

Technical due diligence for space technology investors

Longalba Consulting helps investors make sense of space technology. We assess the technology of the companies in their pipeline, explain it to the investment team in plain terms, and identify the technical risks that bear on the investment decision.

What we assess

Each assessment covers technology maturity, engineering execution, development risk and system architecture. We establish the Technology Readiness Level (TRL) of the critical subsystems and the evidence behind it, from test campaigns and qualification status to flight heritage. We review the development methodology, the engineering team, manufacturing readiness and the supply chain. We measure the gap between the current state of the hardware and software and the product the business plan assumes, and the development effort needed to close it. We test the system design against first principles and compare it with competing solutions.

Coverage includes launch vehicles and propulsion, satellites and constellations for communications and Earth observation, in-orbit servicing, space situational awareness, orbital data centers and ground systems.

How we work

Every assessment is based on evidence. We review the data room and the technical literature, compare the company with the record of similar programs, and hold working sessions with the founders and the engineering team. The work concludes with a written report and a discussion of the findings with the investment team. We also brief investment teams and committees on a technology or a segment of the space sector before they meet a company.

Engagements

We work with funds and family offices, typically under a retainer that covers the screening of incoming opportunities and full assessments of the companies the investment team selects. A team of analysts supports the assessments with targeted research. We keep the number of clients small, and the founder leads every engagement personally. Assessments of a single company are accepted when capacity allows and are scoped individually.

Scope

For investors, Longalba provides technical due diligence only. Our reports describe the technology, its maturity and its risks based on the information that is available to us at the time of the analysis. We provide no financial analysis, valuation, investment advice or recommendations, and we do not arrange or broker investments. Investment decisions remain with the investors and their advisers.

About Longalba

Longalba Consulting UG (haftungsbeschränkt), a German limited liability company, was founded in Munich in 2023 by Alessandro Golkar, a spacecraft engineer and systems architect with a doctorate from the Massachusetts Institute of Technology (MIT). At Airbus he was Vice President for Concurrent Engineering in the Corporate Technology Office, where he established the Concurrent Design Facility and steered a €800 million research and technology portfolio. He is Full Professor and founding Chair of Spacecraft Systems at the Technical University of Munich (TUM). He teaches the New Space Economy program at MIT Professional Education, serves on the advisory board of a space economy equity fund, and wrote the Springer Nature book "The New Space Economy."

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