

4 and 6 April 2006 (Lehr) –

Lecture : *Challenges for Convergence: Interconnection*

Overview of the policy challenges introduced by convergence from voice and video's vertical "silos" to converged digital networks patterned after the Internet's horizontally layered architecture. Case study of carrier interconnection as a convergence policy issue, with focus on the need for interconnection policies among network service providers (backbone Internet providers, wireless and wireline networks, ISPs and ILECs, etc.) and alternative models for regulating interconnection. Debate will focus on whether there is a need to adopt a universal (converged) interconnection regime and the rationale for bill and keep.

**Assigned Readings for this Lecture Include:**

Sicker, Douglas (2002), "Further Defining a Layered Model for Telecommunications Policy," draft mimeo, October 2002.

DeGraba, Patrick, "Bill and Keep at the Central Office As the Efficient Interconnection Regime," OPP Working Paper Series No. 33, Federal Communications Commission, December 2000.

Kende, Michael "The Digital Handshake: Connecting Internet Backbones," OPP Working Paper Series No. 32, Federal Communications Commission, 2000.

**Some questions to consider include:**

- How does "convergence" challenge policymakers? What are the implications for traditional broadcast, telecom, and cable regulation?
- Why is it important to adopt a unified intercarrier compensation scheme? What are the challenges to doing this? What are the benefits (costs) of doing (failing to do) this?
- Do you think Bill and Keep is the right approach for regulating intercarrier compensation?

**Additional (Optional) Readings Include:**

Armstrong, Mark, "The Theory of Access Pricing and Interconnection," in Martin Cave, Sumit Majumdar, and Ingo Vogelsang, eds., *Handbook of Telecommunications Economics*. Amsterdam: North-Holland, 2001.

Briscoe, Bob and Steve Rudkin (2005), "Commercial Models for IP Quality of Service Interconnect," mimeo, British Telecom, April 26, 2005.

Charles River Associates, "Interconnection Pricing: Bill and Keep Compared to TSLRIC," Final Report submitted to Telecom NZ, April 2003.

European Commission (2002a), *Access to, and interconnection of, electronic communications networks and associated facilities*, Communications Services: Policy and Regulatory Framework, INFSO A/1, Brussels 24 April 2002.

FCC (2001), *Notice of Proposed Rulemaking In the Matter of Developing a Unified Inter-carrier Compensation Regime*, Federal Communications Commission, CC Docket No. 01-92, April 27, 2001.

Gabel, David, "A Competitive Market Approach to Interconnection Payments," in Networking Knowledge for Information Societies: Institutions & Intervention, edited by Robin Mansell, Rohan Samarajiva, and Amy Mahan, Delft University Press, 2002.

McCarthy Tetrault (2000b), "Module 3: Interconnection," Telecommunications Regulation Handbook, prepared for infoDev, World Bank, Washington DC, 2000.

Oftel, "Effective Competition Review of Internet Connectivity," 23 August 2001.

Vogelsang, Ingo, "Price Regulation of Access to Telecommunications Networks," April 2003.