



TECHNOLOGY SERVICES



LABORATORY/TESTING

Key to Bechtel's deployment success is our technology expertise. To provide our clients with complete turnkey deployment services, we offer expert technology research and testing services.

The TDR Laboratory, a vendor-neutral applied communications research facility, offers our clients the ability to integrate equipment from multiple vendors to identify interoperability issues, characterize product performance, and ensure compatibility with legacy systems, thereby reducing risk for clients who are integrating new technologies.

HIGHLIGHTS:

- > Established lab/testing facility to support our clients with cutting edge tools to design and plan networks, test new technologies and equipment, and utilize our Bechtel-developed training programs in state-of-the-art classrooms
- > In the past 2 years, tested over 60 different types of network equipment for our client operators and OEMs
- > Tested a variety of devices and technologies at our lab facility, including free space optics, passive optical networks, distributed antenna systems (DAS), RF over fiber, wireless VoIP/PABX, IPv6, cryogenic TMAs, CDMA 2000 1XRTT, EVDO, 802.11x, WiMAX 802.16d,e, microwave radio, GSM/GPRS, UMTS, HSDPA/HSUPA, 450 MHz WLL, and optical transport
- > Developed a state-of-the-art Virtual Survey Tool to support desktop integrated network planning with minimal site visits
- > Developed over 60 technology course offerings and have trained over 750 client personnel on next generation technology including UMTS network deployment

TRAINING, DEMONSTRATION, AND RESEARCH LABORATORY

Located in Frederick, Maryland, Bechtel's TDR Lab affords clients valuable access to a state-of-the-art testing environment, staffed by leading engineers and technicians.



Our TDR Lab testing and training services support a wide variety of wireless and wireline technologies. The facility features:

- > A 72-km fiber optic transport network
- > An up-to-date array of precision diagnostic and analysis test fixtures for both terrestrial and wireless networks
- > A fully functional GSM (global system mobile) PCS (personal communication system), CDEMA2000 and UMTS network
- > Multiple 802.11 wireless LAN (local area network) systems
- > A state-of-the-art classroom training facility with worldwide broadcast capability

BECHTEL COMMUNICATIONS TECHNICAL JOURNAL

Committed to staying ahead of the communications technology curve, Bechtel regularly publishes the Bechtel Communications Technical Journal (BCTJ), an unbiased analysis and review of communications technologies.



Each volume of the BCTJ probes future technologies, network architectures, and industry standards. Check out the latest articles by going to our website.

TECHNOLOGY FORUM

Bechtel Lab hosts two Technology Forums per year, during which all of Bechtel's technologists participate in a detailed technical review and discussion of current and future communications technologies.



If you would like further information, please visit our website www.bechtel.com/communications