with fewer</p>

		<p>fewer people impacted by the airport. The Government agrees with the AC's conclusion that "to make expansion possible...a comprehensive package of accompanying measures [should be recommended to] make the airport's expansion more acceptable to its local community, and to Londoners generally". This will include a highly valued scheduled night flight ban of at least six and a half hours between 11pm and 7am (with the exact start and finish times to be determined following consultation), and the offer of a predictable period of respite for local communities.</p>	<p>people impacted by the airport. The Government agrees with the AC's conclusion that "to make expansion possible...a comprehensive package of accompanying measures [should be recommended to] make the airport's expansion more acceptable to its local community, and to Londoners generally". This is expected to include a highly valued scheduled night flight ban of at least six and a half hours between 11pm and 7am (with the exact start and finish times to be determined following consultation), and the offer of a predictable period of respite for local communities.</p>
Main report	7.4.1	<p>Within the predicted Heathrow Northwest Runway expansion land take, up to 783 homes are expected to be lost. The majority of this housing loss would be seen in Hillingdon, Hounslow and Slough. Harmondsworth primary school is expected to be lost, along with Harmondsworth Community Hall, Sipson Community Centre, Heathrow Special Needs Centre in Longford, nursery schools in Longford and Sipson, the White Horse pub in Longford, and a number of recreational facilities and spaces such as Sipson Recreation Ground. Mitigation includes financial compensation and relocation assistance, and re-provision of Harmondsworth primary school and community hall. Although some mitigation is</p>	<p>Within the predicted Heathrow Northwest Runway expansion land take, up to 783 homes are expected to be lost. The majority of this housing loss would be seen in Hillingdon, Hounslow and Slough. Harmondsworth primary school is expected to be lost, along with Harmondsworth Community Hall, Sipson Community Centre, Heathrow Special Needs Centre in Longford, nursery schools in Longford, Harmondsworth and Sipson, the White Horse and Kings Arms pubs in Longford, and a number of recreational facilities and spaces such as Sipson Recreation Ground. Mitigation includes financial compensation and relocation assistance, and re-provision of Harmondsworth primary school and community hall. Although some mitigation is provided in terms of financial compensation and other</p>

		provided in terms of financial compensation and other measures, the Draft NPS is still considered likely to result in a substantial loss of housing and community facilities that cannot be reversed. Furthermore, cumulative effects may be experienced by the community in relation to other infrastructure such as Crossrail. As a result, the overall effects on community viability caused by loss of housing and community facilities as a result of the proposed LHR-NWR scheme are considered to be Significant Negative.	measures, the NPS is still considered likely to result in a substantial loss of housing and community facilities that cannot be reversed. Furthermore, cumulative effects may be experienced by the community in relation to other infrastructure such as Crossrail. As a result, the overall effects on community viability caused by loss of housing and community facilities as a result of the proposed LHR-NWR scheme are considered to be Significant Negative.
Main report	7.4.53	Where mitigation does not conclude an absence of adverse effects on integrity, both alone and in-combination, further assessment of the Draft Airports Policy would be required under Stages 3 and 4 of the HRA process.	Where mitigation does not conclude an absence of adverse effects on integrity, both alone and in-combination, further assessment of the Airports NPS would be required under Stages 3 and 4 of the HRA process.
Main report	7.4.57	Notwithstanding the conclusion above, the AA undertaken for the two other shortlisted schemes also led to no suitable alternative solutions to LHR-NWR being identified. Further, the basis on which it could be concluded that the LHR-NWR scheme needed to be carried out for IROPI has been examined and it is considered that the needs case underpinning the draft NPS sufficiently fulfils those reasons. In any event, the draft NPS provides that no consent will be granted unless there is full compliance with Article 6(3) or Article 6(4) of	Notwithstanding the conclusion above, the AA undertaken for the two other shortlisted schemes also led to no suitable alternative solutions to LHR-NWR being identified. Further, the basis on which it could be concluded that the LHR-NWR scheme needed to be carried out for IROPI has been examined and it is considered that the needs case underpinning the Airports NPS sufficiently fulfils those reasons. In any event, the Airports NPS provides that no consent will be granted unless there is full compliance with Article 6(3) or Article 6(4) of the Habitats Directive and that any necessary compensatory measures will

		the Habitats Directive and that any necessary compensatory measures will be secured in accordance with Regulation 66.	be secured in accordance with Regulation 66.
Main report	7.4.77	<p>Significant watercourse replacement with diverted/realigned channels is proposed with approximately 12km of watercourse impacted. The diversions of the Colne Brook and Poyle Channel approximately 5km around the end of the runway would be technically difficult and are considered likely to have significant effects on the hydromorphology. The WFD aims to enhance and maintain good status of all waterbodies, this scheme would involve culverting of around 3km of additional culverts. Additionally the River Colne and Wraysbury River along with the Duke of Northumberland's and Longford Rivers would be merged into two culverts, reducing total channel length and change morphological and ecological conditions. This could have impacts on channel processes, ecology and fisheries.</p>	<p>Significant watercourse replacement with diverted/realigned channels is proposed with approximately 12 km of watercourse impacted. The diversion of approximately 1 km of the Colne Brook around the western end of a new runway, diversions of parts of the Duke of Northumberland's River and River Colne to the south of the new runway and creation of a new channel (the 'River Colne Spur') would be technically difficult and are considered likely to have significant effects on hydromorphology and geomorphology. The WFD aims to enhance and maintain good status of all waterbodies, this scheme would involve culverting of around 3 km of additional culverts. Additionally the River Colne and Wraysbury River would be combined into a single culvert, and the Duke of Northumberland's and Longford Rivers would be combined into a single culvert, reducing total channel length and change morphological and ecological conditions. This could have impacts on channel processes, ecology and fisheries.</p>

Main report	7.4.80	Appendix B outlines the reasons why the long-list of alternatives considered by the AC was reduced to a short-list of three schemes. All three schemes would require Article 4.7 including the LHR-NWR proposal. Within the short-list, LHR-NWR has been selected for the reasons set out in Section 3 of the Draft NPS and summarised under Section 7.3 above, including meeting the need to provide a global hub.	Appendix B outlines the reasons why the long-list of alternatives considered by the AC was reduced to a short-list of three schemes. All three schemes would require Article 4.7 including the LHR-NWR proposal. Within the short-list, LHR-NWR has been selected for the reasons set out in Section 3 of the NPS and summarised under Section 7.3 above, including meeting the need to provide a global hub.
Main report	Table 7-2, Row 3	Passenger and Staff Surface Access Emissions (MtCO2) 0.44 0.45 0.44 0.45 0.52 0.61 0.52 0.61	Passenger and Staff Surface Access Emissions (MtCO2) 0.46 0.48 0.46 0.48 0.55 0.64 0.55 0.64
Main report	7.5.5	It is anticipated that proposals put forward by the promoter will be undertaken as a minimum, but these will be re-evaluated throughout project design where further mitigation or enhancement is identified. Reference to text included within the Draft NPS is made where specific mitigation is set out within the Draft NPS. Options for mitigation are also presented in the topic based assessments in Appendix A-	It is anticipated that proposals put forward by the promoter will be undertaken as a minimum, but these will be re-evaluated throughout project design where further mitigation or enhancement is identified. Reference to text included within the NPS is made where specific mitigation is set out within the NPS. Options for mitigation are also presented in the topic based assessments in Appendix A.

Main report	Table 7-3, Column 3 (summary of mitigation), Row: Community	<p>The applicant has proposed a package of financial compensation, help with relocation and provision of alternative community facilities. This has been included within the Draft NPS (5.243):</p> <ul style="list-style-type: none"> * To pay 125% of market value plus taxes and reasonable moving costs for all owner occupied homes within the compulsory acquisition zone; * To pay 125% of market value plus taxes and reasonable moving costs for all owner occupied homes within an additional voluntary acquisition zone incorporating the area known as the “Heathrow Villages”; * Following a third party assessment, to provide full acoustic insulation for residential property within the full 60dB LAeq (16 hr) noise contour of an expanded airport; * Following a third party assessment to provide a contribution of up to £3,000 for acoustic insulation for residential property within the full single mode easterly and westerly 57dB LAeq (16hr) or the full 55 dB Lden noise contours of an expanded airport, whichever is the bigger; and * To deliver a programme of noise insulation and ventilation for schools within the 60dB LAeq (16 hr) contour. <p>Additional mitigation incorporated into the Revised Draft NPS for communities includes:</p> <ul style="list-style-type: none"> * Community Engagement Board - the 	<p>The promoter has proposed a package of financial compensation, help with relocation and provision of alternative community facilities. This has been referred to within the Airports NPS (5.245):</p> <ul style="list-style-type: none"> * To pay 125% of market value plus taxes and reasonable moving costs for all owner occupied homes within the compulsory acquisition zone; * To pay 125% of market value plus taxes and reasonable moving costs for all owner occupied homes within an additional voluntary purchase/acquisition zone incorporating the area known as the “Heathrow Villages”; * Following a third party assessment, to provide full acoustic insulation for residential property within the full single mode easterly and westerly 60dB LAeq (16 hr) noise contour of an expanded airport; * Following a third party assessment to provide a contribution of up to £3,000 for acoustic insulation for residential property within the full single mode easterly and westerly 57dB LAeq (16hr) or the full 55 dB Lden noise contours of an expanded airport, whichever is the bigger; and * To deliver a programme of noise insulation and ventilation for schools within the 60dB LAeq (16 hr) contour. <p>Additional mitigation incorporated into the Airports NPS for communities includes:</p> <ul style="list-style-type: none"> * Community Engagement Board - the applicant must engage constructively with a community engagement board throughout the planning
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applicant must engage constructively with a community engagement board throughout the planning process (5.255).

* Community compensation fund –The Government expects that the size of the fund will be proportionate to the environmental harm caused by expansion of the airport. In its consideration of a noise levy the AC considered that a sum of £50m per annum could be an appropriate amount at an expanded Heathrow and that over a 15 year period a community compensation fund could therefore distribute £750m to local communities (5.245).

The Government agrees with the AC's recommendation for no fourth runway at Heathrow Airport. An application for a fourth runway in the vicinity of Heathrow Airport would not be supported in policy terms, and should be seen as being in conflict with this NPS (5.273).

The Government will require the applicant to provide details of how plans will improve access on and around the airports with schemes that take account of the accessibility needs of all those who use, or are affected by, surface access infrastructure, including those with physical and /or mental impairments as well as older users (4.72). The applicant would need to set out measures to minimise or mitigate expansion of surface access arrangements,

process (5.257).

* Community compensation fund –The Government expects that the size of the fund will be proportionate to the environmental harm caused by expansion of the airport. In its consideration of a noise levy the AC considered that a sum of £50m per annum could be an appropriate amount at an expanded Heathrow and that over a 15 year period a community compensation fund could therefore distribute £750m to local communities (5.247).

The Government agrees with the AC's recommendation of no fourth runway at Heathrow Airport. An application for a fourth runway in the vicinity of Heathrow Airport would not be supported in policy terms, and should be seen as being in conflict with the Airports NPS (5.275).

The Government will require the applicant to provide details of how plans will improve access on and around the airports with schemes that take account of the accessibility needs of all those who use, or are affected by, surface access infrastructure, including those with physical and /or mental impairments as well as older users (4.76). The applicant would need to set out measures to minimise or mitigate expansion of surface access arrangements, including targets to reduce car use (5.15-5.20).

Additional mitigation is also covered under the noise and air quality topics.

		<p>including targets to reduce car use (5.14-5.19). Additional mitigation is also covered under the noise and air quality topics.</p>	
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Main report	Table 7-3, Column 3 (summary of mitigation), Row: Quality of Life	There are a number of options proposed for mitigation measures to reduce magnitude of effects from the AoS topics which comprise quality of life indicators. These are listed in respective appendices for the assessment on Communities (A-1), Noise (A-4) Biodiversity (A-5), Air Quality (A-8) Landscape (A-11) and Historic Environment (A-12). At this stage, no additional measures have been proposed specifically for quality of life because it is recognised that these measures apply to significant effects on wellbeing.	There are a number of options proposed for mitigation measures to reduce magnitude of effects from the AoS topics which comprise quality of life indicators. These are listed in respective appendices for the assessment on Communities (A-1), Noise (A-4) Biodiversity (A-5), Air Quality (A-8) Landscape (A-11) and Historic Environment (A-12).No additional measures have been proposed specifically for quality of life because it is recognised that these measures apply to significant effects on wellbeing.
Main report	Table 7-3, Column 3 (summary of mitigation), Row: Economy	Significant positive effects have been identified within the AoS. The Revised Draft NPS includes the following policy to enhance these effects: Skills - Heathrow Airport has publically committed to ensuring 10,000 additional apprenticeships by 2030, this is double the number previously pledged. Plans will need to be provided setting out timetable, skills, where the opportunities are offered and other information (5.261).	Significant positive effects have been identified within the AoS. The Airports NPS includes the following policy to enhance these effects: Skills - Heathrow Airport has publically committed to ensuring 5,000 additional apprenticeships by 2030, this will double the number previously pledged to 10,000. Plans will need to be provided setting out timetable, skills, where the opportunities are offered and other information (5.263).

<p>Main report</p>	<p>Table 7-3 Column 3 (summary of mitigation), Row: Noise</p>	<p>The mitigation measures proposed by the scheme applicant for the LHR-NWR scheme include¹⁴²:</p> <ul style="list-style-type: none"> * Incentives to promote incorporation of quieter aircraft in fleet mixes; * Designing airport infrastructure to be as quiet as possible through positioning of a third runway; * Compensation and noise insulation schemes for dwellings and community buildings; * Displacement of runway landing thresholds; * Development of quieter operating procedures, including steeper approach slopes (discussed further below), and night fleet management; * Provision of pre-conditioned air (PCA) and fixed electrical group power (FEGP) or ground power units (GPUs) for all aircraft stands to reduce use of auxiliary power units (APUs); * Reduced taxi and holding times; and * Use of modern airside equipment such as electric vehicles and clatter-resistant baggage trolleys, maintained using enhanced procedures to avoid excessive noise. <p>In their Final Report, the AC made a number of further recommendations on mitigation measures for the LHR-NWR scheme, including¹⁴³:</p>	<p>The mitigation measures proposed by the scheme promoter for the LHR-NWR scheme include¹⁴²:</p> <ul style="list-style-type: none"> * Incentives to promote incorporation of quieter aircraft in fleet mixes; * Designing airport infrastructure to be as quiet as possible through positioning of a third runway; * Compensation and noise insulation schemes for dwellings and community buildings; * Displacement of runway landing thresholds; * Development of quieter operating procedures, including steeper approach slopes (discussed further below), and night fleet management; * Provision of pre-conditioned air (PCA) and fixed electrical group power (FEGP) or ground power units (GPUs) for all aircraft stands to reduce use of auxiliary power units (APUs); * Reduced taxi and holding times; and * Use of modern airside equipment such as electric vehicles and clatter-resistant baggage trolleys, maintained using enhanced procedures to avoid excessive noise. <p>In their Final Report, the AC made a number of further recommendations on mitigation measures for the LHR-NWR scheme, including¹⁴³:</p> <ul style="list-style-type: none"> * Clear and legally-binding noise performance targets, in the form of a ‘noise envelope’; * Periods of predictable respite to be more reliably maintained (discussed further below). The airport operator to work with local communities to determine how respite would best be provided; * A ban on all scheduled flights during the 6½-
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	<ul style="list-style-type: none"> * Clear and legally-binding noise performance targets, in the form of a ‘noise envelope’; * Periods of predictable respite to be more reliably maintained (discussed further below). The airport operator to work with local communities to determine how respite would best be provided; * A ban on all scheduled flights during the 6½-hour ‘core’ night period 2330-0600hrs (discussed further below); * Holding the applicant for LHR-NWR to its public commitment to deliver a compensation package valued at more than £1bn, including £700m for noise insulation, and significant investment in noise insulation and other support for schools; * Introduction of a noise levy at major UK airports; and * Creation of an Independent Aviation Noise Authority and Community Engagement Board under an independent Chair. Suggestions made by the AC in their Final Report for ways in which airports can reduce noise at source include¹⁴⁴: * Preferential routing over areas with lower population densities (discussed further below); * Steeper descent angles (discussed further below); * Displaced runway landing thresholds (discussed further below); 	<ul style="list-style-type: none"> hour ‘core’ night period 2330-0600hrs (discussed further below); * Holding the applicant for LHR-NWR to its public commitment to deliver a compensation package valued at more than £1bn, including £700m for noise insulation, and significant investment in noise insulation and other support for schools; * Introduction of a noise levy at major UK airports; and * Creation of an Independent Aviation Noise Authority and Community Engagement Board under an independent Chair. Suggestions made by the AC in their Final Report for ways in which airports can reduce noise at source include¹⁴⁴: * Preferential routing over areas with lower population densities (discussed further below); * Steeper descent angles (discussed further below); * Displaced runway landing thresholds (discussed further below); * Limiting sharp turns; * Keeping landing gear up as long as possible; * New aircraft technology; * Incentives for airlines to optimise noise performance (eg fines); and * Air traffic movement limits. <p>Noise-preferential routing, steeper descent angles and displaced landing thresholds have been investigated as part of the AC assessment work^{145,146,147,148}.</p> <p>In addition to the measures listed under</p>
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- * Limiting sharp turns;
- * Keeping landing gear up as long as possible;
- * New aircraft technology;
- * Incentives for airlines to optimise noise performance (eg fines); and
- * Air traffic movement limits.

Noise-preferential routing, steeper descent angles and displaced landing thresholds have been investigated as part of the AC assessment work^{145,146,147,148}:

In addition to the measures listed under Communities above, the Revised Draft NPS provides for developing a package of mitigation measures in consultation with communities includes measures for:

- * Noise envelope – should be tailored to local priorities and include noise performance targets. The design of the envelope should be defined in consultation with local communities and relevant stakeholders with suitable review periods.
- * Night flight restrictions – the Government expects a ban on scheduled night flights of six and a half hours between 23.00 and 07.00. The operation and timing of such a ban should be defined in consultation with local communities and relevant stakeholders in line with EU Regulation 598/2014. In addition, outside the hours of a ban, The Government expects particular efforts to be made to incentivise the use of the quietest

Communities above, the NPS provides for developing a package of mitigation measures in consultation with communities includes measures for:

- * Noise envelope – should be tailored to local priorities and include noise performance targets. The design of the envelope should be defined in consultation with local communities and relevant stakeholders with suitable review periods.
- * Night flight restrictions – the Government expects a ban on scheduled night flights of six and a half hours between 23.00 and 07.00. The operation and timing of such a ban should be defined in consultation with local communities and relevant stakeholders in line with EU Regulation 598/2014. In addition, outside the hours of a ban, The Government expects particular efforts to be made to incentivise the use of the quietest aircraft at night.
- * Predictable respite – a runway alternation scheme, to provide communities with predictable periods of respite. The timings, duration and scheduling should be defined in consultation with communities and relevant stakeholders.

In addition, mitigation measures at the construction stage should be provided and draw on best practice from other major construction schemes, including during the procurement of contractors. (5.54-5.65)

	<p>aircraft at night.</p> <p>* Predictable respite –a runway alternation scheme, to provide communities with predictable periods of respite. The timings, duration and scheduling should be defined in consultation with communities and relevant stakeholders.</p> <p>In addition, mitigation measures at the construction stage should be provided and draw on best practice from other major construction schemes, including during the procurement of contractors. (5.53-5.64)</p>	
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<p>Main report</p>	<p>Table 7-3, Column 3 (summary of mitigation), Row: Biodiversity (Potential adverse effects on internationally, nationally and locally designated biodiversity sites)</p>	<p>Consideration of mitigation for European Sites been considered in the HRA Appropriate Assessment A range of mitigations were considered in the AA to reduce the effects of air quality impacts on biodiversity including: * implementation of a CEMP to reduce dust and construction emission impacts; * effective application of sustainable transport plans, in particular the use of carbon-efficient and non-road transport ; * congestion charges and improved infrastructure for Ultra Low Emission Vehicles for passengers; * development and application of appropriate air quality management plans and independently certified offsetting Options (including for example, renewable energy and fuel-switching). For habitat loss it is considered likely that at the detailed design stage the impacts could reasonably be avoided through a review of the detailed alignment that avoids encroachment into the designated sites or the immediately adjacent habitats. Indirect impacts from works affecting the River Colne could be avoided through the design of channel diversions and minimising culverting requirements. Direct and indirect impacts to SSSI from habitat loss, air and water will require detailed assessment. Mitigation measures</p>	<p>Mitigation for European sites has been considered in the HRA Appropriate Assessment A range of mitigations were considered in the AA to reduce the effects of air quality impacts on biodiversity including: * Implementation of a CEMP to reduce dust and construction emission impacts; * Effective application of sustainable transport plans, in particular the use of carbon-efficient and non-road transport ; * Congestion charges and improved infrastructure for Ultra Low Emission Vehicles for passengers; * Development and application of appropriate air quality management plans and independently certified offsetting Options (including for example, renewable energy and fuel-switching). For habitat loss it is considered likely that at the detailed design stage the impacts could reasonably be avoided through a review of the detailed alignment that avoids encroachment into the designated sites or the immediately adjacent habitats. Indirect impacts from works affecting the River Colne could be avoided through the design of channel diversions and minimising culverting requirements. Direct and indirect impacts to SSSI from habitat loss, air and water will require detailed assessment. Mitigation measures would be as per those for water and air below. Subsequent to detailed assessment where mitigation cannot reduce significant effects compensation</p>
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	<p>would be as per those for water and air below. Subsequent to detailed assessment where mitigation cannot reduce significant effects compensation measures would need to be considered.</p> <p>Loss of locally designated sites will require further consideration at detailed design. Impacts are likely to extend to a range of legally protected / species of importance residing within the sites. Compensation measures will need to be considered on a landscape scale and potentially implemented well in advance of loss to provide functional alternative habitat at the time of impact.</p> <p>Given that no the potential for adverse effects on integrity of European sites cannot be ruled out for the draft policy, in addition to further test under the Habitats Regulations at this stage, the Draft NPS sets out provisions for HRA at the project stage (1.28-1.29).</p> <p>The Draft NPS sets out the requirements for the applicant: In taking decisions, the Secretary of State should ensure that appropriate weight is attached to designated sites of international, national and local importance, protected species, habitats and other species of principal importance for the conservation of biodiversity, and to biodiversity and geological interests within the wider environment. (5.96).</p>	<p>measures would need to be considered. Loss of locally designated sites will require further consideration at detailed design. Impacts are likely to extend to a range of legally protected / species of importance residing within the sites. Compensation measures will need to be considered on a landscape scale and potentially implemented well in advance of loss to provide functional alternative habitat at the time of impact. Given that the potential for adverse effects on integrity of European sites cannot be ruled out for the policy, in addition to further test under the Habitats Regulations at this stage, the NPS sets out provisions for HRA at the project stage (1.31-1.33).</p> <p>The NPS sets out the requirements for the applicant: In taking decisions, the Secretary of State should ensure that appropriate weight is attached to designated sites of international, national and local importance, protected species, habitats and other species of principal importance for the conservation of biodiversity, and to biodiversity and geological interests within the wider environment. (5.97).</p> <p>The NPS sets out provisions for further assessment under the Habitats Regulations as part of project design (5.99), and processes for determining consent for development which affects SSSIs (5.101) and regional and local sites (5.102).</p>
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		<p>The Draft NPS sets out provisions for further assessment under the Habitats Regulations as part of project design (5.98), and processes for determining consent for development which affects SSSIs (5.100) and regional and local sites (5.101).</p>	
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<p>Main report</p>	<p>Table 7-3, Column 4 (residual effects), Row: Biodiversity (Potential adverse effects on internationally, nationally and locally designated biodiversity sites)</p>	<p>Some mitigation has been provided by the applicant. It was recognised that the efficacy of such mitigation Air Quality proposals could not be substantiated, residual adverse effects were assumed on the integrity of the interest features of the European sites. Through maintaining water quality, volume and flow rate to such an extent that adverse effects are avoided then impacts to River Colne, downstream should be prevented. These measures are considered to be viable and robust to prevent adverse effects to integrity Mitigation measures could reduce residual effects to being not significant. However where compensation is required residual effects would be likely in the short-midterm until compensation is fully established and functional. It was recognised that the efficacy of mitigation proposals could not be substantiated at this time; residual adverse effects were assumed on the integrity of the interest features of the European sites. Further consideration at the detailed design stage will be required, including any compensation measures. In the event that compensation is required (subject to meeting the tests under Stages 3 and 4 of the HRA process).</p>	<p>Some mitigation has been provided by the applicant. It was recognised that the efficacy of such mitigation Air Quality proposals could not be substantiated, residual adverse effects were assumed on the integrity of the interest features of the European sites. Through maintaining water quality, volume and flow rate to such an extent that adverse effects are avoided then impacts to River Colne, downstream should be prevented. These measures are considered to be viable and robust to prevent adverse effects to integrity Mitigation measures could reduce residual effects to being not significant. However where compensation is required residual effects would be likely in the short-midterm until compensation is fully established and functional. It was recognised that the efficacy of mitigation proposals could not be substantiated at this time; residual adverse effects were assumed on the integrity of the interest features of the European sites. Further consideration at the detailed design stage will be required, including any compensation measures, in the event that compensation is required (subject to meeting the tests under Stages 3 and 4 of the HRA process).</p>
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<p>Main report</p>	<p>Table 7-3, Column 3 (summary of mitigation), Row: Biodiversity (Negative effects on undesignated habitats, species, valuable ecological networks and ecosystem functionality)</p>	<p>The mitigation hierarchy comprises 4 tiers and is essential for all development projects aiming for No Net Loss or Net Positive Impact or for adopting a Net Positive Approach It is based on a series of sequential steps that must be taken throughout a project's life cycle in order to limit any negative impacts on biodiversity. It was identified that a default precautionary multiplier of 2 has been proposed by the Applicant to compensate for losses of habitats, and a detailed, quantified list is provided of proposed habitat creation actions. In summary this list prescribes provision of 18ha of species-rich neutral grassland, 40ha of fen, 4ha of swamp/wet grassland, 8.2ha of wetland including wet woodland, 26ha of ponds/lakes, 32.4ha of deciduous woodland, 1ha of traditional orchard, 17.2ha of lowland meadow and 6.0km of ditch. These measures give totals of 146ha of habitat and 6km of linear watercourse. Consideration of the potential requirement for areas greater than those proposed has also been made, to compensate for the possibility of adversely impacting the biodiversity resource of the proposed compensation sites themselves. Parcels of land totalling an area of 217ha have been identified by the Applicant as possible compensation sites. This area would largely</p>	<p>The mitigation hierarchy comprises 4 tiers and is essential for all development projects aiming for No Net Loss or Net Positive Impact or for adopting a Net Positive Approach It is based on a series of sequential steps that must be taken throughout a project's life cycle in order to limit any negative impacts on biodiversity. It was identified that a default precautionary multiplier of 2 has been proposed by the Applicant to compensate for losses of habitats, and a detailed, quantified list is provided of proposed habitat creation actions. In summary this list prescribes provision of 18ha of species-rich neutral grassland, 40ha of fen, 4ha of swamp/wet grassland, 8.2ha of wetland including wet woodland, 26ha of ponds/lakes, 32.4ha of deciduous woodland, 1ha of traditional orchard, 17.2ha of lowland meadow and 6.0km of ditch. These measures give totals of 146ha of habitat and 6km of linear watercourse. Consideration of the potential requirement for areas greater than those proposed has also been made, to compensate for the possibility of adversely impacting the biodiversity resource of the proposed compensation sites themselves. Parcels of land totalling an area of 217ha have been identified by the Applicant as possible compensation sites. This area would largely accommodate the 146ha requirement above plus 6ha of scrub and up to 70ha of pasture/rough grassland to compensate for the loss of these less important (not of Principal Importance)</p>
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	<p>accommodate the 146ha requirement above plus 6ha of scrub and up to 70ha of pasture/rough grassland to compensate for the loss of these less important (not of Principal Importance) habitats</p> <p>An additional requirement for 248.8ha of compensatory habitat which is greater (by 63ha) than the Applicant's recommendation of 217ha, was recommended by the AC due to inclusion of surface access impacts and precautionary allowances for potential indirect effects and protected species.</p> <p>The scheme contains a commitment to mitigation for lost habitat as well as improvement of existing habitat for wildlife, creation of new habitat and development of outdoor leisure opportunities around the airport. The proposals include creation of wetlands, flood meadows, woodland, open water and marginal habitats. All of these areas have the potential to attract hazardous birds to the area or to change the behaviour patterns of birds that are already present and thus create an additional birdstrike risk.</p> <p>The need to manage the birdstrike risk is acknowledged. Any mitigation that involves large scale bird dispersal from e.g. a reservoir has the potential to adversely impact on non-hazardous birds of conservation concern that currently use the site.</p>	<p>habitats</p> <p>An additional requirement for 248.8ha of compensatory habitat which is greater (by 63ha) than the Applicant's recommendation of 217ha, was recommended by the AC due to inclusion of surface access impacts and precautionary allowances for potential indirect effects and protected species.</p> <p>The scheme contains a commitment to mitigation for lost habitat as well as improvement of existing habitat for wildlife, creation of new habitat and development of outdoor leisure opportunities around the airport. The proposals include creation of wetlands, flood meadows, woodland, open water and marginal habitats. All of these areas have the potential to attract hazardous birds to the area or to change the behaviour patterns of birds that are already present and thus create an additional birdstrike risk.</p> <p>The need to manage the birdstrike risk is acknowledged. Any mitigation that involves large scale bird dispersal from e.g. a reservoir has the potential to adversely impact on non-hazardous birds of conservation concern that currently use the site.</p> <p>All mitigation and compensation proposals should be reviewed as further details become available at the project level and in the context of biodiversity no net loss/net gain.</p> <p>The NPS includes the following mitigation, along with other information for the applicant and for decision-making :</p>
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All mitigation and compensation proposals should be reviewed as further details become available at the project level and in the context of biodiversity no net loss/net gain.

The Draft NPS includes the following mitigation, along with other information for the applicant and for decision-making :

The applicant's proposal should address the mitigation hierarchy (which supports efforts to conserve and enhance biodiversity), which is set out in the NPPF¹⁴⁹.

Compensation ratios relating to the effects of the preferred scheme should be considered in more detail during the design. The application of 2:1 compensation ratio is considered to represent the minimum requirement. However, there are other mechanisms for establishing compensation ratios exist such as Defra's biodiversity offsetting metric. Equally it is important to note that habitat ratios form only one part of potential compensation which should be considered and the location and quality of any compensation land is of key importance. In this regard habitat creation, where required, should be focused on areas where the most ecological and ecosystems services benefits can be realised.(5.94).The Draft NPS also acknowledges the importance of ancient woodland and veteran trees (5.102) in addition to opportunities for

The applicant's proposal should address the mitigation hierarchy (which supports efforts to conserve and enhance biodiversity), which is set out in the NPPF¹⁴⁹.

Compensation ratios relating to the effects of the preferred scheme should be considered in more detail during the design. The application of 2:1 compensation ratio is considered to represent the minimum requirement. However, there are other mechanisms for establishing compensation ratios exist such as Defra's biodiversity offsetting metric. Equally it is important to note that habitat ratios form only one part of potential compensation which should be considered and the location and quality of any compensation land is of key importance. In this regard habitat creation, where required, should be focused on areas where the most ecological and ecosystems services benefits can be realised.(5.95).The NPS also acknowledges the importance of ancient woodland and veteran trees (5.103) in addition to opportunities for building in beneficial biodiversity as part of good design (5.104).

		building in beneficial biodiversity as part of good design (5.103).	
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Main report	Table 7-3, Column 3 (summary of mitigation), Row: Soil	<p>Mitigation set out in the AoS includes: As a consequence of the site locations of all schemes, a high proportion of the land take required is from agricultural land, and a low proportion is from Previously Developed Land (PDL). The loss of agricultural land would typically be financially compensated for rather than mitigated against, though in some cases land uses may be relocated to alternative sites.</p> <p>Further Agricultural Impact Assessment surveys could be required to determine the value of agricultural land, and to identify Best and Most Versatile agricultural land in accordance with the guidelines and criteria for grading the quality of agricultural land. This could feed into a strategy to provide mitigation or compensation for this loss. However, it is acknowledged that financial compensation will not mitigate the loss of the resource. Use of best practice means that agricultural and greenfield land take for temporary use during construction would be minimised wherever possible. A strategy for further increasing use of PDL as a means of minimising loss of agricultural land could be substantiated at detailed design.</p> <p>The ecosystem services approach can also be used to consider the environment in terms of the benefits it brings to people, including food production.</p> <p>The contamination of soils should be</p>	<p>Mitigation set out in the AoS includes: As a consequence of the site locations of all schemes, a high proportion of the land take required is from agricultural land, and a low proportion is from Previously Developed Land (PDL). The loss of agricultural land would typically be financially compensated for rather than mitigated against, though in some cases land uses may be relocated to alternative sites.</p> <p>Further Agricultural Impact Assessment surveys could be required to determine the value of agricultural land, and to identify Best and Most Versatile agricultural land in accordance with the guidelines and criteria for grading the quality of agricultural land. This could feed into a strategy to provide mitigation or compensation for this loss. However, it is acknowledged that financial compensation will not mitigate the loss of the resource. Use of best practice means that agricultural and greenfield land take for temporary use during construction would be minimised wherever possible. A strategy for further increasing use of PDL as a means of minimising loss of agricultural land could be substantiated at detailed design.</p> <p>The ecosystem services approach can also be used to consider the environment in terms of the benefits it brings to people, including food production.</p> <p>The contamination of soils should be mitigated through the EIA process and managed through the possible implementation of Environmental</p>
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	<p>mitigated through the EIA process and managed through the possible implementation of Environmental Management Plans Appendix A-6 provides more information on these management plans.</p> <p>The NPS sets out a number of measures to be taken into account during assessment. This includes taking into account economic and other benefits of Best and Most Versatile agricultural land (5.107), minimising the direct effects of a project on the existing use of the proposed site, or proposed uses near the site by the application of good design principles, including the layout of the project and the protection of soils during construction (5.116).</p>	<p>Management Plans Appendix A-6 provides more information on these management plans. The NPS sets out a number of measures to be taken into account during assessment. This includes taking into account economic and other benefits of Best and Most Versatile agricultural land (5.108), minimising the direct effects of a project on the existing use of the proposed site, or proposed uses near the site by the application of good design principles, including the layout of the project and the protection of soils during construction (5.118).</p>
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<p>Main report</p>	<p>Table 7-3, Column 3 (summary of mitigation), Row: Water (Change in status of surface and/or groundwaters through alteration of waterbodies and impacts on water quality/quantity through the discharge of contaminants, such as de-icer and hydrocarbons and</p>	<p>The mitigation measures proposed by the applicant include: * Runoff would be directed from the petrol interceptor via an online Total Organic Carbon (TOC) quality monitoring to detect the presence of de-icers. Runoff contaminated with de-icers would be diverted to treatment whereas non-contaminated water would be discharged to the normal attenuation storage. * Groundwater will be appropriately managed during the construction and operation with consideration given to surface water – groundwater interactions. * Runoff attenuation SuDS and interceptors to provide storage for major spills. * A Sustainable Drainage Strategy will include dedicated areas for de-icing aircraft and a glycol recovery procedure to reduce the concentration of glycol within surface water runoff and separate storage tanks for ‘clean’ and ‘first flush’ surface water. This is also the possibility of a new Sewage Treatment Works with some of the treated water to be re-used for non-potable purposes within the airport. The applicant will need to assess the impacts of the scheme design, on and off site mitigation in relation to how it will interlink as a whole and how it links to the wider water environment and water dependent features (including designated</p>	<p>The mitigation measures proposed by the applicant include: * Runoff would be directed from the petrol interceptor via an online Total Organic Carbon (TOC) quality monitoring to detect the presence of de-icers. Runoff contaminated with de-icers would be diverted to treatment whereas non-contaminated water would be discharged to the normal attenuation storage. * Groundwater will be appropriately managed during the construction and operation with consideration given to surface water – groundwater interactions. * Runoff attenuation SuDS and interceptors to provide storage for major spills. * A Sustainable Drainage Strategy will include dedicated areas for de-icing aircraft and a glycol recovery procedure to reduce the concentration of glycol within surface water runoff and separate storage tanks for ‘clean’ and ‘first flush’ surface water. There is also the possibility of a new Sewage Treatment Works with some of the treated water to be re-used for non-potable purposes within the airport. The applicant will need to assess the impacts of the scheme design, on and off site mitigation in relation to how it will interlink as a whole and how it links to the wider water environment and water dependent features (including designated sites across the offsite catchment). The Airports NPS includes the following statements: * The impact on local water resources can be</p>
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	<p>changes in water resource use)</p>	<p>sites across the offsite catchment). The Revised Draft Airports NPS includes the following statements:</p> <p>* The impact on local water resources can be minimised through planning and design for the efficient use of water, including water recycling. The project should adhere to any National Standards for sustainable urban drainage systems. The risk of impacts on the water environment can be reduced through careful design to adhere to good pollution practice (5.176-5.179).</p> <p>The proposal would also need to have regard to the Thames River Basin Management Plan and the requirements of the WFD and its daughter Directives, including those on priority substances and groundwater. In terms of WFD compliance, the overall aim of development should be no deterioration of ecological status in watercourses, ensuring that Article 4.7 of the WFD Regulations does not need to be applied.</p> <p>Where Article 4.7 does need to be applied, and the conditions set out apply to airport development, the applicant must set out and report any modifications to the physical characteristics of surface water bodies or alterations to levels of groundwater bodies in the Thames River Basin Management Plan.</p> <p>The Secretary of State will need to consider</p>	<p>minimised through planning and design for the efficient use of water, including water recycling. The project should adhere to any National Standards for sustainable urban drainage systems. The risk of impacts on the water environment can be reduced through careful design to adhere to good pollution practice (5.178-5.181).</p> <p>The proposal would also need to have regard to the Thames River Basin Management Plan and the requirements of the WFD and its daughter Directives, including those on priority substances and groundwater. In terms of WFD compliance, the overall aim of development should be to prevent deterioration in status of water bodies to support the achievement of the objectives in the Thames River Basin Management Plan and not to jeopardise the future achievement of good status for any affected water bodies.</p> <p>If the development is considered likely to cause deterioration of water body status or to prevent the achievement of good groundwater status or of good ecological status or potential, compliance with Article 4.7 of the Water Framework Directive must be demonstrated. The Secretary of State will need to consider the interactions of the proposed project with other plans such as water resources management plans. Consideration will also be given to impacts on water quality / resources.</p>
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		<p>the interactions of the proposed project with other plans such as water resources management plans. Consideration will also be given to impacts on water quality / resources.</p>	
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<p>Main report</p>	<p>Table 7-3, Column 4 (residual effects), Row: Water (Change in status of surface and/or groundwaters through alteration of waterbodies and impacts on water quality/quantity through the discharge of contaminants, such as de-icer and hydrocarbons and changes in</p>	<p>Measures to reduce water consumption can be effective, however given the predicted passenger increase, and until further design and assessment are undertaken, the effects on water resources are significant negative. Design can also minimise effects on watercourse modifications and can include enhancement. However, considering the scale of the effects it is unlikely to fully mitigate or compensate for modifications. Until detailed design is undertaken the assessment remains significant negative. Despite mitigation at the airport, contaminants such as de-icers do reach receiving watercourses at certain times as no water quality treatment solution is 100% effective. Depending on quantity and frequency of such discharges there is a potential for an adverse residual effect on WFD physico-chemical status despite mitigation commitments. Under such conditions it may be necessary to offset the deterioration in quality with quantitative improvement measures. The impact is currently such that it is likely that the impact will be required to progress through the Article 4.7 of the WFD route.</p>	<p>Measures to reduce water consumption can be effective, however given the predicted passenger increase, and until further design and assessment are undertaken, the effects on water resources are significant negative. Design can also minimise effects on watercourse modifications and can include enhancement. However, considering the scale of the effects it is unlikely to fully mitigate or compensate for modifications. Until detailed design is undertaken the assessment remains significant negative. Despite mitigation at the airport, contaminants such as de-icers do reach receiving watercourses at certain times as no water quality treatment solution is 100% effective. Depending on quantity and frequency of such discharges there is a potential for an adverse residual effect on WFD physico-chemical status despite mitigation commitments. Under such conditions it may be necessary to offset the deterioration in quality with quantitative improvement measures. The impact is currently such that it is likely that the impact will be required to progress through the exemption provisions of Article 4.7 of the WFD .</p>
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	water resource use)		
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<p>Main report</p>	<p>Table 7-3, Column 3 (summary of mitigation), Row: Water (Change to flood risk and resilience to climate change.)</p>	<p>Design to date has taken into account flood risk through design. The scheme will need to be developed during detailed design to ensure that it is safe from flooding and will not increase flood risk elsewhere from all sources. Detailed hydraulic modelling will be required to understand the interaction between surface and groundwater, needed to develop appropriate mitigation. The Revised Draft NPS includes the following statements: Mitigation measures will need to be developed as part of the applicant's development consent application to ensure that it is safe from flooding, and will not increase flood risk elsewhere for the development's lifetime, taking into account climate change. To satisfactorily manage flood risk and the impact of the natural water cycle on people, property and ecosystems, good design and infrastructure may need to be secured using requirements or planning obligations. This may include the use of sustainable drainage systems but could also include vegetation to help to slow runoff, hold back peak flows and make landscapes more able to absorb the impact of severe weather events . Site layout and surface water drainage systems should be able to cope with events that exceed the design capacity of the</p>	<p>Design to date has taken into account flood risk through design. The scheme will need to be developed during detailed design to ensure that it is safe from flooding and will not increase flood risk elsewhere from all sources. Detailed hydraulic modelling will be required to understand the interaction between surface and groundwater, needed to develop appropriate mitigation. The NPS includes the following statements: Mitigation measures will need to be developed as part of the applicant's development consent application to ensure that it is safe from flooding, and will not increase flood risk elsewhere for the development's lifetime, taking into account climate change. To satisfactorily manage flood risk and the impact of the natural water cycle on people, property and ecosystems, good design and infrastructure may need to be secured using requirements or planning obligations. This may include the use of sustainable drainage systems but could also include vegetation to help to slow runoff, hold back peak flows and make landscapes more able to absorb the impact of severe weather events . Site layout and surface water drainage systems should be able to cope with events that exceed the design capacity of the system, so that excess water can be safely stored on or conveyed from the site without adverse impacts. The surface water drainage arrangements for any project should be such that the volumes and peak</p>
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	<p>system, so that excess water can be safely stored on or conveyed from the site without adverse impacts.</p> <p>The surface water drainage arrangements for any project should be such that the volumes and peak flow rates of surface water leaving the site are no greater than the rates prior to the proposed project, unless specific off-site arrangements are made and result in the same net effect.</p> <p>The sequential approach should be applied to the layout and design of the project. Vulnerable uses should be located on parts of the site at lower probability and residual risk of flooding. Applicants should seek opportunities to use open space for multiple purposes such as amenity, wildlife habitat and flood storage uses. Opportunities can be taken to lower flood risk by improving flow routes, flood storage capacity and using sustainable drainage systems (5.156-5.163).</p>	<p>flow rates of surface water leaving the site are no greater than the rates prior to the proposed project, unless specific off-site arrangements are made and result in the same net effect.</p> <p>The sequential approach should be applied to the layout and design of the project. Vulnerable uses should be located on parts of the site at lower probability and residual risk of flooding. Applicants should seek opportunities to use open space for multiple purposes such as amenity, wildlife habitat and flood storage uses. Opportunities can be taken to lower flood risk by improving flow routes, flood storage capacity and using sustainable drainage systems (5.158-5.165).</p>
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Main report	Table 7-3, Column 3 (summary of mitigation), Row: Air Quality	<p>A number of measures have been incorporated into design by the applicant including a CEMP, Construction Logistics Plan, high level of public transport provision, congestion free access, concentrating airside activities as far as possible from receptors, aircraft engine shut-down (no idling), and cleaner aircraft.</p> <p>The NPS states that the applicant should continue to strive to meet its public pledge that aims to have landside airport related traffic no greater than today (5.37) and set out plans to meet targets. The final package of mitigations should be subject to consultation with local communities and relevant stakeholders to ensure the most effective measures are taken forward. Other mitigation measures listed in the NPS could include, but are not limited to:</p> <ul style="list-style-type: none"> * Landing charges structured to reward airlines for operating cleaner flights (e.g. NOx emissions charging); * Zero or low-emission hybrid or electric vehicle use (ultra-low emission vehicles), charging and fuel facilities; * Reduced or single engine taxiing (improved taxiing efficiency); * Reducing emissions from aircraft at the gate (e.g. installation of fixed electrical ground power and pre conditioned air to aircraft stands to reduce the use of auxiliary power unit); 	<p>A number of measures have been incorporated into design by the applicant including a CEMP, Construction Logistics Plan, high level of public transport provision, congestion free access, concentrating airside activities as far as possible from receptors, aircraft engine shut-down (no idling), and cleaner aircraft.</p> <p>The Airports NPS states that the promoter should continue to strive to meet its public pledge that aims to have landside airport related traffic no greater than today (5.38) and set out and regularly review plans to meet mode share targets (5.17). The final package of mitigations should be subject to consultation with local communities and relevant stakeholders to ensure the most effective measures are taken forward. Other mitigation measures listed in the NPS could include, but are not limited to:</p> <ul style="list-style-type: none"> * Landing charges structured to reward airlines for operating cleaner flights (e.g. NOx emissions charging); * Zero or low-emission hybrid or electric vehicle use (ultra-low emission vehicles), charging and fuel facilities; * Reduced or single engine taxiing (improved taxiing efficiency); * Reducing emissions from aircraft at the gate (e.g. installation of fixed electrical ground power and pre conditioned air to aircraft stands to reduce the use of auxiliary power unit); * Modernised heating supplies in airport buildings; * Changes to the layout of surface access
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	<ul style="list-style-type: none"> * Modernised heating supplies in airport buildings; * Changes to the layout of surface access arrangements; * Traffic restrictions and / or traffic relocation around sensitive areas; * An emissions-based access charge; and * Physical means including barriers to trap or better disperse emissions and speed control on roads. <p>Mitigation measures at the construction stage should also be provided and draw on best practice from other major construction schemes, including during the procurement of contractors. Specific measures could include but are not limited to:</p> <ul style="list-style-type: none"> * Development of a construction traffic management plan (which may include the possible use of rail and consolidation sites or waterways); * The use of low emission construction plant / fleet, fitting of diesel particulate filters and use of cleaner engines; * The use of freight consolidation sites; * Active workforce management / worker transport scheme; * Construction site connection to grid electricity to avoid use of mobile generation; and * Selection of construction material to minimise distance of transport (5.38-5.39) 	<p>arrangements;</p> <ul style="list-style-type: none"> * Traffic restrictions and / or traffic relocation around sensitive areas; * An emissions-based access charge; and * Physical means including barriers to trap or better disperse emissions and speed control on roads. <p>Mitigation measures at the construction stage should also be provided and draw on best practice from other major construction schemes, including during the procurement of contractors. Specific measures could include but are not limited to:</p> <ul style="list-style-type: none"> * Development of a construction traffic management plan (which may include the possible use of rail and consolidation sites or waterways); * The use of low emission construction plant / fleet, fitting of diesel particulate filters and use of cleaner engines; * The use of freight consolidation sites; * Active workforce management / worker transport scheme; * Construction site connection to grid electricity to avoid use of mobile generation; and * Selection of construction material to minimise distance of transport (5.39-5.40)
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Main report	Table 7-3, Column 3 (summary of mitigation), Row: Carbon	<p>Potential mitigation measures in Appendix A of the AoS include:</p> <ul style="list-style-type: none"> * Airside Ground Impacts: efficient runway and taxiway design and use, use of fixed electrical ground power and pre-conditioned air, reduced engine use during taxiing. * Surface Access: Surface Access Strategy to incentivise modal shift towards public transport, improve infrastructure for and incentivise the use of electric and alternatively-fuelled vehicles. * Energy and Fuel Use: use of energy efficient design and construction techniques, specification of high efficiency plant and equipment, including energy efficient baggage handling systems, including LED lighting, incorporation of low carbon and renewable energy technologies such as combined heat and power, heat pumps, solar PV and biomass boilers where technically feasible, use of biogas and alternative energy sources for ground vehicle fleet, regular monitoring of energy use through metering system. * Construction: Construction Environmental Management Plan (CEMP). Mitigation measures at the construction stage should also be provided and draw on best practice from other major construction schemes, including during the procurement of contractors. Specific measures could include but are not limited to (5.79): 	<p>Potential mitigation measures in Appendix A of the AoS include:</p> <ul style="list-style-type: none"> * Airside Ground Impacts: efficient runway and taxiway design and use, use of fixed electrical ground power and pre-conditioned air, reduced engine use during taxiing. * Surface Access: Surface Access Strategy to incentivise modal shift towards public transport, improve infrastructure for and incentivise the use of electric and alternatively-fuelled vehicles. * Energy and Fuel Use: use of energy efficient design and construction techniques, specification of high efficiency plant and equipment, including energy efficient baggage handling systems, including LED lighting, incorporation of low carbon and renewable energy technologies such as combined heat and power, heat pumps, solar PV and biomass boilers where technically feasible, use of biogas and alternative energy sources for ground vehicle fleet, regular monitoring of energy use through metering system. * Construction: Construction Environmental Management Plan (CEMP). Mitigation measures at the construction stage should also be provided and draw on best practice from other major construction schemes, including during the procurement of contractors (5.80). Specific measures could include but are not limited to: <ul style="list-style-type: none"> * Development of a construction traffic management plan (which may include the
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	<ul style="list-style-type: none"> * Development of a construction traffic management plan (which may include the possible use of rail and consolidation sites); * Transport of materials to site by alternative modes to road (i.e. by rail or water); * Increased efficiency in use of construction plant, for example through no-idle policies; * Use of energy efficient site accommodation; * Reduction of waste, and the transport of waste, for example through increasing on-site recycling; * Construction site connection to grid electricity to avoid use of mobile generation; * Smart energy management practices; * Select construction material to utilise low carbon options, such as carbon-negative cement; and * Select construction material to minimise distance of transport. <p>The applicant is expected to take measures to limit the carbon impact of the project, which may include, but are not limited to: (5.77):</p> <ul style="list-style-type: none"> * Zero or low-emission hybrid or electric vehicle use (ultra-low emission vehicles), charging and fuel facilities; * Reduced or single engine taxiing (improved taxiing efficiency); * Reducing emissions from aircraft at the gate;; * Reduced emissions from airport buildings 	<ul style="list-style-type: none"> possible use of rail and consolidation sites); * Transport of materials to site by alternative modes to road (i.e. by rail or water); * Increased efficiency in use of construction plant, for example through no-idle policies; * Use of energy efficient site accommodation; * Reduction of waste, and the transport of waste, for example through increasing on-site recycling; * Construction site connection to grid electricity to avoid use of mobile generation; * Smart energy management practices; * Select construction material to utilise low carbon options, such as carbon-negative cement; and * Select construction material to minimise distance of transport. <p>The applicant is expected to take measures to limit the carbon impact of the project, which may include, but are not limited to: (5.78):</p> <ul style="list-style-type: none"> * Zero or low-emission hybrid or electric vehicle use (ultra-low emission vehicles), charging and fuel facilities; * Reduced or single engine taxiing (improved taxiing efficiency); * Reducing emissions from aircraft at the gate; * Reduced emissions from airport buildings (for example lower carbon heating); * Changes to the layout of surface access arrangements; and <p>Encouraging increased use of public transport by staff and passengers,</p>
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		(for example lower carbon heating); * Changes to the layout of surface access arrangements; and Encouraging increased use of public transport by staff and passengers,	
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<p>Main report</p>	<p>Table 7-3, Column 3 (summary of mitigation), Row: Resources and Waste</p>	<p>Two main management / mitigation strategies for minimising construction waste arisings were proposed for the LHR-NWR. These strategies included:</p> <ul style="list-style-type: none"> * development of a Masterplan to take into account potential waste impacts on communities and the natural environment; and * development of a Site Waste Management Plan (SWMP) which would seek to minimise the volume of waste disposed to landfills, and increase recycling rates of arisings generated during the construction phase. <p>At the next stage of scheme development, there are a number of mechanisms considered appropriate for minimising impacts associated with resource consumption and waste. All the following measures should be adopted and associated opportunities maximised to ensure the preferred scheme is exemplar:</p> <ul style="list-style-type: none"> * Adverse effects during construction and operation should be managed by operating in the highest tiers of the waste management hierarchy. This could require the adoption of the principles of resource efficiency, with opportunities maximised by designing for re-use and recovery, resource optimisation, off-site construction, resource efficient procurement, and designing for the future¹⁵⁰ (design); Establishing a Proximity Principle Strategy, to ensure arisings 	<p>Two main management / mitigation strategies for minimising construction waste arisings were proposed for the LHR-NWR. These strategies included:</p> <ul style="list-style-type: none"> * development of a Masterplan to take into account potential waste impacts on communities and the natural environment; and * development of a Site Waste Management Plan (SWMP) which would seek to minimise the volume of waste disposed to landfills, and increase recycling rates of arisings generated during the construction phase. <p>At the next stage of scheme development, there are a number of mechanisms considered appropriate for minimising impacts associated with resource consumption and waste. All the following measures should be adopted and associated opportunities maximised to ensure the preferred scheme is exemplar:</p> <ul style="list-style-type: none"> * Adverse effects during construction and operation should be managed by operating in the highest tiers of the waste management hierarchy. This could require the adoption of the principles of resource efficiency, with opportunities maximised by designing for re-use and recovery, resource optimisation, off-site construction, resource efficient procurement, and designing for the future¹⁵⁰ (design); Establishing a Proximity Principle Strategy, to ensure arisings generated are handled, stored and managed as close as possible to the point of origin (design); * On-site good practice behavioural incentives
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	<p>generated are handled, stored and managed as close as possible to the point of origin (design);</p> <ul style="list-style-type: none"> * On-site good practice behavioural incentives and training schemes (construction); * (As stated previously) development of a WMP to forecast (design) and verify (construction) arisings. The WMP would include guidance on waste prevention, segregation, storage, handling, transportation, reuse, recycling, treatment and – where necessary – disposal of specific waste streams; * Preparation of a CL:AIRE Code of Practice Materials Management Plan (MMP) (construction); * Loss on Ignition testing is used to ensure that all wastes identified as qualifying for the lower rate of landfill tax (inert, £2.65 per tonne) are effectively segregated and diverted from landfill (construction); * Segregation, bulking and secure storage of construction and excavation arisings to enhance the potential for on- and off-site re-use and recycling; reclamation and processing of demolition materials to encourage on-site re-use (construction); * Re-use of excavated topsoil and agricultural subsoil as fill, as close to the point of excavation as practicable (construction); 	<p>and training schemes (construction);</p> <ul style="list-style-type: none"> * (As stated previously) development of a WMP to forecast (design) and verify (construction) arisings. The WMP would include guidance on waste prevention, segregation, storage, handling, transportation, reuse, recycling, treatment and – where necessary – disposal of specific waste streams; * Preparation of a CL:AIRE Code of Practice Materials Management Plan (MMP) (construction); * Loss on Ignition testing is used to ensure that all wastes identified as qualifying for the lower rate of landfill tax (inert, £2.65 per tonne) are effectively segregated and diverted from landfill (construction); * Segregation, bulking and secure storage of construction and excavation arisings to enhance the potential for on- and off-site re-use and recycling; reclamation and processing of demolition materials to encourage on-site re-use (construction); * Re-use of excavated topsoil and agricultural subsoil as fill, as close to the point of excavation as practicable (construction); * Re-use of surplus excavated material from other developments in London and South East for fill applications (construction); * Re-use of construction materials, incorporation of recycled / secondary content in products, and deployment of materials with other sustainability credentials (construction);
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	<ul style="list-style-type: none"> * Re-use of surplus excavated material from other developments in London and South East for fill applications (construction); * Re-use of construction materials, incorporation of recycled / secondary content in products, and deployment of materials with other sustainability credentials (construction); * Development and implementation of a Resource (including waste) Management Strategy, including a Passenger Behavioural Change Programme and accompanying waste segregation facilities (operational); and * Organisational commitments to reduce waste arisings per passenger, endorsed by senior management (operational); * Specific operational mitigation measures e.g. decreasing newspapers and magazines at gates, collaborations with retail owners to reduce waste at source (operational). <p>The NPS states that applicant should seek to minimise the volume of waste sent for disposal unless it can be demonstrated that the alternative is the best overall environmental, social and economic outcome when considered over the whole lifetime of the project. The applicant should set out a comprehensive suite of mitigations to eliminate or significantly reduce the risk of adverse impacts associated with resource consumption and waste management.</p>	<ul style="list-style-type: none"> * Development and implementation of a Resource (including waste) Management Strategy, including a Passenger Behavioural Change Programme and accompanying waste segregation facilities (operational); and * Organisational commitments to reduce waste arisings per passenger, endorsed by senior management (operational); * Specific operational mitigation measures e.g. decreasing newspapers and magazines at gates, collaborations with retail owners to reduce waste at source (operational). <p>The NPS states that applicant should seek to ensure that all wastes arising from the site are subject to the principles of the waste hierarchy and are dealt with at the highest possible level within the hierarchy.</p> <p>The effects of removing the Lakeside EfW plant upon capacity for treatment of waste will require assessment if not reprovided. (5.135- 5.142).</p>
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		The effects of removing the Lakeside EfW plant upon capacity for treatment of waste will require assessment if not reprovided. (5.132- 5.134).	
Main report	Footnote 151	N/A	¹⁵¹ Article 4 of the revised EU Waste Framework Directive (Directive 2008/98/EC) sets out the ‘waste hierarchy’ with five steps for dealing with waste, ranked according to environmental impact.
Main report	Table 7-3, Column 4 (residual effect), Row: Resources and Waste	Adoption of measures that align with the highest tiers of the Waste Management (Resource Efficiency) Hierarchy have the potential to significantly reduce the magnitude of the consumption of virgin materials and waste disposed of during construction and operation. However, due to the scale of the infrastructure, measures are unlikely to fully mitigate negative effects. As the positive effects (potential success) of proposed	Adoption of measures that align with the highest tiers of the Waste Management (Resource Efficiency) Hierarchy ¹⁵¹ have the potential to significantly reduce the magnitude of the consumption of virgin materials and waste disposed of during construction and operation. However, due to the scale of the infrastructure, measures are unlikely to fully mitigate negative effects. As the positive effects (potential success) of proposed mitigation measures are yet to be specified, the residual effect is assessed as

		mitigation measures are yet to be specified, the residual effect is assessed as significant negative.	significant negative.
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Main report	Table 7-3, Column 3 (summary of mitigation), Row: Historic Environment	<p>The following mitigation for the LHR-NWR scheme are proposed within the ACs reports¹⁵¹:</p> <ul style="list-style-type: none"> * Scheduled monuments flight sequencing and noise respite measures; * Listed buildings to be subject to building recording prior to demolition; relocation following recording and some instances of flight sequencing and noise respite measures; * Non-designated archaeological remains to be subject to a programme of archaeological research investigations, post-excavation analysis and public dissemination. <p>At EIA level the mitigation proposed should be reviewed and revised following an assessment of the significance of the historic environment including the setting of assets. This will need to be undertaken in accordance with the NPPF so the cultural heritage significance of the assets can be determined prior to a mitigation strategy being applied at project level. This assessment will apply the NPPF heritage values: artistic, architectural, archaeological and historic to each of the designated assets. For non-designated assets including archaeological remains their level of importance will be determined i.e. local, neighbourhood, county regional and national.</p> <p>Following determination of significance a</p>	<p>The following mitigation for the LHR-NWR scheme are proposed within the ACs reports¹⁵²:</p> <ul style="list-style-type: none"> * Scheduled monuments flight sequencing and noise respite measures; * Listed buildings to be subject to building recording prior to demolition; relocation following recording and some instances of flight sequencing and noise respite measures; * Non-designated archaeological remains to be subject to a programme of archaeological research investigations, post-excavation analysis and public dissemination. <p>At EIA level the mitigation proposed should be reviewed and revised following an assessment of the significance of the historic environment including the setting of assets. This will need to be undertaken in accordance with the NPPF so the cultural heritage significance of the assets can be determined prior to a mitigation strategy being applied at project level. This assessment will apply the NPPF heritage values: artistic, architectural, archaeological and historic to each of the designated assets. For non-designated assets including archaeological remains their level of importance will be determined i.e. local, neighbourhood, county regional and national. Following determination of significance a hierarchy of mitigation should be applied:</p> <ul style="list-style-type: none"> * The first course of mitigation for all statutory designated heritage assets or those non-designated assets of proven similar significance is avoidance.
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	<p>hierarchy of mitigation should be applied: * The first course of mitigation for all statutory designated heritage assets or those non-designated assets of proven similar significance is avoidance. The next stage is assessment, no detailed mitigation can be proposed until a full investigation of the cultural heritage significance of the assets and the contribution made by their setting has been undertaken. This should be applied using the NPPF heritage values (artistic, architectural, archaeological and historical) along with the appropriate form of fieldwork investigation. Principles that can apply to assessment are set out in Appendix A-11. Should substantial public benefits of the scheme outweigh the harm or loss to the assets then the next course of action would be mitigation through design and/or enhancement. Possibilities for maximising the enhancement of the heritage assets and their settings should be explored. This can include public engagement and interpretation. Should the impacts of the scheme be physical, i.e. the demolition of a building, then following assessment of significance, and assuming that relocation of the building to an appropriate museum is not an option an Historic Building investigation should be undertaken. At this stage the HARR and</p>	<p>The next stage is assessment, no detailed mitigation can be proposed until a full investigation of the cultural heritage significance of the assets and the contribution made by their setting has been undertaken. This should be applied using the NPPF heritage values (artistic, architectural, archaeological and historical) along with the appropriate form of fieldwork investigation. Principles that can apply to assessment are set out in Appendix A-11. Should substantial public benefits of the scheme outweigh the harm or loss to the assets then the next course of action would be mitigation through design and/or enhancement. Possibilities for maximising the enhancement of the heritage assets and their settings should be explored. This can include public engagement and interpretation. Should the impacts of the scheme be physical, i.e. the demolition of a building, then following assessment of significance, and assuming that relocation of the building to an appropriate museum is not an option an Historic Building investigation should be undertaken. At this stage the HARR and listed building designation should be updated. Where preservation or archaeological remains is not an option then there is a need to assess the archaeological significance in the context of a 'research strategy' to identify appropriate mitigation investigation strategies. * Where appropriate seek to encourage opportunities to enhance the significance of</p>
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listed building designation should be updated. Where preservation or archaeological remains is not an option then there is a need to assess the archaeological significance in the context of a 'research strategy' to identify appropriate mitigation investigation strategies.

* Where appropriate seek to encourage opportunities to enhance the significance of heritage assets through the design, planning and implementation of a proposal. Individual proposals would need to be covered in the design stage as stated.

The NPS notes that where the proposed development will lead to substantial harm to or the total loss of significance of a designated heritage asset, the Secretary of State should refuse consent unless it can be demonstrated that the substantial harm or loss of significance is necessary in order to deliver substantial public benefits that outweigh that loss or harm, or alternatively meet a number of conditions. Where the proposed development will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use (5.201 -5.204).

The applicant should look for opportunities for new development within Conservation Areas and WHSs, and within the setting of

heritage assets through the design, planning and implementation of a proposal. Individual proposals would need to be covered in the design stage as stated.

The NPS notes that where the proposed development will lead to substantial harm to or the total loss of significance of a designated heritage asset, the Secretary of State should refuse consent unless it can be demonstrated that the substantial harm or loss of significance is necessary in order to deliver substantial public benefits that outweigh that loss or harm, or alternatively meet a number of conditions. Where the proposed development will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use (5.203 -5.206).

The applicant should look for opportunities for new development within Conservation Areas and WHSs, and within the setting of heritage assets, to enhance and better reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to or better reveal the significance of the asset should be treated favourably. (5.208).

Provisions are also made for recording of heritage assets, adherence to written scheme of investigation and treatment of undiscovered heritage assets (5.209-5.212).

	<p>heritage assets, to enhance and better reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to or better reveal the significance of the asset should be treated favourably. (5.206). Provisions are also made for recording of heritage assets, adherence to written scheme of investigation and treatment of undiscovered heritage assets (5.207-5.210).</p>	
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Main report	Table 7-3 Column 2 (summary of significant effect), Row: Landscape	Effects on designated landscape/townscape/waterscape (including historic landscape) and character, sensitive views and indirect effects from lighting and loss of tranquillity.	Effects on designated and undesignated landscape/townscape/waterscape (including historic landscape) and character, sensitive views and indirect effects from lighting and loss of tranquillity.
Main report	Table 7-3, Column 3 (summary of mitigation), Row: Landscape	<p>Continued development of landscape mitigation proposed by the applicant to provide multiple environmental objectives, including those relating to biodiversity, noise and the setting of heritage assets, whilst contributing positively to the wider green infrastructure.</p> <p>The applicant for LHR-NWR proposes to minimise impacts on existing landscape character and heritage assets.¹⁵² The proposed mitigation would reduce the effects of the proposals on water, biodiversity, landscape and recreational features and would redevelop part of the Colne Valley Regional Park.</p> <p>Measures would include habitat creation areas, a diversion of the Colne Valley Way and improvements to recreational areas runway.</p> <p>The Revised Draft NPS includes the following: Adverse landscape and visual effects may be minimised through appropriate design (including choice of materials), and</p>	<p>Continued development of landscape mitigation proposed by the applicant to provide multiple environmental objectives, including those relating to biodiversity, noise and the setting of heritage assets, whilst contributing positively to the wider green infrastructure.</p> <p>The promoter for LHR-NWR proposes to minimise impacts on existing landscape character and heritage assets.¹⁵³ The proposed mitigation would reduce the effects of the proposals on water, biodiversity, landscape and recreational features and would redevelop part of the Colne Valley Regional Park.</p> <p>Measures would include habitat creation areas, a diversion of the Colne Valley Way and improvements to recreational areas runway.</p> <p>The NPS includes the following: Adverse landscape and visual effects may be minimised through appropriate design (including choice of materials), and landscaping schemes. Materials and designs for the airport should be given careful consideration (5.217). Where green infrastructure is affected, the applicant should aim to ensure the functionality</p>

		<p>landscaping schemes. Materials and designs for the airport should be given careful consideration (5.215).</p> <p>Where green infrastructure is affected, the applicant should aim to ensure the functionality and connectivity of the green infrastructure network is maintained and any necessary works are undertaken, where possible, to mitigate any adverse impact and, where appropriate, to improve that network and other areas of open space, including appropriate access to National Trails and other public rights of way (5.117). Public rights of way, National Trails and other rights of access to land are important recreational facilities for walkers, cyclists and equestrians. The applicant is expected to take appropriate mitigation measures to address adverse effects on National Trails, other public rights of way and open access land and, where appropriate, to consider what opportunities there may be to improve access. In considering revisions to an existing right of way, consideration needs to be given to the use, character, attractiveness and convenience of the right of way (5.121)</p>	<p>and connectivity of the green infrastructure network is maintained and any necessary works are undertaken, where possible, to mitigate any adverse impact and, where appropriate, to improve that network and other areas of open space, including appropriate access to National Trails and other public rights of way (5.119). Public rights of way, National Trails and other rights of access to land are important recreational facilities for walkers, cyclists and equestrians. The applicant is expected to take appropriate mitigation measures to address adverse effects on National Trails, other public rights of way and open access land and, where appropriate, to consider what opportunities there may be to improve access. In considering revisions to an existing right of way, consideration needs to be given to the use, character, attractiveness and convenience of the right of way (5.123)</p>
Main report	7.6.1	As set out in section 3.3.20 above, measures to monitor the predicted significant environmental effects and uncertainties of the implementation of the Draft NPS are proposed in this section. In	As set out in section 3.3.20 above, measures to monitor the predicted significant environmental effects and uncertainties of the implementation of the NPS are proposed in this section. In this AoS, monitoring has been proposed where there are

		<p>this AoS, monitoring has been proposed where there are significant residual effects or uncertainties regarding significant effects in order to identify unforeseen adverse effects at an early stage and facilitating appropriate remedial action. The proposed monitoring can consider the baseline and the beneficial, cumulative, secondary and synergistic effects over the draft policy's lifespan.</p>	<p>significant residual effects or uncertainties regarding significant effects in order to identify unforeseen adverse effects at an early stage and facilitating appropriate remedial action. The proposed monitoring can consider the baseline and the beneficial, cumulative, secondary and synergistic effects over the policy's lifespan.</p>
Main report	Table 7-4 Column 4 (proposed monitoring), Row: Biodiversity (objective 7)	<ul style="list-style-type: none"> * Condition of European Sites (Natura 2000, Ramsar) identified as potentially affected by Draft NPS development, * Condition of Scientific Interest (SSSIs) identified as potentially affected by Draft NPS development * Condition of areas subject to enhancement measures * Condition of areas created as compensation 	<ul style="list-style-type: none"> * Condition of European Sites (Natura 2000, Ramsar) identified as potentially affected by NPS development, * Condition of Scientific Interest (SSSIs) identified as potentially affected by NPS development * Condition of areas subject to enhancement measures * Condition of areas created as compensation
Main report	8.1	DEVELOPMENT OF THE REVISED DRAFT AIRPORTS NPS	DEVELOPMENT OF THE AIRPORTS NPS
Main report	8.1.1	The Government is aiming to provide increased airport capacity for the UK by 2030. The proposed approach to how this will be achieved is set out in the Revised Draft Airports NPS.	The Government is aiming to provide increased airport capacity for the UK by 2030. The proposed approach to how this will be achieved is set out in the Airports NPS.
Main report	8.1.2	Before designating a NPS the Secretary of State must first undertake this Revised AoS (in accordance with the Strategic Environmental Assessment Regulations ("SEA Regulations")), which form part of the	Before designating the NPS the Secretary of State must first undertake this AoS (in accordance with the Strategic Environmental Assessment Regulations ("SEA Regulations")), which form part of the European Union's SEA

		European Union's SEA Directive (2001/42/EC).	Directive (2001/42/EC)).
Main report	8.1.3	The public, which includes statutory bodies, are currently being consulted on the Revised Draft NPS and Revised AoS for Airports. A number of other documents sit alongside the Revised Draft NPS and Revised AoS and these include a draft HRA, Equalities Assessment and Revised Health Impact Analysis.	The public, which includes statutory bodies were consulted on the NPS and AoS for Airports on two separate occasions in February 2017 and October 2017. A number of other documents sit alongside the NPS and AoS and these include a HRA, Equality Assessment and Health Impact Analysis.
Main report	8.1.4	Following consultation, the Airports NPS will be considered for designation by the Secretary of State. If the designation is then ratified by Parliament it will become national planning policy and must be considered when developing or expanding airports above a certain scale or capacity. The criteria are set out in Part 3 of the Planning Act 2008 (as amended by the Localism Act 2011), ("The Planning Act"). Developments that meet these criteria are known as NSIPs.	The Airports NPS has been laid before Parliament for a debate and a vote in the House of Commons. If the NPS is approved, the Secretary of State will then decide whether it should be designated and will make an oral or written statement confirming this decision. If designated, the NPS would provide the primary basis for decision making on development consent applications for a Northwest Runway at Heathrow Airport and would be an important and relevant consideration in respect of applications for new runway capacity and other airport infrastructure in London and the South East of England.
Main report	8.1.5	An AoS Statement (also known as post-adoption statement) will be published as soon as the Airports NPS achieves designation, and this will also set out how the environmental considerations and consultation responses have been taken into account when developing the Airports NPS; the reasons for choosing the preferred	The AoS Statement (also known as post-adoption statement) will accompany or follow any designated Airports NPS. This will set out how the environmental considerations and consultation responses have been taken into account when developing the Airports NPS; the reasons for choosing the preferred scheme in light of reasonable alternatives; and how the significant

		scheme in light of reasonable alternatives; and how the significant environmental effects of implementing the Airports NPS will be monitored.	environmental effects of implementing the Airports NPS will be monitored.
Main report	8.1.6	If you wish to comment on the Revised Draft Airports NPS, Revised AoS or other document, then you can do so on the DfT consultation website www.gov.uk/dft/heathrow-airport-expansion .	N/A
Main report	8.2.1	The Revised Draft Airports NPS identifies a location considered as being able to provide the required increase in UK air capacity. Because expansion of London Heathrow Airport will create additional capacity for at least 10 million passengers per year it meets the criteria for being considered as an NSIP. Before building can begin, a developer will need to obtain a DCO from the Secretary of State. It will be the role of the Planning Inspectorate to examine such an application and to make a recommendation to the Secretary of State on whether the application should be refused or approved. It will be the Secretary of State who makes a final decision.	The Airports NPS identifies a location considered as being able to provide the required increase in UK air capacity. Because expansion of London Heathrow Airport will create additional capacity for at least 10 million passengers per year it meets the criteria for being considered as an NSIP. Before building can begin, a developer will need to obtain a DCO from the Secretary of State. It will be the role of the Planning Inspectorate to examine such an application and to make a recommendation to the Secretary of State on whether the application should be refused or approved. It will be the Secretary of State who makes a final decision.
Main report	8.2.3	The EIA is likely to use much of the information within this AoS to inform the scope of the assessment. However, the EIA will be able to evaluate many of the impacts identified in this Revised AoS in further detail. This process would include further consultation, data collection and baseline	The EIA is likely to use much of the information within this AoS to inform the scope of the assessment. However, the EIA will be able to evaluate many of the impacts identified in this AoS in further detail. This process would include further consultation, data collection and baseline surveys. The EIA will be able to draw on more

		surveys. The EIA will be able to draw on more detailed project information to be developed as part of project design, such as surface access proposals and flight paths. Using this information, specific mitigation proposals would be developed. A HRA would also form part of the application.	detailed project information to be developed as part of project design, such as surface access proposals and flight paths. Using this information, specific mitigation proposals would be developed. A HRA would also form part of the application.
Main report	8.2.8	The developer will also assess the scheme for its environmental impacts at this time, in a process called EIA- The results will be set out in an Environmental Statement, along with how the impacts can be mitigated. This assessment will be informed by the contents of the AoS undertaken whilst the Draft NPS was being developed.	The developer will also assess the scheme for its environmental impacts at this time, in a process called EIA. The results will be set out in an Environmental Statement, along with how the impacts can be mitigated. This assessment will be informed by the contents of the AoS undertaken whilst the NPS was being developed.
Main report	8.2.16	The Draft Airports NPS forms the basis for the examination by the Planning Inspectorate.	The Airports NPS forms the basis for the examination by the Planning Inspectorate.
Main report	8.2.17	The Planning Inspectorate makes a recommendation to the Secretary of State within three months of the end of the six month examination period. The Secretary of State then has a further three months to make the decision on whether to grant or refuse Development Consent. The Secretary of State must decide the application in accordance with the Draft Airports NPS unless he or she is satisfied that to do so would	The Planning Inspectorate makes a recommendation to the Secretary of State within three months of the end of the six month examination period. The Secretary of State then has a further three months to make the decision on whether to grant or refuse Development Consent. The Secretary of State must decide the application in accordance with the Airports NPS unless he or she is satisfied that to do so would
A-1 Communit	Front	TOPIC BASED SCHEMES ASSESSMENT: AoS FOR CONSULTATION DRAFT	TOPIC BASED SCHEMES ASSESSMENT: AoS FOR AIRPORTS NPS

y		AIRPORTS NPS	
A-1 Community	Front	October 2017	June 2018
A-1 Community	1.1.2	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Draft Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the draft Airports NPS, including the outline masterplans supplied to the Airports Commission for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation package put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that wherever possible significant effects are avoided, reduced or offset.	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the Airports NPS, including the outline masterplans supplied to the Airports Commission for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation package put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that wherever possible significant effects are avoided, reduced or offset.
A-1 Community	Table 1.5, Row 5	N/A	Loss of industrial/employment land : Financial compensation and relocation
A-1 Community	Table 1.5 Column 1 (potential impact), Row 8	Loss of four pre-schools/nurseries	Loss of five pre-schools/nurseries

A-1 Community	Table 1.6 Column 1 (potential impact), Row 5	Loss of Punch Bowl Pub during construction	Loss of three pubs during construction
A-1 Community	Table 1.6, Row 7	N/A	Loss of part of the Colne Valley Regional Park : Relocation
A-1 Community	Table 1.6, Row 8	N/A	Loss of Public Rights of Way : Provision of new links to maintain connectivity
A-1 Community	Table 1.6, Row 9	N/A	Loss of cycle routes : Provision of new cycle routes once airport operational
A-1 Community	Table 1.7, Row 4	N/A	Loss of industrial/employment land : Financial compensation and relocation
A-1 Community	Table 1.7, Column 1 (potential impact), Row 9	Loss of Nursery schools in Longford and Sipson	Loss of Nursery schools in Longford, Sipson and Harmondsworth
A-1 Community	Table 1.7, Row 10	Loss of White Horse Pub at Longford : Financial compensation and relocation assistance	Loss of White Horse Pub and Kings Arms Pub at Longford : Financial compensation and/or relocation assistance
A-1 Community	Table 1.7, Row 13	N/A	Severance of section of the Colne Valley Way : Diversion
A-1 Community	Table 1.7, Row 14	N/A	Loss of Public Rights of Way : Provision of new links to maintain connectivity

A-1 Community	Table 1.7, Row 15	N/A	Loss of cycle routes : Provision of new cycle routes once airport operational
A-1 Community	1.8.2	The assessment carried out by the AC to determine the impact of the three schemes has considered impacts during both the construction phase (2020-2025) and the operational phase in 2030 . This is an assessment of the effects which are likely to be felt by communities which live in wards within close proximity to the schemes during the construction and operation phases of each scheme. Direct effects are considered to be those caused within the footprint of a scheme, such as direct loss of services or housing. Indirect effects are considered to be those experienced outside of the footprint of an scheme, such as effects caused by increased noise or traffic.	The assessment carried out by the AC to determine the impact of the three schemes has considered impacts during both the construction phase (2020-2025) and the operational phase in 2030 . This is an assessment of the effects which are likely to be felt by communities which live in wards within close proximity to the schemes during the construction and operation phases of each scheme. Direct effects are considered to be those caused within the footprint of a scheme, such as direct loss of services or housing. Indirect effects are considered to be those experienced outside of the footprint of a scheme, such as effects caused by increased noise or traffic.
A-1 Community	1.9.1	According to the Place Assessment , the number of existing residential properties within the airport land take area is estimated to be 168. The majority of this housing loss would be seen in rural areas between Gatwick and Crawley and between Gatwick and the M23, located within Crawley Borough. An additional 37 residential properties are within the 100m buffer around proposed transport infrastructure and could potentially be lost to the surface access improvements depending on detailed route and construction design. A total of four	According to the Place Assessment , the number of existing residential properties within the airport land take area is estimated to be 168. The majority of this housing loss would be seen in rural areas between Gatwick and Crawley and between Gatwick and the M23, located within Crawley Borough. An additional 37 residential properties are within the 100m buffer around proposed transport infrastructure and could potentially be lost to the surface access improvements depending on detailed route and construction design. A total of five children's nurseries or crèche's will be lost as a result of

		children's nurseries or crèche's will be lost as a result of LGW-2R as well as two places of worship, Trent care home, one charity facility, Crawley Rugby club, Public Rights of Way and part of Rowley Wood.	LGW-2R as well as two places of worship, Trent care home, one charity facility, Crawley Rugby Club, Public Rights of Way and part of Rowley Wood.
A-1 Community	1.9.30	According to the Place Assessment , the number of existing residential properties within the airport land take area is estimated to be 783. The majority of this housing loss would be seen in Hillingdon, Hounslow and Slough. Harmondsworth primary school is expected to be lost, along with Harmondsworth Community Hall, Sipson Community Centre, Heathrow Special Needs Centre in Longford, nursery schools in Longford and Sipson, the White Horse pub in Longford, and a number of recreational facilities and spaces such as Sipson Recreation Ground.	According to the Place Assessment , the number of existing residential properties within the airport land take area is estimated to be 783. The majority of this housing loss would be seen in Hillingdon, Hounslow and Slough. Harmondsworth primary school is expected to be lost, along with Harmondsworth Community Hall, Sipson Community Centre, Heathrow Special Needs Centre in Longford, nursery schools in Longford, Sipson and Harmondsworth, the White Horse and Kings Arms pubs in Longford, and a number of recreational facilities and spaces such as Sipson Recreation Ground.

<p>A-1 Community</p>	<p>Table Objective 1, Question 1, Column 2 (LGW-2R), Row 1</p>	<p>The loss of the following housing and community facilities⁴⁵:</p> <ul style="list-style-type: none"> * 168 residential properties likely to be required for airport expansion; * up to 37 residential properties could be required for surface access, since they fall within the buffer zone for construction works; * potential secondary impacts of relocated households on existing communities; * Trent House care home; * two places of worship (a church used by Seventh Day Adventists, and a Hindu temple); * one charity facility - Outreach 3 Way, which helps people with learning difficulties; * four pre-schools/ nurseries; * Crawley Rugby club, with its sporting and social facilities; * the northern part of Rowley Wood; * other formal and informal recreation sites; * public rights of way; * cycle routes; and * impacts on local journey times, either from severance or increased traffic. <p>Mitigation has been recommended.</p>	<p>The loss of the following housing and community facilities⁴⁵:</p> <ul style="list-style-type: none"> * 168 residential properties likely to be required for airport expansion; * up to 37 residential properties could be required for surface access, since they fall within the buffer zone for construction works; * potential secondary impacts of relocated households on existing communities; * Trent House care home; * loss of industrial/employment land; * two places of worship (a church used by Seventh Day Adventists, and a Hindu temple); * one charity facility - Outreach 3 Way, which helps people with learning difficulties; * five pre-schools/ nurseries; * Crawley Rugby club, with its sporting and social facilities; * the northern part of Rowley Wood; * other formal and informal recreation sites; * public rights of way; * cycle routes; and * impacts on local journey times, either from severance or increased traffic. <p>Mitigation has been recommended.</p>
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<p>A-1 Community</p>	<p>Table Objective 1, Question 1, Column 3 (LHR-ENR), Row 1</p>	<p>The loss of the following housing and community facilities⁴⁶:</p> <ul style="list-style-type: none"> * 242 residential properties likely to be required for airport expansion; * up to 165 residential properties could be required for surface access, since they fall within the potential buffer zone for construction works; * potential secondary impacts of relocated households on existing communities; * loss of industrial/employment land; * loss of Punch Bowl pub during construction; * noise implications for Pippins Primary School; * part of the Colne Valley regional park; * other formal and informal recreation sites; * severance of section of the Colne Valley Way running from Colnbrook to Horton; * severance of Poyle Road, which currently links Poyle and Colnbrook with Wraysbury and Horton; and * severance of route to Poyle from the west along Bath Road. <p>Mitigation has been recommended.</p>	<p>The loss of the following housing and community facilities⁴⁶:</p> <ul style="list-style-type: none"> * 242 residential properties likely to be required for airport expansion; * up to 165 residential properties could be required for surface access, since they fall within the potential buffer zone for construction works; * potential secondary impacts of relocated households on existing communities; * loss of industrial/employment land; * loss of three pubs during construction; * noise implications for Pippins Primary School; * part of the Colne Valley Regional Park; * other formal and informal recreation sites; * public rights of way; * cycle routes; * severance of section of the Colne Valley Way running from Colnbrook to Horton; * severance of Poyle Road, which currently links Poyle and Colnbrook with Wraysbury and Horton; and * severance of route to Poyle from the west along Bath Road. <p>Mitigation has been recommended.</p>
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A-1 Community	Table Objective 1, Question 1, Column 4 (LHR-NWR), Row 1	<p>The loss of the following housing and community facilities⁴⁷:</p> <ul style="list-style-type: none"> * 783 residential properties likely to be required for airport expansion; * up to 289 residential properties could be required for surface access, since they fall within the potential buffer zone for construction works; * potential secondary impacts of relocated households on existing communities; * Harmondsworth Primary School; * Harmondsworth Community hall (including the Wonderland day nursery); * Sipson community centre; * Heathrow special needs centre in Longford; * Nursery schools in Longford and Sipson; * White Horse pub at Longford; * Sipson recreation ground and facilities; * other formal and informal recreation sites; * part of the Colne Valley regional park; and * impacts on local journey times and severance, particularly from A4/M25/Southern Rail Access works. <p>Mitigation has been recommended.</p>	<p>The loss of the following housing and community facilities⁴⁷:</p> <ul style="list-style-type: none"> * 783 residential properties likely to be required for airport expansion; * up to 289 residential properties could be required for surface access, since they fall within the potential buffer zone for construction works; * potential secondary impacts of relocated households on existing communities; * loss of industrial/employment land; * Harmondsworth Primary School; * Harmondsworth Community hall (including the Wonderland day nursery); * Sipson community centre; * Heathrow special needs centre in Longford; * Nursery schools in Longford, Sipson and Harmondsworth; * White Horse and Kings Arms pubs at Longford; * Sipson recreation ground and facilities; * other formal and informal recreation sites; * public rights of way; * cycle routes; * part of the Colne Valley Regional Park; and * impacts on local journey times and severance, particularly from A4/M25/Southern Rail Access works. <p>Mitigation has been recommended.</p>
A-1 Community	Footnote 85	WSP, 2017. AoS Appendix 4, Noise, published as part of the draft Airports NPS Consultation documentation.	WSP, 2017. AoS Appendix 4, Noise, published as part of the Airports NPS documentation.

A-1 Community	1.12.1	<p>Housing – Each scheme will result in the relocation of housing, which may have a negative effect on community viability. LGW-2R is expected to require the relocation of 168 residential properties, LHR-NWR the relocation of 783 residential properties and LHR-ENR the relocation of 242 residential properties. Each of the three schemes will also result in the loss of community facilities, which could also have a negative effect on community viability. In the case of LGW-2R, four children’s nurseries or crèche’s, two places of worship, Trent care home, one charity facility, Crawley Rugby club, Public Rights of Way and part of Rowley Wood are also likely to be lost. In the case of LHR-ENR, the loss of the Punch Bowl pub and industrial / employment land is expected, in addition to noise implications for Pippins Primary School. In the case of LHR-NWR, Harmondsworth Primary School is expected to be lost, along with Harmondsworth Community Hall, Sipson Community Centre, Heathrow Special Needs Centre in Longford, nursery schools in Longford and Sipson, the White Horse pub in Longford, and a number of recreational facilities and spaces such as Sipson Recreation Ground. Although some mitigation is provided in terms of financial compensation and other measures, each of the three schemes is likely to result in a substantial loss of</p>	<p>Housing and community facilities – Each scheme will result in the relocation of housing, and industrial/employment land, which may have a negative effect on community viability. LGW-2R is expected to require the relocation of 168 residential properties, LHR-NWR the relocation of 783 residential properties and LHR-ENR the relocation of 242 residential properties. Each of the three schemes will also result in the loss of community facilities, which could also have a negative effect on community viability. In the case of LGW-2R, five children’s nurseries or crèche’s, two places of worship, Trent House care home, one charity facility, Crawley Rugby Club, Public Rights of Way and part of Rowley Wood are also likely to be lost. In the case of LHR-ENR, the loss of three pubs, Public Rights of Way, cycle paths, recreational space and open space is expected, in addition to noise implications for Pippins Primary School. In the case of LHR-NWR, Harmondsworth Primary School is expected to be lost, along with Harmondsworth Community Hall, Sipson Community Centre, Heathrow Special Needs Centre in Longford, nursery schools in Longford, Sipson and Harmondsworth, the White Horse and Kings Arms pubs in Longford, Public Rights of Way, cycle paths and a number of recreational facilities and spaces such as Sipson Recreation Ground. Although some mitigation is provided in terms of financial compensation and other measures, each of the three schemes is likely to result in a substantial loss of housing and</p>
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		<p>housing and community facilities that cannot be reversed. Furthermore, cumulative effects may be experienced by the community as a result of infrastructure projects such as Crossrail, in both Heathrow schemes. As a result, the overall effects on community viability caused by loss of housing and community facilities as a result of each scheme are considered to be significant and negative.</p>	<p>community facilities that cannot be reversed. Furthermore, cumulative effects may be experienced by the community as a result of infrastructure projects such as Crossrail, in both Heathrow schemes. As a result, the overall effects on community viability caused by loss of housing and community facilities as a result of each scheme are considered to be significant and negative.</p>
A-1 Community	1.12.6	<p>Age - In each of the three scheme's study area, the population tends to be younger than regional and national averages. Therefore, there may be disproportionate effects on younger people in the area due to housing and community facilities loss and severance. The LGW-2R will require the loss of one park. The LHR-NWR will require the relocation of Harmondsworth Primary School as well as the loss of five playgrounds and four public open spaces, including open space within Harmondsworth Moor. The LHR-ENR will not require any relocation of community facilities specifically for children but will require the loss of three public open spaces,</p>	<p>Age - In each of the three scheme's study area, the population tends to be younger than regional and national averages. Therefore, there may be disproportionate effects on younger people in the area due to housing and community facilities loss and severance. LGW-2R will require the loss of one park. LHR-NWR will require the relocation of Harmondsworth Primary School as well as the loss of five playgrounds and four public open spaces, including open space within Harmondsworth Moor and the Colne Valley Regional Park. LHR-ENR will not require any relocation of community facilities specifically for children but will require the loss of three public open spaces, including two playgrounds, and sections of the Colne Valley Regional Park.</p>

		including two playgrounds.	
A-2 Quality of Life	Front	TOPIC BASED SCHEMES ASSESSMENT: AOS FOR REVISED DRAFT AIRPORTS NPS	TOPIC BASED SCHEMES ASSESSMENT: AOS FOR AIRPORTS NPS
A-2 Quality of Life	Front	October 2017	June 2018
A-2 Quality of Life	2.1.2	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Revised Draft Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the Revised Draft Airports NPS, including the outline masterplans supplied to the Airports Commission (AC) for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation packages put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that wherever possible significant effects are avoided, reduced or offset.	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the Airports NPS, including the outline masterplans supplied to the Airports Commission (AC) for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation packages put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that wherever possible significant effects are avoided, reduced or offset.

A-2 Quality of Life	2.4.4	An equalities assessment has also been undertaken for the Revised Draft Airports NPS. Population sub-groups identified as vulnerable or sensitive to particular exposures include people living in proximity to the airports that feature in the three schemes for expansion, and people living close to any potential development or areas of expansion that are likely to be built or extended as part of any of the schemes for airport expansion. These vulnerable population groups are detailed within the equalities assessment and HIA and are not assessed separately for in the QoL topic.	An equalities assessment has also been undertaken for the Airports NPS. Population sub-groups identified as vulnerable or sensitive to particular exposures include people living in proximity to the airports that feature in the three schemes for expansion, and people living close to any potential development or areas of expansion that are likely to be built or extended as part of any of the schemes for airport expansion. These vulnerable population groups are detailed within the equalities assessment and HIA and are not assessed separately for in the QoL topic.
A-2 Quality of Life	2.9.45	Loss of the Punch Bowl Pub and industrial / employment land is expected, which will have a negative impact on QoL for those sections of the community who use pubs or those whose employment is affected by the loss of employment land.	Loss of the three pubs and industrial/employment land is expected, which will have a negative impact on QoL for those sections of the community who use pubs or those whose employment is affected by the loss of employment land.
A-2 Quality of Life	Table Objective 3, Question 5, Column 4 (LHR-NWR), section 6	<p>Access to nature/ and cultural heritage Negative impact on the wellbeing of users of the recreational area and local residents who value the presence of these amenity areas.</p> <p>Indirect overall benefit to wellbeing through improving Access to Nature and the living environment, involving extensive mitigation and improvement measures.</p>	<p>Access to nature and cultural heritage Negative impact on the wellbeing of users of high value recreational areas including the Colne Valley Regional Park, and local residents who value the presence of these amenity areas.</p> <p>Indirect overall benefit to wellbeing through improving Access to Nature and the living environment, involving extensive mitigation and improvement measures.</p>

A-2 Quality of Life	2.12.9	<p>The LHR-ENR scheme is predicted to have a negative impact on QoL through:</p> <ul style="list-style-type: none"> * Additional traffic volume causing additional distress and anxiety to local residents during the construction phase; * Loss of housing and displacement and for the remaining residents who shall experience the disruption of an extended construction period during the construction phase; * Loss of amenity and social network due to loss and displacement of the Punch Bowl Pub during the operational phase; * Loss of industrial / employment land, leading to negative impacts on employment; * Additional pressures on existing facilities by the occupants of relocated households; * Increases in the population exposed to aircraft noise causing annoyance; * Impaired learning of school children who are at risk of exposure to excessive aircraft noise levels during the operational phase; * Several thousand local residents as well as other sensitive receptors being exposed to worsening air quality; * Loss of habitat and recreational areas reducing access to the environment; * Direct loss of, indirect effects on sites of cultural heritage; and * Increased risk of flooding through loss of floodplain and increase in non-permeable surface. 	<p>The LHR-ENR scheme is predicted to have a negative impact on QoL through:</p> <ul style="list-style-type: none"> * Additional traffic volume causing additional distress and anxiety to local residents during the construction phase; * Loss of housing and displacement and for the remaining residents who shall experience the disruption of an extended construction period during the construction phase; * Loss of amenity and social network due to loss and displacement of the Punch Bowl Pub during the operational phase; * Loss of industrial / employment land, leading to negative impacts on employment; * Additional pressures on existing facilities by the occupants of relocated households; * Increases in the population exposed to aircraft noise causing annoyance; * Impaired learning of school children who are at risk of exposure to excessive aircraft noise levels during the operational phase; * Several thousand local residents as well as other sensitive receptors being exposed to worsening air quality; * Loss of habitat and recreational areas reducing access to the environment; * Direct loss , indirect effects and cumulative impacts on sites of cultural heritage; and * Increased risk of flooding through loss of floodplain and increase in non-permeable surface.
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A-2 Quality of Life	2.12.15	<p>The LHR-NWR scheme is predicted to have a negative impact on QoL through:</p> <ul style="list-style-type: none"> * Disruption to the road network during construction will result in extended journey times, degraded journey ambience and increased congestion during the construction phase; * Loss of housing, and displacement and for the remaining residents experiencing the disruption of an extended construction period; * Loss of amenity and social network due to loss and displacement of Harmondsworth Primary School and community facilities during the construction phase; * Loss of recreation and amenity from the removal of the War Memorial Recreation Ground during the construction phase; * Additional pressures on existing facilities by the occupants of relocated households; * Increases in the population exposed to aircraft noise causing annoyance; * Impaired learning of schoolchildren at risk of exposure to excessive aircraft noise levels; * Several thousand local residents as well as other sensitive receptors being exposed to worsening air quality; * Loss of access to the environment and recreational areas for local residents during the construction phase; * Direct loss of and indirect effects on sites 	<p>The LHR-NWR scheme is predicted to have a negative impact on QoL through:</p> <ul style="list-style-type: none"> * Disruption to the road network during construction will result in extended journey times, degraded journey ambience and increased congestion during the construction phase; * Loss of housing, and displacement and for the remaining residents experiencing the disruption of an extended construction period; * Loss of amenity and social network due to loss and displacement of Harmondsworth Primary School and community facilities during the construction phase; * Loss of recreation and amenity from the removal of the War Memorial Recreation Ground during the construction phase; * Additional pressures on existing facilities by the occupants of relocated households; * Increases in the population exposed to aircraft noise causing annoyance; * Impaired learning of schoolchildren at risk of exposure to excessive aircraft noise levels; * Several thousand local residents as well as other sensitive receptors being exposed to worsening air quality; * Loss of access to the environment and recreational areas for local residents during the construction phase; * Direct loss, and indirect effects and cumulative impacts on sites of cultural heritage; and * Increased risk of flooding through loss of floodplain and increase in non-permeable
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		of cultural heritage; and * Increased risk of flooding through loss of floodplain and increase in non-permeable surface.	surface.
A-3 Economy	Front	TOPIC BASED SCHEMES ASSESSMENT: AOS FOR CONSULTATION DRAFT AIRPORTS NPS	TOPIC BASED SCHEMES ASSESSMENT: AOS FOR AIRPORTS NPS
A-3 Economy	Front	October 2017	June 2018
A-3 Economy	3.1.2	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the draft Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the draft Airports NPS, including the outline masterplans supplied to the Airports Commission (AC) for the three shortlisted schemes. This AoS considers the	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the Airports NPS, including the outline masterplans supplied to the Airports Commission (AC) for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation

		impacts of expansion without the benefits of the mitigation package put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that, wherever possible, significant effects are avoided, reduced or offset.	package put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that, wherever possible, significant effects are avoided, reduced or offset.
A-3 Economy	Footer 20	WSP, 2017. <i>AoS Appendix 1, Community</i> , published as part of the draft Airports NPS Consultation documentation.	WSP, 2017. <i>AoS Appendix 1, Community</i> , published as part of the Airports NPS Consultation documentation.
A-3 Economy	Footer 21	WSP, 2017. <i>AoS Appendix 2, Quality of Life</i> , published as part of the draft Airports NPS Consultation documentation.	WSP, 2017. <i>AoS Appendix 2, Quality of Life</i> , published as part of the Airports NPS Consultation documentation.
A-4 Noise	Front	TOPIC BASED SCHEMES ASSESSMENT: AoS FOR CONSULTATION DRAFT AIRPORTS NPS	TOPIC BASED SCHEMES ASSESSMENT: AoS FOR AIRPORTS NPS
A-4 Noise	Front	October 2017	June 2018
A-4 Noise	4.1.3	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Draft Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the Revised Draft Airports NPS, including the outline masterplans supplied to the Airports Commission (AC) for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the Airports NPS, including the outline masterplans supplied to the Airports Commission (AC) for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation package put forward by scheme promoters, unless stated otherwise. The Government has

		mitigation package put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that wherever possible significant effects are avoided, reduced or offset.	outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that wherever possible significant effects are avoided, reduced or offset.
A-5 Biodiversity	Front	TOPIC BASED SCHEMES ASSESSMENT: AoS FOR CONSULTATION DRAFT AIRPORTS NPS	TOPIC BASED SCHEMES ASSESSMENT: AoS FOR AIRPORTS NPS
A-5 Biodiversity	Front	October 2017	June 2018
A-5 Biodiversity	5.1.2	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Draft Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the draft Airports NPS, including the outline masterplans supplied to the Airports Commission for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation package put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the Airports NPS, including the outline masterplans supplied to the Airports Commission for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation package put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that wherever possible significant effects are avoided, reduced or offset.

		wherever possible significant effects are avoided, reduced or offset.	
A-5 Biodiversity	5.6.8	There are four LNRs within 5 km of the LGW-2R scheme boundary, with two within 2 km (Edolph's Copse LNR and Grattons Park LNR).	There are six LNRs within 5 km of the LGW-2R scheme boundary, with three within 2 km (Edolph's Copse LNR and Grattons Park LNR).
A-5 Biodiversity	5.6.15	There are 39 SSSIs and four NNRs within 15 km of the proposed scheme. There are eight SSSIs within 5 km, the following four of which are within 2 km of the proposed boundary: Wraysbury Reservoir SSSI; Wraysbury and Hythe End Gravel Pits SSSI; Wraysbury No 1 Gravel Pit SSSI; and Staines Moor SSSI. Staines Moor SSSI is within the footprint of the scheme. All SSSIs within the 5 km buffer are in either favourable or unfavourable recovering status barring a small section (under 2%) of Staines Moor SSSI in unfavourable declining condition.	There are 40 SSSIs and four NNRs within 15 km of the proposed scheme. There are eight SSSIs within 5 km, the following four of which are within 2 km of the proposed boundary: Wraysbury Reservoir SSSI; Wraysbury and Hythe End Gravel Pits SSSI; Wraysbury No 1 Gravel Pit SSSI; and Staines Moor SSSI. Staines Moor SSSI is within the footprint of the scheme. All SSSIs within the 5 km buffer are in either favourable or unfavourable recovering status barring a small section (under 2%) of Staines Moor SSSI in unfavourable declining condition.
A-5 Biodiversity	5.6.22	There are 34 SSSIs and four NNRs within 15 km of the proposed scheme. There are seven SSSIs within 5 km, with Wraysbury Reservoir SSSI and Staines Moor SSSI. All SSSIs within the 5 km buffer are in either favourable or unfavourable recovering	There are 35 SSSIs and four NNRs within 15 km of the proposed scheme. There are seven SSSIs within 5 km, with Wraysbury Reservoir SSSI and Staines Moor SSSI. All SSSIs within the 5 km buffer are in either favourable or unfavourable recovering status barring a small section (under

		status barring a small section (under 2%) of Staines Moor SSSI in unfavourable declining condition.	2%) of Staines Moor SSSI in unfavourable declining condition.
A-5 Biodiversity	5.6.23	There are nine LNRs within 5 km of the scheme boundary, with five within 2 km (Cranebank LNR; Bedfont Lakes LNR; Hounslow Heath LNR; Arthur Jacobs Nature Reserve LNR; and, Pevensley Road LNR).	There are seven LNRs within 5 km of the scheme boundary, with five within 2 km (Cranebank LNR; Bedfont Lakes LNR; Hounslow Heath LNR; Arthur Jacobs Nature Reserve LNR; and, Pevensley Road LNR).
A-5 Biodiversity	5.9.48	Further investigation as to the effects of the likely changes in quality and quantity of water on the interest features of the site will be necessary at the project-level HRA once further details are available. However, for the purposes of the AA undertaken for the Draft Airports NPS, recourse is given to the precautionary principle and adverse effects are considered likely on the integrity of the European sites. The LHR-ENR scheme involves extending the existing northern runway to the west, and operating in dual mode with landings and departures on the same runway at the same time. This will mean that the western threshold of the extended runway will be significantly closer to the European sites.	Further investigation as to the effects of the likely changes in quality and quantity of water on the interest features of the site will be necessary at the project-level HRA once further details are available. However, for the purposes of the AA undertaken for the Airports NPS, recourse is given to the precautionary principle and adverse effects are considered likely on the integrity of the European sites. The LHR-ENR scheme involves extending the existing northern runway to the west, and operating in dual mode with landings and departures on the same runway at the same time. This will mean that the western threshold of the extended runway will be significantly closer to the European sites.
A-6 Soils	Front	TOPIC BASED SCHEMES ASSESSMENT: AoS FOR CONSULTATION DRAFT AIRPORTS NPS	TOPIC BASED SCHEMES ASSESSMENT: AoS FOR AIRPORTS NPS
A-6 Soils	Front	October 2017	June 2018

A-6 Soils	6.1.2	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Draft Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the draft Airports NPS, including the outline masterplans supplied to the Airports Commission for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation packages put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that wherever possible significant effects are avoided, reduced or offset.	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the Airports NPS, including the outline masterplans supplied to the Airports Commission for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation packages put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that wherever possible significant effects are avoided, reduced or offset.
A-7 Water	Front	TOPIC BASED SCHEMES ASSESSMENT: DRAFT AoS FOR AIRPORTS NPS	TOPIC BASED SCHEMES ASSESSMENT: AoS FOR AIRPORTS NPS
A-7 Water	Front	October 2017	June 2018
A-7 Water	7.1.2	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Draft Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the draft Airports NPS, including the outline masterplans supplied to	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the Airports NPS, including the outline masterplans supplied to the Airports Commission for the three shortlisted

		<p>the Airports Commission for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation package put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that wherever possible significant effects are avoided, reduced or offset.</p>	<p>schemes. This AoS considers the impacts of expansion without the benefits of the mitigation package put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that wherever possible significant effects are avoided, reduced or offset.</p>
A-7 Water	7.9.18	<p>Significant watercourse replacement with diverted/realigned channels is proposed with approximately 12km of watercourse impacted. The diversions of the Colne Brook and Poyle Channel, approximately 5km around the end of the runway, would be technically difficult and are considered likely to have significant effects on the hydromorphology and WFD compliance, as the scheme would involve culverting of around 12km of additional culverts. This could have impacts on channel processes, ecology and fisheries.</p>	<p>Significant watercourse replacement with diverted/realigned channels is proposed with approximately 12 km of watercourse impacted. The diversions of the Colne Brook and Poyle Channel, approximately 5 km around the west end of the runway, would be technically difficult and are considered likely to have significant effects on the hydromorphology, geomorphology and WFD compliance, as the scheme would involve culverting of around 12 km of additional culverts. The Longford River, the Duke of Northumberland's River, River Colne and Wraysbury River would be culverted underneath the proposed runway. This could have impacts on channel processes, ecology and fisheries.</p>

A-7 Water	7.9.28	<p>Significant watercourse replacement with diverted/realigned channels is proposed with approximately 12km of watercourse impacted. The diversions of the Colne Brook and Poyle Channel approximately 5km around the end of the runway would be technically difficult and are considered likely to have significant effects on the hydromorphology. The WFD aims to enhance and maintain good status of all waterbodies, this scheme would involve culverting of around 3km of additional culverts. Furthermore the River Colne and Wraysbury River along with the Duke of Northumberland's and Longford Rivers would be merged into two culverts, reducing total channel length and change morphological and ecological conditions. This could have impacts on channel processes, ecology and fisheries.</p>	<p>Significant watercourse replacement with diverted/realigned channels is proposed with approximately 12 km of watercourse impacted. The diversion of approximately 1 km of the Colne Brook around the western end of a new runway, diversion of parts of the Duke of Northumberland's River and River Colne to the south of the new runway and creation of a new channel (the 'River Colne Spur') would be technically difficult and are considered likely to have significant effects on hydromorphology and geomorphology. The WFD aims to enhance and maintain good status of all waterbodies, this scheme would involve culverting of around 3 km of additional culverts. Furthermore the River Colne and Wraysbury River would be combined into a single culvert, and the Duke of Northumberland's and Longford Rivers would be combined into a single culvert, reducing total channel length and change morphological and ecological conditions. This could have impacts on channel processes, ecology and fisheries.</p>
A-8 Air Quality	Front	TOPIC BASED SCHEMES ASSESSMENT: AOS FOR REVISED DRAFT AIRPORTS NPS	TOPIC BASED SCHEMES ASSESSMENT: AOS FOR AIRPORTS NPS
A-8 Air Quality	Front	October 2017	June 2018
A-8 Air Quality	Front	This document has been updated to take account of DfT analysis of airport demand and UK Government's 2017 AQ Plan	N/A

A-8 Air Quality	8.1.2	<p>By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the revised Draft Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the revised Draft Airports NPS, including the outline masterplans supplied to the Airports Commission for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation package put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that wherever possible significant effects are avoided, reduced or offset.</p>	<p>By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the Airports NPS, including the outline masterplans supplied to the Airports Commission for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation package put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that wherever possible significant effects are avoided, reduced or offset.</p>
A-8 Air Quality	8.3.6	<p>The Government published an Air Quality Plan for Nitrogen Dioxide (the 2015 Plan) and associated evidence base including Pollution Climate Mapping (PCM) modelling in December 2015, after the AC's work was concluded. In November 2016, the High Court ordered the Government to produce a modified Air Quality Plan. This was published in July 2017 (2017 Plan).</p>	<p>The Government published an Air Quality Plan for Nitrogen Dioxide (the 2015 Plan) and associated evidence base including Pollution Climate Mapping (PCM) modelling in December 2015, after the AC's work was concluded. In November 2016, the High Court ordered the Government to produce a modified Air Quality Plan. This was published in July 2017 (2017 Plan). The Government has now also published for consultation a draft Clean Air Strategy, which sets out the Government's approach for reducing air</p>

			pollution from all sources.
A-8 Air Quality	Footnote 21	WSP Parsons Brinckerhoff, February 2017. Updated Air Quality Re-Analysis, published as part of the draft Airports NPS Consultation documentation	WSP, February 2017. Updated Air Quality Re-Analysis, published as part of the draft Airports NPS Consultation documentation
A-9 Carbon	Front	TOPIC BASED SCHEMES ASSESSMENT: AOS FOR REVISED DRAFT AIRPORTS NPS	TOPIC BASED SCHEMES ASSESSMENT: AOS FOR AIRPORTS NPS
A-9 Carbon	Front	This document has been updated to reflect DfT's latest aviation forecasts and analysis around airport expansion	N/A
A-9 Carbon	Front	October 2017	June 2018
A-9 Carbon	9.1.2	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the draft Airports NPS. The AoS considers alternatives to the government's preferred scheme as set out in the draft Airports NPS, including the outline masterplans supplied to the Airports Commission (AC) for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation packages put forward by scheme promoters, unless stated otherwise. The government has outlined that	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Airports NPS. The AoS considers alternatives to the government's preferred scheme as set out in the Airports NPS, including the outline masterplans supplied to the Airports Commission (AC) for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation packages put forward by scheme promoters, unless stated otherwise. The government has outlined that it expects a significant mitigation package to be put in place by the promoter of its

		it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that, wherever possible, significant effects are avoided, reduced or offset.	preferred scheme to ensure that, wherever possible, significant effects are avoided, reduced or offset.
A-9 Carbon	Table 9.3, Row 1	Passenger and staff surface access 9.6 9.6 7.6 7.6 9.1 9.1	Passenger and staff surface access 9.7 9.7 8.1 8.1 9.5 9.5
A-9 Carbon	Table 9.3, Row 4	Total 14.8 14.8 19.9 19.9 23.1 23.1	Total 14.9 14.9 20.3 20.3 23.6 23.6
A-9 Carbon	Table 9.4, Row 3	Passenger and Staff Surface Access Emissions (MtCO2) 0.24 0.21 0.24 0.21 0.25 0.25 0.25 0.25	Passenger and Staff Surface Access Emissions (MtCO2) 0.24 0.22 0.24 0.22 0.25 0.42 0.25 0.42
A-9 Carbon	Table 9.5, Row 3	Passenger and Staff Surface Access Emissions (MtCO2) 0.44 0.45 0.44 0.45 0.53 0.45 0.53 0.45	Passenger and Staff Surface Access Emissions (MtCO2) 0.46 0.48 0.46 0.48 0.55 0.61 0.55 0.61
A-9 Carbon	Table 9.6, Row 3	Passenger and Staff Surface Access Emissions (MtCO2) 0.44 0.45 0.44 0.45 0.52 0.61 0.52 0.61	Passenger and Staff Surface Access Emissions (MtCO2) 0.46 0.48 0.46 0.48 0.55 0.64 0.55 0.64

<p>A-9 Carbon</p>	<p>Table Objective 14, Question 27, Column 2 (LGW-2R), Row: Description of Impact (including receptor)</p>	<p>Over the 60-year Appraisal Period (2025 to 2085), under the carbon-capped scenario, it is forecast that the development of LGW-2R will result in the emission of a further 193.9 MtCO₂ from the expanded airport over the baseline case⁴².</p> <p>Over the same Appraisal Period under the carbon-traded scenario, it is forecast that the development of LGW-2R will result in the emission of a further 200.7 MtCO₂ from the expanded airport over the baseline case⁴³.</p> <p>In both cases, construction emissions will contribute a further 3.9 MtCO₂e to UK emissions, however, this is a one-off impact at the beginning of the appraisal period⁴⁴.</p>	<p>Over the 60-year Appraisal Period (2025 to 2085), under the carbon-capped scenario, it is forecast that the development of LGW-2R will result in the emission of a further 192.1 MtCO₂ from the expanded airport over the baseline case⁴².</p> <p>Over the same Appraisal Period under the carbon-traded scenario, it is forecast that the development of LGW-2R will result in the emission of a further 200.5 MtCO₂ from the expanded airport over the baseline case⁴³.</p> <p>In both cases, construction emissions will contribute a further 3.9 MtCO₂e to UK emissions, however, this is a one-off impact at the beginning of the appraisal period⁴⁴.</p>
<p>A-9 Carbon</p>	<p>Table Objective 14, Question 27, Column 3 (LHR-ENR), Row: Description of Impact (including receptor)</p>	<p>Over the 60-year Appraisal Period (2026 to 2086), under the carbon-capped scenario, it is forecast that the development of LHR-ENR will result in the emission of a further 257.6 MtCO₂ from the expanded airport over the baseline case⁴⁵.</p> <p>Over the same Appraisal Period under the carbon-traded scenario, it is forecast that the development of LHR-ENR will result in the emission of a further 326.4 MtCO₂ from the expanded airport over the baseline case⁴⁶.</p>	<p>Over the 60-year Appraisal Period (2026 to 2086), under the carbon-capped scenario, it is forecast that the development of LHR-ENR will result in the emission of a further 256.1 MtCO₂ from the expanded airport over the baseline case⁴⁵.</p> <p>Over the same Appraisal Period under the carbon-traded scenario, it is forecast that the development of LHR-ENR will result in the emission of a further 266.7 MtCO₂ from the expanded airport over the baseline case⁴⁶.</p> <p>In both cases, construction emissions will</p>

		In both cases, construction emissions will contribute a further 10.1 MtCO ₂ e to UK emissions, however this is a one-off impact at the beginning of the appraisal period ⁴⁷ .	contribute a further 10.1 MtCO ₂ e to UK emissions, however this is a one-off impact at the beginning of the appraisal period ⁴⁷ .
A-9 Carbon	Table Objective 14, Question 27, Column 4 (LHR-NWR), Row: Description of Impact (including receptor)	<p>Over the 60-year Appraisal Period (2026 to 2086), under the carbon-capped scenario, it is forecast that the development of LHR-NWR will result in the emission of a further 310.3 MtCO₂ from the expanded airport over the baseline case⁴⁸.</p> <p>Over the same Appraisal Period under the carbon-traded scenario, it is forecast that the development of LHR-NWR will result in the emission of a further 326.4 MtCO₂ from the expanded airport over the baseline case⁴⁹.</p> <p>In both cases, construction emissions will contribute a further 11.3 MtCO₂e to UK emissions, however this is a one-off impact at the beginning of the appraisal period⁵⁰.</p>	<p>Over the 60-year Appraisal Period (2026 to 2086), under the carbon-capped scenario, it is forecast that the development of LHR-NWR will result in the emission of a further 308.5 MtCO₂ from the expanded airport over the baseline case⁴⁸.</p> <p>Over the same Appraisal Period under the carbon-traded scenario, it is forecast that the development of LHR-NWR will result in the emission of a further 327.1 MtCO₂ from the expanded airport over the baseline case⁴⁹.</p> <p>In both cases, construction emissions will contribute a further 11.3 MtCO₂e to UK emissions, however this is a one-off impact at the beginning of the appraisal period⁵⁰.</p>

<p>A-9 Carbon</p>	<p>Table Objective 14, Question 28, Column 2 (LGW-2R) Row: Description of Impact (including receptor)</p>	<p>Over the 60-year Appraisal Period (2025 to 2085), under the carbon-traded scenario, it is forecast that the development of LGW-2R will result in the emission of an additional 9.6 MtCO₂ at the expanded airport due to Passenger and Staff Surface Access over the baseline case⁵¹.</p> <p>In DfT's revised carbon-capped scenario, demand is unaffected by the abatement measures implemented, so the surface access CO₂ estimates are the same as in the carbon-traded Case</p> <p>Emissions from freight transport movements are also likely to rise, but these were not quantified in DfT's assessment. It is recommended that they be assessed by an applicant at the time of detailed design.</p>	<p>Over the 60-year Appraisal Period (2025 to 2085), under the carbon-traded scenario, it is forecast that the development of LGW-2R will result in the emission of an additional 9.7 MtCO₂ at the expanded airport due to Passenger and Staff Surface Access over the baseline case⁵¹.</p> <p>In DfT's revised carbon-capped scenario, demand is unaffected by the abatement measures implemented, so the surface access CO₂ estimates are the same as in the carbon-traded Case</p> <p>Emissions from freight transport movements are also likely to rise, but these were not quantified in DfT's assessment. It is recommended that they be assessed by an applicant at the time of detailed design.</p>
<p>A-9 Carbon</p>	<p>Table Objective 14, Question 28, Column 3 (LHR-ENR) Row: Description of Impact (including receptor)</p>	<p>Over the 60-year Appraisal Period (2026 to 2086), under the carbon-traded scenario, it is forecast that the development of LHR-ENR will result in the emission of an additional 7.6 MtCO₂ at the expanded airport due to Passenger and Staff Surface Access over the baseline case⁵².</p> <p>In DfT's revised carbon-capped scenario demand is unaffected by the abatement measures implemented, so the surface access CO₂ estimates are the same as in the carbon-traded Case</p>	<p>Over the 60-year Appraisal Period (2026 to 2086), under the carbon-traded scenario, it is forecast that the development of LHR-ENR will result in the emission of an additional 8.1 MtCO₂ at the expanded airport due to Passenger and Staff Surface Access over the baseline case⁵².</p> <p>In DfT's revised carbon-capped scenario demand is unaffected by the abatement measures implemented, so the surface access CO₂ estimates are the same as in the carbon-traded Case</p>

		<p>Emissions from freight transport movements are also likely to rise, but these were not quantified in DfT's assessment. It is recommended that they be assessed by an applicant at the time of detailed design.</p>	<p>Emissions from freight transport movements are also likely to rise, but these were not quantified in DfT's assessment. It is recommended that they be assessed by an applicant at the time of detailed design.</p>
A-9 Carbon	<p>Table Objective 14, Question 28, Column 4 (LHR-NWR) Row: Description of Impact (including receptor)</p>	<p>Over the 60-year Appraisal Period (2026 to 2086), under the carbon-traded scenario, it is forecast that the development of LHR-NWR will result in the emission of an additional 9.1 MtCO₂ at the expanded airport due to Passenger and Staff Surface Access over the baseline case⁵³.</p> <p>In DfT's revised carbon-capped scenario demand is unaffected by the abatement measures implemented, so the surface access CO₂ estimates are the same as in the carbon-traded Case</p> <p>Emissions from freight transport movements are also likely to rise, but these were not quantified in DfT's assessment. It is recommended that they be assessed by an applicant at the time of detailed design.</p>	<p>Over the 60-year Appraisal Period (2026 to 2086), under the carbon-traded scenario, it is forecast that the development of LHR-NWR will result in the emission of an additional 9.5 MtCO₂ at the expanded airport due to Passenger and Staff Surface Access over the baseline case⁵³.</p> <p>In DfT's revised carbon-capped scenario demand is unaffected by the abatement measures implemented, so the surface access CO₂ estimates are the same as in the carbon-traded Case</p> <p>Emissions from freight transport movements are also likely to rise, but these were not quantified in DfT's assessment. It is recommended that they be assessed by an applicant at the time of detailed design.</p>

A-9 Carbon	Table 9.7, Row 1	Passenger and staff surface access 9.6 9.6 7.6 7.6 9.1 9.1	Passenger and staff surface access 9.7 9.7 8.1 8.1 9.5 9.5
A-9 Carbon	Table 9.7, Row 4	Total 14.8 14.8 19.9 19.9 23.1 23.1	Total 14.9 14.9 20.3 20.3 23.6 23.6
A-10 Resources & Waste	Front	TOPIC BASED SCHEMES ASSESSMENT: AOS FOR CONSULTATION DRAFT AIRPORTS NPS	TOPIC BASED SCHEMES ASSESSMENT: AOS FOR AIRPORTS NPS
A-10 Resources & Waste	Front	October 2017	June 2018
A-10 Resources & Waste	10.1.2	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Draft Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the draft Airports NPS, including the outline masterplans supplied to the Airports Commission for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation package put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that wherever possible significant effects are avoided, reduced or offset.	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the Airports NPS, including the outline masterplans supplied to the Airports Commission for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation package put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that wherever possible significant effects are avoided, reduced or offset.

A-10 Resources & Waste	10.2.10	Through their work, a circular economy is increasingly recognised as having the potential to create new opportunities for growth, reduce waste, advance resource productivity, create a more competitive economy, and reduce environmental impacts both in the UK and abroad. Defra has stated that UK businesses could benefit by up to £23 billion per year through low cost or no cost improvements achieved through the more efficient use of resources.	Through their work, a circular economy is increasingly recognised as having the potential to create new opportunities for growth, reduce waste, advance resource productivity, create a more competitive economy, and reduce environmental impacts both in the UK and abroad. Defra has stated that UK businesses could benefit by around £6 billion to £7 billion per year through low cost or no cost improvements achieved through the more efficient use of resources.
A-10 Resources & Waste	10.2.11 Title	Defra – 25 Year Plan for the natural environment	25 Year Plan for the environment
A-10 Resources & Waste	10.2.11	Defra has announced that Government will be developing a 25 year Plan for the natural environment. The plan will emphasise integrated decision making and adopt a rigorous methodology to setting goals and reporting success or failure.	The Government launched its 25 Year Plan for the environment in January 2018. The plan contains ten goals, six about enhancing the environment to secure the benefits it provides, from clean air to clean water, and four about managing the pressures we put on the environment, such as climate change and waste. It includes a suite of ambitious policies to achieve these goals, emphasising an integrated approach to decision making based on natural capital.
A-10 Resources & Waste	10.6.9	The proposals comprise two elements: * A Circular Economy Action Plan aimed at improving resource efficiency and reducing waste through a variety of actions (for example, from production and consumption, to management and the market for secondary raw materials) that will protect the environment, and save money whilst	The proposals comprise two elements: * A Circular Economy Action Plan aimed at improving resource efficiency and reducing waste through a variety of actions (for example, from production and consumption, to management and the market for secondary raw materials) that will protect the environment, and save money whilst stimulating economic growth.

		<p>stimulating economic growth.</p> <p>* Proposals to amend waste legislation, including the Waste Framework and Landfill Directives. This may lead to targets being amended to 2030.</p>	<p>* Proposals to amend waste legislation, including the Waste Framework and Landfill Directives. These were adopted at Council on 22nd May 2018, with an expected transposition deadline of June or July 2020.</p>
A-10 Resources & Waste	10.6.10	<p>Legislative target amendments which are relevant to airport operations are likely to include:</p> <p>* a common EU target for recycling 65% of municipal waste by 2030;</p> <p>* a common EU target for recycling 75% of packaging waste by 2030; and</p> <p>* a binding landfill target to reduce landfill to a maximum of 10% of municipal waste by 2030²³.</p>	<p>Legislative target amendments which are relevant to airport operations are likely to include:</p> <p>* a common EU target for recycling 65% of municipal waste by 2035;</p> <p>* a common EU target for recycling 70% of packaging waste by 2030; and</p> <p>* a binding landfill target to reduce landfill to a maximum of 10% of municipal waste by 2035²³.</p>
A-10 Resources & Waste	10.6.14	<p>Separately, Defra has announced that Government will be developing a 25 year Plan for the natural environment. The plan will have a much greater emphasis on integrated decision making and adopt as rigorous a methodology as possible to setting goals and reporting success or failure. The plan will use the insights of natural capital thinking to provide a framework to help government, businesses and individuals to make better decisions to improve the environment including areas such as resource use and waste.</p>	<p>Separately, the Government's 25 Year Environment Plan has a much greater emphasis on integrated decision making, seeking to manage pressures on the environment in a much more holistic way, addressing the problems at all the stages they occur. The plan uses the insights of natural capital thinking to provide a framework to help government, businesses and individuals make better decisions to improve the environment, including in areas such as resource use and waste.</p>
A-11 Historic Environme	Front	<p>TOPIC BASED SCHEMES ASSESSMENT: AoS FOR CONSULTATION DRAFT AIRPORTS NPS</p>	<p>TOPIC BASED SCHEMES ASSESSMENT: AoS FOR AIRPORTS NPS</p>

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A-11 Historic Environment	Front	October 2017	June 2018
A-11 Historic Environment	11.1.2	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Draft Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the draft Airports NPS, including the outline masterplans supplied to the Airports Commission for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation packages put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that wherever possible significant effects are avoided, reduced or offset.	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the Airports NPS, including the outline masterplans supplied to the Airports Commission for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation packages put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that wherever possible significant effects are avoided, reduced or offset.

A-11 Historic Environment	11.8.6	<p>An assessment of the significance of individual heritage assets has not been undertaken at strategic level but would be undertaken to support any application for Development Consent. As described above for the NPPF this should be in line with best practice. It would comprise an assessment of the significance of any heritage assets affected (including any contribution made by their setting) together with the impact of the relevant scheme on that significance and the steps that have been taken to avoid/minimise any possible harm. It is recognised that more detail on development of a preferred scheme will be available at this time so that the impact of the scheme and proposed mitigation is better understood. This will be able to inform site specific surveys and assessments. The level of detail would be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on that significance. In addition, it is important to consider possible impacts (including cumulative) upon the wider historic environment. It is expected that this will be secured by the assessment provision in the draft NPS.</p>	<p>An assessment of the significance of individual heritage assets has not been undertaken at strategic level but would be undertaken to support any application for Development Consent. As described above for the NPPF this should be in line with best practice. It would comprise an assessment of the significance of any heritage assets affected (including any contribution made by their setting) together with the impact of the relevant scheme on that significance and the steps that have been taken to avoid/minimise any possible harm. It is recognised that more detail on development of a preferred scheme will be available at this time so that the impact of the scheme and proposed mitigation is better understood. This will be able to inform site specific surveys and assessments. The level of detail would be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on that significance. In addition, it is important to consider possible impacts (including cumulative) upon the wider historic environment. It is expected that this will be secured by the assessment provision in the NPS.</p>
A-12 Landscape	Front	<p>TOPIC BASED SCHEMES ASSESSMENT: AoS FOR CONSULTATION DRAFT AIRPORTS NPS</p>	<p>TOPIC BASED SCHEMES ASSESSMENT: AoS FOR AIRPORTS NPS</p>
A-12	Front	<p>October 2017</p>	<p>June 2018</p>

Landscape			
A-12 Landscape	12.1.2	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Draft Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the draft Airports NPS, including the outline masterplans supplied to the Airports Commission for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation package put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that wherever possible significant effects are avoided, reduced or offset.	By law, before designating an Airports National Policy Statement (NPS) an Appraisal of Sustainability (AoS) must be carried out. This AoS is a strategic level assessment. It is based on the contents of the Airports NPS. The AoS considers alternatives to the Government's preferred scheme as set out in the Airports NPS, including the outline masterplans supplied to the Airports Commission for the three shortlisted schemes. This AoS considers the impacts of expansion without the benefits of the mitigation package put forward by scheme promoters, unless stated otherwise. The Government has outlined that it expects a significant mitigation package to be put in place by the promoter of its preferred scheme to ensure that wherever possible significant effects are avoided, reduced or offset.
Appendix B	Front	ALTERNATIVES CONSIDERED: AOS FOR DRAFT AIRPORTS NPS	ALTERNATIVES CONSIDERED: AOS FOR AIRPORTS NPS
Appendix B	Front	October 2017	June 2018
Appendix D	Front	VARIATIONS CONSIDERED: AOS FOR DRAFT AIRPORTS NPS	VARIATIONS CONSIDERED: AOS FOR AIRPORTS NPS
Appendix D	Front	October 2017	June 2018

Appendix D	Table 5, Column 4 (Summary of existing assessment (and significance)), Community, Appraisal Question 1	<p>Significant Negative effect (--) The loss of the following housing and community facilities¹¹:</p> <ul style="list-style-type: none"> * 168 residential properties likely to be demolished for airport expansion; * up to 37 residential properties could be demolished for surface access, since they fall within the buffer zone for construction works; * potential secondary impacts of relocated households on existing communities; * Trent House care home; * two places of worship (a church used by Seventh Day Adventists, and a Hindu temple); * one charity facility - Outreach 3 Way, which helps people with learning difficulties; * four pre-schools/ nurseries; * Crawley Rugby club, with its sporting and social facilities; * The northern part of Rowley Wood; * other formal and informal recreation sites; * public rights of way; * cycle routes; and * Impacts on local journey times, either from severance or increased traffic. <p>Mitigation has been recommended.</p>	<p>Significant Negative effect (--) The loss of the following housing and community facilities¹¹:</p> <ul style="list-style-type: none"> * 168 residential properties likely to be demolished for airport expansion; * up to 37 residential properties could be demolished for surface access, since they fall within the buffer zone for construction works; * potential secondary impacts of relocated households on existing communities; * Trent House care home; * loss of industrial/employment land; * two places of worship (a church used by Seventh Day Adventists, and a Hindu temple); * one charity facility - Outreach 3 Way, which helps people with learning difficulties; * five pre-schools/ nurseries; * Crawley Rugby club, with its sporting and social facilities; * the northern part of Rowley Wood; * other formal and informal recreation sites; * public rights of way; * cycle routes; and * impacts on local journey times, either from severance or increased traffic. <p>Mitigation has been recommended.</p>
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Appendix D	Table 5, Column 4 (Summary of existing assessment (and significance)), Carbon, Appraisal Question 27	<p>Significant Negative effect (--)</p> <p>Over the 60-year Appraisal Period (2025 to 2085), under the Carbon-Capped scenario, it is forecast that the development of a second runway at Gatwick Airport will result in the emission of a further 197.3 MtCO₂ over the baseline case²⁰.</p> <p>Over the same Appraisal Period under the Carbon-Traded scenario, it is forecast that the development of a second runway at Gatwick Airport will result in the emission of a further 204.2 MtCO₂ over the baseline case²¹.</p> <p>In both cases, construction emissions will contribute a further 3.9 MtCO₂e to UK emissions, however, this is a one-off impact at the beginning of the Appraisal Period²².</p>	<p>Significant Negative effect (--)</p> <p>Over the 60-year Appraisal Period (2025 to 2085), under the carbon-capped scenario, it is forecast that the development of a second runway at Gatwick Airport will result in the emission of a further 192.1 MtCO₂ from the expanded airport over the baseline case²⁰.</p> <p>Over the same Appraisal Period under the carbon-traded scenario, it is forecast that the development of a second runway at Gatwick Airport will result in the emission of a further 200.5 MtCO₂ over the baseline case²¹.</p> <p>In both cases, construction emissions will contribute a further 3.9 MtCO₂e to UK emissions, however, this is a one-off impact at the beginning of the appraisal period²².</p>
Appendix D	Table 5, Column 4 (Summary of existing assessment (and significance)), Carbon, Appraisal Question 28	<p>Significant Negative effect (--)</p> <p>Over the 60-year Appraisal Period (2025 to 2085), under the carbon-traded scenario, it is forecast that the development of a second runway at Gatwick Airport will result in the emission of an additional 10.6 MtCO₂ due to Passenger and Staff Surface Access over the baseline case²³.</p> <p>In the DfT's revised carbon-capped scenario, demand is unaffected by the abatement measures implemented, so the surface access CO₂ estimates are the same as in the carbon-traded Case Emissions from freight transport movements are also likely</p>	<p>Significant Negative effect (--)</p> <p>Over the 60-year Appraisal Period (2025 to 2085), under the carbon-traded scenario, it is forecast that the development of a second runway at Gatwick Airport will result in the emission of an additional 9.7 MtCO₂ due to Passenger and Staff Surface Access over the baseline case²³.</p> <p>In the DfT's revised carbon-capped scenario, demand is unaffected by the abatement measures implemented, so the surface access CO₂ estimates are the same as in the carbon-traded Case Emissions from freight transport movements are also likely to rise, but these were not quantified in the DfT's assessment. It is</p>

		to rise, but these were not quantified in the DfT's assessment. It is recommended that they be assessed by the Scheme Promotor during the Detailed Design stage.	recommended that they be assessed by the Scheme Promotor during the Detailed Design stage.
Appendix D	Table 6, Column 4 (Summary of existing assessment (and significance)), Community, Appraisal Question 1	<p>Significant Negative effect (--)</p> <p>The loss of the following housing and community facilities²⁴:</p> <ul style="list-style-type: none"> * 242 residential properties likely to be required for airport expansion; * up to 165 residential properties could be required for surface access, since they fall within the potential buffer zone for construction works; * potential secondary impacts of relocated households on existing communities; * loss of industrial/employment land; * loss of Punch Bowl pub during construction; * noise implications for Pippins Primary School; * part of the Colne Valley regional park; * other formal and informal recreation sites; * severance of section of the Colne Valley 	<p>Significant Negative effect (--)</p> <p>The loss of the following housing and community facilities²⁴:</p> <ul style="list-style-type: none"> * 242 residential properties likely to be required for airport expansion; * up to 165 residential properties could be required for surface access, since they fall within the potential buffer zone for construction works; * potential secondary impacts of relocated households on existing communities; * loss of industrial/employment land; * loss of three pubs during construction; * noise implications for Pippins Primary School; * part of the Colne Valley Regional Park; * other formal and informal recreation sites; * public rights of way; * cycle routes; * severance of section of the Colne Valley Way running from Colnbrook to Horton;

		<p>Way running from Colnbrook to Horton;</p> <ul style="list-style-type: none"> * severance of Poyle Road, which currently links Poyle and Colnbrook with Wraysbury and Horton; and * severance of route to Poyle from the west along Bath Road. <p>Mitigation has been recommended.</p>	<ul style="list-style-type: none"> * severance of Poyle Road, which currently links Poyle and Colnbrook with Wraysbury and Horton; and * severance of route to Poyle from the west along Bath Road. <p>Mitigation has been recommended.</p>
Appendix D	Table 6, Column 4 (Summary of existing assessment (and significance)), Carbon, Appraisal Question 27	<p>Significant Negative effect (--)</p> <p>Over the 60-year Appraisal Period (2026 to 2086), under the Carbon-Capped scenario, it is forecast that the development of an extended Northern runway at Heathrow Airport will result in the emission of a further additional 260.0 MtCO₂ over the baseline case.</p> <p>Over the same Appraisal Period under the Carbon-Traded scenario, it is forecast that the development of an extended Northern runway at Heathrow Airport will result in the</p>	<p>Significant Negative effect (--)</p> <p>Over the 60-year Appraisal Period (2026 to 2086), under the carbon-capped scenario, it is forecast that the development of an extended Northern runway at Heathrow Airport will result in the emission of a further additional 256.1 MtCO₂ from the expanded airport over the baseline case.</p> <p>Over the same Appraisal Period under the carbon-traded scenario, it is forecast that the development of an extended Northern runway at Heathrow Airport will result in the emission of a</p>

		<p>emission of a further 268.6 MtCO₂ over the baseline case.</p> <p>In both cases, construction emissions will contribute a further 10.1 MtCO₂e to UK emissions, however this is a one-off impact at the beginning of the Appraisal Period.</p>	<p>further 266.7 MtCO₂ from the expanded airport over the baseline case .</p> <p>In both cases, construction emissions will contribute a further 10.1 MtCO₂e to UK emissions, however this is a one-off impact at the beginning of the Appraisal Period .</p>
Appendix D	Table 6, Column 4 (Summary of existing assessment (and significance)), Carbon, Appraisal Question 28	<p>Significant Negative effect (--) Over the 60-year Appraisal Period (2026 to 2086), under the carbon-capped scenario, it is forecast that the development of an extended Northern runway at Heathrow Airport will result in the emission of an additional 8.4 MtCO₂ due to Passenger Surface Access over the baseline case.</p> <p>In the DfT's revised carbon-capped scenario demand is unaffected by the abatement measures implemented, so the surface access CO₂ estimates are the same as in the carbon-traded Case</p> <p>Emissions from freight transport movements are also likely to rise, but these were not quantified in the DfT's assessment. It is recommended that they be assessed by an applicant at the time of detailed design.</p>	<p>Significant Negative effect (--) Over the 60-year Appraisal Period (2026 to 2086), under the carbon-traded scenario, it is forecast that the development of an extended Northern runway at Heathrow Airport will result in the emission of an additional 8.1 MtCO₂ due to Passenger and Staff Surface Access over the baseline case.</p> <p>In the DfT's revised carbon-capped scenario demand is unaffected by the abatement measures implemented, so the surface access CO₂ estimates are the same as in the carbon-traded case</p> <p>Emissions from freight transport movements are also likely to rise, but these were not quantified in the DfT's assessment. It is recommended that they be assessed by an applicant at the time of detailed design.</p>

Appendix D	Table 7, Column 4 (Summary of existing assessment (and significance)), Community, Appraisal Question 1	<p>Significant Negative effect (--) The loss of the following housing and community facilities³²:</p> <ul style="list-style-type: none"> * 242 residential properties likely to be required for airport expansion; * up to 165 residential properties could be required for surface access, since they fall within the potential buffer zone for construction works; * potential secondary impacts of relocated households on existing communities; * loss of industrial/employment land; * loss of Punch Bowl pub during construction; * noise implications for Pippins Primary School; * part of the Colne Valley regional park; * other formal and informal recreation sites; * severance of section of the Colne Valley Way running from Colnbrook to Horton; * severance of Poyle Road, which currently links Poyle and Colnbrook with Wraysbury and Horton; and * severance of route to Poyle from the west along Bath Road. <p>Mitigation has been recommended.</p>	<p>Significant Negative effect (--) The loss of the following housing and community facilities³²:</p> <ul style="list-style-type: none"> * 242 residential properties likely to be required for airport expansion; * up to 165 residential properties could be required for surface access, since they fall within the potential buffer zone for construction works; * potential secondary impacts of relocated households on existing communities; * loss of industrial/employment land; * loss of three pubs during construction; * noise implications for Pippins Primary School; * part of the Colne Valley Regional Park; * other formal and informal recreation sites; * public rights of way; * cycle routes; * severance of section of the Colne Valley Way running from Colnbrook to Horton; * severance of Poyle Road, which currently links Poyle and Colnbrook with Wraysbury and Horton; and * severance of route to Poyle from the west along Bath Road. <p>Mitigation has been recommended.</p>
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Appendix D	Table 7, Column 4 (Summary of existing assessment (and significance)), Carbon, Appraisal Question 27	<p>Significant Negative effect (--) Over the 60-year Appraisal Period (2026 to 2086), under the Carbon-Capped scenario, it is forecast that the development of an extended Northern runway at Heathrow Airport will result in the emission of a further additional 217.1 MtCO₂ over the baseline case.</p> <p>Over the same Appraisal Period under the Carbon-Traded scenario, it is forecast that the development of an extended Northern runway at Heathrow Airport will result in the emission of a further 259.6 MtCO₂ over the baseline case.</p> <p>In both cases, construction emissions will contribute a further 10.1 MtCO₂e to UK emissions, however this is a one-off impact at the beginning of the Appraisal Period.</p>	<p>Significant Negative effect (--) Over the 60-year Appraisal Period (2026 to 2086), under the carbon-capped scenario, it is forecast that the development of an extended Northern runway at Heathrow Airport will result in the emission of a further additional 256.1 MtCO₂ over the baseline case .</p> <p>Over the same Appraisal Period under the carbon-traded scenario, it is forecast that the development of an extended Northern runway at Heathrow Airport will result in the emission of a further 266.7 MtCO₂ over the baseline case .</p> <p>In both cases, construction emissions will contribute a further 10.1 MtCO₂e to UK emissions, however this is a one-off impact at the beginning of the appraisal period .</p>
Appendix D	Table 7, Column 4 (Summary of existing assessment (and significance)), Carbon, Appraisal Question 28	<p>Significant Negative effect (--) Over the 60-year Appraisal Period (2026 to 2086), under the carbon-capped scenario, it is forecast that the development of an extended Northern runway at Heathrow Airport will result in the emission of an additional 4.9 MtCO₂ due to Passenger Surface Access over the baseline case.</p> <p>Over the same Appraisal Period under the carbon-traded scenario, it is forecast that the development of an extended Northern runway at Heathrow Airport will result in the emission of an additional 6.3 MtCO₂ due to</p>	<p>Significant Negative effect (--) Over the 60-year Appraisal Period (2026 to 2086), under the carbon-traded scenario, it is forecast that the development of an extended Northern runway at Heathrow Airport will result in the emission of an additional 8.1 MtCO₂ due to Passenger and Staff Surface Access over the baseline case.</p> <p>In DfT's revised carbon-capped scenario demand is unaffected by the abatement measures implemented, so the surface access CO₂ estimates are the same as in the carbon-traded case.</p>

	<p>Passenger Surface Access over the baseline case. Emissions from staff surface access and freight transport movements are also likely to rise, but these were not quantified in the AC's assessment. It is recommended that they be assessed by the Scheme Promoter during the Detailed Design stage.</p>	<p>Emissions from staff surface access and freight transport movements are also likely to rise, but these were not quantified in the AC's assessment. It is recommended that they be assessed by an applicant during the detailed design stage.</p>
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Appendix D	Table 8, Column 4 (Summary of existing assessment (and significance)), Community, Appraisal Question 1	<p>Significant Negative effect (--) The loss of the following housing and community facilities³⁹:</p> <ul style="list-style-type: none"> * 783 residential properties likely to be required for airport expansion; * up to 289 residential properties could be required for surface access, since they fall within the potential buffer zone for construction works; * potential secondary impacts of relocated households on existing communities; * Harmondsworth Primary School; * Harmondsworth Community hall (including the Wonderland day nursery); * Sipson community centre; * Heathrow special needs centre in Longford; * Nursery schools in Longford and Sipson; * White Horse pub at Longford; * Sipson recreation ground and facilities; * other formal and informal recreation sites; * part of the Colne Valley regional park; and * impacts on local journey times and severance, particularly from A4/M25/Southern Rail Access works. <p>Mitigation has been recommended.</p>	<p>Significant Negative effect (--) The loss of the following housing and community facilities³⁹:</p> <ul style="list-style-type: none"> * 783 residential properties likely to be required for airport expansion; * up to 289 residential properties could be required for surface access, since they fall within the potential buffer zone for construction works; * potential secondary impacts of relocated households on existing communities; * loss of industrial/employment land; * Harmondsworth Primary School; * Harmondsworth Community hall (including the Wonderland day nursery); * Sipson community centre; * Heathrow special needs centre in Longford; * Nursery schools in Longford, Harmondsworth and Sipson; * White Horse and Kings Arms pubs at Longford; * Sipson recreation ground and facilities; * other formal and informal recreation sites; * part of the Colne Valley Regional Park; and * public rights of way; * cycle routes; * impacts on local journey times and severance, particularly from A4/M25/Southern Rail Access works. <p>Mitigation has been recommended.</p>
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Appendix D	Table 8, Column 4 (Summary of existing assessment (and significance)), Carbon, Appraisal Question 27	<p>Significant Negative effect (--) Over the 60-year Appraisal Period (2026 to 2086), under the Carbon-Capped scenario, it is forecast that the development of a third runway at Heathrow Airport will result in the emission of a further 313.3 MtCO₂ over the baseline case⁴⁸.</p> <p>Over the same Appraisal Period under the Carbon-Traded scenario, it is forecast that the development of a third runway at Heathrow Airport will result in the emission of a further 329.4 MtCO₂ over the baseline case⁴⁹.</p> <p>In both cases, construction emissions will contribute a further 11.3 MtCO₂e to UK emissions, however this is a one-off impact at the beginning of the Appraisal Period⁵⁰.</p>	<p>Significant Negative effect (--) Over the 60-year Appraisal Period (2026 to 2086), under the carbon-capped scenario, it is forecast that the development of a third runway at Heathrow Airport will result in the emission of a further additional 308.5 MtCO₂ over the baseline case⁴⁸.</p> <p>Over the same Appraisal Period under the carbon-traded scenario, it is forecast that the development of a third runway at Heathrow Airport will result in the emission of a further 327.1 MtCO₂ over the baseline case⁴⁹.</p> <p>In both cases, construction emissions will contribute a further 11.3 MtCO₂e to UK emissions, however this is a one-off impact at the beginning of the appraisal period⁵⁰.</p>
Appendix D	Table 8, Column 4 (Summary of existing assessment (and significance)), Carbon, Appraisal Question 28	<p>Significant Negative effect (--) Over the 60-year Appraisal Period (2026 to 2086), under the carbon-capped scenario, it is forecast that the development of a third runway at Heathrow Airport will result in the emission of an additional 5.7 MtCO₂ due to Passenger Surface Access over the baseline case⁵¹.</p> <p>* In the DfT's revised carbon-capped scenario demand is unaffected by the abatement measures implemented, so the surface access CO₂ estimates are the same as in the carbon-traded Case Emissions from freight transport movements are also likely to rise, but these were not</p>	<p>Significant Negative effect (--) Over the 60-year Appraisal Period (2026 to 2086), under the carbon-traded scenario, it is forecast that the development of a third runway at Heathrow Airport will result in the emission of an additional 9.5 MtCO₂ due to Passenger and Staff Surface Access over the baseline case⁵¹.</p> <p>* In the DfT's revised carbon-capped scenario demand is unaffected by the abatement measures implemented, so the surface access CO₂ estimates are the same as in the carbon-traded Case Emissions from freight transport movements are also likely to rise, but these were not quantified in the DfT's assessment. It is recommended that</p>

		quantified in the DfT's assessment. It is recommended that they be assessed by an applicant at the time of detailed design.	they be assessed by an applicant at the time of detailed design.
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