



Turnkey Submarine Services



Subphoton offers complete turnkey solutions for new undersea fiber optics cable infrastructures. By acting as prime contractor, projects are managed, executed, and supervised end to end, from design to commissioning.

With its inhouse experience and solid ecosystem of reliable partners, Subphoton delivers turnkey services to build the regional and transoceanic submarine cable systems at the lowest cost per bit.



Innovation and Expertise for Turnkey Submarine Projects

Subphoton leverages a team of recognized industry experts with over 30 years of experience in the design and build of various submarine cable system installations around the globe.

Subphoton combines its innovative open wetplant portfolio of high-fiber-count, high-capacity optical repeaters, branching units, and line supervisory equipment with its inhouse expertise in system engineering and project management to deliver complete turnkey submarine cable system solutions to hyperscalers, telecom service providers, and institutions.

Subphoton provides a single point of accountability for submarine cable system projects by acting as prime contractor and managing its ecosystem of trusted, best-in-class partners to cost-effectively deliver reliable turnkey submarine solutions end to end across the complete procurement lifecycle – from planning and design to installation and turnup.

Cable Route Study and Permitting

As the critical stage to ensure the viability and long-term security of the cable system project, Subphoton, together with its partners, provides the expertise for the generation of the desktop study (DTS) to specify the project requirements, and to identify and obtain the necessary permits. Such activity includes the definition of the preferred cable route positioning list (RPL) and landing points, preliminary route engineering design, cable and protection requirements, permits requirements, crossing agreements, preliminary straight-line diagram (SLD), and marine survey specification.

Marine Survey

Marine survey verifies the geophysical and geotechnical features of the DTS proposed cable route and produces the burial assessment survey (BAS) to determine the final cable route based on seabed profiling techniques as well as climate and tidal currents analysis. This activity is performed by trusted partners of Subphoton.

System Route Engineering and Design

Subphoton provides system route engineering services to determine the final cable lengths and protection types and launch system procurement and manufacturing. Subphoton has also the expertise and capabilities to design the fiber optics wetplant final SLD according to capacity and performance requirements, and to select the most appropriate technology elements along the optical path, including the innovative, high capacity Subphoton's 48fp OSLA repeater.

Manufacturing and Factory Acceptance

Once system design has been completed, Subphoton takes responsibility for the procurement and manufacturing of all system components, and for their factory acceptance prior to deployment. Subphoton designs and manufactures inhouse the active wetplant elements (repeaters, branching units, line monitoring) and relies on its trusted partners for the procurement of cable, power feed equipment, and optionally terminals.

Marine and Land Installation

Through its ecosystem of global partners, Subphoton offers complete marine and land installation services, including system load and assembly, shore-end operations, pre-lay grapnel run (PLGR) and route clearance, main lay, post-lay inspection and burial (PLIB), cable station installation.

Turnup and Acceptance

Subphoton takes responsibility for project management for the entire duration of the turnkey project and ensures that all the elements of the submarine cable system solution do work together seamlessly. Subphoton manages and supervises the commissioning and turnup of the system end-to-end.



About Subphoton

At Subphoton, we create the building blocks for open submarine cable architectures. We offer wet plant technology and turnkey solutions that maximize system capacity and enable seamless multivendor operations at the lowest cost per bit. We unlock our customers' potential to innovation and efficiency.

© 2024 Subphoton

Subphoton Srl
Via Privata Oslavia, 28
20134 Milan
Italy

www.subphoton.eu

Document code: SPDSTK2405