Communications

1550-nm Links, Advanced Services Planned for International Telecom

Several telecommunications consortia have announced plans to increase international digital capacity and lower costs by installing new submarine fiberoptic cables. At least two of these will operate at 1550-nanometer wavelengths, thus requiring fewer repeaters and lowering the immense cost of undersea maintenance. And the owners of 1300-nm TAT-8 have promised new digital data services when the cable becomes operational in 1988.

Enter TAT-9. In the Atlantic, a consortium of five companies from the U.S., Canada, U.K, France, and Spain announced their intention to build TAT-9, an advanced successor to TAT-8. The new link, estimated to cost \$400 million, should be operational by late 1990 or early 1991, only three years after TAT-8 is scheduled for cutover. The 1550-nm system will carry up to 80,000 telephone

calls, twice the capacity of TAT-8, operating at 565 Mbit/s over 2 fiber pairs.

Australian Connection. Australia's international telecommunications authority, the Overseas Telecommunications Commission, has

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announced a \$1 billion submarine fiberoptic network linking Australia to New Zealand, and later, to North America and Asia. The OTC, along with the New Zealand Post Office, plans to connect Tasmania, Australia with New Zealand by 1991. According to Trevor Duff, manager of OTC's U.S. office in New York, the Phase II extension to North America is scheduled for completion by 1993, and Phase III to Asia by 1995.

The first phase, called TASMAN-2, will carry the equivalent of 57,000 voice channels, using digital circuit multiplication equipment (CME) to increase the 11,400 64-kilobit per second "hard" circuits. It will contain a minimum of three fiber pairs, each carrying 280 Mbit/s at 1550 nm. Duff said that the company plans to issue a worldwide manufacturers' request for proposals in late 1986.

Impetus for the project came from the fact that existing Australian and New Zealand telecom links are nearing their limits. Currently, the TASMAN-1 cable provides only 480 analog voice channels between Australia and New Zealand, while ANZ-CAN, the Australia-to-Canada cable, branches off another 480 analog circuits to New Zealand. Going north to Asia through Guam, the Southeast Asia Commonwealth Cable, SEA-

