As the telecom industry continues to wade through what Gartner Group telecom analyst Dave Fraley calls The Telecom Great Depression, a synergistic environment among vendors, service providers and industry forums can help service providers launch compelling services in a more efficient manner.

Such a concept can be found this week in the halls of the University of New Hampshire, which is serving as one of the three hosts for the MSF (Multiservice Switching Forum) global interoperability demonstration. Formed in 1998 with support from multiple vendors and major carriers, the overall goal of the MSF is to demonstrate interoperability in a multiservice, multi-vendor and multi-carrier environment.

“To get out of this economic crater, we need to deliver value to the industry,” said Chris Daniel, MSF vice president and director of systems engineering and product management for Leapstone. “With the MSF’s MSS (multiservice switching system) architecture, vendors will be able to leverage industry resources to create a generic underlying foundation and use their own internal resources to add their own secret sauce.”

Seventeen next-gen and established vendors and service providers interconnected at three global sites: BTexact Technologies’ advanced research lab in Ipswich, England; NTT’s Musashino Research and Development Lab in Tokyo; and the University of New Hampshire’s Interoperability Lab in Durham, N.H. To interconnect each of the respective sites, network capacity was donated from Qwest, the Abilene Internet2 network and the BT Ignite network.

During the two-week demonstration, vendors and participating service providers took part in one data and four voice scenarios. In the first week, network configuration and component testing was performed. In week 2, participants validated testing of the five planned scenarios. To diagnose any problems within the tests, a number of test and measurement companies, including Empirix, Spirent and NetTest provided their equipment and expertise to both the equipment manufacturers and service providers.

By leveraging the efforts of other standards bodies such as the IETF and IEEE, the MSF’s MSS concept is based on a distributed switching methodology, i.e., frame, cell or packet-based that can support voice, video and data. This week, the MSF participating members demonstrated Release 1 architecture for MSSs utilizing MEGACO/H.248, BICC (Bearer Independent Call Control) and SIP.

The MSF Release 1 architecture calls for a physical and logical separation of multiple next-gen voice components such as switches, media gateways and media gateway controllers. In the test matrix, participants tested multiple media and protocol scenarios including TDM-ATM-TDM, IP-TDM, TDM-IP-TDM and MPLS.

As a testament to this work, a number of member vendors including Cisco, Alcatel, LG Electronics, Marconi and MetaSwitch have adopted the MSF MSS guidelines. Going forward, the MSF plans to produce an end-to-end VoIP network that incorporates the best elements of existing standards bodies and resolves any discrepancies.