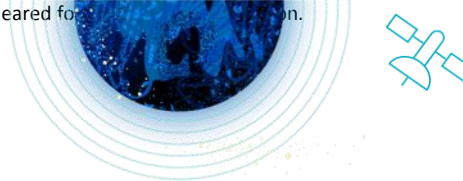


Space Launch & Orbit Group (SPLOG) Meeting

London
14th July 2026



Agenda

time	subject
10:30	Welcome and introduction – Colin Macleod
10:35	Update from Autumn 2025 SPLOG : - Orbital Licences – Jeremy Ketley - End of Life Policy – Rob Garner - Direct & Effective Control Policy – Stephen Hill
10:55	AEE Industry Good Practice Guidance update – Sam Timbrell, Ruth Fain, Robyn Burman
11:20	<i>Break (15mins)</i>
11:35	Transforming Orbital Regulatory Regime project – Marie Tilbee
12:10	Pre-application Process – Sue Kee
12:20	Review Slido and feedback – Colin Macleod
12:30	<i>Networking Lunch (1hr)</i>



Slido joining link:
<https://app.sli.do/event/iQqag8y11S99Qyjhehdt4h>

Welcome

Housekeeping

- Please mute microphones
- Please use meeting Q&A for subject specific questions, or raise your hand
- Use Slido to suggest future topic requests & engagement approaches
- Please be respectful to colleagues
- We will publish the slides and actions from this meeting

Welcome and introduction

Colin Macleod, Head of UK Space
Regulator, CAA



Update from Autumn 2025 SPLOG



RIO Commitments: Orbital Licences etc

Jeremy Ketley, Policy Specialist





Update on RIO Commitments

Further to the November session of SPLOG, we have published for the first time:

Guidance on model orbital licence terms, conditions and reporting requirements for operating a space object and procurement of a launch.

The guidance can be found in Appendix 2 to [CAP 2210 – Guidance for Orbital Operator licence applicants and licensees](#) and [CAP 2224 Guidance on applying for a licence under the Outer Space Act 1986](#). The aim of this guidance is to provide applicants with more transparency and certainty on what their licence will require, if granted.

[Spaceflight Regulatory Objectives](#) that underpin our assessment of licence applications and ongoing regulatory functions under the Space Industry Act 2018 and the Space Industry Regulations 2021.

Space licensing performance metrics on the [CAA Service Standards webpage](#).

End of Life Policy

Robert Garner, Space Analysis Lead



End of life plans

- In November we introduced a new approach to managing end of life in licences, including new licence conditions, reporting requirements and guidance on what should be included
- This approach is being used in new licences
- The key points are that:
 - You are required to maintain an end of life plan
 - You do not need to permission from the CAA to dispose of a satellite in line with that plan
 - You will need to notify us if you intend to change your end of life plan, as well as when you start and when you end the disposal phase
 - We adopted definitions for “end of mission”, “disposal”, “disposal phase” and “end of life” from ISO 24113
- Further information is [available on our website](#)

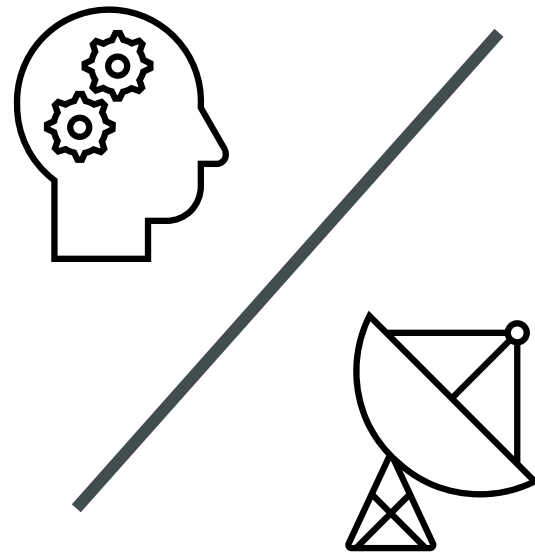
Direct and Effective Control policy

Stephen Hill, Policy Specialist



Direct and Effective Control

- DEC is the key concept for orbital operations, and has been since the OSA- but we're conscious we've never outlined it specifically in published guidance before
- We will shortly be publishing a piece of guidance which outlines the DEC concept- this guidance will be incorporated into the orbital guidance on the next revision
- The new guidance includes a 'primer' on DEC and a non-exhaustive list of examples
- We do have a presentation on DEC, if there is sufficient interest, I'm happy to deliver it
- No change to the way things work- we're just outlining it in guidance



AEE Update

Sam Timbrell, Mott Macdonald





UK Spaceports and Launch Operators

Industry Good Practice Guidance for the
Assessment of Environmental Effects

Introductions



Sam Timbrell

Senior Associate
at Mott MacDonald



Ruth Fain

Director of Aurora Environmental
Consulting Limited



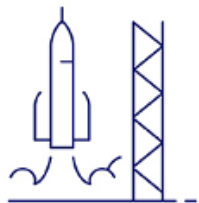
Robyn Burman

Space Regulatory Policy Specialist
at the Civil Aviation Authority

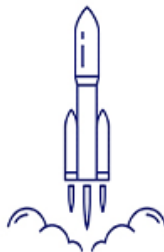
Environmental requirements

- **Section 11 of the SIA** requires applicants for either a spaceport or a launch operator licence to submit an assessment of environmental effects (AEE).
- The CAA is required to take into account the AEE when deciding to grant a licence and what, if any, conditions to attach, as one of the legislative tests.
- Statutory guidance for the AEE sets out the requirements for an AEE (CAP2215).
- **Section 2(2)(e) of the SIA** requires the regulator to take account of any environmental objectives set by the Secretary of State.
- Guidance on the environmental objectives provides advice on what the objectives are and what is required to meet the objectives.
- There are no regulations for the purposes of environment, all minimum requirements come from the guidance.

SIA Licence types



Spaceport



Launch



Range



In orbit



Procurement Only

What is an AEE?

- **A process and a document**

- A systematic process to identify, predict and evaluate the environmental effects of the proposed activities.
- An evidence-based document which presents the findings of that process, complying with CAP2215, including:
 - The significance of the environmental effects; and
 - Identifying the mitigation measures (where required).

- **The purpose:**

- To provide information for informed decision-making based on the environmental consequences of the proposed activities; and
- Improved environmental protection.

What are the proposed activities?

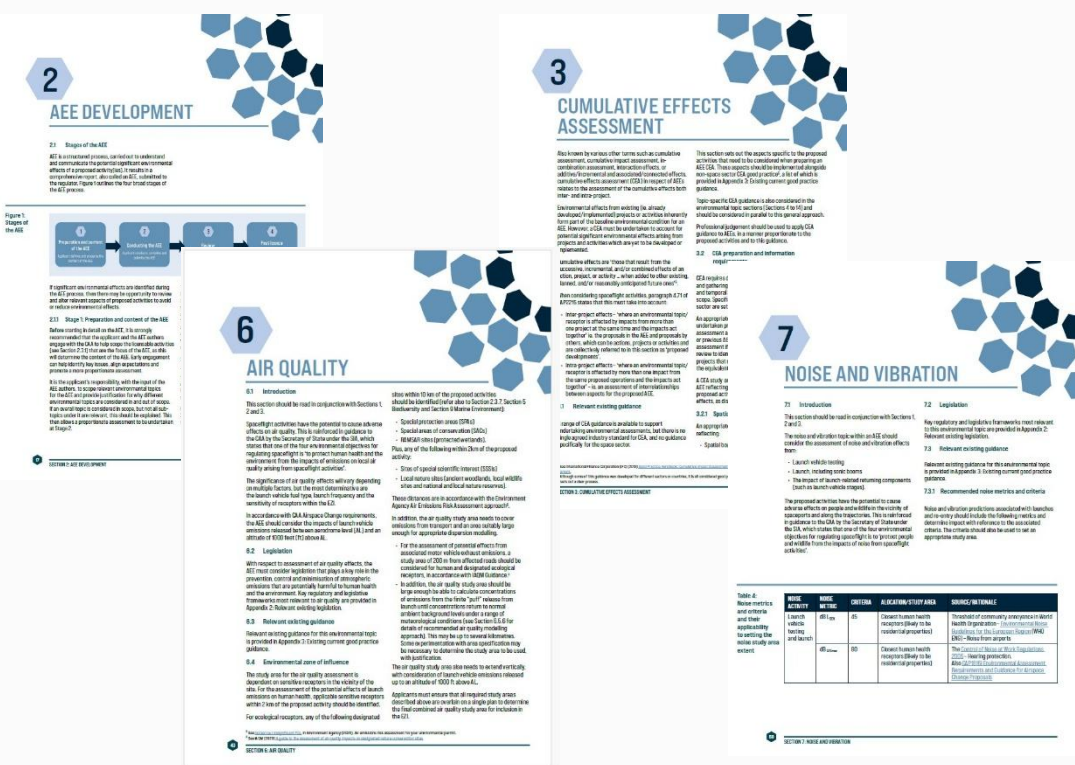
Proposed activities are activities relevant to the AEE,
and include:

- Launch vehicle and payload processing
- Hazardous materials storage and handling
- Propellant loading
- Launch

Why is this guidance needed?

- CAP2215 sets out the requirements of an AEE but does not provide detailed guidance on HOW to carry out the assessment.
- Experience indicated that AEEs could be improved to facilitate a shorter review time and less requests for information, and therefore a shorter licensing process.
- Guidance was therefore developed by an industry-led Spaceport and Launch Environmental Working Group, operating under the professional membership body the Institute of Sustainability and Environmental Professionals (ISEP).
- Working group was set up through this SPLOG and included specialists from across impact assessment as well as spaceport and launch operators.
- The guidance, published in March 2026, was co-authored by Ruth and I, and the CAA was involved in development and review.

The Guidance





Main Authors:

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Aurora Environmental Consulting

SAM TIMBRELL

Mott MacDonald

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Review and editorial support:

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Vanessa Hawes, ISEP

Recommended good practice

- Provide clarity and appropriate level of detail on proposed activity.
- Mission 'design freeze' and subsequent changes – manage between the AEE author and the operator, and with the CAA.
- Document achievement of the environmental objectives within the AEE.
- Spaceport and launch operator relationship/interdependency.
- Continual communication with the CAA throughout the project.
- Guidance sets out specific methodologies.

Approach to proportionality

More emphasis is needed in AEEs on:

- Relevance - AEE author scoping and providing adequate reasoning.
- Significance - Justification of what effects are not likely to be significant.
- Equivalent assessments – appropriate use of existing assessments can reduce the need for new assessments.

Applying existing environmental assessment practice to a new sector

- **Using competent experts**
- **Using tried and tested approaches from Environmental Impact Assessment (EIA)**
 - Reporting
 - Assessment methods
- **Tailoring to the specifics of the space sector**
 - Professional experience (UK and abroad)
 - Proposed activities
 - Identifying which topics are less likely to be affected
 - Trial and adjustment

Topic assessment methodology examples

➤ Air quality

- Industry-related modelling (e.g. puff release)
- Emissions profiling (e.g. directionality, pollutants)

➤ Noise and vibration

- Industry-related modelling (e.g. RUMBLE and PCBoom)
- Vibration modelling
- Modelling of the operational phase

➤ Climate

- Industry-specific gaps (e.g. upper atmosphere effects, black carbon)

➤ Accidents and disasters

- Major accidents are assessed to identify and test the suitability of environmental mitigation measures in the event of a scenario unfolding.
- The assumption for assessment purposes is that the scenario will happen ($P=1$) and the environmental impact is certain to occur, even though it may not in reality

Lessons Learnt

- Collaborative approach and knowledge sharing between industry, their Consultants, the CAA and their competent experts.
- Outcome focused approach to regulation from the very start of the regulatory regime.
- Iterative process and always improving.
- Lots of opportunities for development of understanding e.g.
 - Monitoring of launches will feed back into the AEEs
 - Technology development may fill gaps

Conclusions

- Regulatory regime is under ongoing review as the industry develops to make sure it continues to achieve its aims.
- As the UK's first resource of its kind, this guide marks an important step in shaping consistent, evidence-based environmental practice for the UK space sector.
- As experience grows and innovation continues, the working group welcomes feedback to strengthen future editions and continue pushing the boundaries of environmental assessment.

15 min break

11:20 – 11:35



Transforming Orbital Regulatory Regime project

Jeremy Ketley and Marie Tilbee



Why are we doing this ?

Key Drivers

Continuous Improvement CAA's ongoing commitment since 2021

CAA commitments to RIO Contribute to delivery against various commitments we made in exchange of letters Oct 2025

Commitments to HMG 25% Reduction in administration burden by 2030

Growth Agenda

Regulatory Review 2024 (e.g. Recommendation 3)

Evolving space industry landscape Increasing complexity (potentially at same time as increasing volume)

What is it?

Joint CAA and UKSA programme of work to continue building a more efficient and flexible orbital regulatory regime for the space sector



Vision

A flexible orbital regime that enables licensing of multiple missions through proportionate, assurance driven regulation.

Key elements:



- Streamlining end-to-end processes and improvements to the pre-application and application portals



- Structured re-use of assessments and information to reduce regulatory burden on the sector



- Piloting and testing pathways to use powers under section 12 of the SIA for “multi-mission” (multi-satellite) licensing

Objectives



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**Flexible licensing
pathways**



**Structured
information re-use**



**Lower
administrative burden**



**Reduced licensing
timelines**



**Support long-term
business planning**



**Targeted regulatory
intervention**



Growth

MML Regulatory Sandbox

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- This Regulatory Sandbox aims to secure sector input to the CAA and HMG's exploration and development of options and pathways to authorise and regulate multiple satellites under a single orbital operator licence.
- The procurement for the Regulatory Sandboxes is now live, with a tender deadline of **10th August 2026**. Suppliers should refer to the published tender notice for details on how to access the tender.



TENDER NOW LIVE

The sandbox tender is now live and available on the Find a Tender service.

[Space Regulatory Sandboxes, including the Re-Entry Regulatory Sandbox and the Multi-Mission Licensi...](#)

The sandbox will aim to deliver both short term benefits and long term reform:



Short term benefits:

- Testing re-use of information principles which will benefit all returning operators to the UK



Long term reform:

- Using sandbox evidence to develop a multi-mission licensing framework

What you told us



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What is working well



Helpful and responsive engagement

Stakeholders value the support, responsiveness and accessibility they receive.



Good dialogue during the process

Open and constructive conversations help progress applications and build trust.



Confidence in the regulatory approach

There is trust in the CAA's expertise and decision-making.



Regulatory intent is sound

The regulatory framework is seen as enabling proportionate and risk-based decisions.



Where we're focusing



Information is duplicated

Information is requested multiple times across different requests or submissions.



Sequential activities could run in parallel

Some sequential steps could be redesigned to run in parallel.



Portal isn't always intuitive

The portal isn't always intuitive and could be easier to navigate.



Progress tracking isn't always clear

Delays are difficult to predict and progress tracking isn't always clear.



Some areas require interpretation

Some areas require interpretation – clearer examples of "good" would be helpful.

Workstreams

Options to improve how information is collected, maintained and used to support regulatory decisions are being developed through two workstreams



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Streamlining the licensing process

- Improve the end-to-end application journey
- Better integrate pre-application engagement
- Streamline supporting processes (e.g. National Security Questionnaire)
- Improve digital services and portal functionality

2

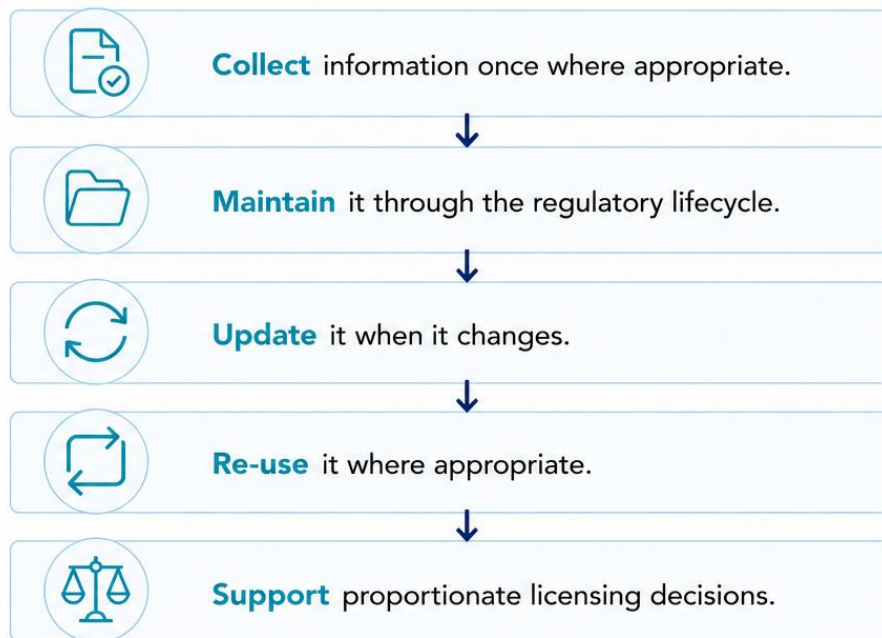


Structured information re-use

- Optimise how information is collected and maintained to enable re-use throughout the regulatory lifecycle
- Ensure regulatory effort is targeted on areas of change and risk
- Reduce unnecessary reassessment through structured re-use
- Formalise our approach and ensure a consistent re-use approach is applied across licensing activities

Structured information re-use

Instead of requesting the same information as part of each licence application, information should be maintained, updated and re-used throughout the regulatory lifecycle



Types of information



Organisational information

Information about the operator that can be maintained and re-used across multiple missions (e.g. governance, contacts, security arrangements).



Mission specific information

Information unique to a particular mission or application (e.g. spacecraft, payload, orbit, mission arrangements).



Regulatory evidence

Evidence obtained through regulatory oversight (e.g. monitoring activity, compliance history, operational performance).



Not all information changes with each application and different information requires different maintenance approaches



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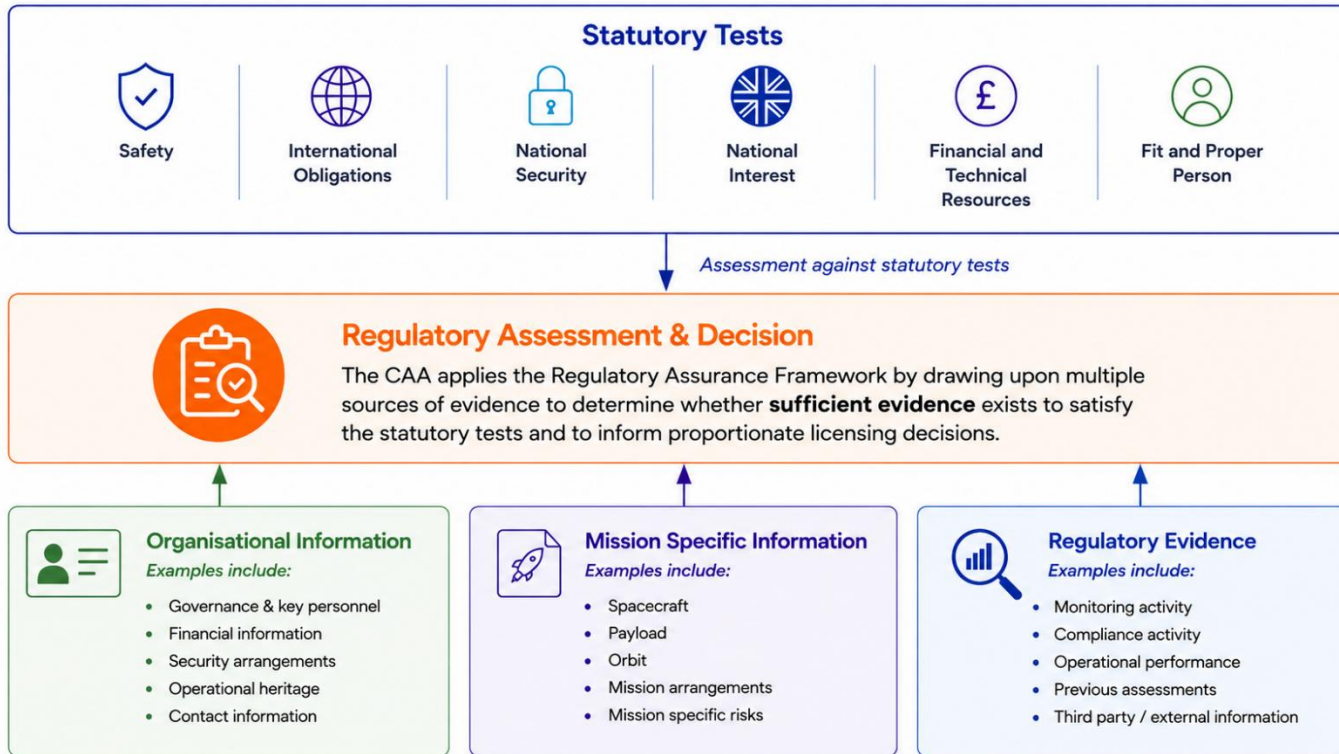


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Conceptual Orbital Operator Re-use Model



- Three distinct sources of information support regulatory decisions.
- Organisational information, mission-specific information and regulatory evidence are treated separately.
- Evidence is combined proportionately to satisfy the statutory tests.

Conceptual user journey

One example of how a re-use approach could operate in practice

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Information maintained throughout the regulatory lifecycle

Examples of organisational information that can be maintained over time and re-used across multiple licence applications



Examples
of
information
maintained
by the
operator



Corporate

- Company details
- Directors
- Ownership structure
- Contact information
- Articles of Association / MoA



Governance

- Key personnel
- Governance arrangements
- Roles and responsibilities
- Delegations



Operational

- Previous missions
- Operational heritage
- Ground segment arrangements
- Operating procedures and capabilities



Security

- Security arrangements
- Relevant personnel information
- Security accreditations and assessments



Financial

- Financial standing
- Financial guarantees (where applicable)

Emerging Opportunities



We are exploring a range of practical short-term and longer-term opportunities to improve the regulatory process. These examples illustrate the types of changes that could reduce administrative burden while maintaining robust regulatory assurance.

HAVE YOUR SAY!



Launch & Procurement Providers



TODAY

Many orbital operators use well known launch and launch procurement providers.

There is currently repetition of effort assessing known providers across applications.



OPPORTUNITY

Maintain assurance of recognised providers where appropriate.

Re-use previous assessments to reduce unnecessary duplication.



Operator Experience



TODAY

Applicants are currently asked to describe their operational capability in every application.



OPPORTUNITY

Maintain operational capability information through the regulatory lifecycle.

Applicants confirm or update information rather than resubmitting it.

Next steps

OFFICIAL - Public. This information has been cleared for unrestricted distribution.

Agree the approach

Agree structured information re-use principles
Engage industry and CAA & government stakeholders
Complete information inventory



Jul



Aug

Develop proposals

Define reusable information
Design concept options
Identify early improvements

Regulatory sandbox

Complete procurement process and mobilise sandbox delivery, subject to award and contract execution

Sep



Oct



Sandbox Commences

Test proposed approaches
Gather operational evidence
Refine concepts

Implement early improvements

Deliver agreed quick wins
Refine guidance and processes
Prepare implementation roadmap



Dec

Mar/Apr



Evaluation

Publish evidence report
Recommendations for long-term reform
Inform future implementation

Thank you

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caa.co.uk/space

Pre-application process

Sue Kee, Head of Space Applications

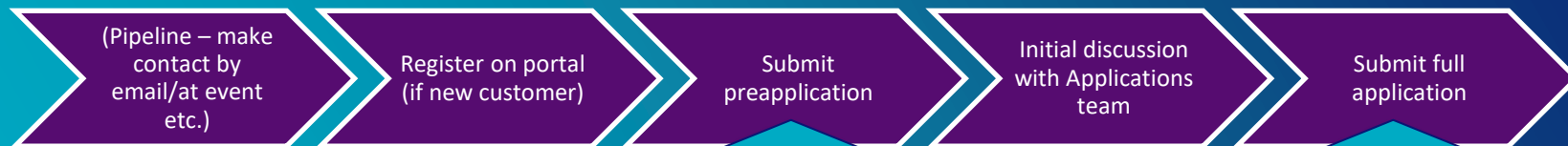


Pre-application process

- Current process:



- Interim updates:



- Future state:



Additional questions:
Previous CAA engagement, and summary of expectation/ask.

Ability to reuse applicant information and mission details from preapplication.

SAMPLE QUESTIONS:

What do you wish you'd known before you'd started your full application?

What could we do better?

What other methods of engagement and information sharing would be useful to new applicants?

If you would be willing to add further input, please contact Sue.Kee@caa.co.uk

Future session feedback

<https://app.sli.do/event/iQqag8y11S99Qyjhehdt4h>

Open for comments until this evening



AOB and Closing Remarks



Thank you
caa.co.uk/space

Please join us for a
networking lunch