



*ESO Statement under Agenda Item 4, General Exchange of Views.*

**Statement by Dr. Andrew Williams on behalf of the European Organisation for Astronomical Research in the Southern Hemisphere (ESO) to the 59<sup>th</sup> Session of the Scientific and Technical Subcommittee of United Nations Committee on the Peaceful Uses of Outer Space.**

Mr Chair, Distinguished Delegates,

It is a great honour to deliver this statement on behalf of the European Organisation for Astronomical Research in the Southern Hemisphere, known as ESO. We would like to offer our warmest congratulations to you, Mr Chair, on your election as Chair. We are confident that the work of the Committee will benefit from your experience and leadership.

Mr Chair,

I'm pleased to report to the Committee that ESO's astronomy programmes are on a strong footing, despite the challenges of the past two years. Thanks to the support of our 16 Member States under the framework of our intergovernmental treaty, our Host State Chile, and Australia—our strategic partner, ESO continues to be the world's most productive astronomical observatory, providing a range of world leading facilities to astronomers from around the world.

The construction of the Extremely Large Telescope is underway, with over 80% of the contractual value of this Billion-Euro-class project making progress in industry. With a primary mirror of 39m in diameter, the Extremely Large Telescope will be the world's largest optical and infrared telescope at its 'first light' during this decade. The ELT will be a powerful machine to explore outer space and will track down Earth-like planets around other stars, and search for evidence of life outside of our Solar System. It will also probe the furthest reaches of the cosmos, revealing the properties of the very earliest galaxies and the nature of the dark Universe.

We are continuing to support and develop the Atacama Large Millimetre / Sub-Millimetre Array, or ALMA, which is an international partnership amongst Europe, represented by ESO, North America, and East Asia, in cooperation with the Republic of Chile. ALMA is to date the world's largest astronomical cooperation and has enabled many amazing

science discoveries due to its powerful capabilities, for the benefit of all humankind. Finally, the Very Large Telescope and its interferometer the VLTI continue to be at the forefront of optical astronomy.

Mr Chair,

We all recognise the great value that astronomy plays in providing critical functions to space exploration, space science, and planetary defense, in stimulating interest in scientific and technical studies and careers, and in building national capacity towards a space capability.

I would like to close with a reflection on the increasing number of artificial space objects, particularly satellite constellations placed in low earth orbit, which have the goal to provide global communications. While these developments present both challenges and opportunities, the astronomy community has raised concerns about the impact on our ability to conduct fundamental science.

ESO is joining other Observers including the IAU and SKAO, and several Member States, in endorsing a Working Paper, which encourages this Committee and its Member States to consider mitigation measures and voluntary best practices and guidelines for implementation by satellite constellation industry, while also enabling humankind to continue its observation and understanding of the Universe, safeguarding our cultural and natural heritage right to a pristine night sky.

Mr Chair, Distinguished Delegates, thank you for your kind attention.