

A satellite with solar panels is shown in orbit against the backdrop of Earth from space. The satellite is positioned in the center-left, with its solar panels extending outwards. The Earth's horizon is visible at the bottom, showing blue oceans and white clouds. The background is a dark starry sky.

THi

**We Make Your Satellites
Dance in Space**

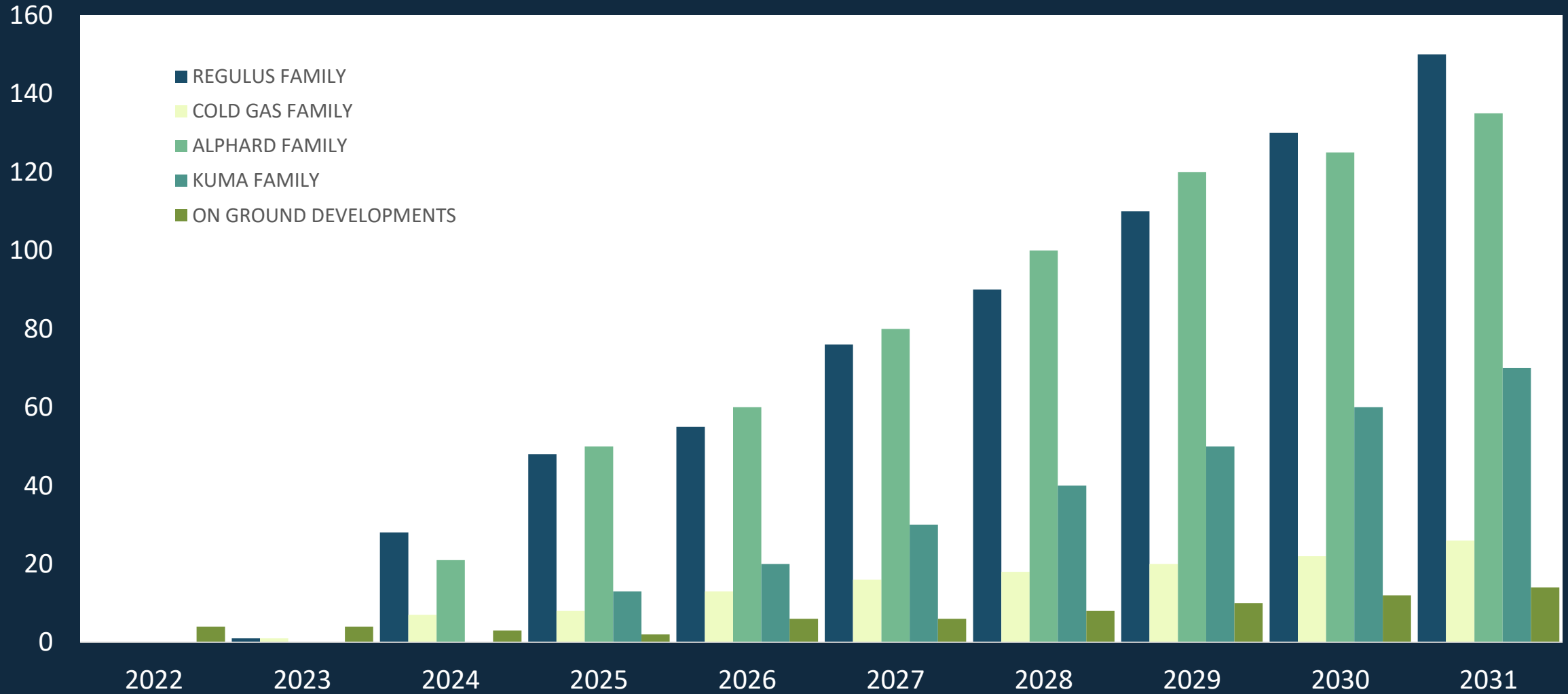
PITCH DECK 26/06/2023

Technology Portfolio: T4i holds a technology portfolio which is one among the widest in the world on space propulsion, covering from access to space to in orbit satellites maneuvers. T4i provides to the customers a unique capability of dealing with a wide range of requirements.

Tailor Made: Thanks to its broad experience on different type of propulsion systems, T4i supports its customers in selecting the best propulsive solution for their mobility needs and designs and implements propulsion system configurations based on combination of different propulsion units capable of satisfy challenging mission requirements.

Cost/performance/quality: T4i design develop and implement its propulsion units always focusing on the best compromise between cost, quality, and performances.

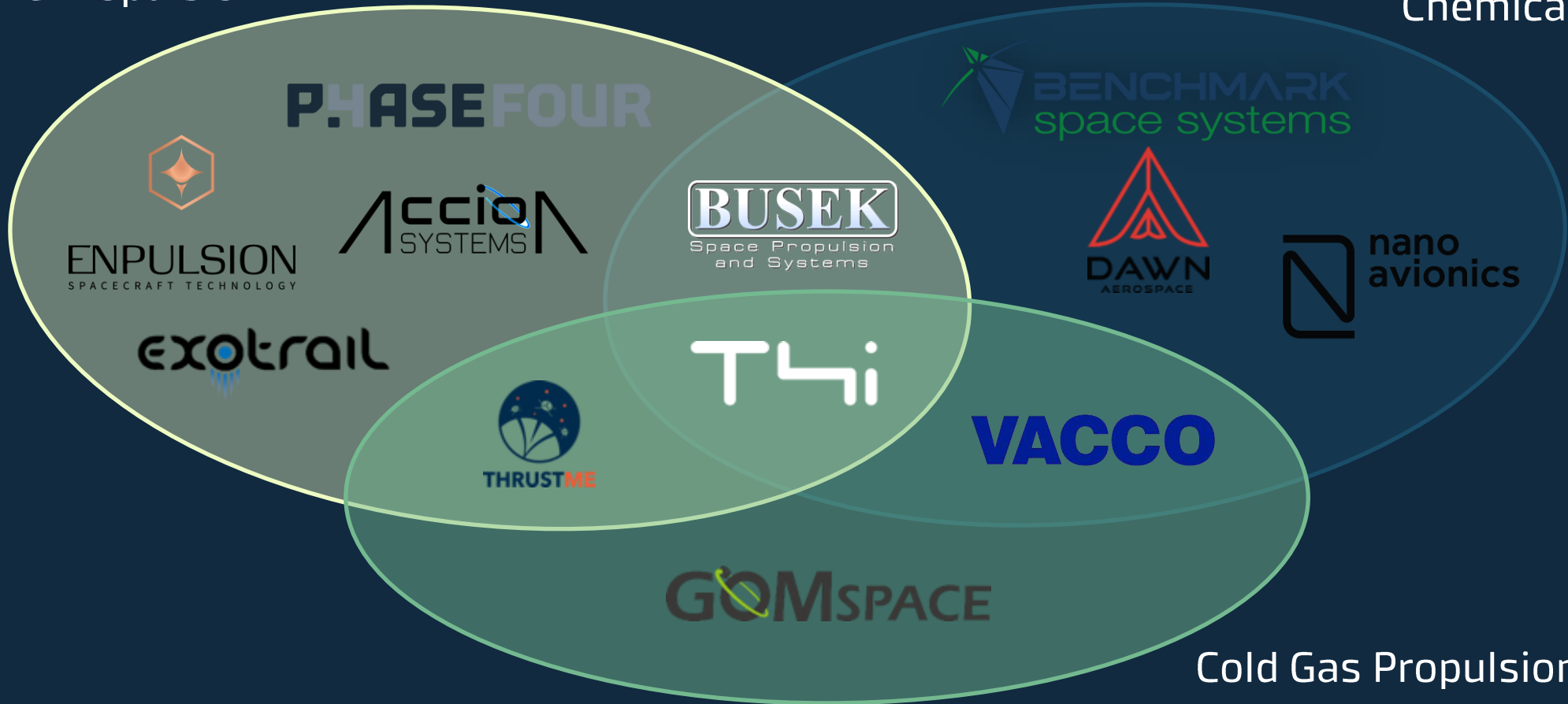
OVERALL TRACTION



IN-SPACE COMPETITIVE LANDSCAPE

Electric Propulsion

Chemical Propulsion



DIRECT COMPETITION - ELECTRIC PROPULSION



	T4i REGULUS EP FAMILY	HALLEFFECT	GRIDDED ION	ELECTROSPRAY FEEP
VERSATILITY	● ● ●	● ●	●	●
COSTS	● ● ●	●	● ●	● ● ●
RELIABILITY	● ● ●	● ● ●	● ●	●
GREEN	● ● ●	● ● ●	● ● ●	● ● ●

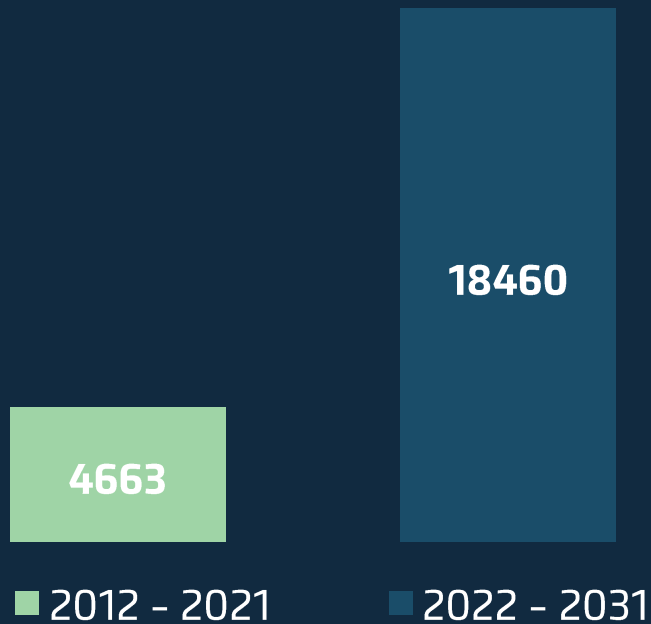
DIRECT COMPETITION - CHEMICAL PROPULSION



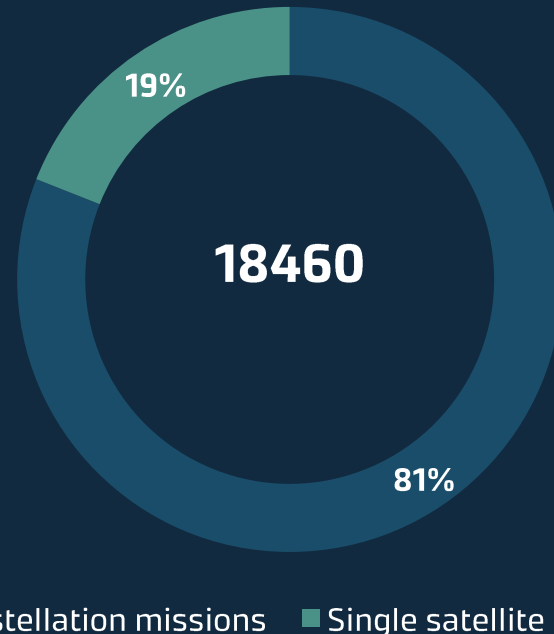
	T4i ALPHARD MONO PROPELLANT	GREEN MONO PROPELLANT	IDRAZINE BASED THRUSTERS
VERSATILITY	● ● ●	● ●	● ●
COSTS	● ● ●	●	●
RELIABILITY	● ● ●	● ●	● ●
GREEN	● ● ●	● ● ●	●

SMALL SATELLITE MARKET BY 2031 (1/2)

GROWTH OF THE NUMBER OF SMALLSATS



SMALLSATS TO BE LAUNCHED

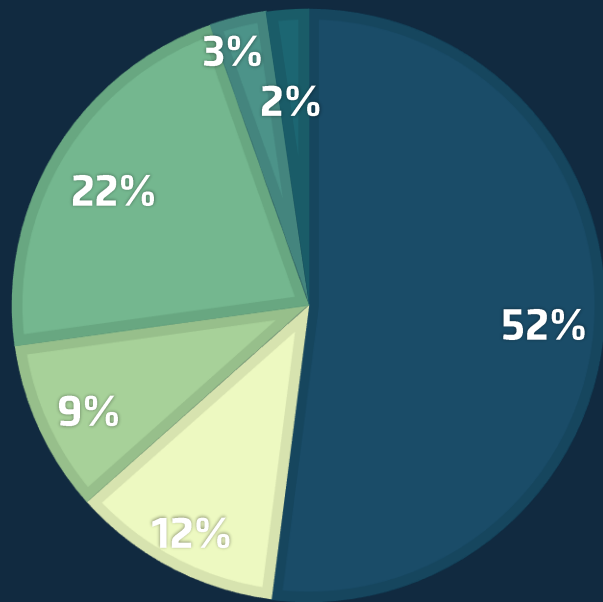


MARKET VALUE



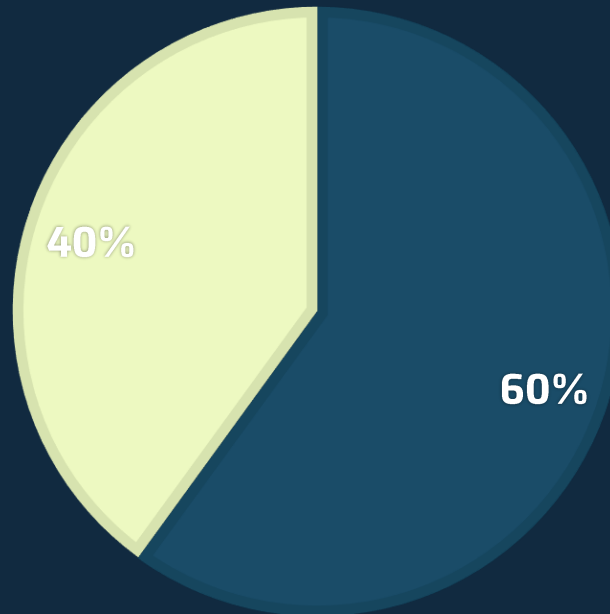
SMALL SATELLITE MARKET BY 2031 (2/3)

REGION BY NUMBER OF SMALLSATS (W/O SPACEX & AMAZON)



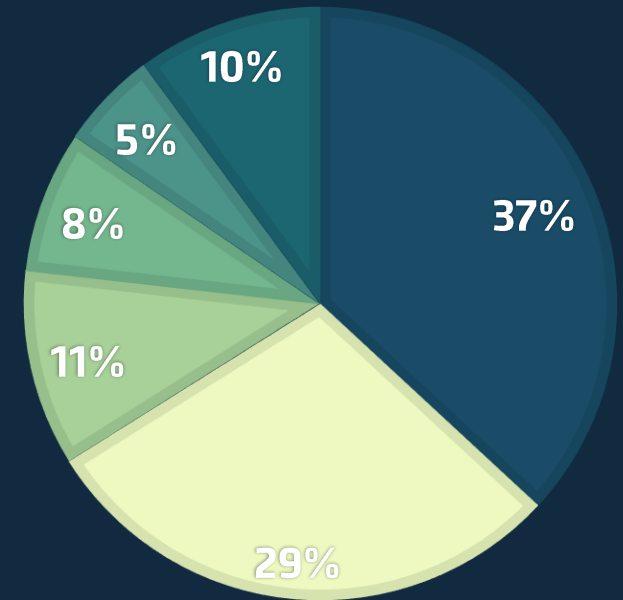
USA Europe
China Asia

REGION BY NUMBER OF SPACE TUGS









USA Europe

REGION BY NUMBER OF SMALLSATS COMPANIES

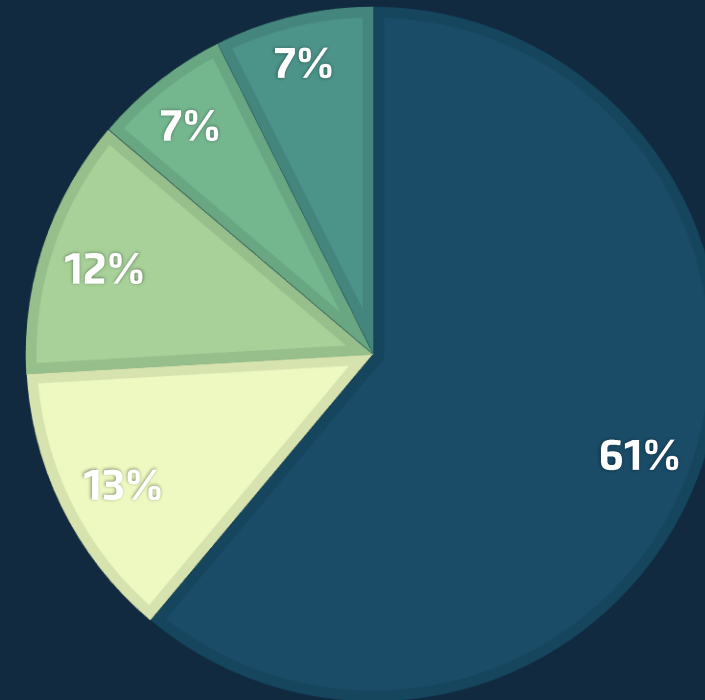


USA Europe China
Asia Canada ROW

SMALL SATELLITE MARKET BY 2031 (3/3)

Application	Definition
 Satcom	Satcom satellite systems funded by civil or defense government agencies for broadband and MSS communications services including internet, broadcasting.
 Earth Observation	Satellites for electro-optical and radar observation of the Earth, as well as for meteorology, both for operational and Earth-science research purposes. It also includes GNSS radio occultation (GPS-RO).
 Information	Smallsats providing narrowband communications services (IoT & M2M) and data collection from ground, aerial and atmospheric sensors (e.g. AIS, ADS-B).
 Technology	Technology development satellites built to test new technologies or platform/payload components; some technology satellites may serve other applications on a non-operational basis.
 Security	Satellites for space surveillance and tracking, missile early warning, near-Earth object monitoring, electrical intelligence (ELINT), and space weather. It also includes SIGINT, including RF monitoring applications.
 Science, Exploration	Small satellites for astrophysics and astronomy, planetary science (including Earth science and lunar missions), heliophysics, and solar-terrestrial interactions.
 Space Logistics	This application features four parts : In-Orbit Servicing (IOS) i.e. satellites designed to repair, refurbish, refuel or take-over station-keeping of a customer; Debris Removal; Last Mile Logistics and In-Orbit Manufacturing (IOM).

MARKET SEGMENTATION BY APPLICATION



REVENUE MODEL

B2B CLIENTS



Commercial contracts with small satellite manufacturers.

INSTITUTIONAL CLIENTS



Commercial contracts with institutional clients (e.g., governments and agencies).

R&D PROGRAMS



R&D grants from institutions and governments.



Marketing Strategy

- › Direct actions towards satellite manufacturers
- › Special preferential agreements with strategic selected manufacturers
- › Hardware simulator @ customer premises



Pricing Strategy

- › Basic price plus accessories
- › Special prices for constellations and/or for double/triple digit orders
- › Special prices for pivoting clients

INTERNATIONALIZATION PLAN

Q1 2024



Get insights and introductions to entry the market by exploiting already existing partners that have an established presence in the US market.

Q3 2024



Start sales activity in USA by establishing a partnership or a joint venture with an American partner.

Q1 2025



Increase brand awareness and reputation and nurture first clients by hiring commercial and institutional sales agents and vendors.

Q3 2025



Opening of T4i subsidiary to get a solid reputation, achieve a sustainable selling regime covering T4i business plan selling goals.



CHALLENGES AND RISKS

Challenge/Risk	Response/Mitigation
Challenges in establish and consolidate strategic partnerships	Start with companies with which we already have partnerships here in Europe, but which have already a solid presence in the United States
Challenges in hiring and retain skilled personnel	Increase T4i employer branding
Not having enough liquidity to increase the staff/expand the American office	Looking for additional funding sources, both private (e.g., VCs) and public (e.g., grants)
Inadequate knowledge of the political, institutional, economic, and commercial dynamics regulating the USA-Italy trade	<ul style="list-style-type: none"> • Establish contacts in Italy with internationalization entities to get to know the ecosystem in depth • Lessons learned for other Italian companies already in the US
Failing to make the American business self-sustainable	Incremental growth to minimize the associated risks
In-depth knowledge of the market, of the competitor ecosystems, of their business models and selling tactics.	Continuous market and competitors analyses performed by the mkt staff in the HQ, to be confirmed or implemented by the American staff
Management of the relationship between the T4i Italian HQ and the American subsidiary	<ul style="list-style-type: none"> • Flexible approach depending on the growing size of the subsidiary • Open and transparent intra-organizational communication methods, shared practices, and control mechanisms

MAIN PARTNERSHIPS AND CLIENTS



Agenzia Spaziale Italiana



UNIVERSITÀ
DEGLI STUDI
DI PADOVA



Politecnico
di Torino



POLITECNICO
MILANO 1863



A satellite with solar panels is shown in space, orbiting the Earth. The background is a dark blue space filled with stars, and the Earth's blue and white atmosphere is visible at the bottom.

TLi

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