

Next Generation Optical Networks for Broadband European Leadership (NOBEL)

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This talk deals with research and trends of optical transport networks, as considered in the second phase of the EU project NOBEL (2006-2008). It highlights investigated architectures of future integrated broadband networks, service-focused network engineering, burst/packet networks for extended long term scenarios, integrated network control and management supporting multi-layer networks, and transmission technologies behind broadband for all.

The NOBEL studies envisage new paradigms for the enhanced transport networks of the future based on, firstly, a transparent optical layer enabling low-cost end-to-end optical transmission and automatic provisioning, secondly, a packet transport layer for the effective support of IP-based services, and, thirdly, a multi-layer control plane for integrated management and control of all network services.