

# CommTel: Tailoring Technology

CommTel Network Solutions always welcomes a challenge. As a specialist company in providing design, engineering, integration and project management services for advanced telecommunications systems, the

gas, transport and emerging carrier markets.

It was this trailblazing company ethos that first brought CommTel and Marconi together, explained CommTel Director,

"In 1999, Marconi purchased Nokia's SDH/DWDM (Dense Wavelength Division Multiplexing) transport business and we continued using the Synfonet SDH product through its new owner. And then, in 2002, Marconi launched a whole new SDH range, the SMA Series 4 of add/drop multiplexers."

radio applications to provide economical backhaul, to support delivery of mass telephony in residential areas, and in situations where carriers require service variety – across Ethernet LAN (Local Area Network), 2 Mbit/s and other PDH (Plesiochronous Digital Hierarchy) circuits together with STM-1 and STM-4 – coupled with high levels of security.

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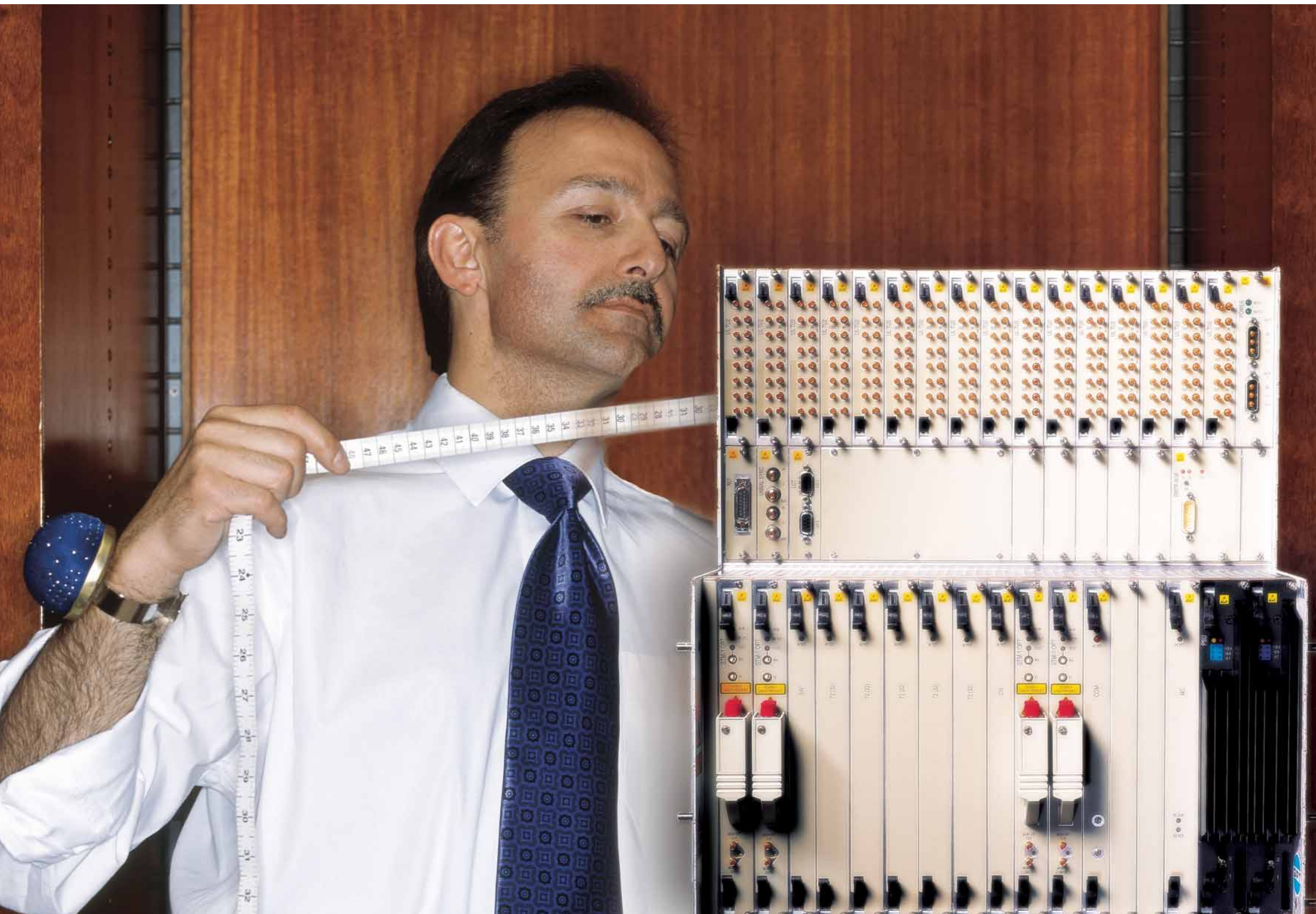
Victoria-based company actually invites it. CommTel's core expertise is in the application of new and advanced optical fibre transmission technologies to either new or particularly challenging opportunities in the power utility, oil and

Gerald Molenkamp. "SDH (Synchronous Digital Hierarchy) is the most popular transmission technology in the market in which we specialise, and we had been using an SDH product from Nokia in our networking solutions," said Molenkamp.

The challenge for CommTel was that Marconi's primary customer base for the SMA Series 4 portfolio was the carrier market – a focus that has earned Marconi worldwide leadership in SDH – and not the dedicated network utility/transport market in which CommTel has carved a front-runner position of its own.

"The requirements of our customers were different," added Paul Mascitti, CommTel's Manager for Technology and Innovation. "Unlike carriers, which focus on developing and delivering telecommunications services, the fundamental issue with our market is the need to leverage communications technology to support their core business, whether it's distributing electricity or running a railway. And in this market sector, the technology commitment is clearly to SDH."

The high-capacity SMA Series 4 multiplexers are typically deployed by Marconi carrier customers in metro access and metro edge rings or spurs, in multi-tenancy buildings in business parks or campuses, in fixed and mobile



Following a period of stringent evaluation, including in-depth interoperability trials and a variety of tough environmental tests, CommTel came to the conclusion that the SMA Series 4 multiplexers had the potential to meet the needs of its customer base, except in terms of distance. Because the multiplexers were developed for the carrier market, their maximum range of 100kms was more than sufficient, but this distance did not fulfil the criteria of CommTel's customer base.

"We put the challenge to our R&D group, and the team developed our own add-on amplifier – the CommTel Optical Booster

leading family of multiplexers that reduces capital and operational costs, maximises revenue potential with versatile delivery platforms, and ensures customers of a cost-effective, responsive, high-availability service to this day."

#### **New contract wins**

Recently, CommTel has racked up a number of key wins based on the CommTel OBA-enhanced Marconi SMA Series 4 multiplexer, including:

- **Western Power** – Western Australia's leading energy corporation, Western Power, with five major power stations

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Amplifier (OBA) – to increase the SMA Series 4's range to 200kms," said Molenkamp. "The result is an industry-

and 26 smaller regional stations serving almost 900,000 customers, has selected the Marconi SMA

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multiplexer solution for six nodes in its core communications network in Perth. Also of importance to Western Power was the fact that the product is standards compliant, and will allow them to use the network to carry Ethernet as well as SDH traffic.

- **Ergon Energy** – Australian-owned and operated, Ergon Energy is one of the country's largest electricity companies, serving over half a million residential and business customers. The SMA Series 4 contract that CommTel was awarded is to upgrade Ergon Energy's core network in major regional centres in Queensland to allow the introduction of Ethernet capabilities into sub-stations in those

areas. In addition, CommTel is supplying Marconi's ServiceOn Access network management solution, in operation in over 170 operators' networks worldwide.

"A major factor in our success at CommTel, supplying the Marconi SMA Series 4 platform and with everything we do, is that we work very closely with our customers and that they trust us," said Molenkamp. "They trust us, they trust our advice, and they trust that we will keep looking after their interests. And this is a challenge that's always rewarding to meet."