



made the world a smaller place allowing even the smallest of businesses to operate on a global scale.

American manufacturers are truly the beneficiaries of a globally-deployed broadband infrastructure, which has transformed the way they operate. For example, in 2005 U.S. manufacturers led all industry sectors in eCommerce activity, accounting for almost half (48 percent) of all eCommerce – over \$1.86 trillion in sales.<sup>1</sup> The trend is growing – eShipments accounts for 35 percent of all manufacturing shipments between 2006 and 2007 alone.<sup>2</sup>

It is in this interest that the NAM submits these comments on the National Broadband Plan (Plan), so that the Federal Communications Commission (Commission) may develop a robust plan to best foster an environment where businesses and consumers in unserved areas can obtain the critical broadband services and content they need.

## **DISCUSSION**

### A Market-Driven Internet

Since the World Wide Web was introduced to the public in 1991, anyone with a computer and telephone line can connect to the vast network of networks, consisting of millions of smaller domestic, academic, business and government networks. By March of 2008, more than 1.047 billion people<sup>3</sup> had used the Internet to do business, communicate, learn and play.

This incredible growth is often attributed to the lack of central administration, which allows organic growth of the network. In addition, the non-proprietary open nature of Internet protocols encourages vendor interoperability and prevents any one company from monopolizing the network.

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<sup>1</sup> U.S. Census Bureau, Economics and Statistics Administration; [www.census.gov/estats](http://www.census.gov/estats), May 28, 2009

<sup>2</sup> Ibid.

<sup>3</sup> <http://www.internetworldstats.com/stats.htm>

A major factor in the success of the Internet is the government's light regulatory touch. The NAM has consistently opposed legislative efforts to impose new rules and regulations on the Internet. For example, the NAM opposed proposed regulations that would have required federal officials to draft complex pricing rules governing traffic over the Internet and private networks, also known as intercarrier compensation. Instead, the NAM urged the adoption of streamlined, federally pre-emptive compensation rules that would simplify the currently complicated and arbitrary pricing structure, and bring certainty to the market. By adopting a simplified pricing structure, the goals of both industry and government – increased investment in the deployment of broadband infrastructure – may be realized.

Another critical Internet regulation issue is open access or network management mandates, also known as 'net neutrality,' a misleading term proponents use to describe new rules and regulations on the Internet. In promoting open access mandates, proponents argue that government intervention is necessary to avoid *potential* price and content discrimination as Internet service providers and telecom carriers utilize technology and market solutions to address network management issues arising from increased Internet traffic. In fact, there are no signs of market failure, abuse of market power, or content discrimination that would require regulation.

Growth in data traffic is approaching 60 percent annually and there are multiple Internet access providers in every major market. Regulation is ill-advised, as Internet users enjoy substantive consumer protection through unfair competition law, antitrust law, multiple common law tort theories and, of course, the power of the marketplace. Moreover, the Commission – as well as the Federal Trade Commission and the Department of Justice – already has the power to take regulatory action against unfair business tactics by broadband providers.

In contrast, under a regulated Internet as envisioned by net neutrality advocates, broadband network providers would have difficulty recovering the billions of dollars they invest in the construction of high-speed networks as government regulators would determine what prices they could charge, as opposed to the free market. As a result, investment in the physical infrastructure needed to provide high-speed Internet would slow down, forcing manufacturers in rural and underserved areas to wait even longer to enter the digital age.

It is critical that future government policies continue to support a world-class telecommunications system throughout the United States. The National Broadband Plan should avoid imposing new laws, rules and regulations that impede the deployment, management and use of high-speed data lines. In particular, the Plan should avoid recommending any legislation or regulation that would impose non-discrimination ‘open access’ principles on network managers.

### Promoting Broadband Deployment

As the Internet becomes more integral to the nation’s economic growth, it becomes increasingly important for policy-makers to ensure that broadband supply continues to meet demand. Access to broadband provides limitless opportunities for advancing technology, innovation, investment and job creation. Future economic growth depends on the ability of businesses and individuals to easily secure broadband services not impeded by burdensome regulations.

Economists project that just a seven percentage point increase in broadband adoption could result in 2.4 million jobs created or saved annually, resulting in over \$92 billion in wages.<sup>4</sup> In the area of health care alone, effective use of broadband could cut \$800 billion from health care costs over the next 25 years.<sup>5</sup> It is important for policy-makers to foster an environment where businesses and consumers can obtain the services and content they want, when they want it, regardless of the medium.

Whenever possible, policy-makers should rely on market-based solutions to satisfy consumer demand for broadband access. Private telecommunications providers should be allowed to maintain their networks, allocate resources and determine the optimal performance of their networks. In limited cases where supply of broadband is low, public and private interests should combine resources – including public-private partnerships that include incentive

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<sup>4</sup> [“The Economic Impact of Stimulating Broadband Nationally.”](#) Connected Nation, February 21, 2008.

<sup>5</sup> [“The Broadband Fact Book.”](#) Internet Innovation Alliance, 2008.

programs and subsidy mechanisms – to increase broadband supply without the imposition of mandates or regulations. An example of this would be through the reform of the Universal Service Fund to encourage broadband infrastructure deployment to unserved and underserved areas.

The federal government should adopt a comprehensive broadband policy, aimed at the deployment of services, open access and smart resource allocation, including policies that:

- remove barriers to entry that prevent broadband providers from offering high-speed information services to homes and businesses;
- balance the need for regulations against the potential to dampen private industry's incentive to invest in broadband technology;
- encourage federal and state regulators to monitor the rollout of broadband services; and
- support a federal framework to ensure fair, technology-neutral competition for all providers.

#### Protecting America's Supply-chain: Cyber Security and Infrastructure Protection

Our nation's cyber-infrastructure is critical not only to American manufacturing, but to our overall national security. As the U.S economy grows increasingly dependent on the Internet for communication, commerce and homeland security, it is critical that the National Broadband Plan makes Internet security a continued priority in national homeland security initiatives and preparedness activities.

Protecting our cyber-infrastructure is of critical importance to manufacturers as Internet-based attacks are on the upswing. In the early days of Internet use, attacks came mostly from cyber-hooligans; now the attacks are more sophisticated and stem from organized crime and hostile nations. A recent study revealed that prime targets of cyber-attacks are small- and medium-sized businesses, with one-third of them having been attacked more than four times in the last three years. The research concluded that a quarter of those attacked (28 percent) took at

least a week to recover—a devastating time to be offline for small firms that conduct business and sales via the Web.<sup>6</sup>

Regardless of business size, viruses, hacker intrusions, spyware and spam can lead to lost or stolen data, computer downtime, decreased productivity, compliance issues, lost sales and even loss of reputation. A recent survey of 5000 global firms estimated that the direct costs of cyber attacks and consequent lost business can cost up to \$2 million for each occurrence.<sup>7</sup> In addition, almost a third of the businesses reported computer intrusions to law enforcement.<sup>8</sup> To ensure the security of the U.S. economy, government must partner with industry – through both open channels of communication and targeted incentives — to bolster key resources and adopt best practices.

Because private industry owns, manages and maintains most of the networks over which the Internet resides, the Federal government has recognized that it can advance homeland security preparedness through increased collaboration and coordination with the private sector, as was called for by the recently released President’s Cyberspace Policy Review.<sup>9</sup> It specifically calls for market incentives that will foster the creation of more secure products and services, as well as adjustments to liability considerations, indemnification, and voluntary compliance mechanisms.

The National Broadband Plan must work hand-in-hand with the President’s Cyberspace Policy as they are addressing two sides of the same coin – creating and securing a robust broadband network. This is especially critical if the Commission contemplates imposing open access mandates upon network managers, as many of the network management tools implicated in open access requirements are needed to effectively secure the very same network.

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<sup>6</sup> [“Does Size Matter? The Security Challenge of the SMB”](#); McAfee; July 2008.

<sup>7</sup> [“Internet Business Disruption – Loss Rates for Global 5000 Firms,”](#) Aberdeen Group, June 2004.

<sup>8</sup> [2007 CSI/FBI Computer Crime and Security Survey.](#)

<sup>9</sup> [http://www.whitehouse.gov/assets/documents/Cyberspace\\_Policy\\_Review\\_final.pdf](http://www.whitehouse.gov/assets/documents/Cyberspace_Policy_Review_final.pdf) , May 29, 2009.

## CONCLUSION

The NAM commends the Commission for a remarkable job in encouraging competition through its regulatory forbearance. By doing so, it has promoted a competitive and innovative Internet that enables broadband network operators to take advantage of technology to maximize capacity, avoid bottlenecks, protect privacy and meet the differing technical requirements of a wide range of Internet services and applications. The NAM encourages the Commission to avoid unnecessary regulation that might raise costs to consumers, limit efficiency, or disrupt efforts to provide and manage additional capacity so that American consumers can enjoy the full benefits of the Internet. While NAM has great confidence in how advanced telecommunications capabilities are being deployed to all Americans in a timely and reasonable fashion, we believe it could be further strengthened by a comprehensive plan for infrastructure investment. We also suggest that recommendations in the National Broadband Plan must work hand-in-hand with the efforts to strengthen our national cyber-infrastructure.

Respectfully submitted,

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