

# SERAPHIM SPACE INVESTMENT TRUST PLC

ANNUAL REPORT - Twelve months ended 30 June 2023

## TWELVE MONTHS TO 30 JUN 2023 HEADLINES



Will Whitehorn

Chair Seraphim Space Investment Trust plc

- Net assets of £222m and market capitalisation of £65m as at 30 Jun 2023
- Period end liquid resources of £35m (16% of NAV)
- Portfolio valuation increased by £1.3m to £187.4m
- Driven by disposals, realised loss, unrealised fair value reduction and unrealised FX loss of £15.8m in aggregate more than offset by investments of £17.1m
- 6 new investments (£4.9m) and 8 follow-on (£12.2m)
- Portfolio fair value down at 98.5% of cost
- Continued strong performance of portfolio companies: top 10 investments<sup>1</sup> grew revenues by 34% and bookings by 199%





## SERAPHIM PLAYBOOK **HEADLINES**



Mark Boggett

Chief Executive Officer



Sarah Shackleton

Chief Operating Officer



Information Asymmetry

**Accelerator Programme** 



Unique Model

**Investment Fund** 



Global VC Investor

Ecosystem





## FINANCIAL HIGHLIGHTS

## **AS AT 30 JUN 2023**



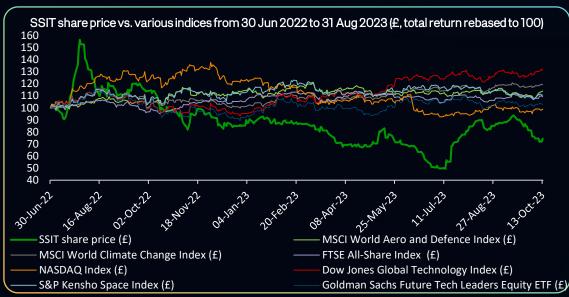








£187<sub>M</sub>





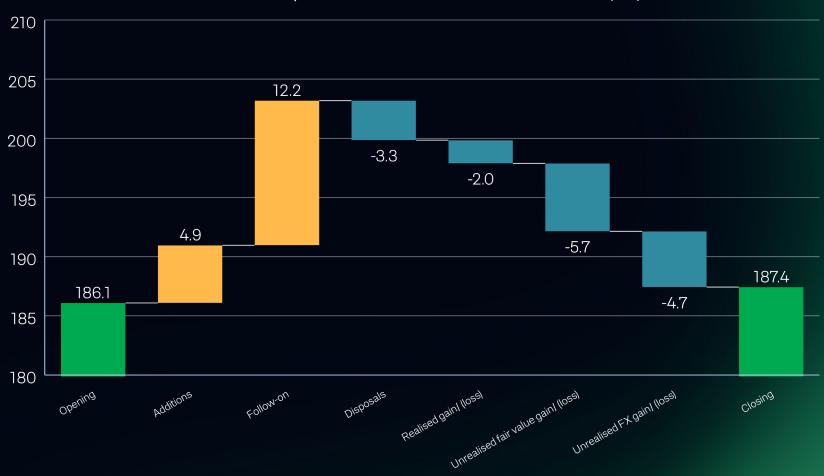


Source: Morningstar; Bloomberg Note: <sup>1</sup> AIC peer group is average of AIC Growth Capital peer group

#### **FY ATTRIBUTION ANALYSIS**

## 12 MONTHS TO 30 JUN 2023





98.5%

Portfolio fair value vs. cost

£187M

Fair value of portfolio as at 30 Jun 2023

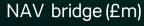
£17.1M

Aggregate investments during period



#### NAV BRIDGE

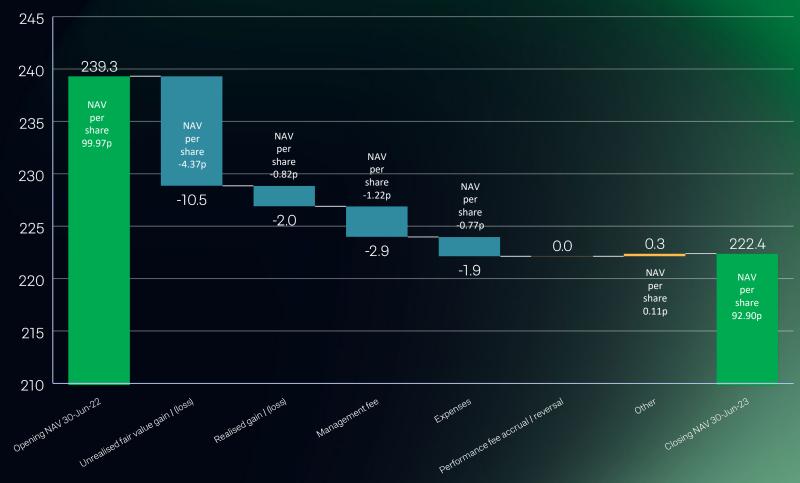
## 12 MONTHS TO 30 JUN 2023













#### PORTFOLIO SNAPSHOT

#### 12 MONTHS TO 30 JUN 2023

£187M

Fair value (2022: £186m) **8**5%

Top 10 investments as % of fair value (2022: 87%)

119%

Private portfolio fair value vs. initial cost (2022:123%)

13%

Listed portfolio fair value vs. initial cost (2022: 45%)

34%

Average portfolio company revenue growth<sup>1</sup>

199%

Average portfolio company bookings growth<sup>1</sup>

\$360M+

Total money raised by private portfolio companies<sup>2</sup>

**20**MTHS

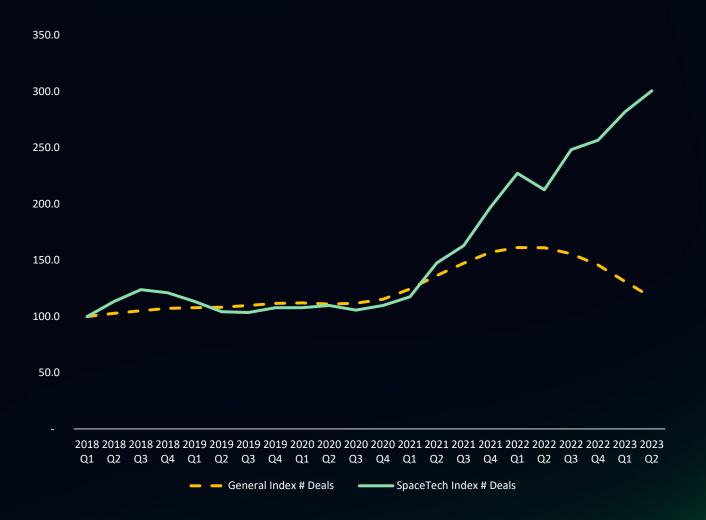
Average cash runway of the private portfolio from 30 June 2023<sup>3</sup>



<sup>&</sup>lt;sup>3</sup> Fair value weighted average number of months of cash runway from 30 June 2023 for the private holdings representing 97% of fair value, taking into account cash as at the year end and any funding raised post period end. Source: Portfolio company data.

#### MARKET INDEX – TRANSACTIONS BY VOLUME

#### TRAILING 12 MONTHS SPACETECH VS. GLOBAL TECHNOLOGY VC



- Compared to the broader technology venture capital landscape, SpaceTech has shown superior performance when indexed against Q1 CY18.
- SpaceTech has demonstrated greater resilience amid macroeconomic uncertainty, contrasting with broader technology VC trends.
- The sector's resilience is evident in its growing deal activity, in stark contrast to five quarters of decline in general technology.



## PORTFOLIO CASH RUNWAY

## **AS AT 30 JUN 2023**

17 portfolio companies closed funding rounds FY22/23

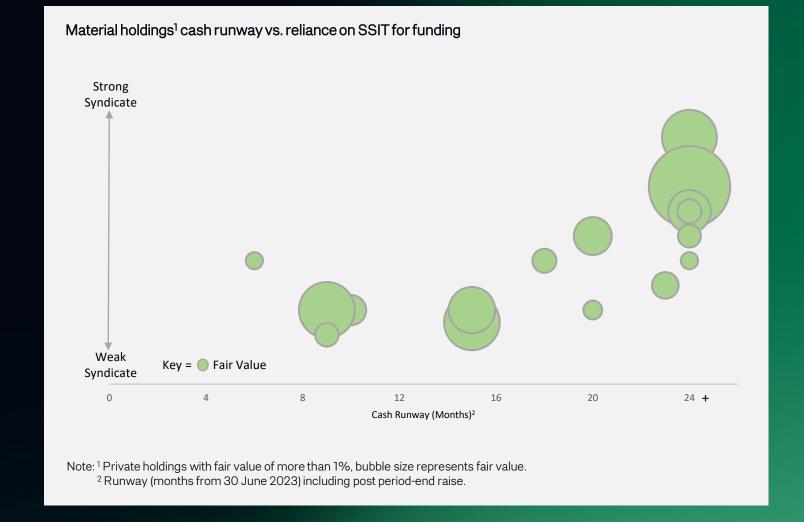


- # existing companies raising internal round
- # existing companies raising external round
- # new companies invested in

11 existing portfolio companies' (as of start of year) round pricing FY22/23



- # companies raising up rounds
- # companies raising down rounds
- # companies raising flat rounds
- # companies raising unpriced rounds







## FY22/23 INVESTMENTS

#### Investments made during the period

Company	Segment	HQ	Туре	Cost£m
Voyager	Beyond Earth	US	New investment	2.1
Taranis	Analyse	Israel	New investment	2.1
PlanetWatchers	Analyse	UK	Follow-on	2.5
D-Orbit	Launch	Italy	Follow-on	4.4
SatVu	Platform	UK	Follow-on	2.1
4 early stage investments			New investment	0.7
5 early stage investments			Follow-on	3.2

Total 17.1

14

Transactions completed

6

New investments

£17.1<sub>M</sub>

Cash deployed



## FY22/23 NEW INVESTMENTS



## **VOYAGER**

Voyager has designed and developed Starlab, a next generation free flying space station. Starlab provide the facilities to host public and private astronauts, as well forming the critical infrastructure required to support research, development & manufacturing in space.

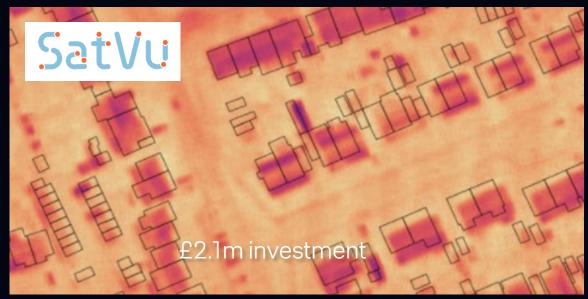


## **TARANIS**

Taranis is improving agricultural efficiency by providing insights to growers on field health through using satellite and drone imagery in combination with their extensive library of crop health indicators, for early detection of disease or nutrient deficiencies.



## FY22/23 FOLLOW-ON INVESTMENTS



## SATVU

SatVu is deploying a constellation of infrared sensing satellites. Using this constellation, the business will to monitor the temperature of any building on the planet in near real time to determine valuable insights into economic activity, energy efficiency and carbon footprint.



## D-ORBIT

D-Orbit is the first space logistics company, a "space taxi" delivering satellites to precisely the right orbit on-time. Its supplementary business model then adapts other advanced in-orbit services.



## **FY22/23 FOLLOW-ON INVESTMENTS**



## **PLANETWATCHERS**

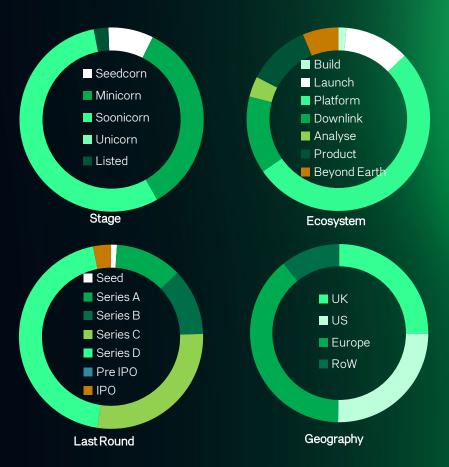
PlanetWatchers provides global scale information to the crop insurance industry, including acreage reports, crop classifications, planting dates, and details the damage of flood & wind events.



## PORTFOLIO

## **AS AT 30 JUN 2023**

Summary by value

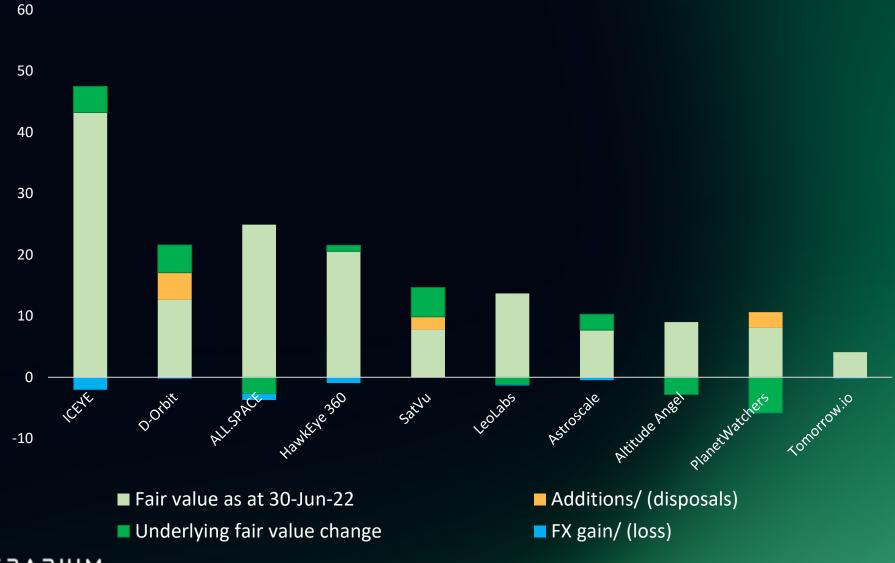


#### **NET ASSET VALUE**

FV£m	NAV
45.5	20.4%
21.4	9.6%
21.2	9.5%
20.6	9.3%
14.7	6.6%
12.4	5.6%
9.8	4.4%
6.2	2.8%
4.8	2.2%
3.9	1.8%
160.6	72.2%
26.8	12.1%
187.4	84.3%
35.3	15.9%
-	-
-0.3	-0.1%
222.4	100.0%
	45.5 21.4 21.2 20.6 14.7 12.4 9.8 6.2 4.8 3.9 160.6 26.8 187.4 35.30.3



## TOP 10 HOLDINGS VALUATION CHANGE





#### **FULL YEAR 2022/23 REVIEW**

- Sector has seen growth across the listed major space players in US and Europe
- Notable M&A with Viasat/Inmarsat, Oneweb/Eutelsat, Maxar/Advent
- SSIT portfolio revenue (+34%) and bookings growth (+199%)
- 11 portfolio companies raised funding, majority led by new external investors, 6 increased valuation only one down
- SSIT's portfolio's valuations robust, fair value of £187.4 million, with 0.7% year-on-year increase.

#### **OUTLOOK**

- Portfolio runway 20 months, SSIT cash position of £35m.
- With the secular trends global security and climate/ sustainability expected to accelerate
- Portfolio companies should result in them continuing to deliver strong growth metrics.





## APPENDIX



## RECALIBRATION OVERVIEW

Company	Last priced funding event	Last funding round	Last EV recalibration
ICEYE	Jan-22	Jan-22	Jun-23
D-Orbit	May-23	May-23	Jun-23
ALL.SPACE	Aug-23	Aug-23	Jun-23
HawkEye 360	Jul-23	Jul-23	Jun-23
, SatVu	May-23	May-23	Jun-23
LeoLabs	Jul-23	Jul-23	Jun-23
Astroscale	Feb-23	Feb-23	Mar-23
Altitude Angel	Jul-21	Jan-23	Jun-23
PlanetWatchers	Aug-22	Aug-22	Jun-23
Tomorrow.io	Jun-23	Jun-23	Jun-23



#### TOP 10 INVESTMENTS



Web:	iceye.com
HQ:	Finland
Taxonomy:	Platform / Earth Observation
Status:	Private; Soonicorn
Stake category:	>5-10%
Fair value vs. cost:	115%
Valuation method:	Premium to price of recent

ICEYE operates the world's first and largest constellation of miniaturised satellites that use radar to image the earth both during the day and night, even through cloud. ICEYE's radar technology has the ability to monitor change in

Total estimated long term addressable market: \$10bn+

Key sectors addressed: insurance, defence, climate

#### Recent key developments:

near real-time.

- ICEYE US awarded 5-year blanket purchase agreement by NASA for use in Earth Science and Research.
- Announced beta release of Wildfire Insights product, a first of its kind with building-level data in near realtime.
- Entered data agreement with Global Parametrics to drive disaster risk management.
- Announced partnership with Bayanat and Yahsat to build national satellite and remote sensing capabilities within the UAE.
- Signed contract with Government of Ukraine to provide access to constellation.
- Announced partnership to provide radar imaging satellite for BAE Systems' new multi-sensor satellite constellation.



Web:	dorbit.space
HQ:	Italy
Taxonomy:	Launch / In-orbit Services
Status:	Private, Soonicorn
Stake category:	>5-10%
Fair value vs. cost:	183%
Valuation method:	Calibrated price of recent

D-Orbit is the market leader in the space logistics and orbital transportation services industry.

Total estimated long term addressable market: \$1-5bn

Key sectors addressed: space logistics, datacentres

#### Recent key developments:

- Successfully launched its eleventh ION mission.
- Secured four multi-million Euro contracts with European Space Agency and Italian Space Agency, including one of €26m and one of €6m.
- Featured in Sifted as one of Europe's leading SpaceTech companies.
- Completed 10-month edge computing in space demonstration with Amazon Web Services.



Web:	all.space
HQ:	UK
Taxonomy:	Downlink / Ground Terminals
Status:	Private; Minicorn
Stake category:	>10-15%
Fair value vs. cost:	109%
Valuation method:	Calibrated price of recent investment (post period)

ALL.SPACE is aiming to create a mesh network of satellite connectivity by developing an antenna capable of connecting to any satellite in any constellation in any orbit.

Total estimated long term addressable market: \$10bn+

Key sectors addressed: communications, defence, transport

#### Recent key developments:

- Rebranded from Isotropic Systems to ALL.SPACE.
- Making strong progress in delivering its first products during 2023.
- Announced a strategic partnership with Kratos Defense & Security Solutions, Inc. (NASDAQ: KTOS).
- Delivered first terminal to SES for testing and verification.



Web:	he360.com
HQ:	US
Taxonomy:	Platform / Earth Observation
Status:	Private, Soonicorn
Stake category:	0-5%
Fair value vs. cost:	111%
Valuation method:	Calibrated price of recent

HawkEye 360 operates the world's largest satellite constellation collecting radio frequency signals to identify and geolocate previously invisible activities.

investment (post period)

Total estimated long term addressable market: \$10bn+

Key sectors addressed: maritime, defence

#### Recent key developments:

- Cluster 7 of satellites launched to orbit in April, bringing constellation to 21 satellites, with meaningful drop in overall latency.
- Established new customers in India, Australia, Europe and Nigeria, with customers now over 6 continents.
- Working with Pacific Islands Forum Fisheries Agency for greater maritime visibility in the Pacific Islands
- Further \$58m funding closed in July 2023.



Web:	satellitevu.com
HQ:	UK
Taxonomy:	Platform / Earth Observation
Status:	Private; Minicorn
Stake category:	>15-25%
Fair value vs. cost:	218%
Valuation method:	Calibrated price of recent

SatVu is aiming to monitor the temperature of any building on the planet in near real time to determine valuable insights into economic activity, energy efficiency and carbon footprint.

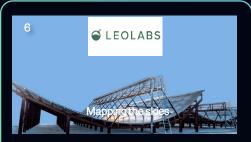
Total estimated long term addressable market: \$1-5bn

Key sectors addressed: energy, property

#### Recent key developments:

- Launched its first satellite (HOTSAT 1) on Falcon 9 transporter 8 on 12 June 2023.
- Closed additional £13m of funding as part of Series A2 round.
- Gathered pipeline of 50+ pre-contracts with options to purchase £100m+ in imagery.

#### TOP 10 INVESTMENTS



Web:	leolabs.space
HQ:	US
Taxonomy:	Product / Data Platforms
Status:	Private; Minicorn
Stake category:	0-5%
Fair value vs. cost:	106%
Valuation method:	Calibrated price of recent

LeoLabs is providing the mapping service for space by deploying a network of ground-based antennas capable of detecting objects as small as 2cm as far as 1,000km away.

Total estimated long term addressable market: \$1-5bn

Key sectors addressed: space, insurance, defence

#### Recent key developments:

- Expanded its radar network to 6 sites with another under construction for greater coverage.
- Awarded contract with the Japanese MoD to provide space situational awareness.
- Won sole source contract with US Department of Commerce, validating that LeoLabs is only real viable alternative data source to US Space Surveillance Network.
- Continued success in growing commercial/ recurring revenue base, including several large satellite constellations.
- Showcased its new manoeuvre-detection dashboard, demonstrating suspicious movements from adversary spacecraft.



Web:	astroscale.com
HQ:	Japan
Taxonomy:	Beyond Earth / In-orbit Services
Status:	Private; Soonicorn
Stake category:	0-5%
Fair value vs. cost:	105%
Malacation models adv	Calibrated price of recent

Astroscale is a global leader of space sustainability solutions. It is currently developing a set of capabilities around satellite monitoring, refuelling, upgrading, repairing and disposal to enable a vibrant in-orbit economy.

Total estimated long term addressable market: \$1-5bn

Key sectors addressed: space, defence

#### Recent key developments:

- Following successful \$76m Series E funding round in Q1 CY23, Astroscale added Gayle Sheppard, former Corporate VP and CTO at Microsoft, and Erica Newland, former Finance Director at Intel, to its board.
- Opened subsidiary and office in France and announced partnership with CNES (the French Space Agency) that includes funded study for active debris removal of French space debris.
- Announced partnership with Astro Digital US Inc.,which will incorporate Astroscale's Generation 2 Docking Plate into its satellite bus.



Web:	altitudeangel.com
HQ:	UK
Taxonomy:	Product / Data Platforms
Status:	Private; Minicorn
Stake category:	>15-25%
Fair value vs. cost:	167%
Valuation method:	Milestone, market

Altitude Angel operates a cloud-based automated air traffic control platform for drones and flying taxis. Its software powers the world's first sky corridor for drones.

Total estimated long term addressable market: \$10bn+

Key sectors addressed: logistics, aviation

#### Recent key developments:

- 256km drone super highway announcement made in UK.
- · Received backing from BT Group's Incubation Hub.
- Began rolling out purpose-built low-altitude aviation surveillance network.



Web:	planetwatchers.com
HQ:	UK
Taxonomy:	Analyse / Data Analytics
Status:	Private; Seedcorn
Stake category:	>25-50%
Fair value vs. cost:	86%
Valuation method:	Partial write down to price of recent investment

PlanetWatchers has developed an Al-enabled analytics platform using satellite radar imagery for crop monitoring, insurance and automated insurance claims assessments.

Total estimated long term addressable market: \$5-10bn

Key sectors addressed: agriculture, insurance, climate

#### Recent key developments:

- Successfully expanded customer footprint within North American crop insurance market during CY23 growing season.
- Launched CropCycle webapp as second product line to provide easier access to crop intelligence.
- Satellite-based acreage reporting product now reaching precision higher than 90% in many cases.



Web:	tomorrow.io
HQ:	US
Taxonomy:	Platform / Data Platforms
Status:	Private; Soonicorn
Stake category:	0-5%
Fair value vs. cost:	93%
Valuation method:	Calibrated price of recent

Tomorrow.io is powering actionable weather insights around the world. The company's mission is to help countries, businesses and individuals better manage their weather-related challenges with the best information and insights.

Total estimated long term addressable market: \$30+bn

Key sectors addressed: logistics, aviation, maritime, government civil, government defence

#### Recent key developments:

- Successfully launched first two satellites of its planned weather radar constellation to provide global coverage.
- Completed \$87m Series E fundraising, led by US growth investor, Activate Capital.
- Launched 'Gale' generative AI platform to effortlessly convert climate and weather data into predictive and actionable insights.

#### **FURTHER INFORMATION**

#### Company Information

#### **Board of Directors**

Will Whitehorn (Non-executive Director / Chair)

Sue Inglis (Non-executive Director / Senior Independent Director)

Christina McComb (Non-executive Director / Management Engagement

Committee Chair)

Angela Lane (Non-executive Director / Audit Committee Chair)

#### Manager

Seraphim Space Manager LLP, One Fleet Place, London, EC4M 7WS

#### **Brokers**

Deutsche Numis, 45 Gresham Street, London, EC2V 7AF

J.P. Morgan Securities plc, 25 Bank Street, Canary Wharf, London, E14 5JP

#### Contact Details

Registered Office - 5th Floor 20 Fenchurch Street, London, EC3M 3BY

NAV per share	93r
Share price	27 <sub>F</sub>
Share price premium/	( <del>-</del> - ) \

1.25% NAV

None

Net assets	£222n
Market capitalisation	£65n
Ticker code	SSI

(discount) to NAV

Management fees

Gearing

Key Financials as at 30 Jun 2023

Calendar	
AGM	20 Nov 2023
Q1 FY23/24 results	21 Nov 2023

(71)%

#### Environmental social and governance matters

Seraphim Space Manager LLP is a signatory to the United Nations backed Principles of Responsible Investment. The PRI is the world's leading proponent of responsible investing <a href="https://www.unpri.org/">https://www.unpri.org/</a>

#### Website

https//:investors.seraphim.vc is constantly being updated to ensure that you can always access Seraphim Space Investment Trust Plc latest data and information on your computer or mobile device in a transparent, convenient and intuitive manner.

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