

## **The application of geophysics and geology for the design and installation of a submarine pipeline**

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A submarine pipeline route survey was carried out in mid 2000 to investigate the feasibility of installing a submarine pipeline connecting gas field facilities in Papua New Guinea (PNG) to mainland Australia.

TEKNIK LENGKAP SDN BHD, (TLSB), through its marine survey division TL Geohydrographics, was engaged to perform the marine investigation to determine the feasibility of this route using geophysical methods that included the acquisition of the following types of data:

1. Bathymetry or water depth along the proposed route
2. Sonar imagery of sea floor and its conditions
3. Sub-bottom geological information, including soil properties
4. Current measurements

The survey was carried out using one offshore vessel and two near shore or shallow draft vessels, equipped with various state-of-the-art electronic sensors and systems.

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