

Item 9: Spin-off benefits of space technology

Chair, Distinguished Delegates

The spin off benefits of space technology are clear to the United Kingdom. Raising awareness of space solutions across a variety of sectors outside the space industry is key to maximizing the benefits to the public. This in turn helps to continue to grow interest in space exploration. The UK welcomes the opportunity to share some illustrative examples of developments in the Agricultural and Health sectors.

Clean growth is an important objective globally with growing pressures on the environment due to climate change. Waste methane, generated by traditional farming, that escapes into the atmosphere negatively contributes to climate change. In the UK, a new agricultural service is being developed for agricultural and grass landowners leveraging satellite communications in the generation of local biomethane. The service will provide on-site equipment to generate the biomethane, and using satellite communication services and earth observation, it provides information and advice about when to cut fields and grass land areas to support the optimal generation of biomethane. This allows farms, golf courses and football fields to use their waste grass cuttings, feed and animal waste to generate biomethane onsite to fuel their vehicles. This significantly reduces the amount of waste methane damaging the environment produced by farms and grassland owners. It reduces overall operational costs and reliance on fossil fuels, and provides a new revenue stream through the sale of excess biomethane to other users.

In the healthcare industry, there are exciting developments taking place to support patients with long term respiratory and cardiac conditions, with the impact of air pollution continuing to be a concern. A new service that provides a personalised space technology platform will allow patients to receive tailored activity and exercise programmes that take into account their health conditions and their local environmental conditions. Using earth observation and global navigation satellite system data

to monitor air quality, the service can give patients greater confidence in undertaking everyday tasks and exercise to improve and maintain their long-term health.

In conclusion, the range of sectors that can benefit from spin-off technologies of space continues to grow. The UK is committed to raising awareness outside of the space industry of the revolutionary technology being developed and the positive impacts it can have for businesses and the public.