

United Kingdom, Item 15

UK General Statement at the 62nd session of the Scientific and Technical

Subcommittee of COPUOS, 3-14th February 2025

Chair, Distinguished Delegates,

The UK acknowledges the vital role that astronomical observations from space and Earth-based installations play in our ability to understand our Universe, enable deep space navigation and exploration and provide early warning detection of Near-Earth Objects. The UK also recognises the benefits satellite constellations can bring to bridge the digital divide as well as provide global connectivity. The UK welcomes the addition of this agenda item to our programme of work and hopes we can remain focused on the discussion around how to balance our access to vital services from space, whilst minimising the impact on important scientific research.

Addressing the issues and challenges of Dark and Quiet Skies requires international collaboration. The UK is an active member of the Group of Friends for Dark and Quiet Skies for Science and Society and has UK representatives from the astronomical community as well as industry contributing to the groups work. The UK welcomes the CRP developed by the Group of Friends shared at this session as a key source of possible implementation actions for member States including areas such as increasing the accuracy of predictions and optical brightness.

To support the awareness raising on this topic the UK invited Eutelsat OneWeb to provide a technical presentation under this agenda item during week 1 of this session titled “Dark and quiet skies: perspective from a satellite operator.” Eutelsat OneWeb is an operator of a large constellation and the presentation provided insight into the steps being taken in the design of the constellation, brightness predictions and sharing of satellite ephemeris to attempt to mitigate the impacts of operations on ground based astronomy. The UK hopes the presentation proved useful to member states and we continue to encourage sharing of best practice from operators within the subcommittee on this topic.

The UK is host to the Square Kilometre Array Observatory’s international headquarters and co-funded the sites expansion in 2019. The UK is contributing 15% of the cost of constructing the Square Kilometre Array Observatory from 2021 to 2030 and is the largest contributor to the observatory. The Square Kilometre Array Observatory is a co-host of the International

Astronomical Union Centre for the Protection of the Dark and Quiet Sky from Satellite Constellation Interference and the UK fully supports the work of this group.

The UK has re-formed its All-Party Parliamentary Group for Dark Skies which aims to work with major organisations, experts and communities to identify political priorities on dark sky issues, discuss lighting and planning policies and advocate for them in the UK Parliament. The Group's objectives are to highlight the importance of preserving the environmental benefits of a dark sky at night, promoting the adoption of dark sky friendly lighting and planning policies, protecting existing UK Dark Sky reserves and support potential new reserves as well as collaborating with overseas groups such as Dark Sky International and Dark Sky UK. The group held its inaugural meeting in November 2024.

To continue to develop knowledge on the impacts of space activities on astronomical observations, the UK Space Agency has recently provided funding to conduct two studies in relation to the agenda item. The first studies intention is to take a first step towards the development of a standard for visible wavelength satellite brightness. The second study will look at the precision of ephemeris data needed for the astronomical community to effectively predict satellite positions, plan observations, and implement mitigation strategies to reduce the impact of satellite interference. We hope to present the results of these studies at the next session to advance understanding of some of the proposed actions of the Group of Friends.

The UK wishes to reiterate the need to remain focused on the impacts of constellations on astronomical observations and the ways in which these can be mitigated. The UK will continue to emphasise the importance of finding solutions to the issue of Dark and Quiet Skies and it is our strong hope that progress can be made at this meeting and across the duration of the COPUOS agenda item.