

Reliable ship - to - shore transmission infrastructure is a key demand. Currently, much offshore traffic is routed through INMARSAT circuits or dedicated satellite dishes, but the service is extremely expensive and increasingly hard to get approval from the government.

Vietnam's *coal and heavy and precious minerals sector*, with vast untapped potential and a significantly lower level of foreign participation than the oil community, is even further out of the loop. While banks have the luxury of operating out of Vietnam's nominal communications hubs, and foreign oil companies have the budgets, knowledge and the influence to acquire and utilize dedicated equipment, mining organizations are remotely located, and have precious little capital or expertise.

Manually-serviced phone lines and outmoded military-issue radio sets form the meager heart of mining communications. While operations are in general not sophisticated enough to utilize data communications, they are in desperate need of failsafe phone lines and mobile facilities.

The hard currency to acquire network infrastructure is also a crucial issue. Exports of coal are rising, and the state coal industry's four producing companies all employ a single corporation which is responsible not only for handling the export of Vietnam's high quality anthracite coal, but also for acquiring foreign materials and equipment with the profits. This provides potential communications equipment manufacturers with a one-stop introduction point to Vietnam's coal industry.

Foreign mining interests, initially put off by the low level of development and the lack of comprehensive mining regulatory legislation, are beginning to enter Vietnam. The first entrants are primarily Australian, and their nationality has been reflected in their radio and other wireless equipment selections. In a few cases, foreign joint venture mines are beginning to work with provincial P&Ts to sponsor the installation of enhanced facilities, such as PBXs for central exchanges and mobile systems. The P&Ts are welcoming the chance to exploit these relationships, to gain desperately sought after capital to expand services, and are smoothing the regulatory path for mining companies.

