

Space Career Opportunities

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The background of the slide is a vibrant space-themed image. It features a view of the Earth's horizon from space, with a bright blue atmospheric glow. In the upper left, a large, detailed Moon is visible. A satellite with solar panels is in the upper right. A rocket is launching from the bottom right, leaving a massive trail of white smoke and orange fire. A space station with a red and white striped parachute is in the bottom left. The Milky Way galaxy is visible as a streak of blue and white light across the dark star-filled sky.

Agenda

- **Space Research & Applications**
- **Model Rocketry** Workshop
- **CubeTwin** Simulator
- **Startup /** Career Opportunities

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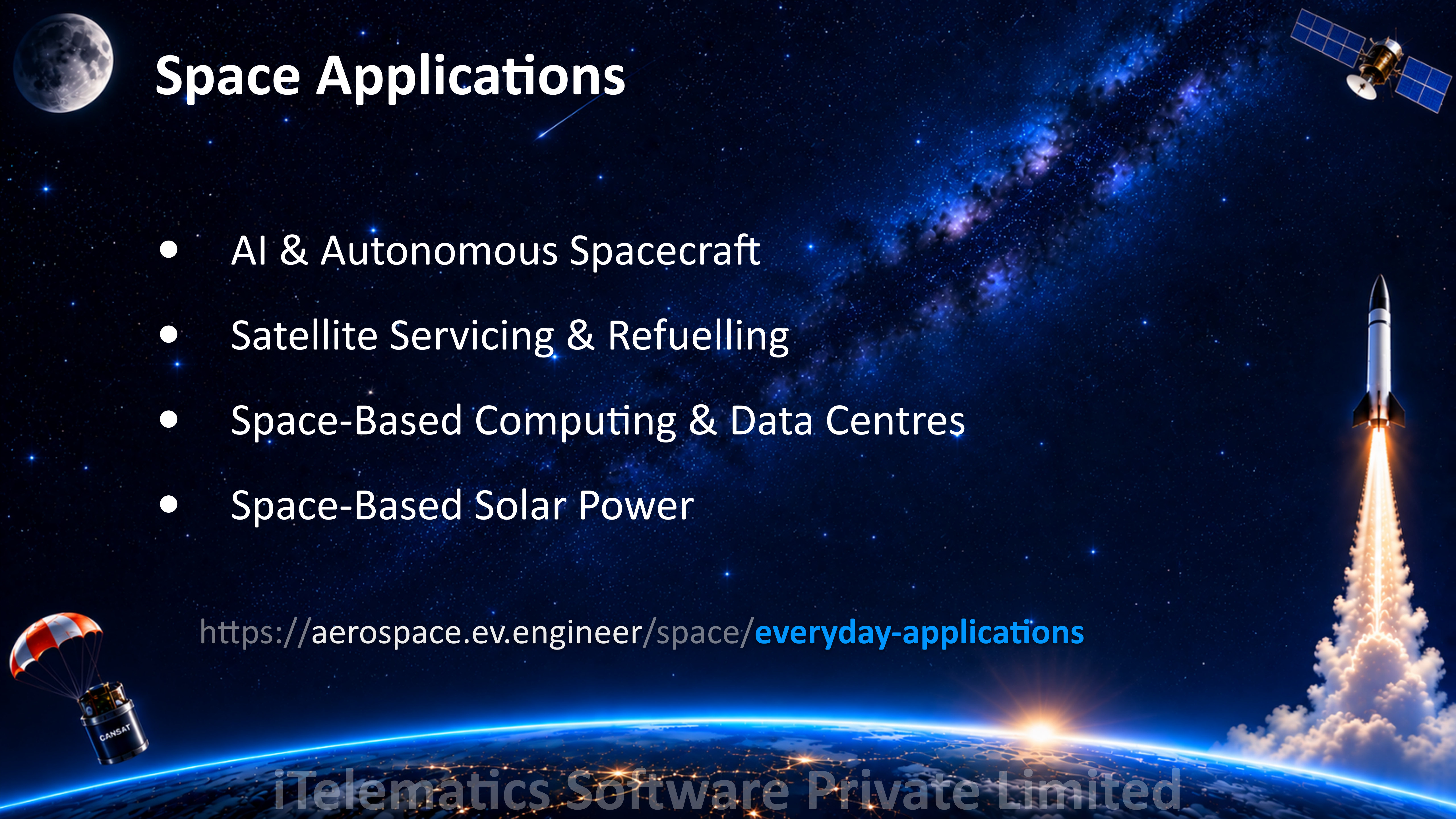
Space Research

Learn to Protect Missions.

Build Systems That Protect Spacecraft.

<https://aerospace.ev.engineer/space>

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Space Applications

- AI & Autonomous Spacecraft
- Satellite Servicing & Refuelling
- Space-Based Computing & Data Centres
- Space-Based Solar Power

<https://aerospace.ev.engineer/space/everyday-applications>

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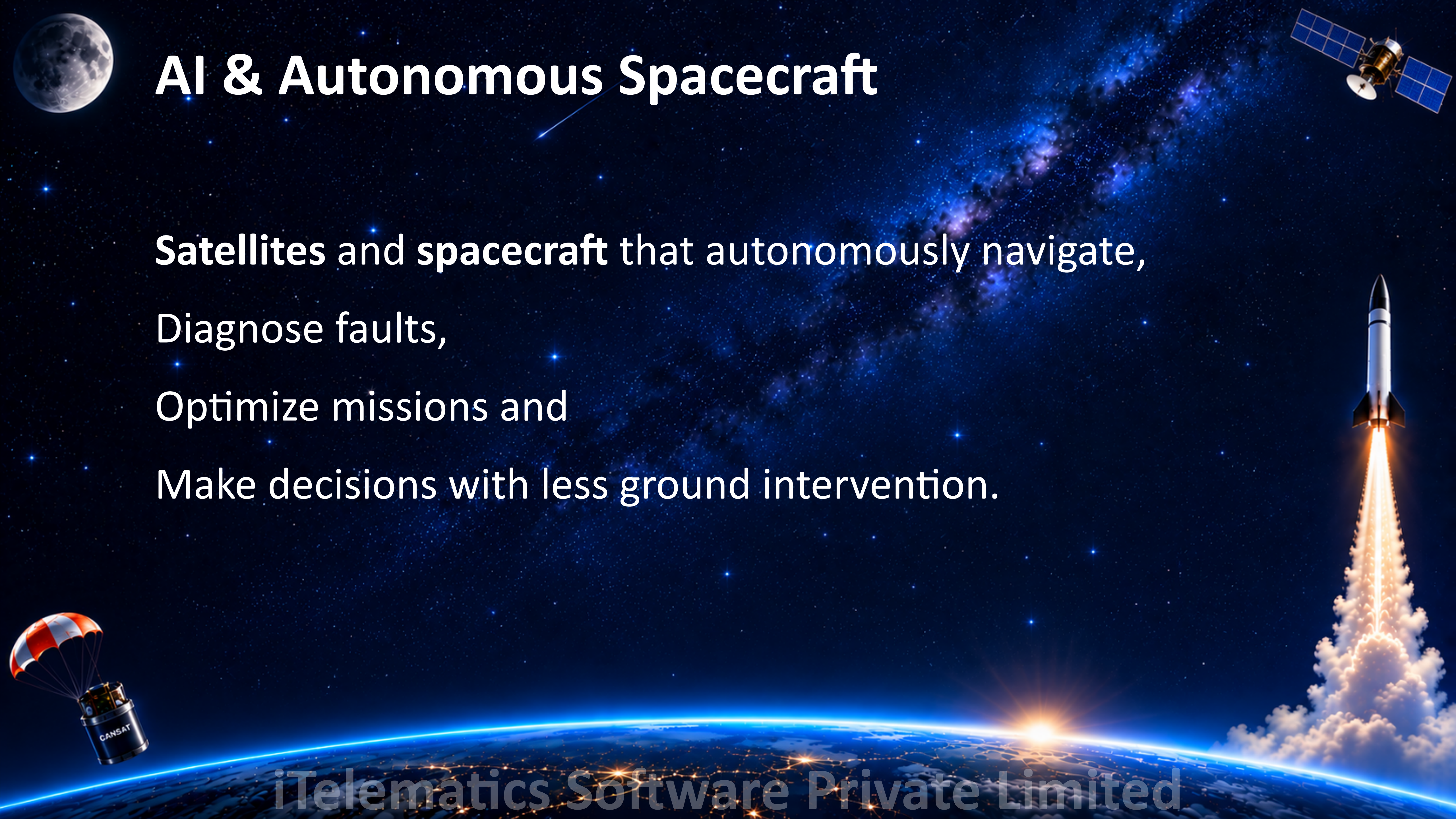


Space Applications

- AI Earth Digital Twin & Climate Intelligence
- Space Internet + Direct-to-Device + Satellite IoT
- Space Debris Removal & Orbital Circular Economy
- Lunar Surface Technology

<https://aerospace.ev.engineer/space/everyday-applications>

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AI & Autonomous Spacecraft

Satellites and spacecraft that autonomously navigate,
Diagnose faults,
Optimize missions and
Make decisions with less ground intervention.

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AI & Autonomous Spacecraft



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Satellite Servicing & Refuelling

Robotic inspection,

Repair,

Component replacement,

Refuelling and

Life-extension of satellites already in orbit.

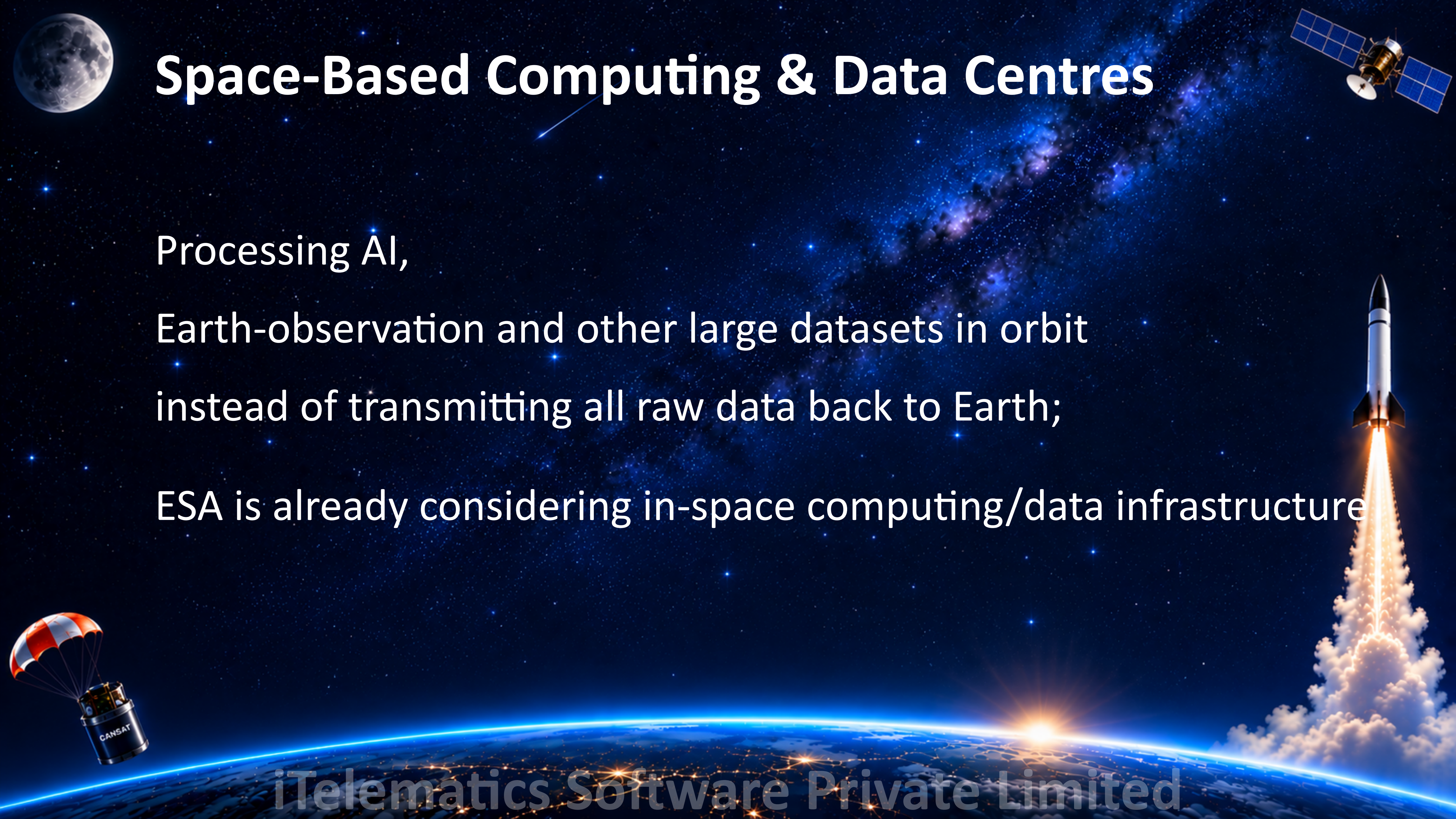
NASA and **ESA** are actively developing this direction

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Satellite Servicing & Refuelling



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Space-Based Computing & Data Centres

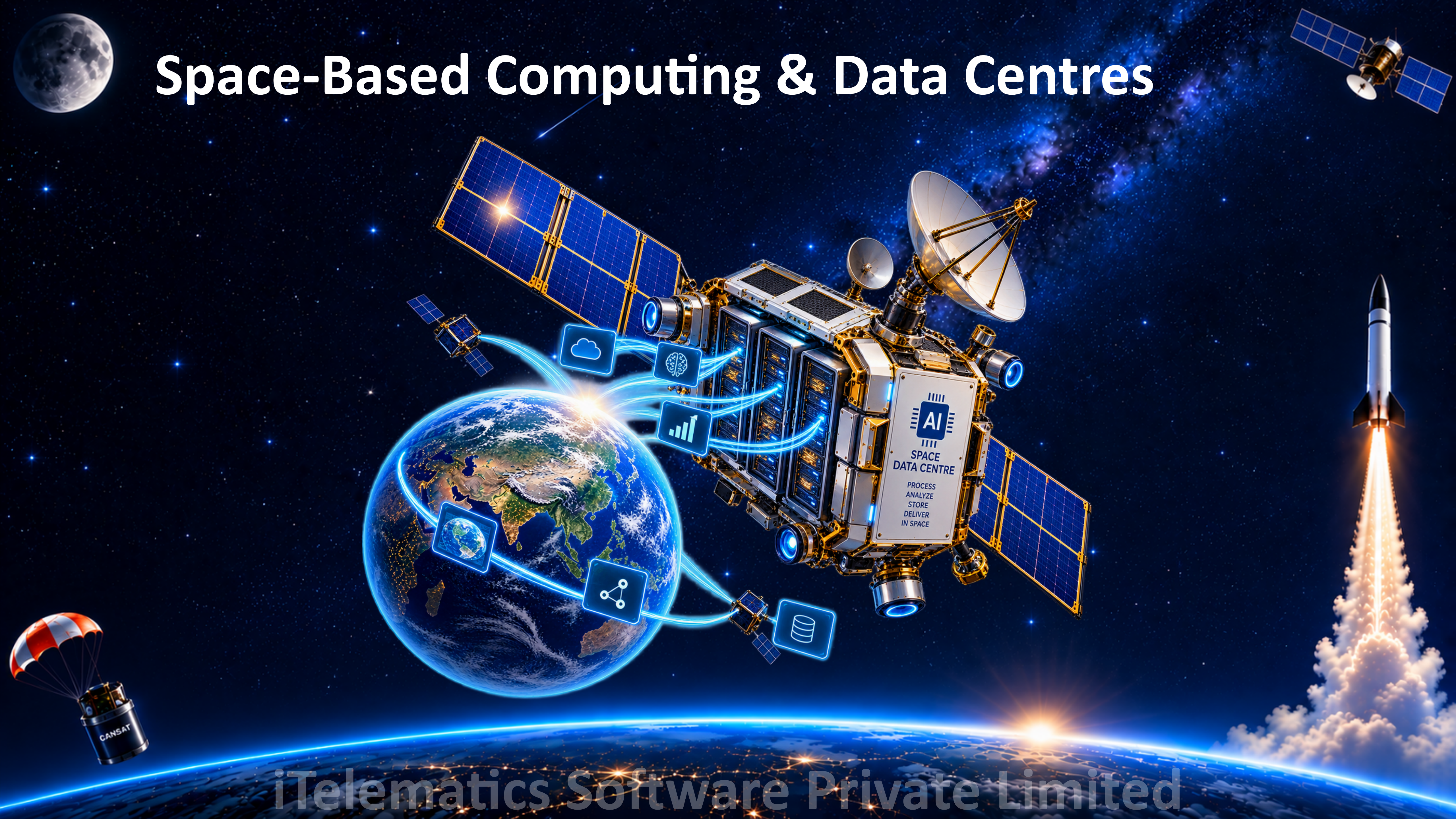
Processing AI,

Earth-observation and other large datasets in orbit
instead of transmitting all raw data back to Earth;

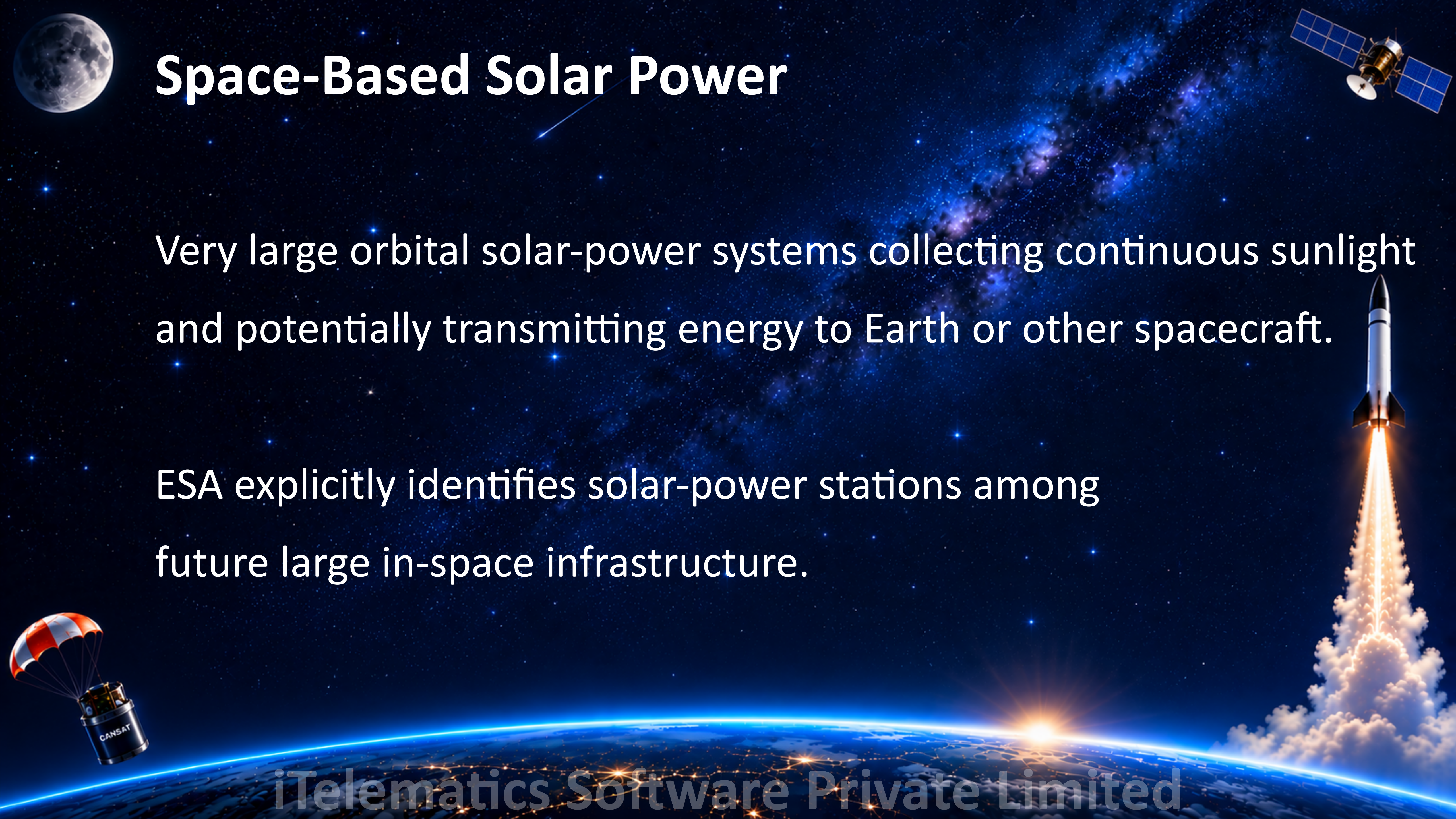
ESA is already considering in-space computing/data infrastructure

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Space-Based Computing & Data Centres



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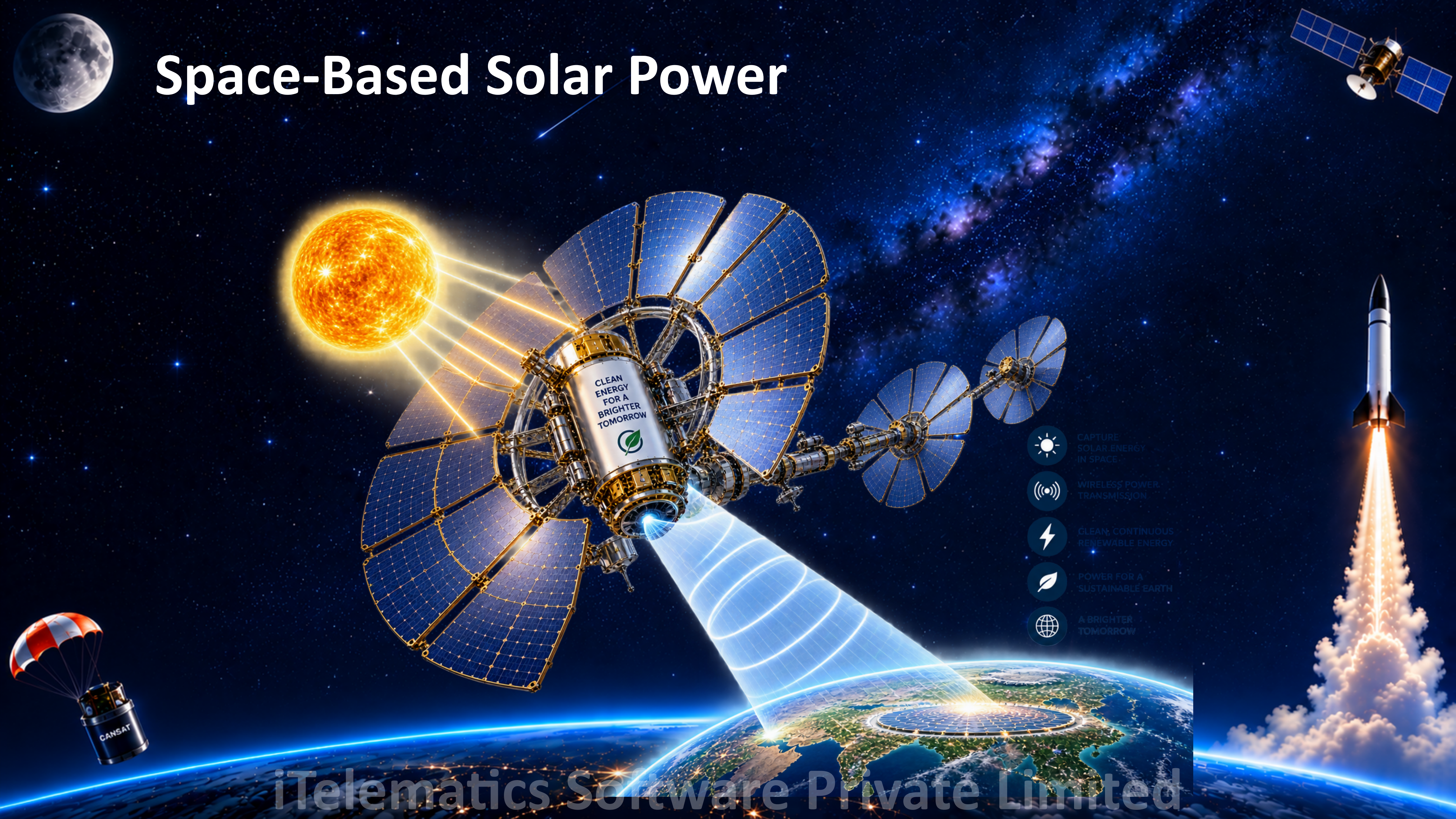
Space-Based Solar Power

Very large orbital solar-power systems collecting continuous sunlight and potentially transmitting energy to Earth or other spacecraft.

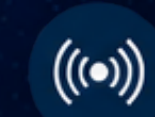
ESA explicitly identifies solar-power stations among future large in-space infrastructure.

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Space-Based Solar Power



CAPTURE
SOLAR ENERGY
IN SPACE



WIRELESS POWER
TRANSMISSION



CLEAN, CONTINUOUS
RENEWABLE ENERGY

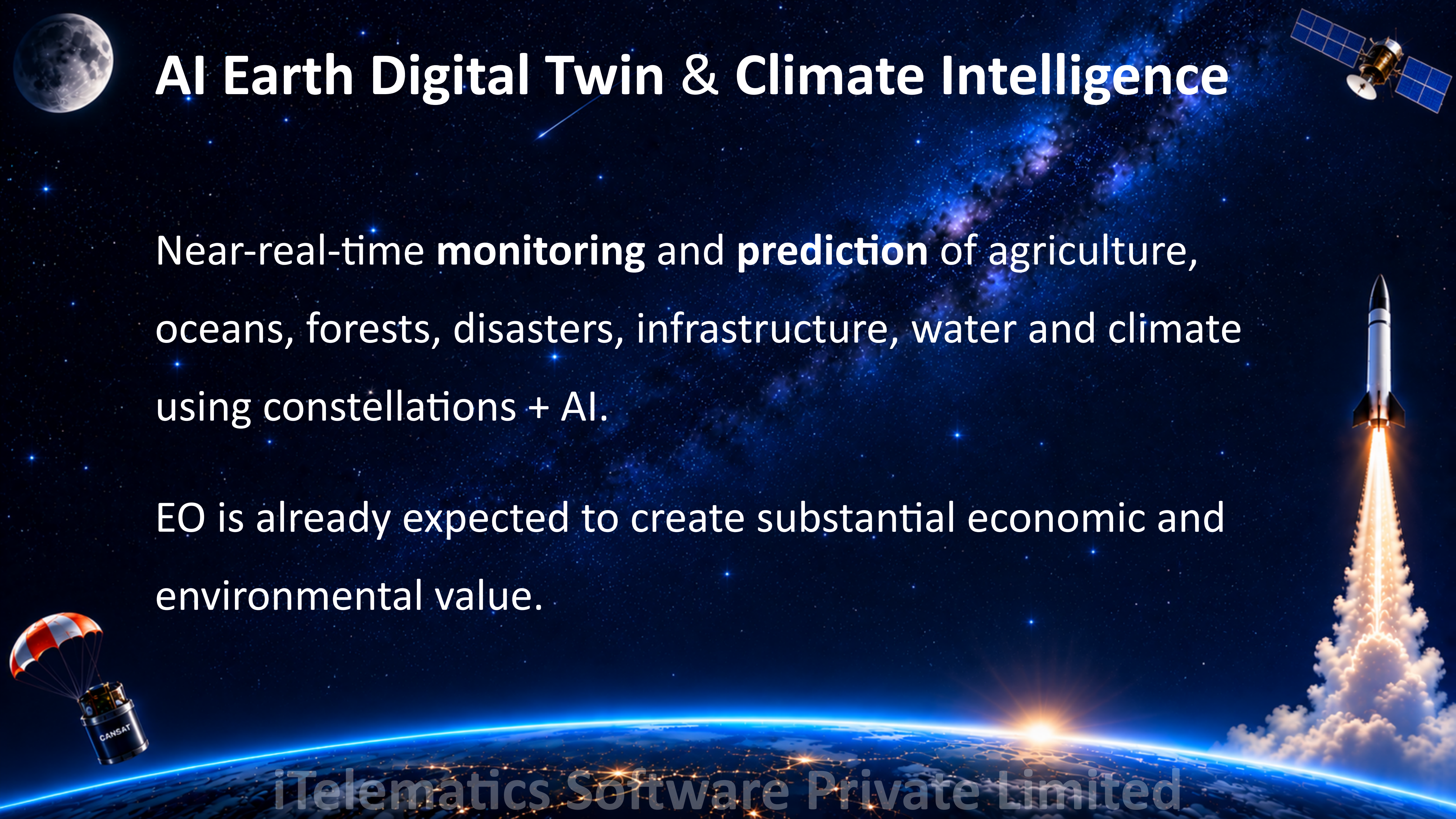


POWER FOR A
SUSTAINABLE EARTH



A BRIGHTER
TOMORROW

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AI Earth Digital Twin & Climate Intelligence

Near-real-time **monitoring** and **prediction** of agriculture, oceans, forests, disasters, infrastructure, water and climate using constellations + AI.

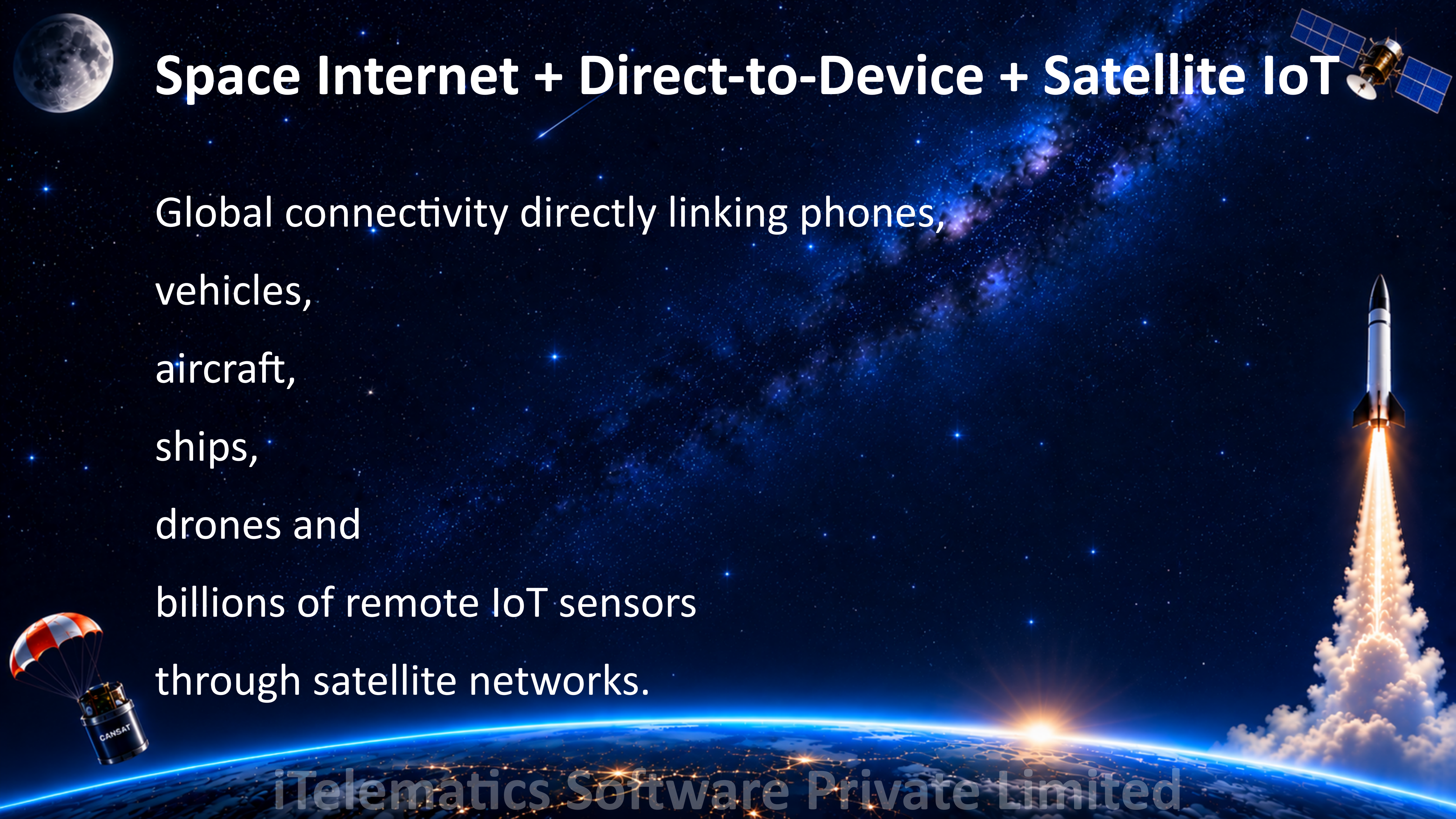
EO is already expected to create substantial economic and environmental value.

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AI Earth Digital Twin & Climate Intelligence



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Space Internet + Direct-to-Device + Satellite IoT

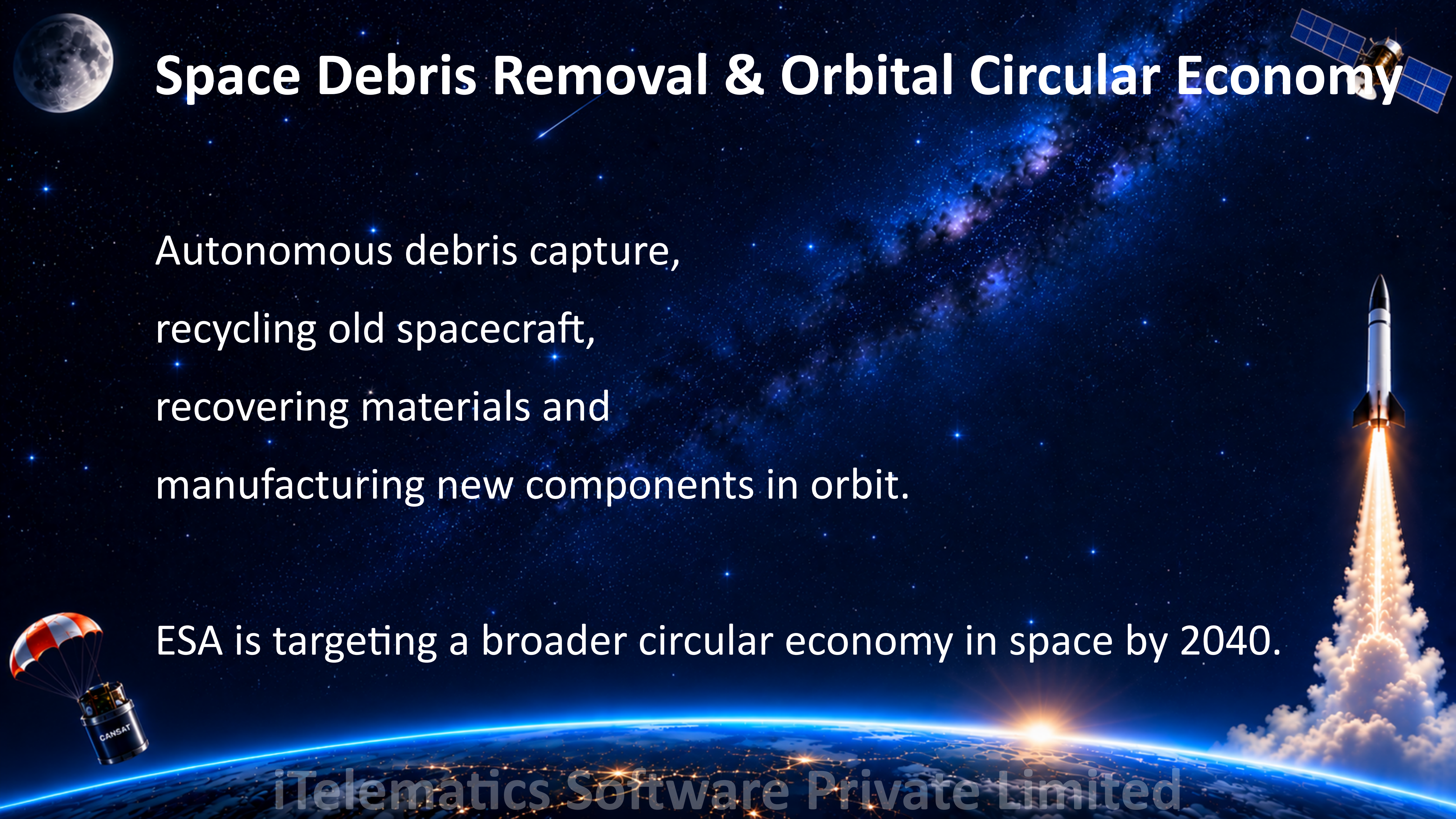
Global connectivity directly linking phones,
vehicles,
aircraft,
ships,
drones and
billions of remote IoT sensors
through satellite networks.

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Space Internet + Direct-to-Device + Satellite IoT



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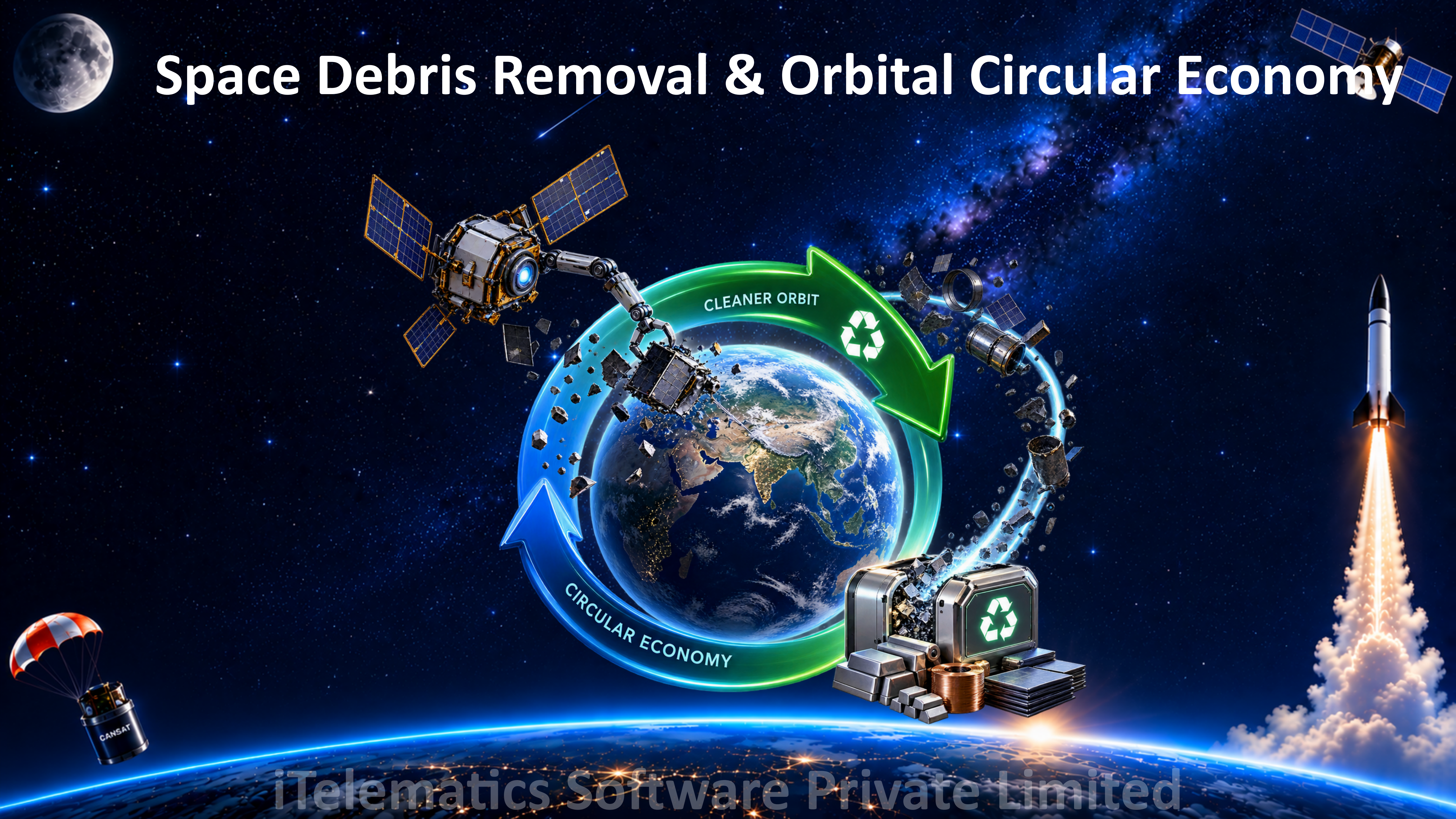
Space Debris Removal & Orbital Circular Economy

Autonomous debris capture,
recycling old spacecraft,
recovering materials and
manufacturing new components in orbit.

ESA is targeting a broader circular economy in space by 2040.

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Space Debris Removal & Orbital Circular Economy



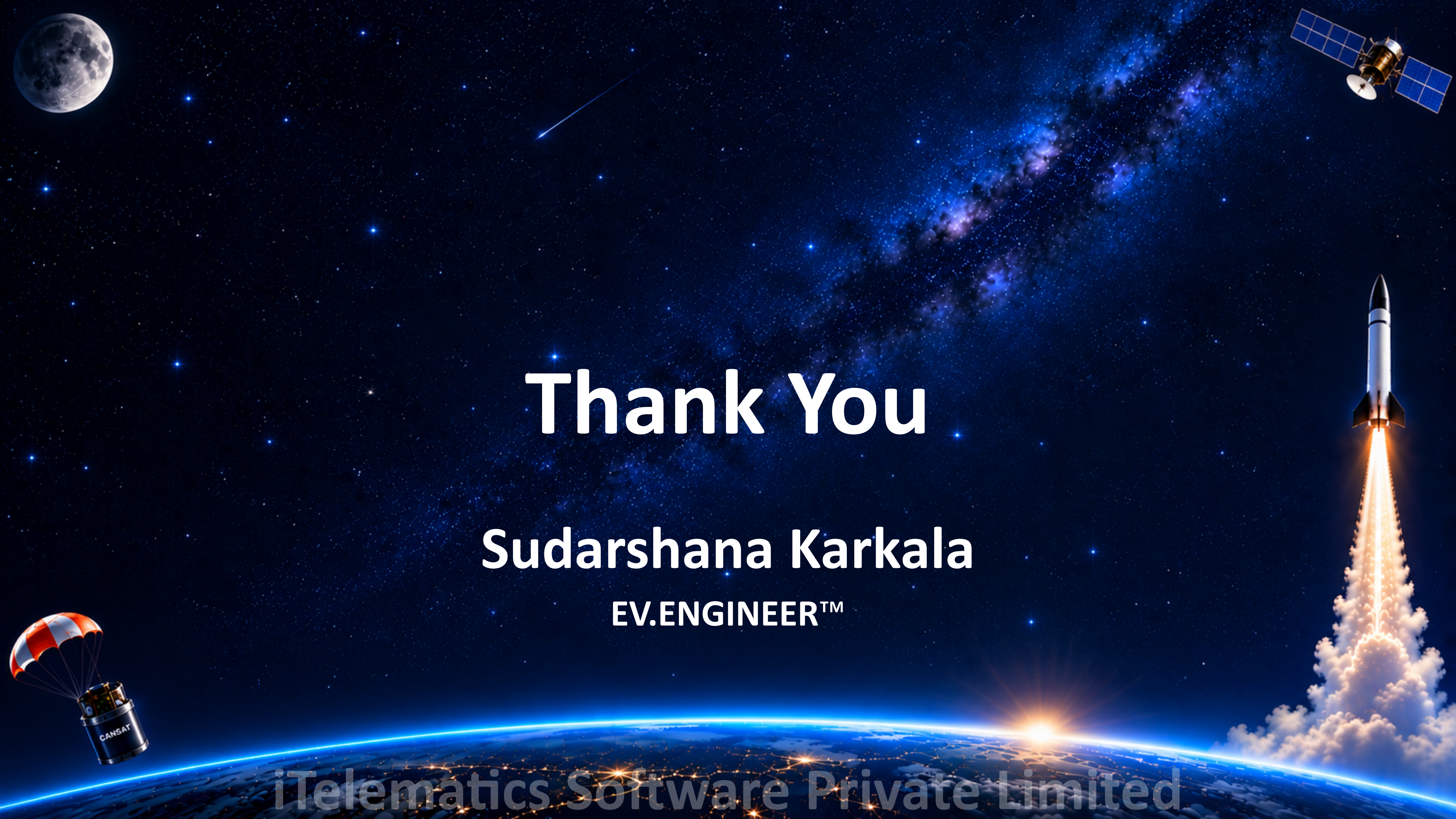
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Lunar Surface Technology

Lunar power systems, water/oxygen extraction,
landing pads, roads, robotic construction
and eventually permanent operational infrastructure.

<https://www.nasa.gov/lunar-surface-technology/>

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A vibrant space-themed background featuring a view of Earth's horizon with city lights, a bright sun or star on the horizon, a large full moon in the top left, a satellite in the top right, a rocket launching on the right with a large plume of fire and smoke, a meteor streak in the upper center, and a colorful nebula or galaxy in the upper right.

Thank You

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