



Department
for Transport

The Spaceflight Safety and Regulatory Council – Second Meeting 16.00-18.00, Thursday 31st March 2022 (Virtual Meeting)

Attendees

Member attendance

- Kevin Craven, Chief Executive, ADS Group
- Phil Wadey, Head of Space, Airbus
- Joanne Wheeler, Managing Partner, Alden Legal
- Paul Williams, Executive Director, Black Arrow Space Technologies
- Manny Shar, Head of Analytics, Bryce Tech
- Phil Davies (deputising for Sean Hardacre, Managing Director), Deimos Space UK Ltd
- Akiko Hama, Client Executive Space and Aerospace, Global Aerospace
- Mark Dickinson, Vice President of Satellite Operations, Inmarsat
- Chris McLaughlin, Chief of Government, Regulation & Engagement, OneWeb (Co-Chair)
- Chris Larmour, CEO, Orbex
- Stuart Fyvie (deputising for Mick O'Connor, Programme Director, Prestwick Spaceport)
- Steve Powell, Senior Campaign Lead, Qinetiq
- Chris Mutlow, Director, RAL Space
- Luke Winfield (deputising for Melissa Thorpe, Head, Spaceport Cornwall)
- Victoria Montag, General Manager – UK Launch Services, Spaceport Macrihanish
- Matthew Hinton, Estates Manager (deputising for Lee Paul), Snowdonia Aerospace
- Mark Roberts, Project Director, Spaceport 1
- Jan Skolmli, Chief Commercial Officer, UK Space
- Andy Bradford, Co-Founder and CEO, UKLSL
- Dan Hart, CEO, Virgin Orbit
- Andy Palfreyman (deputising for Phil Brownnett, Surrey Satellite Technology)
- Stephen Vance, CGI

Department for Transport (DfT), Aviation Directorate official attendance

- Jenny Ward, Deputy Director, Aviation Strategy, Consumers and Innovation (Deputy Co-Chair)

Department for Business, Energy and Industrial Strategy (BEIS) official attendance

- Jennifer Hurley (deputising for Rebecca Evernden, Director for Space)

Ministry of Defence (MoD) official attendance

- Air Commodore Julien Ball (deputising for Air Vice Marshal Harvey Smith, CBE, OFC, DFC, Head of UK Space Directorate)

Apologies

- Rt Hon Trudy Harrison MP, Parliamentary Under Secretary of State for Transport
- David Oxley, Space Hub Sutherland
- Phil Brownnett, Surrey Satellite Technology Ltd
- Luis Gomes, CEO, AAC Clyde Space
- Paul Livingston, Lockheed Martin UK Ltd
- Scott Hammond, Shetlands Space Centre

Meeting observers & technical advisors

The Spaceflight Safety and Regulatory Council (SSRC) is formed of senior-level members from spaceflight industry, government officials, and Ministers. It is representative of the segments of the commercial spaceflight industry affected by the Space Industry Act 2018 and new commercial spaceflight regulations.

Observer status was offered to stakeholders and industry members who are not members of the Council and to other government departments and the devolved administrations.

The meeting was also supported by technical advisors from other government departments including the UK Space Agency, the Civil Aviation Authority, Air Accidents Investigation Branch, Health & Safety Executive, and Maritime Coastguard Agency.

Agenda

1. Welcome and opening remarks from the Co-Chair

Chris McLaughlin welcomed the delegates to the second meeting of the SSRC, reminded them of the basic 'house-keeping' rules for its conduct and thanked the secretariat and support staff for bringing it about. The Council is not operating under Chatham House rules and this meeting is being minuted and recorded. After the meeting the minutes will be made publicly available on the SSRC's GOV.UK page (<https://www.gov.uk/government/groups/spaceflight-safety-and-regulatory-council>). Council membership will also be published on this page.

2. UK Government updates across UK commercial spaceflight

Jenny Ward (Deputy Co-Chair) advised that following the request at the first SSRC this would be a standing agenda item where updates from UK Government on spaceflight could be discussed.

The government announced in the Spending Review plans for the largest R&D budget. Nearly £40 million over the next three years, to drive forward the innovation strategy and become a global science superpower. This includes increased funding for the UK Space Agency which will grow by more than £600 million by 2025. Two funding streams have concluded over the last few months are the nanosat competition, where five applicants shortlisted, and some funding for projects supporting sustainable operations in space, particularly to deal with space debris.

In April the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) is meeting, in which we will participate, with updates on national legislation, utilisation of space and action on space debris.

Across government, we continue to work closely with companies that have been affected by the international situation in Ukraine.

Following publication of the National Space Strategy in September 2021, the Defence Space Strategy was published on 1st February 2022. This sets out the government's vision for defence as a global actor in the space domain and discusses how the Ministry of Defence will deliver the Protect and Defend goal through space-related capabilities, operations and partnerships.

3. Insurance and liabilities

Members received an update on (i) the call for evidence to inform developments of the orbital liability and insurance policy, (ii) operator liability limits - section 12(2) of the Space Industry Act and (iii) launch liability and insurance.

Following the call for evidence in October 2021, there was a re-focusing on three areas.

- Satellite operator liability limits and insurance requirements, including (i) a move to a variable liability limit approach, (ii) reflecting an orbital sustainability focus, (iii) a limited number of liability bands from £0 to £50m and (iv) use the waiver of insurance approach to support the broader aims of the National Space Strategy.
- Alternatives to traditional third-party liability approach were being considered, including collective buying of insurance by industry body, mutual approach and a Government-issued 'space bond'.
- Other considerations included insurance requirements for overseas launch; end-of life requirements; re-entry insurance requirements and an all-encompassing overview of insurance requirements for an entire mission.

The Government has clarified that all licences issued under the Space Industry Act (SIA) will contain a limit of operator liability with respect to claims made under both sections 34 and 36 of the Act. Government is considering amending section 12(2) of the SIA to clarify that all operator licences must specify a limit on the amount of the licensee's liability under section 36.

Concerning launch liability, launch operator's insurance requirement and a cap on liability will be calculated using a Modelled Insurance Requirement (MIR). Analysis

indicated that this would give the UK a competitive advantage in comparison with a flat rate. An upper flat rate cap for launch operator insurance and liability is being considered. This would provide certainty at the outset for a launch licence applicant on the maximum amount of insurance and liability needed. A workshop on this topic is proposed by DfT in the future.

There was discussion by members around MIR process transparency. It was agreed this needed to be discussed with the CAA. Members thanked the team for their work and the government for listening to industry's concerns regarding insurance models.

4. Charging Process

Members received a progress report by UKSA on Orbital Charging of payloads.

Government sets fees in line with costs incurred (as set out in HM Treasury guidance, Managing Public Money). Orbital fees have remained at £6,500 since 1998 whilst licensing costs have increased over time. There are no plans to update orbital fees in the short term.

Over the longer-term, there are plans to create a more flexible charging scheme which considers different mission types, different activities (licensing vs. monitoring).

Concerning the Constellation Refund Scheme one operator has successfully applied under the scheme. There are no changes to the existing scheme for the forthcoming year.

UKSA/BEIS are exploring possible options to enable the CAA to charge to transfer OSA charging powers to the CAA, as set out in the consultation for the Space Industry Regulations. The aim is to provide CAA with powers to charge under OSA (alongside existing SIA powers). The UKSA will provide members with a progress update later in the year.

5. National Space Partnership (NSP) moderated views on the Regulatory Framework

The Council received a briefing by the National Space Partnership on Members views on the Regulatory Framework. All 27 Council members were contacted and 15-minute interviews were conducted with 17. A report was delivered to DfT on 25th March 2022.

The conclusions drawn were that (i) the CAA was the appropriate agency for licensing and was engaging well, (ii) the expectations of applicants and the process itself were their concern and not, the framework, which was broadly accepted (iii) there was a need for balance between safety concerns and commercial attractiveness and (iv) increased training and communications on licencing combined with a smaller, more focussed Council would be helpful.

Members welcomed the comments about the new regulator, which was adapting and learning.

Members requested more engagement with the CAA to identify any systematic issues with UK licensing applications. The CAA agreed to engage with a group of applicants via the SPLOG or meet on a one-to-one basis.

It was noted Members experience had shown discussions regarding a licence application could start with the Federal Aviation Authority (FAA) up to 2 years in advance of submitting an application, whereas, the UK, engagement with the CAA and the start of the licensing application process were simultaneous. Therefore, to ease the process it would be useful to understand which aspects of the licensing process were the same between the UK and US.

Environmental Assessments and their importance were raised as launch debris can fall in the oceans and can be jettisoned elsewhere, requiring different assessments. The CAA and DfT will take the matter forward, with a view to its resolution, either through legislation or policy decision.

The purpose of the Council is to listen to industry and consider the needs for regulatory change, for example the topics discussed today.

Concerning Council membership, if there were those who believed that they were not benefitting from Membership, they were welcome to continue as Observers and should contact the Secretariat accordingly.

6. Any Other Business and Closing Remarks

The Chair thanked all the participants for their contributions for a productive meeting.

The Spaceflight Safety and Regulatory Council will next meet in July 2022, with a date to be confirmed.

Meeting closed at 16.25.