

This is the CAA's internally targeted checklist and supporting guidance to be used when conducting the initial screen of an Assessment of Environmental Effects (AEE) submitted by launch operator or spaceport licence applicants under the Space Industry Act 2018.

It describes the framework within which the CAA will consider whether

1. the minimum information has been provided and
2. the AEE is appropriate for public consultation

The AEE will not pass to full assessment until the above tests have been met.

**This is not guidance to applicants on how to write AEEs.**

Applicants should refer to [Guidance for the assessment of environmental effects \(caa.co.uk\)](https://www.caa.co.uk/guidance-for-the-assessment-of-environmental-effects) before submitting their AEE to the CAA

## **BLOCK A – Initial screening checklist**

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The initial screening checklist is a tool to aid the assessment of environmental effects (AEE) reviewer to establish, at a high level, whether the mandatory assessment of environmental effects (AEE) information requirements are likely to have been met. This checklist should also be used to record whether an equivalent assessment(s) is provided, and if the equivalent assessment intended to fulfil the AEE either in part or full is suitable in meeting the AEE requirements at a high level. The AEE reviewer should be able to determine the presence of the information (without focus on the detail) and complete this form. However, if they have any concerns or questions, they should review the relevant part of the 'Assessment framework for the AEE' and/or seek support from the Civil Aviation Authority's (CAA's) environmental specialist.

There will inevitably be circumstances where we may need to consider asking for further information or where we may decide something is not required. AEE reviewers should use their professional judgement, based on their regulatory and / or environmental assessment experience. If you are asking for information not covered by this checklist, this should be agreed with the CAA's environmental specialist. The reasons why any further information is being requested should be explained to the applicant. Where asking for further information, the AEE reviewer should establish whether further information is required elsewhere in the application

and supplementary assessments with a view to co-ordinating the request and/or avoiding duplication in the information requested, where possible.

The AEE reviewer must ensure that screening decision is appropriately recorded in the checklist below and, where possible, identify where in the AEE the decision relates to. This enables the key pieces of information in the AEE to be identified more easily.

The AEE guidance (link provided below), in particular 'Annex A: Example Template for an AEE' contains useful details for what information is required within the AEE. You should refer to this guidance, as appropriate, when communicating with the applicant.

**Link to AEE guidance:** <https://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=10561>

**Link to the environmental objectives guidance:**

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/995153/guidance-to-the-regulator-on-environmental-objectives-relating-to-the-exercise-of-its-functions-under-the-space-industry-act-2018.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/995153/guidance-to-the-regulator-on-environmental-objectives-relating-to-the-exercise-of-its-functions-under-the-space-industry-act-2018.pdf)

**Link to the Regulator's licensing rules:** <https://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=10559>

## 1. Application Details

Licence Application Reference	Include reference number
Applicant	Name/Organisation
Spaceport or Launch operator licence application?	Spaceport/launch operator licence application
Type of licence	New, renewal, variation, transfer
AEE details	Title/date/version number
Requested Licence duration	From 20XX to 20XX (Total X years)
AEE reviewer and checker	Record reviewer name here and organisation Record checker name here, and organisation.

Date initial screen started	DD/MM/YYYY
Checklist completed pre-or-post request for information?	Pre-request for information completion / post-request for information completion / No request for information required
Date initial screen complete	DD/MM/YYYY
Brief description of the proposals	<p>Add key aspects of the proposals here that provides context for the rest of the checklist. This should include a summary of information on the following:</p> <ul style="list-style-type: none"> <li>▪ The location of the proposals</li> <li>▪ Proposed launch type (horizontal/vertical), launch system and launch vehicle assessed for the purposes of the AEE, including fuel(s)</li> <li>▪ Proposed trajectory(ies)</li> <li>▪ The launch timeframe and number of launches proposed (per year and overall total number of launches proposed)</li> <li>▪ Any proposed ground or support activities</li> <li>▪ Note any related licence applications (e.g. same spaceport), their stage in the AEE review process and date this was noted</li> </ul>

## 2. AEE General Submission Requirement Details

<b>AEE Requirement (refer to 4.19 and 4.21, and 4.29 to 4.30 of the AEE guidance)</b>	<b>Presence of information and summary of comments</b>
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<p>2.1 Has a statement been provided outlining the relevant expertise, or qualifications of such (competent) experts used to conduct the AEE?</p>	<p>If NO, this must be requested.</p>
<p>2.2 If YES, has the applicant's information sufficiently demonstrated that competent expert(s) have been used?</p>	<p>If NO, this must be requested.</p> <p>The statement of competent experts should include the topic(s) the authors are experts in, which chapters the experts were the author for and their relevant professional membership details/qualifications to undertake that chapter/environmental topic assessment. In addition, experience of environmental assessment in the UK should be outlined. Note that the full name of any acronyms (e.g. education and professional affiliations) should be provided.</p>
<p>2.3 Is the AEE clear, concise and uses plain, non-technical language where possible?</p>	<p>If NO, this must be requested.</p> <p>Note that the provision of a non-technical summary is optional. Review some sections of text to see whether it is understandable to you. The presence of a glossary could assist meeting this requirement.</p>
<p>2.4 Has the need for other assessments and consents, such as planning permission, environmental permits and marine licences, been identified if applicable?</p>	<p>If NO, no further action.</p> <p>If uncertain, consider requesting clarification.</p> <p>If YES, summarise key points.</p> <p>This question is to enable an understanding of whether there would be benefit in the regulator liaising or working with other competent authorities (if there are parallel applications)..</p> <p>As it is the applicant's responsibility to identify the need for other consents, permits and licences that might need to be</p>

	sought independently of the AEE submission, no further investigation into the applicability of other assessments or consents is required by the CAA.
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### 3. Equivalent Assessments

<b>AEE Requirement (refer to 4.31 and 5.21 to 5.25 of the AEE guidance)</b>	<b>Presence of information and summary comments</b>
3.1 Have one or more equivalent assessments been used to form part/all of the AEE?	<p>The applicant should have indicated this in the AEE.</p> <p>If NO, proceed to question 4.</p> <p>If YES, record whether the equivalent assessments are provided as part or all of the AEE, the number of equivalent assessments provided, the document names, and date produced.</p> <p>Note, an equivalent assessment is information prepared under another legal requirement (or previous Space Industry Act 2018 licence application) to satisfy the requirement for an AEE either in part or in full.</p>
3.2 If YES, do these assessments remain valid in meeting the requirements of the AEE i.e. there has been no material change since the assessment(s) were undertaken?	Check to see if a statement demonstrating that the equivalent assessment(s) is valid has been provided by the applicant. If not valid, check if it has been clearly identified by the applicant that other information is provided to address this. You are not expected to determine whether there has been a material change.

	<p>If NO, check whether additional or supplementary information has clearly been provided to fill any gaps but you are not required to review the detail of it. If no supplementary information has been provided, the applicant must be advised to re-submit an updated AEE.</p> <p>If YES, record here what information is within the AEE that backs up this view.</p> <p>If uncertain, it is recommended to seek clarification from the applicant.</p> <p>It is not adequate justification to rely on referencing existing assessments alone. Particularly where those assessments were developed for another purpose (i.e. not for the spaceflight activities) and the assessments not provided. Where the AEE relies on those assessments e.g. to form the AEE or scope out environmental topics, the document should be provided. The AEE should clearly explain why the previous assessment(s) still remains valid in meeting the AEE requirements.</p>
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**When considering equivalent assessments – Spaceflight Regulator**

<p>3.3 Was the equivalent assessment(s) used previously submitted and reviewed AEE in support of a previous spaceport or launch operator licence under the Space Industry Act 2018?</p>	<p>If NO, proceed to question 3.4</p> <p>If YES, it is expected that the applicant will provide these details. Record the details (including the licence application reference) here. If not provided, consider a further information request (although the information may be available internally this would ensure the correct application is referred to).</p>
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## When considering equivalent assessments – Competent Authorities

<p>3.4 Was the equivalent assessment(s) used to satisfy another competent authority's statutory requirements or licensing regime?</p>	<p>the equivalent assessment provided was produced for.</p> <p>If NO, proceed to question 3.5.</p> <p>If YES, record name of the competent authority, including the licence application reference, and the specific assessment (e.g. EIA for planning), whether information is provided on if the consent/licence has been granted. If granted, note whether the decision document has been provided (for example, the planning application consent notice or the licence). If some of this information has not been provided, consider a further information request.</p> <p>If uncertain, this information should be requested from the applicant.</p>
<p>3.5 Has a habitats regulation assessment/appraisal (HRA), in compliance with the Habitats Directive, already been conducted by another competent authority and been provided as an equivalent assessment?</p>	<p>Note that this refers to a HRA undertaken for the proposals included in the AEE.</p> <p>If NO (or if unaware), no action. If no mention is made of HRA in the AEE, no further action is required.</p> <p>If YES (i.e. a HRA from another competent authority is provided as an equivalent assessment), record a summary of this. If referred to but not provided, no further action is required to obtain it from the applicant.</p> <p>Note that this may be called an HRA, screening and/or appropriate assessment.</p> <p>If you believe that a HRA may have been undertaken by another competent authority related to the activities in the AEE,</p>

	but it has not been provided with the AEE, this information can be captured in Q18.1.
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## 4. Material Change

AEE requirement (refer to para 4.31, 4.33, 5.21, and 5.24 of the AEE guidance)	Presence of information and summary comments
4.1 Is material change a relevant consideration for this AEE?	<p>If NO, document reasoning here and move to question 4.</p> <p>If YES, or possibly, document reasoning here.</p> <p>Material change is relevant where it is proposed to vary, transfer or renew an existing granted licence. It is only relevant for new licence applications if an equivalent assessment has been provided. The applicant provide justification where an updated AEE is not provided e.g. with a request to vary a licence, and explain why the change is not material. The applicant should make clear in the document whether there has been a material change (where it is relevant). You do not need to determine this yourself. If the AEE discusses change, but not whether it is material, document this here.</p>
4.2 On the basis of the information are you confident that no material changes have taken place?	<p>If NO, document reasoning here and request further information from the applicant to resolve this uncertainty.</p> <p>If YES, no action is required.</p>

## 5. Consultation

AEE requirement (refer to para 6.6 to 6.7 and 4.27 of the AEE guidance)	Presence of information and summary comments
5.1 Does the AEE contain any commercially sensitive or confidential information, and/or information that may compromise national security and, if so, is justification provided as to why this is the case?	<p>If uncertain or not mentioned in the AEE, make a request for the applicant to confirm the status of the AEE.</p> <p>If NO, record decision.</p> <p>If YES, reference location within AEE, or other communications (e.g. RFI) confirming this.</p> <p>Note, it is not a requirement that this confirmation is contained in the AEE, just that there is written confirmation about the status of the AEE.</p> <p>Note, the presence of this type of information influences whether parts of the AEE must be redacted by the regulator prior to public consultation, which occurs in Full Assessment.</p> <p><b>No consultation is required to be undertaken during Initial Screen.</b></p>

## 6. Scoping

AEE requirement (refer to para 4.24 to 4.25 of the AEE guidance)	Adequacy evaluation and comments
6.1 Has a scoping exercise been carried out to identify the main issues to be addressed within the AEE and scope out issues unlikely to have a significant effect?	If NO, no action is required.

	<p>If YES, record key points (e.g. what topics have been scoped out) and proceed to next question.</p> <p>Check whether there is information provided on the scoping of the AEE. There is no statutory requirement for applicants to undertake scoping. Where a scoping exercise has been carried out, it is undertaken by the applicant alone; there is no CAA involvement in scoping.</p> <p>The focus should be on whether a scoping exercise has been carried out or not, with question 9.2 covering some details of the information.</p>
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## 7. Proposed Activities

AEE requirement (refer to paras 4.6 to 4.9, 4.12 to 4.15, 4.17 to 4.18, 4.40 to 4.45 and 1.28-1.29 of the AEE guidance)	Presence of information and summary comments
7.1 Has a description of all proposed activities been provided?	<p>If NO, this must be requested.</p> <p>Check for a section in the AEE that describes the proposed activities (both launch activities and associated activities directly related to launch) that form the basis of the AEE. The focus should be on activities being introduced by the licence proposals. For example, where a proposed spaceport is at an existing aerodrome we would not be concerned by the existing airport operations that are already covered by the existing aerodrome licence.</p>

7.2 Are day-to-day operations (associated activities) which are intrinsically linked to the launch activities identified?

If NO, this must be requested.  
Check for a section listing, or wording explaining, day-to-day activities but do not review the detail to cross-check against the full list of requirements.

7.3 Is information provided on items jettisoned or separated during the flight?

If NO, this must be requested.  
Check for a section or text using these terms, or terms such as drop zone or components.  
This should include information on the following:

- drop zone locations
- a description of the contributions from jettisoned or separated items during the flight (e.g. weights/volume/fragment size, nature of debris, residual fuel or hazardous materials)
- status of the components jettisoned at release and at the point of impact with the earth's surface

7.4 Is information provided about where, when, how and for what period of time the proposed activities will take place?

If NO, this must be requested.  
In relation to the proposed activities (day-to-day and launch activities) check for an explanation of the duration (or number of years) that the activities to be licenced are expected to occur over. In addition, check that the location where the activities occur is provided. This must also include explanation of the proposed schedule of these activities (including spaceport activities where relevant, and launches).

	<p>Detail regarding launch allowance and launch frequency is to be captured in question 8, and details regarding environmental zones of influence are to be captured in question 10.</p>
<p>7.5 Is information provided on what changes in the environment are likely to occur as a result of the identified activities (including short-term changes as well as any longer-term changes)?</p>	<p>If NO, this must be requested.</p> <p>If YES, record key points here.</p> <p>Note that this is likely to be a summary or conclusion section explaining this, and look for the use of the terms short-term and long-term within the AEE. These changes in the environment might not be significant and therefore may not be captured by question 15. However, if they are significant effects, any detail is to be captured in question 15.</p>
<p>7.6 Is information provided on the extent and magnitude of the effects?</p>	<p>If NO, this must be requested.</p> <p>If YES, record key points here.</p> <p>Check for the use of these words within the AEE. The extent and magnitude of effects on the environment might not be significant and therefore may not be captured by question 15. However, if they are significant, any detail is to be captured in question 15.</p>
<p>7.7 Is information provided on the environmental zones of influence of the activities, including off-site activities that might be relevant, such as spectators and the depositing of jettisoned objects?</p>	<p>If NO, this must be requested.</p> <p>If YES, record key points here.</p> <p>Check for a section describing environmental zones of influence (EZI – note there may be more than one), and/or this information might be provided within each topic chapter. The term ‘study area’ may have been used instead.</p>

	<p>The focus of this question is on whether environmental zones of influence have been included or not within the AEE, and that the EZIs are linked to the range and geographical location of the proposed activities, with question 10.1 covering more detail on zones of influence for all proposed activities.</p>
<p>7.8 Is information provided on possible pathways from the sources of the effects to the receptor or environment, such as noise, water, air?</p>	<p>If NO, this must be requested.</p> <p>If YES, summarise key points here.</p> <p>Check for the word ‘pathway’ although it may not be used in the AEE. Check for the provision of a section(s) that describes how the activities may affect the environment, for example an assessment section under an environmental topic heading.</p>
<p>7.9 For a SPACEPORT AEE, is this based on the latest and most relevant data about the prospective launch vehicle(s) to model the environmental effects of likely launch(es) from that location? Or, where the launch operator is not known, is this based on a reasonable worst-case scenario based on the representative launch vehicle(s) they are aiming to attract?</p>	<p>If NO, this must requested.</p> <p>If YES, record key points here regarding model/worst-case scenario.</p> <p>Note that you are not expected to undertake any research to check whether the latest and most relevant data has been used in the AEE. Check whether the applicant has said they are using a representative launch scenario/launch vehicle, or actual launch vehicle information (and that they have identified which launch vehicles). If this is not clear, seek clarification from the applicant.</p>
<p>7.10 For a LAUNCH OPERATOR AEE, is this based on the specific launch(es) they are intending to apply for, including actual details of the class, type and detailed requirements of the launch vehicle(s)? (must not be based on assumptions).</p>	<p>If NO, this must requested.</p> <p>If YES, record key points here.</p>

	Check with applicant if the presence of this information is not evident in the AEE. You are not expected to check this for accuracy or review the detail.
7.11 For a LAUNCH OPERATOR AEE, does this cover the entire launch operation?	<p>If NO, this must be requested.</p> <p>Note, you do not need to check all activities are covered, just that either there is a statement to this effect, or that there are no obvious gaps in the proposed activities. This can be based on the answer to question 5.1.</p>

## 8. Overall Launch Allowance and Frequency (Launch Baseline)

<b>AEE requirement (refer to paras 4.10 to 4.11 and 4.46 to 4.50 of the AEE guidance)</b>	<b>Presence of information and summary comments</b>
8.1 Have the launch allowance and launch frequency been defined and the launch baseline established?	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Note, the launch baseline is the overall launch allowance and launch frequency. The overall launch allowance is the maximum number of launches that the applicant intends to carry out. Launch frequency is the number of launches intended to take place over a specified period (e.g. per month or per week). Check that this information is included within the AEE.</p>

8.2 Have the launch allowance and launch frequency taken environmentally sensitive periods of time into account (if required)?

If NO mention is made, this must be requested - clarify if there are no environmentally sensitive periods, or they have not been considered.

If YES, summarise the sensitive periods are, when, and how they have been considered, or note if the AEE states that there are no environmentally sensitive periods to be considered.

Note, this information may be contained in a section describing alternatives or mitigation. Check for the term 'sensitive' or 'environmentally sensitive' or terms relating to activities that may be environmentally sensitive. For example, breeding or migrating wildlife, or launches during the night/hours of darkness.

8.3 Has the type of launches been identified and considered in the AEE?

If NO, this must be requested.

If YES, record key details here.

Check that some text is present explaining the type of launches assumed for the AEE. This is the type of launches that an operator is proposing to conduct, or for a spaceport to facilitate. Type of launches can include for example the launch process (horizontal, vertical, or (mid)-air launch), the type of payload (satellite and/or human occupants).

8.4 Have assumptions for test or scrubbed launches been taken into account in setting the launch allowance and launch frequency?

If NO, this must be requested.

If YES, summarise assumptions.

Check for the use of these terms in the AEE and whether they are accompanied by assumptions, for example, number assumed to occur.

	Note, a test launch is where certain aspects of the launch are practiced in advance of a planned launch. Scrubbed launches can be defined as a type of off-nominal (or abnormal) launch where a launch does not proceed as planned for example it is cancelled or rearranged because of unsuitable weather.
8.5 For a LAUNCH OPERATOR AEE launching from a spaceport, is it clear how much of the spaceport's launch allowance (environmental budget) is being used, and that it does not exceed the environmental budget?	<p>If NO, confirm what has and has not been provided. Any missing information must be requested.</p> <p>If YES, record key details here.</p> <p>Check for text about the environmental budget/launch allowance of the spaceport, or consideration of this in relation to an existing airport/aerodrome.</p>
8.6 For a SPACEPORT AEE, has an environment budget (maximum number of launches per launch vehicle that can take place over a year) been set, has this been adequately described, does it take into account the cumulative effect of all launches?	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check for text about the environmental budget/launch allowance of the spaceport.</p>

## 9. Environmental Topics

AEE requirement (refer to paras 4.1 and 4.51 to 4.53 of the AEE guidance)	Presence of information and summary comments
9.1 Have all the environmental topics listed in para 4.51 of the AEE guidance that are likely to be affected by the proposed activities been identified, described and assessed for potential direct and indirect significant effects?	<p>If NO, this must be requested (unless scoped out, see question 7.2).</p> <p>If YES, record key details here.</p>

	<p>Note, some topics might be grouped together e.g. human health might be grouped with air quality and noise, split into several separate sections, e.g. ornithology, or have slightly different titles that cover the same topic (e.g. ecology instead of biodiversity).</p> <p>Check that the following topics are discussed in the AEE:</p> <ul style="list-style-type: none"> <li>▪ population and human health</li> <li>▪ biodiversity (for example, ecology, flora and fauna)</li> <li>▪ air quality</li> <li>▪ noise and vibration</li> <li>▪ water (for example, quantity and quality)</li> <li>▪ marine environment</li> <li>▪ climate (for example, greenhouse gas emissions, impacts relevant to adaptation)</li> <li>▪ land, soils and peat</li> <li>▪ landscape and visual impact</li> <li>▪ material assets and cultural heritage (including architectural and archaeological aspects)</li> </ul>
<p>9.2 Where environmental topics have been deemed to not be significantly affected (out of scope) has it been clearly explained why in the AEE?</p>	<p>If NO, (e.g. where all the topics listed below are not discussed within the AEE) this must be requested.</p>

If YES, confirm key points made and document whether you can follow the logic provided and can broadly agree (not looking at the detail).

The following topics are required to be discussed in the AEE:

- population and human health
- biodiversity (for example, ecology, flora and fauna)
- air quality
- noise and vibration
- water (for example, quantity and quality)
- marine environment
- climate (for example, greenhouse gas emissions, impacts relevant to adaptation)
- land, soils and peat
- landscape and visual impact
- material assets and cultural heritage (including architectural and archaeological aspects)

Note that the marine environment can include marine ecology and biodiversity, air quality, noise, water (water quality and resources and coastal change and flooding), seascape, climate change adaptation, historic environment, and marine activities and users. It must be confirmed whether these aspects of the marine environment topic are included in the AEE or not.

	<p>Check whether there is a section on scoping within the AEE where topics listed above are not discussed within the AEE.</p> <p>To scope out environmental topics (or sub-topics) the applicant needs to demonstrate that there will be no significant effects and provide justification to support the statements and conclusions. This could be, for example, through demonstrating that there are no relevant receptors, no pathways to receptors, or no relevant activities.</p> <p>Note that whether or not a scoping exercise has been carried out is captured in question 6.1.</p>
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**10. Environmental Zones of Influence**

<b>AEE requirement (refer to paras 4.54 to 4.61 of the AEE guidance)</b>	<b>Presence of information and summary comments</b>
<p>10.1 Have environmental zones of influence, where potential effects from the proposed activities could occur, been identified and described?</p>	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>EZI (or EZIs – there is likely to be more than one EZI identified within the AEE, e.g. there may be one EZI for each environmental topic, or multiple EZIs for different aspects of an environmental topic) may be included in the AEE as maps and/or text. Note, the term ‘study area’ may also be used, and ‘transboundary’ may be referred to.</p> <p>The focus of this question is on whether detailed information on the environmental zones of influence for all activities has been</p>

	<p>included and that some detail is provided, with question 7.7 covering whether environmental zones of influence have been included or not within the AEE.</p>
<p>10.2 For a SPACEPORT AEE, does this cover as a minimum: in the vicinity of the spaceport; drop zone(s); and the proposed trajectories of the different launches it intends to facilitate?</p>	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check for the use of these terms, and a radius being used around the spaceport.</p>
<p>10.3 For a LAUNCH OPERATOR AEE, does this cover as a minimum: in the vicinity of the launch location; drop zone(s); and along the trajectory of the specific launches being applied for?</p>	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check for the use of these terms plus (optional) carrier craft, and a radius being used around the spaceport (if relevant to licence applied for).</p>
<p>10.4 If the EZI cannot be properly defined, has this been acknowledged and a precautionary approach taken?</p>	<p>If it is clearly stated that there is no uncertainty (N/A), no further action is necessary.</p> <p>If NO (there is uncertainty, but this not acknowledged/explained) this must be confirmed/requested.</p> <p>If YES, explain uncertainty and approach taken.</p> <p>Note that uncertainty can include insufficient information to properly define the EZI. The applicant may discuss using a precautionary approach, in which case there is uncertainty.</p>
<p>10.5 Has an assessment been provided of whether there could be any global impacts from the proposed activities?</p>	<p>If NO, this must be requested - for example climate change from greenhouse gases.</p> <p>If YES, record key details here.</p>

	Check for discussions on global effects or impacts.
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## 11. Alternative Proposals

<b>AEE requirement (refer to paras 4.62 to 4.63 of the AEE guidance)</b>	<b>Presence of information and summary comments</b>
11.1 Where significant effects are likely, has the applicant considered reasonable alternatives (to mitigate those effects)?	<p>If NO, this must be requested from the applicant.</p> <p>If YES, record key details here.</p> <p>Check whether there is a section or text discussing alternatives such as alternative options.</p> <p>Note, alternative options only need to be considered where significant effects have been identified.</p>
11.2 Have comparisons between alternative options been provided?	<p>If NO, consider whether further information should be requested.</p> <p>If YES, record key details here.</p> <p>Check whether alternatives have been compared, for example in a table but do not review the detail, e.g. alternative launch location(s), trajectories/drop zones, design and technology (e.g. of spaceport/launch facilities or materials/sizes/propellants/payloads, timings and frequency.</p> <p>Depending on the topics scoped in and the proposals, it may be appropriate to do a high-level review of the alternatives identified (or not) AEE against the environmental objectives guidance, considering in particular the 'mitigations' which the regulator needs to take account of. This can identify broadly</p>

	whether the applicant needs to show consideration of a wider range of alternative options.
11.3 Has a clear justification been provided for the specific option(s) selected?	<p>If NO, this must be requested from the applicant.</p> <p>If YES, record key details here.</p> <p>Check whether any justification or reasoning has been provided on selecting one of the alternative options, e.g. selection of a 'preferred option'.</p> <p>Depending on the topics scoped in and the proposals, it may be appropriate to do a high-level review of the alternatives identified (or not) AEE against the environmental objectives guidance, considering in particular the 'mitigations' which the regulator needs to take account of. This can identify broadly whether the applicant needs to consider / justify their choice of alternative option further.</p>

## 12. Accidents and Disasters

<b>AEE requirement</b> (refer to paras 4.2, 4.64 to 4.68, and 5.5 of the AEE guidance)	<b>Adequacy evaluation and comments</b>
Have environmental effects from reasonable worst-case scenarios from accidents and disasters which could occur during, or as a result of, the proposed activities been described?	<p>If NO, this must be requested.</p> <p>IF YES, record key details here.</p> <p>The focus of this question is on whether a section on accidents and disasters has been included within the AEE, with question 12.2 covering more detail of this information.</p>

<p>12.2 Has the AEE provided the information required on accidents and disasters?</p>	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>The focus of this question is on some specifics for the information provided on accidents and disasters. Check whether there is an accidents and disasters section/chapter and discussion includes terms such as worst-case scenario, off-nominal launch scenarios, launch failure or abnormal launch, estimated failure rate risk, and geographical location(s) for the potential accident and disaster activities.</p> <p>Also identify whether there are any accidents /disasters that seem to have a higher likelihood of occurring and therefore may need consideration in question 18.1.</p>
<p>12.3 Has the AEE considered any significant environmental effects arising from accidents and disasters which could result from the proposed activities?</p>	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check whether the accidents and disasters text includes mention of significant effects (whether there are any or not).</p>
<p>12.4 If significant environmental effects have been identified for accidents and disasters, have measures to prevent or mitigate these been identified?</p>	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check whether the accidents and disasters text includes mention of mitigation, where significant effects were identified in question 12.3.</p>
<p>12.5 Is information provided identifying hazards from the proposed activities and how vulnerability to accidents and</p>	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p>

disasters can be avoided or reduced to prevent significant environmental effects?	Consider the emergency response plan and potential remediation requirements.
12.6 Is information provided identifying hazards from the proposed activities and how vulnerability to accidents and disasters can be avoided or reduced to prevent significant environmental effects?	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check for information on hazards and vulnerability, and terms for avoidance, reduction and prevention in the accidents and disasters text.</p>

### 13. Assessment Methodology

<b>AEE requirement (refer to para 5.2 and Annex A of the AEE guidance)</b>	<b>Presence of information and summary comments</b>
13.1 Have the potential effects on the environmental topics been assessed against the environmental baseline?	<p>If NO, this should be requested.</p> <p>If YES, record key details here.</p> <p>The focus of this question is on whether a review against the environmental baseline has been undertaken, with question 14.3 covering some specifics relating to the review against the baseline.</p> <p>Check for sections called 'environmental baseline' or 'existing conditions' etc which identifies the baseline and then subsequent section called 'environmental assessment' or 'assessment of effects' or 'environmental consequences' etc which identifies the potential environmental effects against the identified baseline or wording that clearly demonstrates this.</p>

## 14. Environmental Baseline Conditions

AEE requirement (refer to paras 5.3, 4.76 to 4.77 and Annex A of the AEE guidance)	Presence of information and summary comments
14.1 Has a description of the relevant aspects of the current state of the environment (environmental baseline conditions) been provided?	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check that there is a baseline section for each environmental topic in scope and that it is clear what calendar year the baseline is taken to be for the AEE. It should also be clear how the baseline has been established for the AEE, e.g. using existing available data, or survey(s) undertaken.</p>
14.2 Is the AEE conducted against this established environmental baseline?	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check that there is text stating the baseline in the AEE has been used in the assessment(s), and that there is a baseline section in each environmental topic chapter.</p>
14.3 Does the AEE demonstrate how the conditions may or will change in relation to this baseline because of the proposed activities?	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check that there is a section containing an assessment in the AEE.</p> <p>Check for sections called 'assessment', 'environmental assessment', 'assessment of effects' or 'environmental consequences' etc which identifies the potential environmental</p>

	<p>effects against the identified baseline or wording that clearly demonstrates this.</p> <p>The focus of this question is on the review against the environmental baseline and whether the AEE identifies how the baseline conditions may change as a result of the proposals, with question 13.1 covering whether a review against the environmental baseline has been undertaken or not.</p>
<p>14.4 Does the AEE describe the relevant aspects of the current state of the environment (baseline scenario) and how it may change in the absence of the proposed activities (i.e. the future baseline)?</p>	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check that future baseline is identified for each environmental topic.</p>
<p>14.5 If it is likely that the baseline conditions may change by the time the proposed activities take place, is this considered within the AEE?</p>	<p>If NO (not considered), this must be requested or clarified by the applicant.</p> <p>If YES, record key details here.</p> <p>Check for this information in the baseline section (baseline calendar year) and assumptions on the start date of the proposed activities. Note that if there is a short duration (e.g. a year or two) between the baseline calendar year and the proposed commencement of activities then a change may not be likely/expected.</p>

## 15. Assessing Significance (of effects)

AEE requirement (refer to paras 4.3, 4.4, 5.9 to 5.14 and Annex A of the AEE guidance)	Adequacy evaluation and comments
15.1 Has an assessment been provided on whether the proposed activities are likely to have any significant effects on the environment?	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check for a section on significant effects, which could be standalone (a summary) and/or within each topic chapter.</p>
15.2 Have the significant effects been assessed in the context of the established environmental baseline conditions within the EZI(s)?	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check for a statement to this effect.</p>
15.3 Does the assessment of significant effects cover the direct effects and any indirect, secondary, cumulative, transboundary, short term, medium term, long term, permanent and temporary, positive and negative effects of the proposed spaceflight activities?	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check for the use of these terms within the AEE</p>
15.4 Has a conclusion been provided on the significance of the effects for each environmental topic and, where mitigation is in place, any residual effects?	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check for a conclusion section in each of the environmental topic chapters, and there may also be a summary/conclusion to the AEE that contains this. Also check that the terms mitigation and residual effects are used within the environmental topic chapters.</p>

15.5 Is the evaluation of significant effects based on the best available scientific evidence?

If NO, this must be requested (although see below).

If YES, record key details here.

Note, it is expected that the applicant will have reviewed and be aware of the best scientific evidence and justify where this has not been used within the AEE. Consultation would assist determining this, but none is proposed to be undertaken during Block A. It is not expected that you will undertake research to establish if the best available scientific evidence has been used to evaluate significant effects. Therefore, it may not be possible through this review to determine whether this requirement has been met.

15.6 Where there is doubt about whether an effect is significant, has a precautionary approach been taken?

If NO, this must be requested.

If YES, record key details here.

Check for the discussions on uncertainty and precautionary approach in relation to the assessment of significance. Where there is no or limited uncertainty, a precautionary approach may not be proposed and so this question may not be relevant.

15.7 Has information been provided on all the significance of effects for each environmental topic, without mitigation and with mitigation?

If NO, this must be requested.

If YES, record key details here.

Check each topic assessment for discussions on mitigation proposals and the significance, to see that this information has broadly been provided, but there is no requirement for you to check that this has been undertaken for every effect identified.

	Note that mitigation is only required where significant effects have been identified.
15.8 Is the focus of the assessment on the significant effects that could arise from the proposals (making the AEE proportionate and succinct)?	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check that information not relevant to the licence application (e.g. construction or demolition information, existing activities that are already licensed, or lots of information on non-significant effects relevant to the licence application), are not provided unless relevant to the AEE (e.g. relevant to the consideration of cumulative effects).</p>

## 16. Avoidance, Mitigation and Enhancement

<b>AEE requirement</b> (refer to paras 4.73 to 4.75, 5.9, 5.17 to 5.20 and Annex A of the AEE guidance)	<b>Presence of information and summary comments</b>
16.1 Has the AEE followed established best practice when considering mitigation measures, for example using the mitigation hierarchy?	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check for use of the phrase mitigation hierarchy and variations on the terms avoid, prevent, mitigate, reduce, compensate, offset.</p>
16.2 Has the AEE provided the information required on mitigation?	If NO, this must be requested. Note that mitigation is only required to be included within the AEE for significant environmental effects (otherwise it is optional). This applies to

	<p>all significant effects identified and not only significant residual effects.</p> <p>If YES, details will be reviewed in question 16.3.</p> <p>Check whether the AEE identifies the mitigation proposed has been discussed for relevant environmental topics (i.e. where significant environmental effects are identified).</p> <p>The focus of this question is on whether the AEE has included a section on mitigation for all environmental topics where a significant effect has been identified, with question 16.3 covering the specific aspects of this information.</p>
<p>16.3 Has a description of the control measures (mitigation) that could be put in place to avoid, prevent, reduce, offset, and, if possible, remedy any significant environmental effects of the proposed activities been provided?</p>	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>The focus of this question is on these specific aspects regarding the information provided on mitigation, with question 16.2 covering whether information on mitigation has been included or not within the AEE. This may also include discussions on monitoring.</p>
<p>16.4 Has a description been provided of the mitigation measures and their expected effectiveness?</p>	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check some of the topic assessment sections for discussions on effectiveness (i.e. the environmental effect before and after application).</p>
<p>16.5 Has an assessment of any residual effects been provided?</p>	<p>If NO, this must be requested.</p>

	<p>If YES, record key details here.</p> <p>Check for use of the term within the environmental topic chapters.</p> <p>Note, residual effects are those environmental effects that are predicted to occur after the proposed mitigation measures are in place.</p>
16.6 Has consideration been made to where there could be enhancement in order to produce a net gain for biodiversity and the environment?	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check for the use of variations of the term 'enhancement', 'improvement' and 'opportunity', plus the term biodiversity net gain (BNG).</p>

## 17. Cumulative Effects

AEE requirement (refer to paras 4.16, 4.69 to 4.72, 5.15 to 5.16 and Annex A of the AEE guidance)	Presence of information and summary comments
17.1 Has a description of the likely cumulative effects of the proposed activities on the environment been provided?	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check for a separate chapter on cumulative effects (or cumulative effects assessment (CAE). Cumulative effects may also be briefly discussed in environmental topic chapters but look for the complete assessment.</p> <p>The focus of this question is on whether a section on cumulative effects has been included within the AEE, with</p>

	question 17.2 covering some specifics related to this information.
17.2 Have cumulative effects that could arise from the proposed operations as a whole been identified and described? Does the cumulative effects assessment consider intra-project (with other projects) effects and inter-project effects (within the project)?	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check whether the cumulative assessment discusses inter-project effects (identifying projects/licences that are outside of the proposed activities, which can be spaceflight or non-spaceflight activities) and also intra-project effects (between effects identified through this AEE).</p> <p>The focus of this question is on these specifics for any information provided on cumulative effects.</p>
17.3 Does the cumulative effects assessment consider impact interactions and additive effects within the environmental zone of influence?	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check whether the cumulative assessment identifies and discusses an EZI(s) and interactions between impacts. Terms such as additive and secondary effects may be used.</p>
17.4 Has a conclusion been provided about whether proposed activities, under the prospective licence, are likely to have a cumulative significant effect?	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check whether the cumulative assessment identifies whether or not any of the cumulative effects are significant.</p>
17.5 Where a likely significant cumulative effect is found, have measures to avoid and mitigate this effect been proposed, noting any residual effects?	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p>

	Where the cumulative assessment identifies significant effects, check that avoidance and mitigation are discussed.
17.6 For LAUNCH OPERATOR AEEs, if more than one launch is being applied for, under the same launch operator licence application, has a cumulative assessment of those launches been conducted including any test launch(es)?	<p>If NO, this must be requested (if relevant).</p> <p>If YES, record key details here.</p> <p>Check that the cumulative assessment includes multiple launches over time, where this is relevant to the proposed activities.</p>

## 18. Habitats Regulations Assessment/Appraisal

AEE requirement (refer to paras 6.12 to 6.15 of the AEE guidance)	Presence of information and summary comments
18.1 Where a HRA is relevant, has information been provided by the applicant, to enable the HRA to be undertaken by us, as to whether the proposed operations are likely to have a significant effect on the integrity of a European site or European offshore marine site?	<p>If NO, (and relevant) this must be requested from the applicant.</p> <p>If YES, document where this information can be found.</p> <p>The HRA process is relevant if one or more European sites or European marine sites (i.e. special areas of conservation (SACs), special protection areas (SPAs) and/or Ramsar sites), candidate SACs (cSACs), potential SPAs (pSPAs) are identified in the AEE as <u>having the potential to be affected by the proposals</u>, and the site(s) are in the UK (including within the Exclusive Economic Zone (EEZ) of UK territorial waters (which can range from 0 to 200 nautical miles).</p> <p>For example, a European site or European marine site may be at risk of being affected if one or more of them are within an EZI, including drop zones. Another example is where the</p>

proposal may cause impacts with a pathway to a more distant European site. This could be due to the launch or flight along the trajectory causing air, water, noise or light pollution, or affecting a feeding area used by one of the species designated in a European site (which could be outside of a designated European site). The responses to the questions in section 12 may also be relevant to informing any decision here.

In addition to the AEE requirements elsewhere, it is likely that to determine the need for HRA the AEE will need to include:

- The location of the project/activities and associated EZIs in relation to any European site(s), on a map(s) which includes EEZs. The EZI must be defined using coordinates based on the distance of extent of the EZI, and a graphical output provided in the AEE using the most appropriate projection and coordinate system (both with justification) to accurately display the sites against the EZIs (e.g. coordinate system WGS1984).

If it is unclear whether the HRA process may be applicable to the AEE (because of a lack of information upon which to identify the potential for impact, or the location of sites or receptors), you must request confirmation of the missing information needed to assist in making this decision from the applicant. For example, to clarify whether there is a European site within the EZI, or a source and pathway of impacts that could affect an identified European site. This information may already be included in a section on ecology or biodiversity.

	<p>In addition, the applicant may submit a HRA (which could also be ‘screening’ or an ‘appropriate assessment’) alongside the AEE. This is optional and if one is not supplied this should not be requested.</p> <p>If you believe that a HRA may have been undertaken by another competent authority related to the activities in the AEE, but it has not been provided with the AEE, then discussions could be held at this stage with the relevant competent authority to see whether it is possible to obtain a copy for use at Full Assessment. This might apply, for example, to a newly constructed spaceport that went through the Town and Country Planning process.</p>
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**19. Conclusion of Overall Findings from Review of AEE**

<b>AEE requirement</b> (refer to paras 5.6, 4.22, 6.1 to 6.3 and Annex A of the AEE guidance)	Adequacy evaluation and comments
<p>19.1 Has evidence been provided that the proposed activities will be compliant with all relevant environmental legislation and government policy, including environmental policy objectives?</p>	<p>If NO, this must be requested.</p> <p>If YES, record key details here.</p> <p>Check whether a statement is provided, or a section included, for international, national and local legislation and objectives.</p> <ul style="list-style-type: none"> <li>• The applicant also needs to demonstrate how the UK government’s four environmental objectives for spaceflight have been taken into account. The environmental objectives are as follows:</li> </ul>

- Minimise emissions contributing to climate change resulting from spaceflight activities;
- Protect human health and the environment from the impacts of emissions on local air quality arising from spaceflight activities;
- Protect people and wildlife (including domesticated animals and livestock) from the impacts of noise from spaceflight activities; and
- Protect the marine environment from the impacts of spaceflight activities.

Note that, in the context of the environmental objectives, the marine environment can include marine ecology and biodiversity, air quality, noise, water (water quality and resources and coastal change and flooding), seascape, climate change adaptation, historic environment, and marine activities and users. It must be confirmed whether these aspects of the marine environment topic are included in the AEE or not.

Also, note that the AEE might not directly reference or consider the 'environmental objectives', so this could be determined by identifying whether any parts of the four environmental objectives have been scoped out in the environmental topics. If any topics relating to the four environmental objectives have been scoped out, there must be justification provided in the AEE.

## 20. Further Information and Other Requests

AEE requirements not met through any of the above questions	Adequacy evaluation and comments
20.1 Are you satisfied that information relating to the AEE requirements, outlined in this checklist, have been provided to allow a detailed review of the AEE and the AEE meets the minimum requirements?	<p>If NO, summarise missing information (e.g. reference relevant question numbers) and follow the further information request process where information must be provided by the applicant. This should be 'NO' if any questions indicated above in yellow have been answered as NO.</p> <p>If YES, go to question 21.</p>
20.2 Is a further information request(s) required?	<p>This must be completed as 'YES' if any questions indicated above in yellow have been answered as NO.</p> <p>Document all requests made for further information here.</p>
20.3 If YES, what further information was requested and on what date?	<p>Further information requested:</p> <p>On XX/XX/XXXX</p> <p>Document all requests made for further information here. Reference is to be made to the separate RFI document containing the request for further information.</p>
20.4 Was the further information received within 28 days?	<p>If NO, document whether the application is stopped/returned to the applicant.</p> <p>If YES, record key details here.</p>
20.5 If further information was received, outline the information provided	<p>Outline of further information provided:</p> <p>Document all responses to requests made for further information here, by cross-referencing the separate response</p>

	document provided by the applicant. Also identify, if an updated AEE was provided, the AEE date/revision number/title.
20.6 Did the further information received address the environmental queries?	Record whether YES or NO.  Summarise any key issues here.  Also, note whether this checklist was updated to take into account the information received (it should be if the response changes the information relevant to any of the questions). A copy of both the pre- and post- request for information initial screening checklist is to be saved as a record.
20.7 If further information received did not address the queries, is the application being returned or a new further information request being made?	If NO, document here how the missing further information will be managed, e.g. through a further information request(s) in full assessment.  If YES, document process being taken and reasons.  Note the AEE must contain enough information to go out to public consultation before progressing to full assessment.  Document all requests made for further information here.

## Regulators Conclusions

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### 21. Final Check and Record of Initial Screening Checklist Outcome

21.1 Are you satisfied that mandatory information requirements relating to the AEE requirements, outlined in this checklist, has been provided to allow:	Y/N  If NO, the review of the AEE will not proceed to Full Assessment until mandatory information has been provided and serious concerns have been addressed. If this is the case,
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<p>a) The AEE to go out for public consultation?</p> <p>b) Detailed review of the AEE conclusions?</p>	<p>discussions are required to agree the timeline for the provision of further information and finalising this checklist.</p>
<p>21.2 Date initial screening checklist complete</p>	<p>DD/MM/YYYY</p> <p>Note whether this date is either:</p> <ul style="list-style-type: none"> <li>• no further information is required and therefore the AEE is ready for detailed review; or</li> <li>• the date in which all further information requested was received and the AEE has sufficient information for the detailed review</li> </ul>
<p>21.3 Date this screening checklist was passed onto the environmental specialist for detailed review (Block B)</p>	<p>DD/MM/YYYY</p>
<p>21.4 Date AEE is returned (if applicable)</p>	<p>DD/MM/YYYY</p> <p>Note that this should only be used after the further information request process has been followed and a response has not been received within the required timescale. If the AEE is to be returned, discussions are required to agree the approach before finalising this checklist (e.g. in relation to question 21.1).</p>