

Item 12: Space and Global Health

United Kingdom Statement to the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) – Scientific and Technical Subcommittee, on Space for Health

Chair, distinguished delegates,

The United Kingdom welcomes this opportunity to contribute to the discussion under the agenda item "Space and Global Health" and wishes to highlight the transformative potential of space technologies to address global health challenges.

The UK believes that space applications will play an increasingly vital role in improving health outcomes, particularly through the provision of satellite derived data, insights and services in support of healthcare systems. Satellite remote sensing provides critical data for monitoring environmental factors that affect public health, such as air quality, waterborne disease outbreaks, and vector-borne risks. Satellite communications enable telemedicine and e-health solutions, extending healthcare services to under-served regions and strengthening global health equality. Space technology has been spun out into innovative healthcare applications from more precise x-ray machines for detecting cancer to air purifying systems. These contributions are vital in times of crisis, such as pandemics or natural disasters, where space-based tools guide timely and effective responses.

The UK would also like to highlight the emerging potential of the low Earth orbit environment for developing pharmaceutical and biomedical innovations, such as advanced drug formulations, tissue engineering and regenerative medicine. Microgravity conditions in space offer unique opportunities for research and development that could revolutionise healthcare on Earth. However, the realisation of these opportunities is contingent upon addressing shared global barriers, including reliable and affordable launch and return logistics, access to the necessary

manufacturing and testing infrastructure, clear and proportionate regulation, and ease of integration into existing healthcare systems.

The UK is home to the largest publicly funded National Health Service in the world which makes us uniquely placed to lead the development and implementation of innovative healthcare solutions. Working in collaboration with our National Health Service, the UK has identified two priority areas where space technologies can have the most immediate impact on healthcare. First, the use of satellite-enabled technologies to enhance tracking of patients, staff, and equipment to create resource and cost efficiencies. Second, remote monitoring, enabled by satellite communication and Earth observation, to allow for proactive diagnosis and care at home, reducing hospital admissions and supporting better management of chronic conditions.

The UK Space Agency is advancing innovative healthcare solutions through its Unlocking Space for Government programme, which is fostering a user-centred design approach between Government, industry, and academia to pilot space enabled healthcare solutions. In collaboration with the European Space Agency, the UK is also driving innovation in areas such as telemedicine, environmental monitoring, and pharmaceutical development in Low Earth Orbit. These efforts are helping to align funding and resources across the innovation life cycle and address regulation and procurement barriers.

The UK also recognises the transformative potential of artificial intelligence and other critical technologies in delivering space-enabled healthcare solutions. The UK believes these technologies can play a critical role in analysing complex datasets, enabling predictive healthcare models, and supporting decision-making processes to enhance patient outcomes.

However, no single nation can realise the full potential of these technologies alone. The UK encourages member states to work together to harmonise regulatory frameworks, establish global standards for data-sharing and interoperability, and share best practices for integrating space-enabled solutions into healthcare systems. Collaborative research and development,

joint funding mechanisms, and knowledge exchange platforms will be invaluable to overcoming shared challenges and accelerating progress.

The UK stresses the importance of fostering a user-centred approach to ensure space technologies address real-world healthcare challenges. Healthcare providers require actionable insights and reliable services not just raw data. Many space-based solutions already exist but remain underutilised due to procurement challenges, limited interoperability, and a lack of awareness among healthcare professionals.

The United Kingdom encourages collaboration between all stakeholders to advance this agenda. A coordinated and user-focused approach will ensure that space-derived healthcare solutions are accessible, actionable, and transformative for all, helping to build more equitable and resilient healthcare systems across the globe.

Thank you Chair