

**REPORT: ABSENT NEW INVESTMENT, INTERNET WILL FACE
“RUSH HOUR TRAFFIC” JAM, SMARTER NETWORKS
NEEDED TO COPE WITH SURGING VIDEO DEMAND**

Today, Internet Handling New Traffic Jump From YouTube, Other Social Media, But Next Generation of Video May Not Run Smoothly Without Major Expansion of Capacity.

WASHINGTON, D.C.//August 9, 2007//With YouTube and dozens of imitators generating over 100 million user-generated videos a day, today’s Internet traffic is piling up rapidly in a non-stop “digital rush hour” jam that could wind up in gridlock. To keep pace with current and future bandwidth demands, major investments in new capacity and intelligent network technologies will be needed, according to a new Analysys report released today by the New Millennium Research Council (NMRC – www.thenmrc.org).

Entitled “The Never-Ending Rush Hour: Internet Traffic Growth Requires Continual Investment in Capacity and Innovation in Network Management,” the new Analysys report for NMRC concludes: **“Online video will require a new wave of network upgrades. Combine [YouTube] with the video offerings of traditional media outlets like Disney as well as myriad other new video services and the traffic is piling up rapidly. Despite the current advancements in online video distribution, the real challenge – delivering real-time TV-quality video over the Internet to a large number of simultaneous viewers – has yet to arrive. To handle this (next) level of traffic increase, backbone operators will need to reach a new plateau in network scale and traffic management capability.”**

Report author Jason Kowal, U.S. head of research, Analysys Consulting, said: **“Throughout the history of the Internet, dealing with very rapid growth has become standard operating procedure for network managers, engineers and planners around the world. In order to cope with the significant traffic growth that will be associated with the advent of high-grade, longer-form video, networks must be continuously monitored and prepared for the necessary upgrade. Service providers, software companies, and network vendors will need to constantly invent new ways to meet enhanced expectations for speed, security, and accountability.”**

Commenting on the report, Ed Moran, director of Product Innovation & NE Convergence Practice, Technology, Media & Telecommunications (TMT) Group, Deloitte Services, LP, said: **“The NMRC/Analysys report illustrates the ongoing struggle network operators face to maintain the Internet’s health, and raises important issues about how we effectively address the recent and rapid rise of user-generated video, peer-to-peer, social networking applications, and other new forms of traffic. To ensure that the next innovator is able to thrive free of traffic congestion, service providers will have to continuously invest in new capacity while applying the latest technological solutions to manage growing traffic efficiently.”**

FINDINGS/RECOMMENDATIONS

There are numerous signs of dramatic increases in Internet traffic demand documented in the NMRC/Analysys report. TeleGeography found that in 2006, the growth in average Internet traffic

levels (75 percent) outpaced the growth of capacity (47 percent) on international Internet backbones for the third consecutive year. A March 2007 comScore study found that 123 million people in the US – no fewer than 70 percent of Internet users – viewed 123 billion videos online, with an average length of 2.6 minutes. According to reports from traffic management system vendors CacheLogic, Sandvine, and Ellacoya networks, somewhere between 40 percent and 60 percent of consumer Internet traffic originates with P2P software, which allows users to share huge audio and video files via their local hard drives. As of October 2006, six million U.S. households had downloaded at least one digital video file (10Mb or larger) from a peer-to-peer (P2P) service.

This trend is likely to continue with new higher-quality, long-form video offerings becoming available from Disney, iTunes, Wal-Mart and other major commercial vendors. After Apple released iTunes 7 with the capability to download feature length movies and NFL game highlights, peak traffic increased 140 percent among iTunes users in North America. This explosion in iTunes use came on top of the 220 TV shows already available.

The Analysys report concludes, “Given the continuous need for expanding network capacity and intelligence as well as the recent explosion in online video, there is a role for policymakers in stimulating the next wave of Internet evolution:

- First, careful attention should be paid to any new regulation which might adversely impact the business case for Internet investment or set preference for one business model over another.
- Second, policymakers should consider methods to encourage network investment, particularly for the last mile of underserved locations.
- Third, regulators should not inhibit Internet service providers’ flexibility to experiment with new traffic management technologies and strategies in order to efficiently deliver new services with the quality and security options that Internet users desire.”

Matt Bennett, executive director, New Millennium Research Council, said: **“The new NMRC/Analysys report clearly defines the traffic issues the Internet faces today and offers important perspectives on the need for continuous investment and ‘smart’ network management. By following the simple principles outlined in the report, policymakers can help provide a framework in which network engineers can keep the Internet running reliably and create the additional network capabilities required to meet the needs of future applications.”**

ABOUT ANALYSYS

Analysys provides strategy and management consultancy, information services and start-up support throughout the telecommunications, IT and media sector. Analysys helps its clients to understand and manage business risk, launch new market propositions and develop and implement ongoing and sustainable business improvement programs. Analysys’ international client base includes: network operators and media groups; equipment manufacturers; regulators and policy makers; banks, investment and legal institutions; corporate users; regional development organizations and local government bodies. Analysys has over 160 staff in offices in Cambridge, London, Madrid,

Milan, Paris, Singapore and Washington DC. Analysys Research is part of Analysys Mason Group Limited, owned by the international networking and IT services company Datatec Limited.

ABOUT NMRC

Created in 1999, the New Millennium Research Council is a Washington, D.C. think tank. The work of NMRC focuses primarily on the fields of telecommunications and technology. The contributors to NMRC reports develop workable, real-world solutions to the issues and challenges confronting policymakers. For more information, please visit <http://www.thenmrc.org> on the Web.

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EDITOR'S NOTE: A streaming audio recording of the news event will be available on the Web as of 5 p.m. EDT on August 9, 2007 at <http://www.thenmrc.org>.