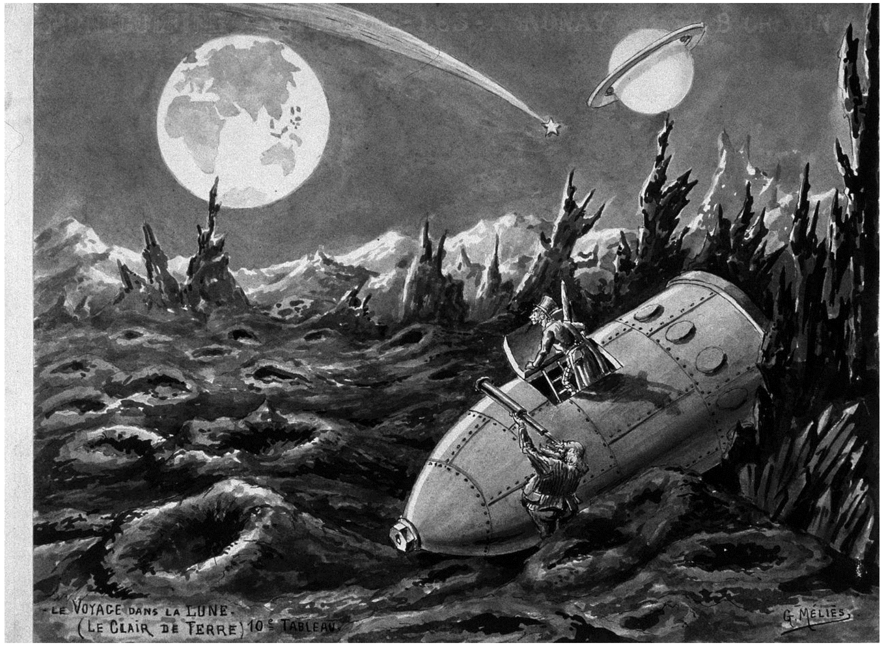
SPACE EXPLORATION IN THE SPACE ECONOMY



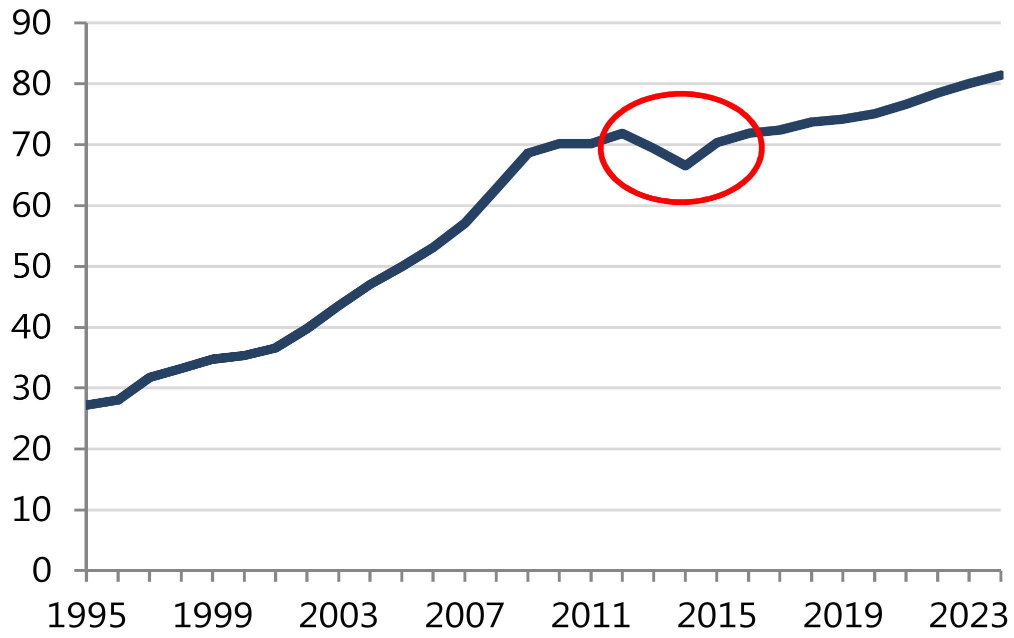
SYMPOSIUM TO STRENGTHEN THE PARTNERSHIP WITH INDUSTRY
THE ROLE OF INDUSTRY IN SPACE EXPLORATION

United Nations, Vienna
Feb. 15 2016

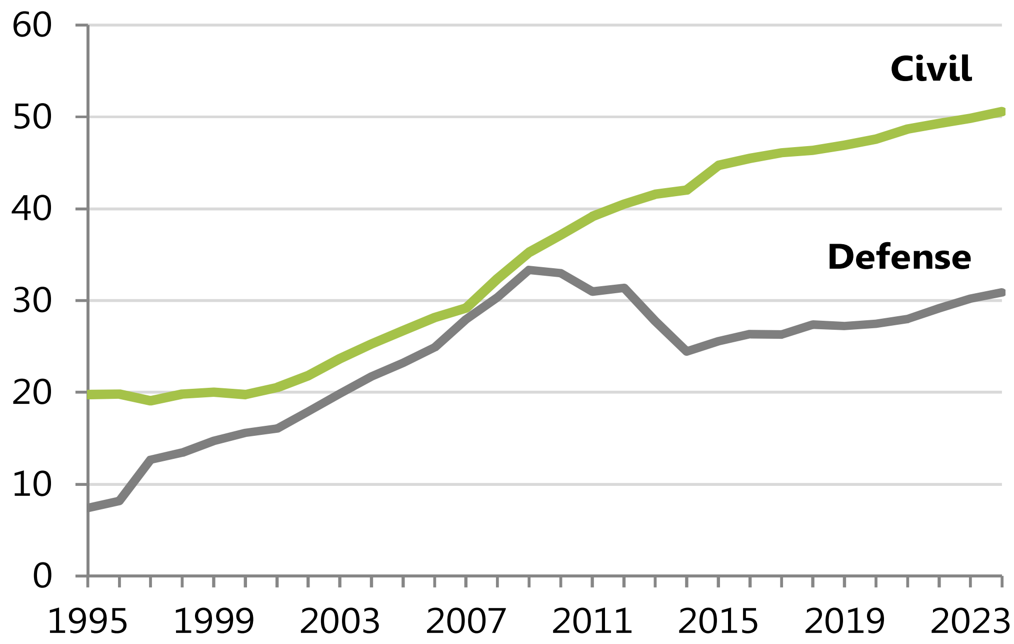
By Steve Bochinger, COO

SPACE EXPENDITURES IN A TRANSITION PHASE

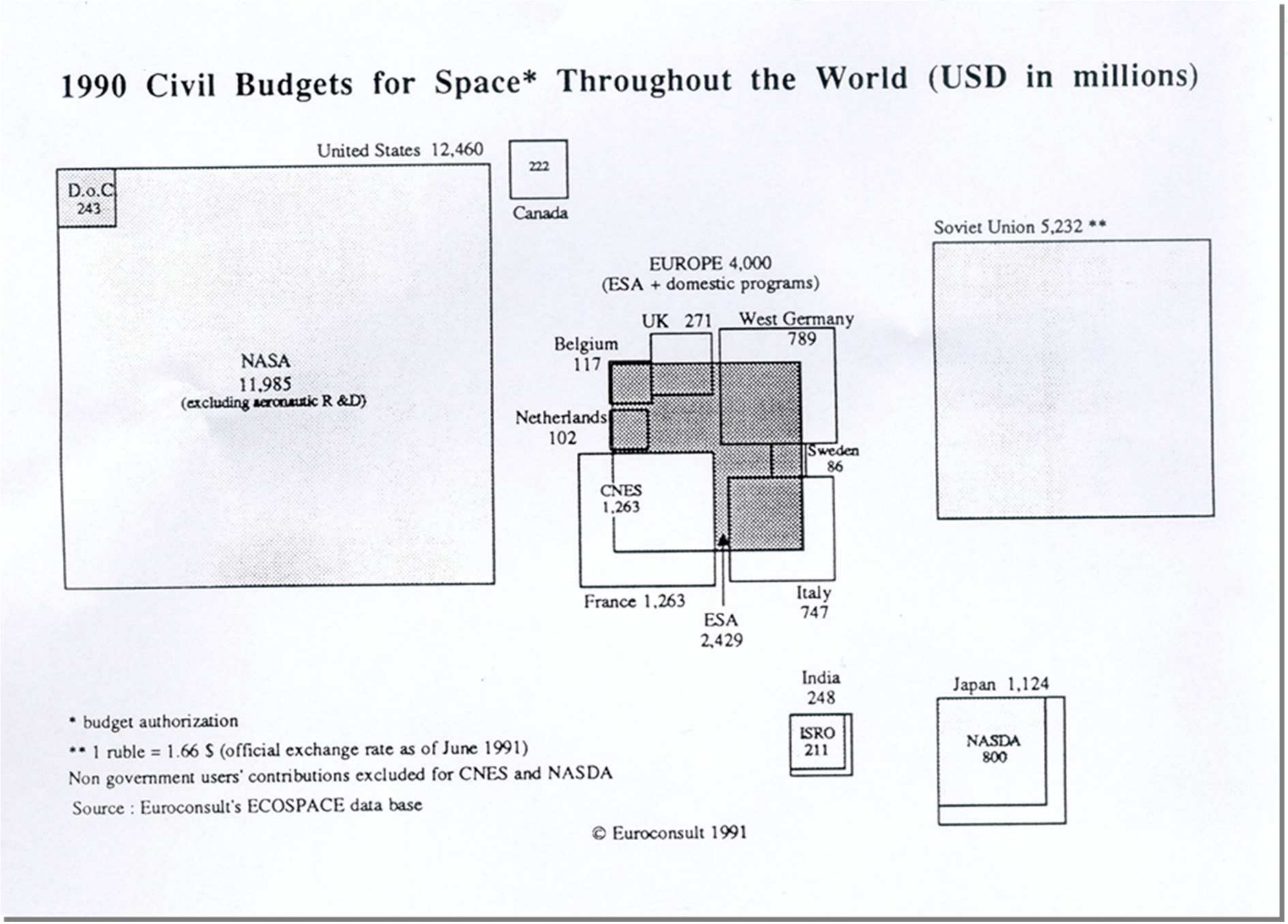
WORLD GOVERNMENT SPACE EXPENDITURES



CIVIL AND DEFENSE

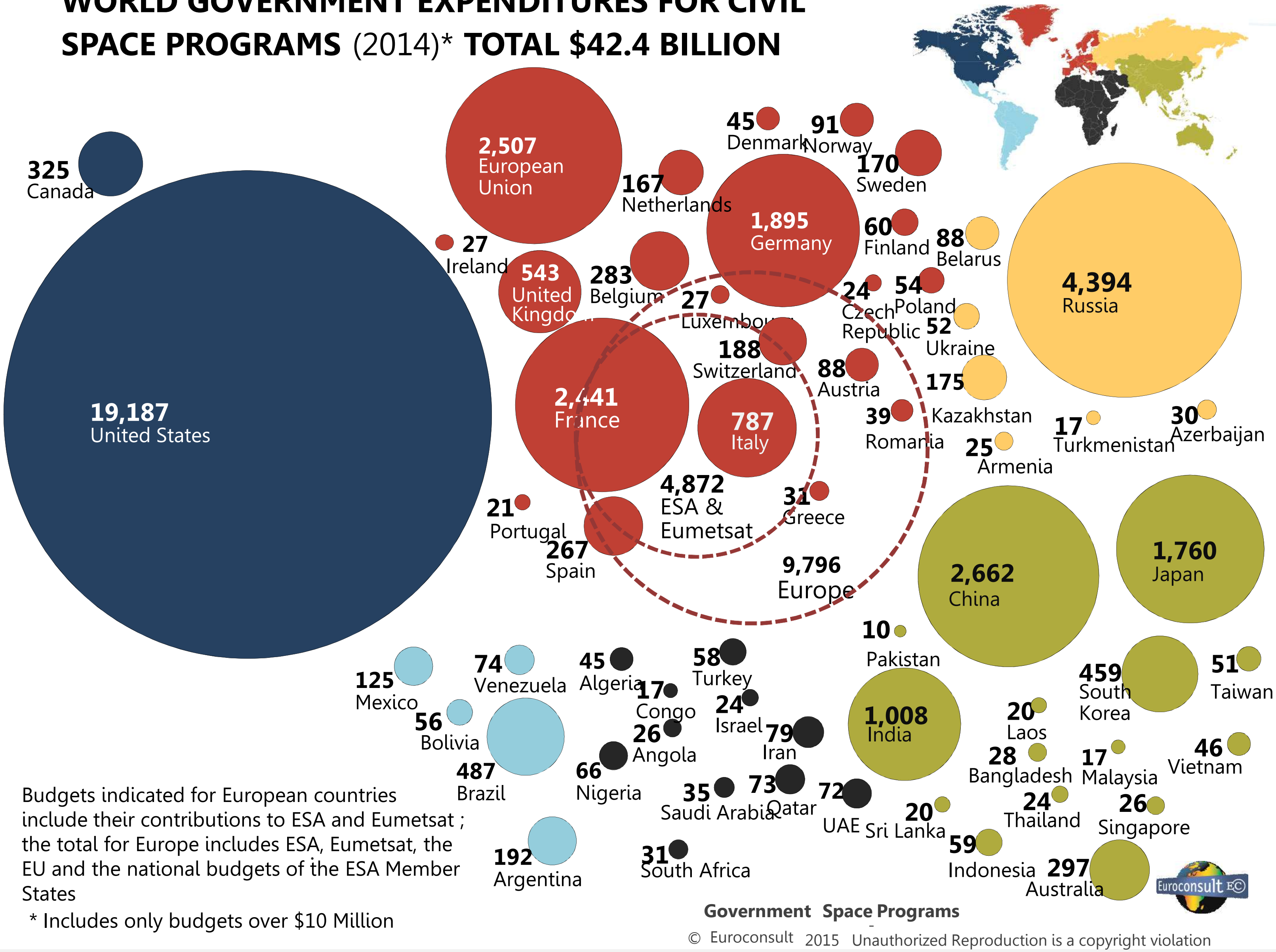


SPACE PROGRAMS 25 YEARS AGO



TODAY….

WORLD GOVERNMENT EXPENDITURES FOR CIVIL SPACE PROGRAMS (2014)* TOTAL $42.4 BILLION



Budgets indicated for European countries include their contributions to ESA and Eumetsat ; the total for Europe includes ESA, Eumetsat, the EU and the national budgets of the ESA Member States

* Includes only budgets over $10 Million

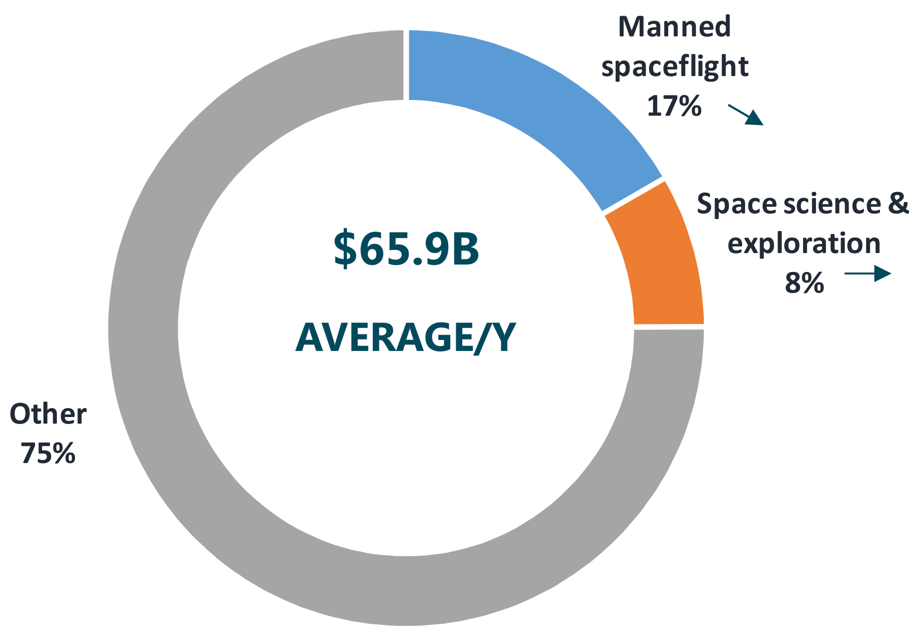
CHANGING LANDSCAPE FOR GOVERNMENTS

	1995	2005	2015	2025
# COUNTRIES WITH SPACE PROGRAM	15	30	60	80
TOP 3 AS OF WORLD	USA/URSS/ESA 95%	USA/ESA/JAPAN 80%	USA/RUSSIA/CHINA 70%	USA/RUSSIA/CHINA 70%
# GOV SATS LAUNCHED	35	50	86	76
# OF SAT IN OPERATION FROM EMERGING PROGS	20	39	87	155

SPACE EXPLORATION & MANNED SPACEFLIGHT IN GOVERNMENT PROGRAMS

WORLD GOV SPENDING FOR SPACE

2006-2015

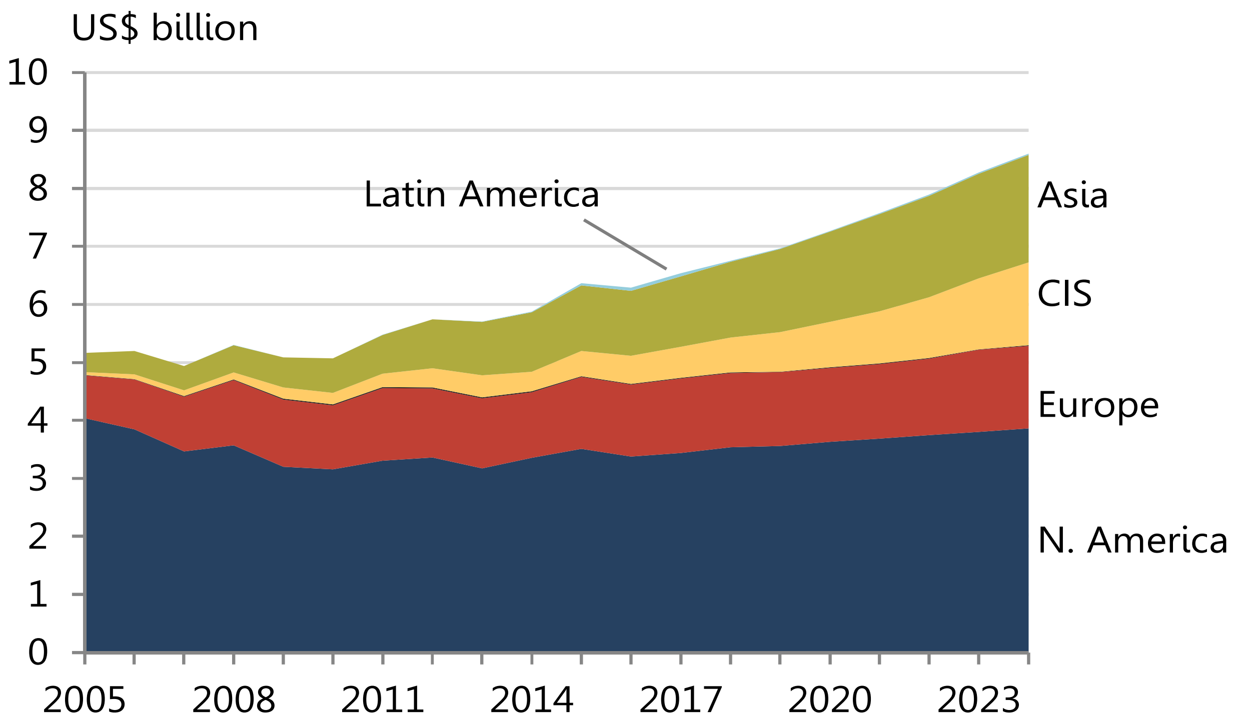


COUNTRIES INVESTING IN APPLICATIONS

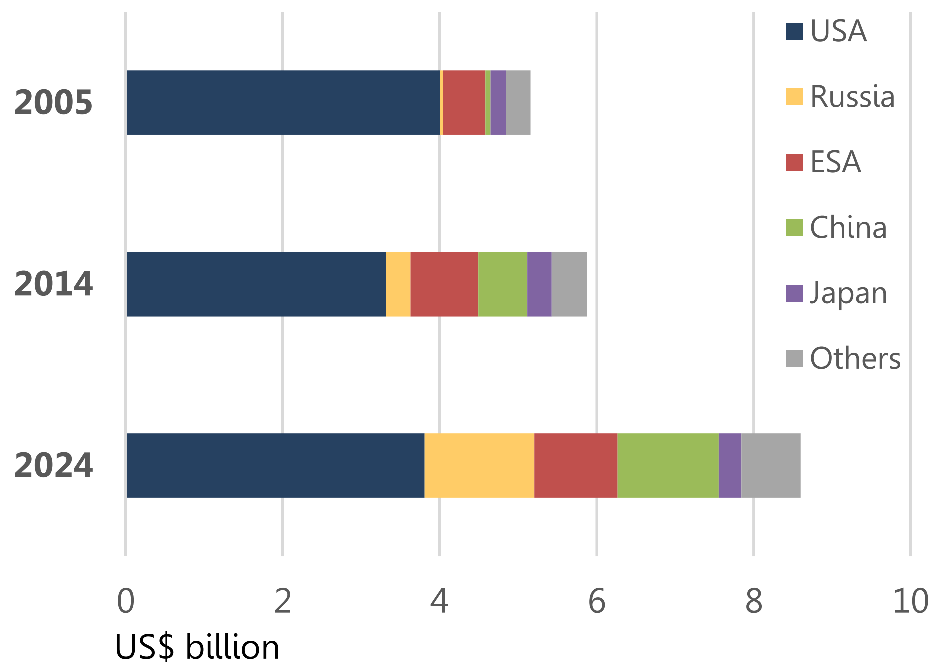
	2004	2013	2023
EO	28	55	62
Satcom	20	48	61
Science & exploration	18	25	28
Launchers	11	15	16
Security	4	8	11
Satnav	6	9	9
Manned Spaceflight	7	8	8

GROWING INTEREST FOR SPACE EXPLORATION

SPACE SCIENCE AND EXPLORATION SPENDING BY REGION

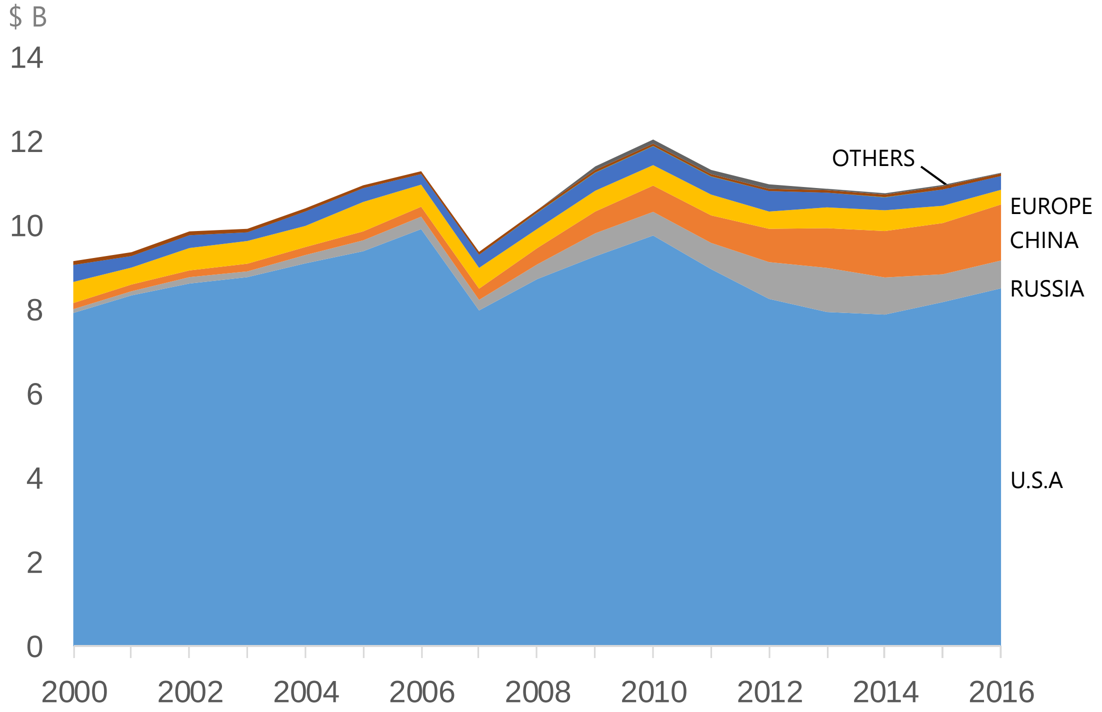


CONCENTRATION OF SPENDING

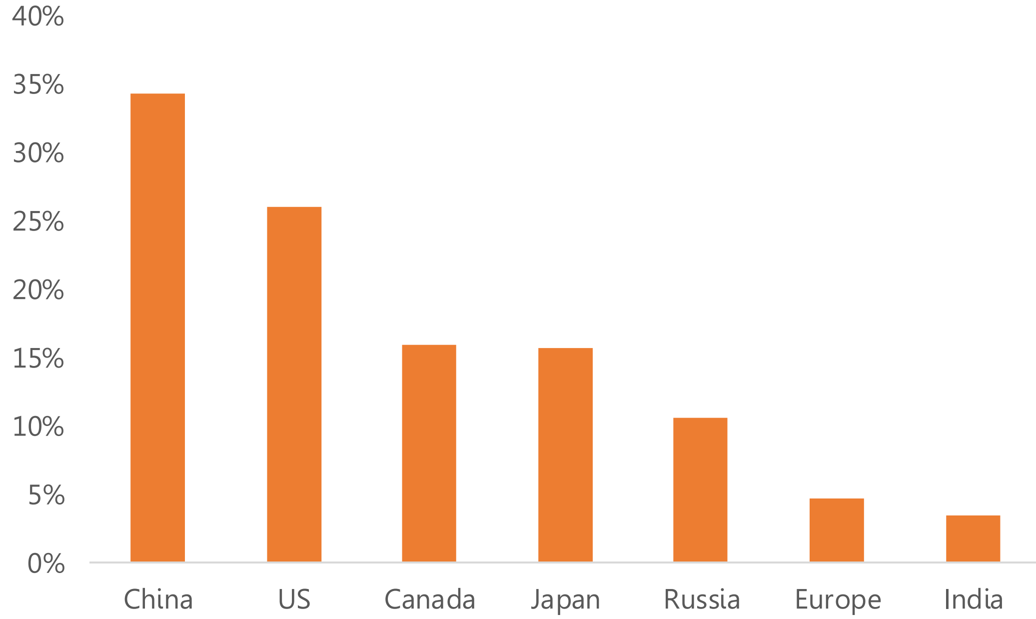


MANNED SPACEFLIGHT REMAINS AFFORDABLE FOR A FEW

MANNED SPACEFLIGHT SPENDING BY COUNTRY



MANNED SPACEFLIGHT AND EXPLORATION AS OF SPACE BUDGET

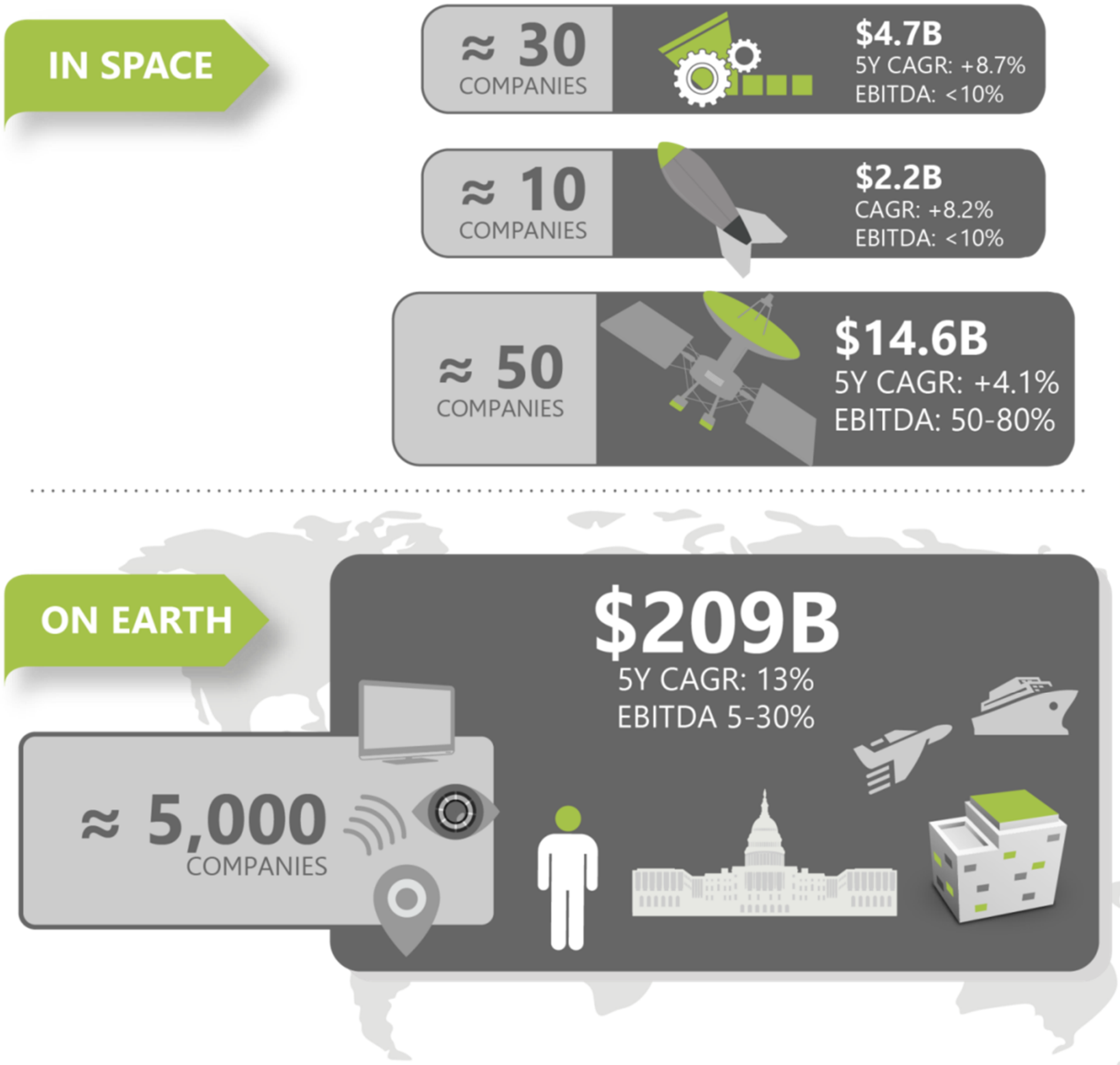


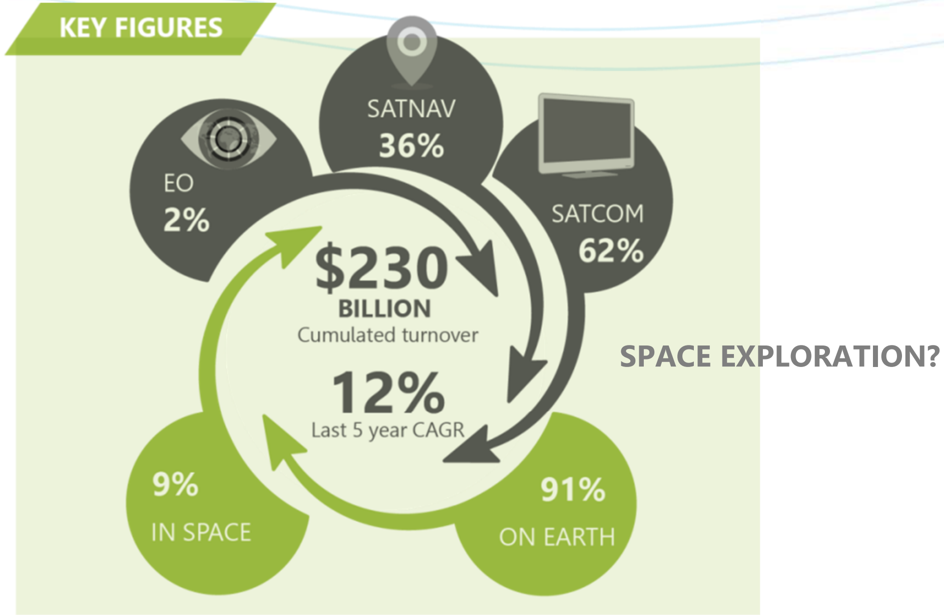
Tough financial context in historical countries impacts funding and program affordability

Look for cooperation: international and commercial solutions

COMMERCIAL REVENUES RELY SO FAR ON SATELLITE MARKETS

The commercial satellite value chain





* Not eliminating double-counting of revenues within the industry's supply chain.

A NEW ECOSYSTEM FOR PRIVATE ENTERPRISE

Access to space

SpaceX
Blue Origin
Generation Orbit
Stratolaunch Systems
RocketLab
Firefly
Swiss Space Systems
Reaction Engines

Suborbital: techno. test & tourism

Virgin Galactic
XCOR Aerospace
Scaled Composites
Final Frontier Design
Masten Space System
ZeroGravity
Up Aerospace
Zero2Infinity
Copenhagen Suborbital

In-space operation

Made in Space
Shackleton Energy
Planetary Ressources
Deep Space Industries

ISS utilization

Urthecast
NanoRacks

Human spaceflight

Bigelow Aerospace
Paragon Space Dev.
Golden Spike
Inspiration Mars
Mars Foundation

Science and others

B612 Foundation
Digital Solid State
Moon Express
Exolance
TimeCapsule2Mars

SOME CONDITIONS FOR MARKET DEVELOPMENT

SUSTAINED FUNDING SUPPORT

DIVERSIFICATION OF PLAYERS

INTERNATIONAL COORDINNATION & COOPERATION

PROGRAM COHERENCE

RISK MITIGATION

PRIVATE SECTOR FINANCING

CUT COST

OPEN TO NON SPACE SECTORS

DOWNSTREAM ACTIVITIES

WHERE IS THE ROI?

THANK YOU

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WHO WE ARE

- Leading global consulting firm specializing in supporting decision making in the the space, communication and Earth observation sectors
- Privately-owned, fully independent firm

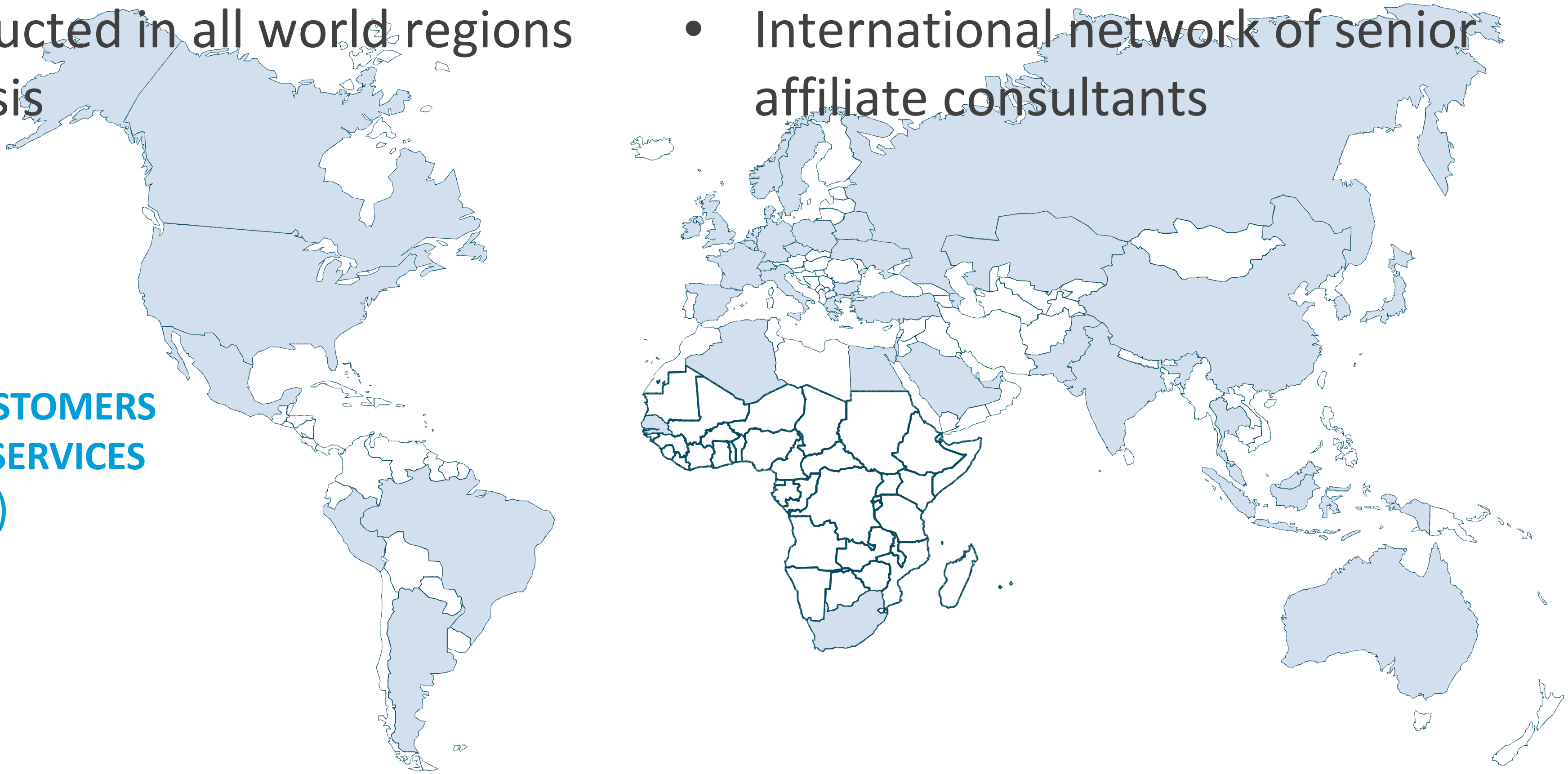
CONSULTING

RESEARCH

SUMMITS

A GLOBAL PRESENCE AND SERVICE CAPABILITY

- Close to **600** customers in over **50** countries
- We participate in over **30** international events each year
- Missions conducted in all world regions on a yearly basis
- Multi-cultural team of over 30 full-time experts
- Offices in 4 countries: France (Hq), the U.S., Canada and Japan
- International network of senior affiliate consultants



COUNTRIES WITH CUSTOMERS FOR EUROCONSULT SERVICES
(2010-2015)

END-TO-END CAPABILITY IN THE SPACE SECTOR

- **Independence**
  Independent assessment & decision-making assistance to institutional, industrial & financial organizations

- **Experience**
  We have completed 500+ consulting missions in the space sector

- **Trusted business partner**
  The majority of our clients are returning customers

- **Large service offering**
  As a one-stop-shop firm, we cover the full spectrum of our clients' requirements