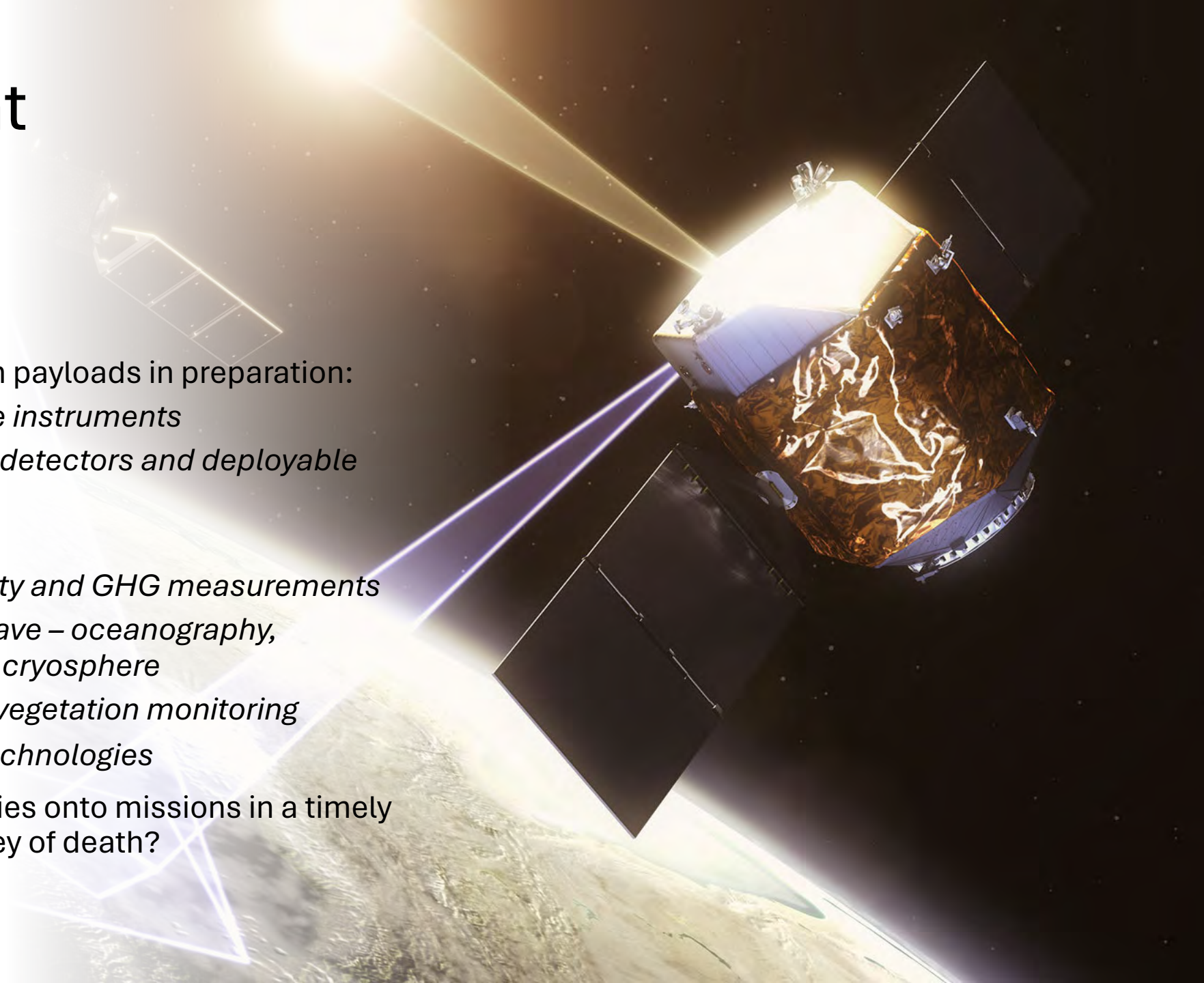


How do I get my instrument
into space?



CEOI Instrument Portfolio

- CEOI has many instrumentation payloads in preparation:
 - *Optical imaging – complete instruments*
 - *Thermal infrared imaging – detectors and deployable optics*
 - *MWIR spectro-radiometry*
 - *Spectroscopy - for air quality and GHG measurements*
 - *Passive and active microwave – oceanography, meteorology soil moisture, cryosphere*
 - *Lidar - instrumentation for vegetation monitoring*
 - *Quantum and cold atom technologies*
- How do we get these technologies onto missions in a timely manner, and avoid another valley of death?





Routes to Space?

- CEOI – budget has increased, but not yet to a level where missions can be funded
- ESA – Earth Explorers, Scouts, Earthwatch.
 - *CEOI and UKSA have done well in these programmes, but opportunities are highly competitive, and it can be a long and sometimes arduous road. Inevitably only a small number of missions can be accessed.*
- National missions?
 - *Possibly! We have a national launch programme, but again, only a small number of missions can be supported.*
- Bilateral international missions?
 - *Opportunities exist, but they are few and constrained by budgets and politics.*
- Commercial missions?
 - *Yes, but requires a plausible market for information services, a bombproof business plan, and access to private investment, (and nerves of steel)!*

Exploring Ideas

- This session presents a series of short talks (we will police the time strictly!) from:
 - *Space Agencies,*
 - *Mission builders – case studies*
 - *Launch providers*
 - *The MoD*
 - *ARIA*
 - *Space Economist*
- We have a slot after the talks for discussion and Q&A with speakers which we hope will continue into the evening and into the future, so we will leave questions until the end
- If there is support, CEOI will organise a dedicated meeting in this area.



A photograph of an astronaut in a white spacesuit floating in space. The Earth's horizon is visible in the upper left, showing a blue sky and white clouds. The astronaut's arm and part of the spacecraft are visible in the upper right. The background is a vast, dark space with a faint starry pattern.

Suggestions for Discussions

- What are your ambitions for a mission opportunity?
 - What drivers are in play?
- What barriers do you foresee?
 - Funds, business planning, opportunities
- How can HMG, UKSA and CEOI help?
 - Funding of course, but future plans?
- What measures from other countries could be adopted by the UK?
 - Any experiences or insights?