BOSTON CONSULTING GROUP

Space evolution

BCG Perspective

JUNE 2024

VENICE WORLD SUSTAINABILITY CAPITAL FOUNDATION

Objectives for today's

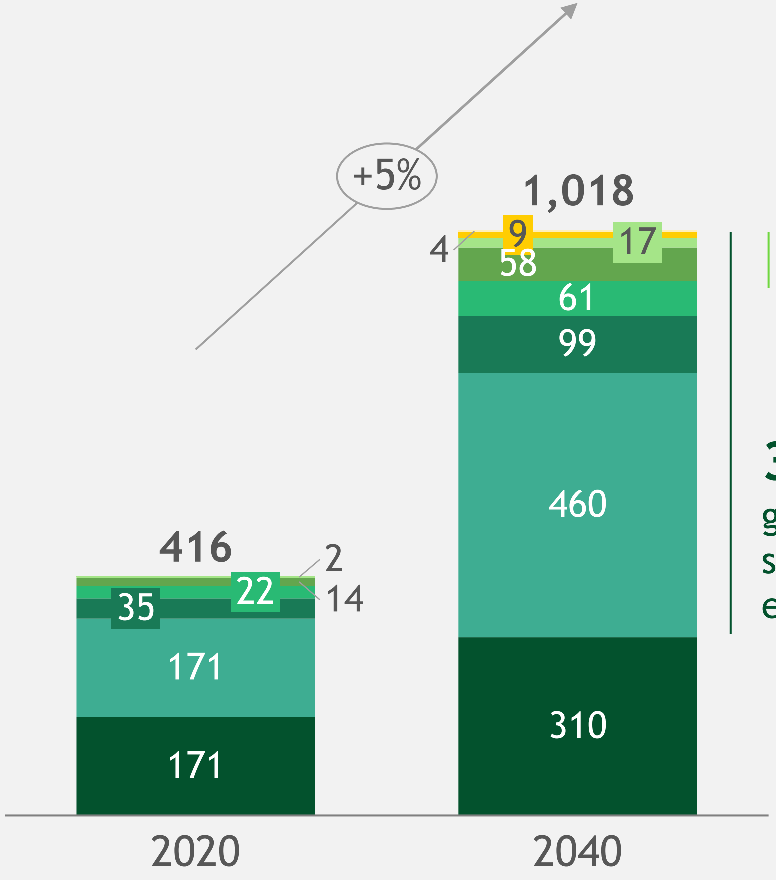
Highlight key space industry dynamics

Discuss recent and most relevant trends

Summarize funding evolution & opportunities

Space sector to grow fast to $1T, opening opportunities for new applications

Space economy 2020 vs 2040, $B



5x
growth for fast-growing segments

3x
growth for all segments except SatCom

	CAGR '20-40
In-space industrial	*n.a.*
In-orbit services	*8%*
Space Exploration	*11%*
Earth Observation	*7%*
Science & Tech	*5%*
Military	*5%*
PNT	*5%*
SatCom	*3%*

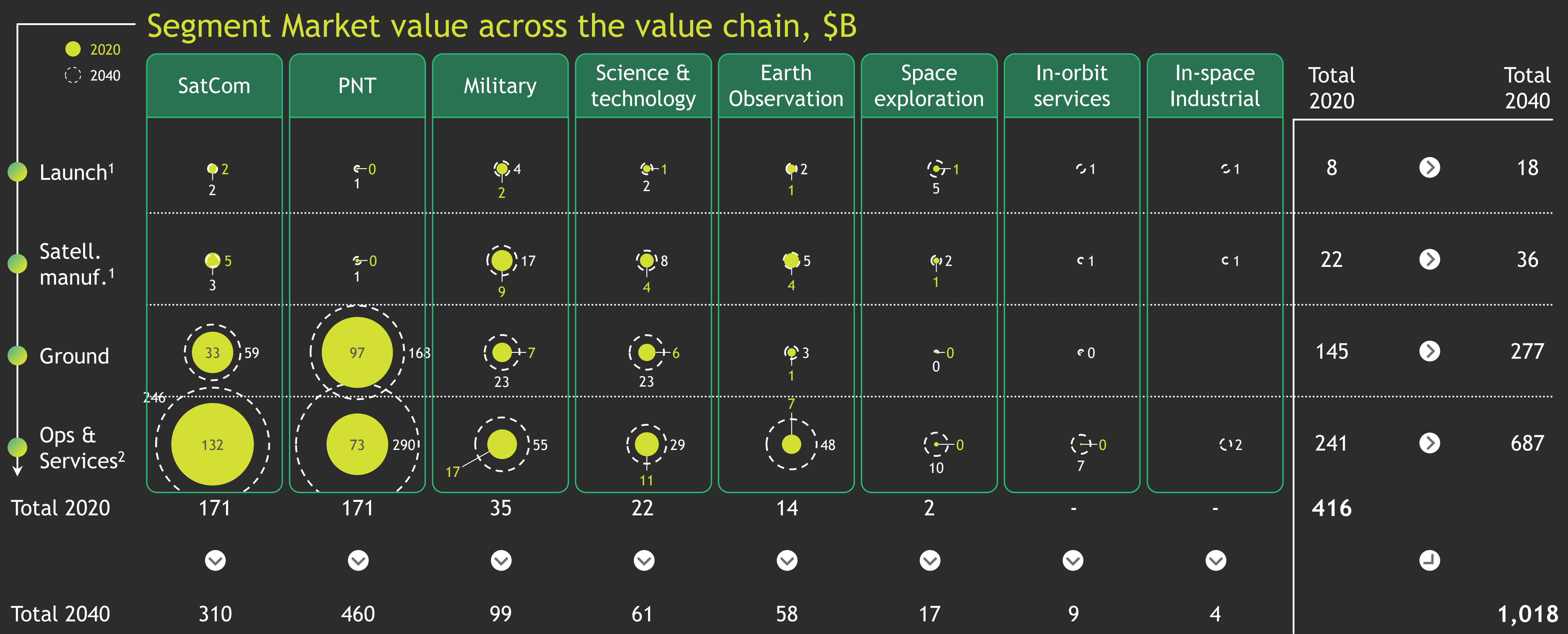
Source: FAA Compendium; Euroconsult; The Space Report; Space Foundation; Governments & Space Agencies Budgets; BCG Analysis

2040 space sector value chain

- *4%* $18B Launch
- *2%* $36B Satellite Manufacturing
- *3%* $277B Ground
- *5%* $687B Services

X% *20-40 CAGR*

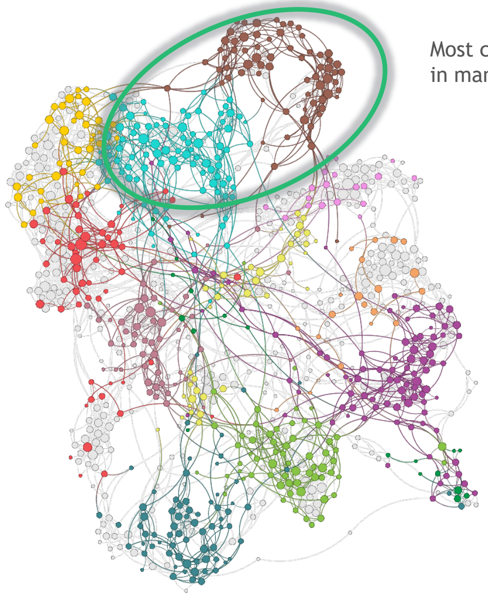
More established sectors to consolidate (e.g., SatCom), while new ones to appear (e.g., EO, Space Exploration)



Source: FAA Compendium; Euroconsult; The Space Report; Space Foundation; Governments & Space Agencies Budgets; BCG Analysis

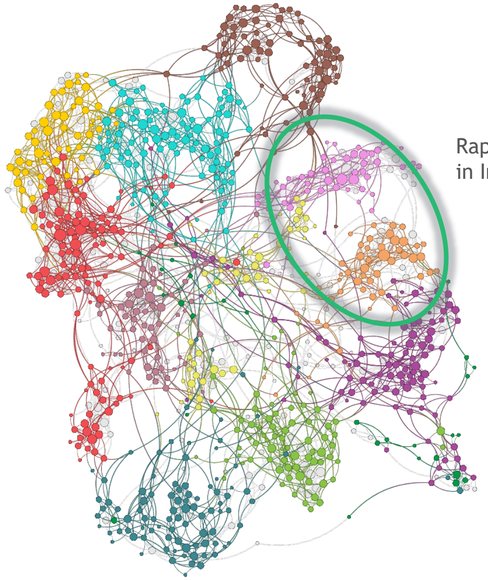
Space industry has grown by 50% over last decade from 600+ active space companies in 2012 to 1,000+ in 2022

2012
623 total companies



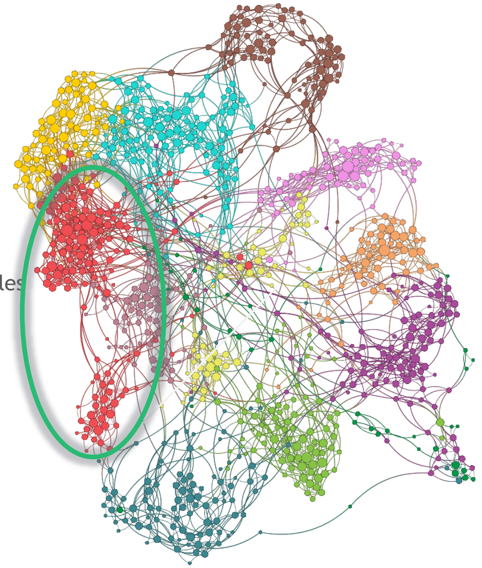
- Most activity per 2021 in the Satellite Suppliers segments
- Very few companies established in Earth Observation and EO Analytics

2017
823 total companies (+30%)



- Major development in Earth Observation and EO Analytics of x2.4
- Growth of 94% in Launch Vehicles

2022
1,000 total companies (+20%)

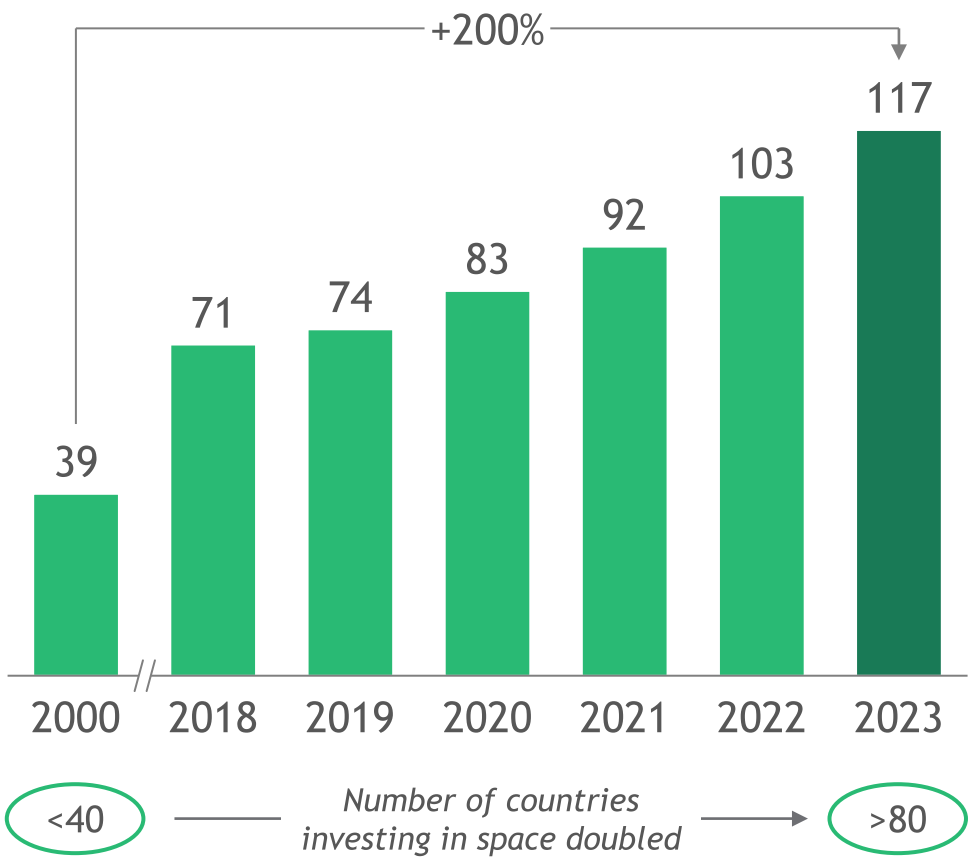


- 36% growth in Launch Vehicles
- Expansion in Space Situational Awareness (SSA) of 34%

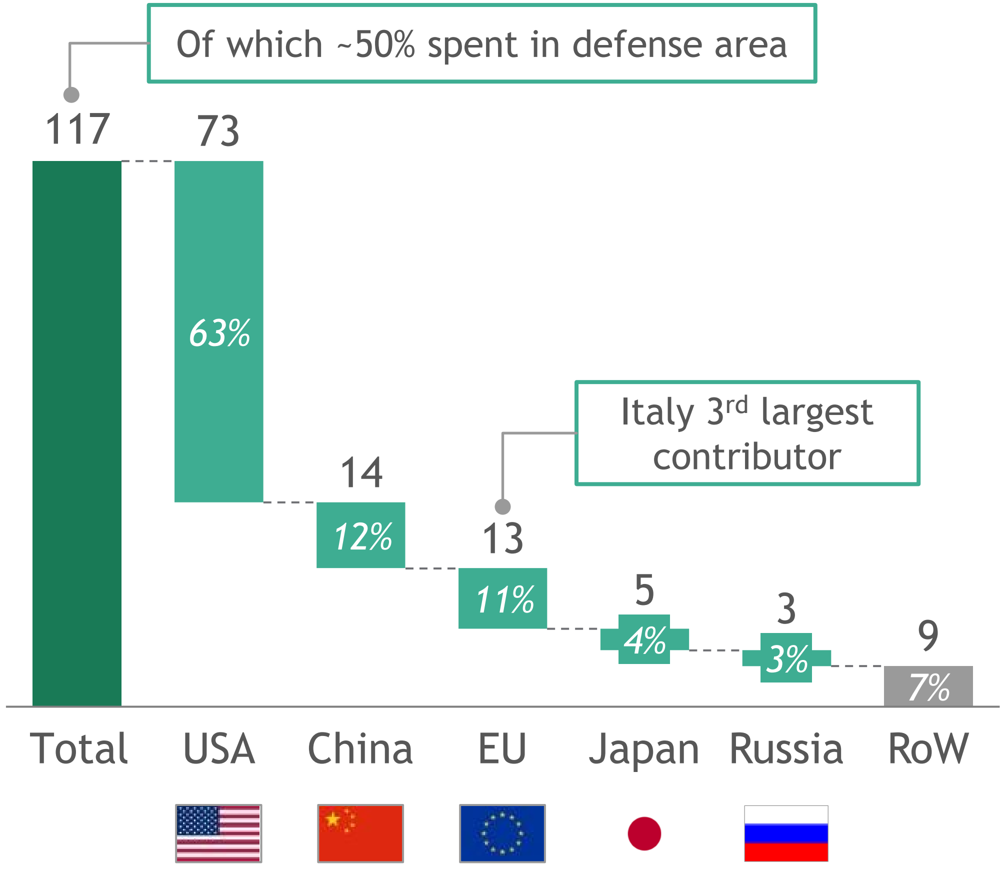
Note: Nodes represent companies. Node size equates to degree of similarity to cluster
Source: Quid; BCG analysis

Government spending topped $117B in '23, US leading with >60%

Space expenditures evolution, $B



Space expenditures in 2023 by country, $B



Source: Novaspace; BCG analysis

EU space industry today already with relevant impact...

8 €B
Sales

+200
companies

57k
FTE

Source: Eurospace - "Facts & Figures" - July 2023

...yet only few large players, an opportunity to double down?

	Established	*Emerging*
Launch	arianespace arianeGroup; AVIO	ORBEX; isar aerospace; PLD SPACE; RFA Rocket Factory; HyImpulse; maiaspace
Satellite manuf.	ThalesAlenia Space a Thales / Leonardo company; AIRBUS DEFENCE & SPACE; OHB	AAC CLYDE SPACE; SITAEL
Ground	TELESPAZIO a LEONARDO and THALES company	LEAFSPACE; GOONHILLY EARTH STATION
Ops. & Services	eutelsat; SES your satellite company; e-geos AN ASI / TELESPAZIO COMPANY	ALTEC; The Exploration Company; ICEYE; D-ORBIT

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