

 **Permanent
Mission
of Austria**

to the United
Nations in Vienna

AUSTRIA, ITEM 18

**General Exchange of Views on Dark and Quiet Skies
for Science and Society**

59th STSC (7 – 18 February 2022)

Ambassador Gabriela SELLNER

Chair,
Excellencies – Colleagues,
Dear Ladies and Gentlemen,

Austria supports and co-sponsors the **Working Paper on the protection of Dark and Quiet Skies for Science and Society (A/AC.105/C.1/L.396)**. The increasing number of existing satellites in various Earth orbits has effects on both professional astronomical research and amateur astronomy as well as on us the humans on earth.

Let me add a few comments regarding that paper.

Regarding II.9:

Calculations show that the brightness of all artificial objects in Earth's orbit can produce a non-negligible contribution to the brightness of the night sky. More precisely, these can correspond to an addition of 10% to the natural night sky brightness (Kocifaj et al., 2021). According to the classification of the *International Astronomical Union (IAU)*, this already exceeds the limit for locations for astronomical observatories and shows that satellite constellations must also be regarded as very dangerous sources of light pollution.

Regarding III.17:

The establishment of the *IAU Centre for the Protection of the Dark and Quiet Skies* is welcomed. The centre will produce and disseminate data and information on the mitigation of optical light interference by satellite constellations. The centre will foster the development of tools and procedures that can mitigate the impact of satellite constellations on optical astronomy. It will work with the space companies and industries to discuss and converge on mitigations. This creates a solid base of data needed by all stakeholder groups involved.

We think that this topic needs awareness and subsequent action. We therefore look forward to the discussion on this new topic and possible next steps to preserve space activities for present and future generations.