The Testimony of

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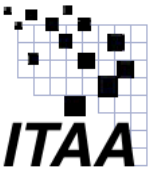

Introduction

Chairman Allen, Senator Biden and other esteemed Subcommittee Members, I appreciate your taking time from your very busy schedules to hold this hearing today on the challenges facing the critical relationship between the United States and the European Union as it impacts emerging technologies, the global information economy, technology trade, and the overall regulatory environment for information technology.

I am Harris N. Miller, President of the Information Technology Association of America (ITAA), representing over 380 member companies in the information technology (IT) industry - the enablers of the information economy. Our members are located in every state in the United States, and range from the smallest IT start-ups to industry leaders in the software, services, systems integration, telecommunications, Internet, and computer consulting fields. These firms are listed on the ITAA website at www.itaa.org. Many of them operate on a truly global basis with offices, operations, and clients throughout the world, including Europe.

ITAA is also the secretariat for the World Information Technology and Services Alliance (WITSA), a consortium of information technology (IT) industry associations from 67 economies around the world, representing over 90 percent of the world's IT market. As the global voice of the IT industry, WITSA is dedicated to advocating policies that advance industry growth and development; facilitating international trade and investment in IT products and services; strengthening WITSA's national industry associations; providing members with a broad network of contacts; and overseeing the World Congress on Information Technology, the premier industry-sponsored global IT policy event, that will be held in May, 2006, in Austin, Texas.

Before I address the specific issues at hand, it is important to put them into context. The E.U. and the U.S. have become like children on a beach fighting over castles in the sand. We are so utterly focused on control over our own little sand castles that we cannot see that the tide is rising. Unless we can refocus on our common interests and flee to higher ground, our sand castles, along with our future economic prospects in high technology, will be washed away in the surf.

In the 21st century, the rising tide represents the developing economies, primarily in Asia and Eastern Europe, and especially China and India. While the U.S. and Europe, along with Japan, represent the leading nations in today's global Information and Communications Technology (ICT) market, China and India are gaining market share rapidly. These nations represent two of the fastest growing information economies in the world today.

The primary reason for this rapid accession into IT global leadership is that unlike traditional industries, there is a relatively low cost of entry into the global ICT market. Along with the implicit efficiency and productivity afforded by technologies such as IP networking and high volume data storage, a commitment to leadership in ICT is nearly

all that it takes for an emerging economy to rival established powers, as long as they prepare their workforce, the "iron ore" of the IT revolution.

Despite our differences, the U.S. and E.U. are bound by a common heritage and common values. We believe in the democratic process, in freedom of expression, and in free market economies. We also share common interests. We represent much of the developed world. We both currently spend more on ICT than any other global region. We depend more on information technology to "grease the gears" of every day life. We are first to enjoy the productivity benefits of automation and the value this productivity creates for customers and shareholders.

Similarly, the U.S. and the E.U. face many of the same challenges to our global leadership in information and communication technology. Our ICT markets are developed, and while they will continue to grow steadily, our companies must look to other geographies for rapid growth opportunities. Our comparative advantage in terms of technical know-how and quality performance is challenged by the developing economies cited above, which are anxious to use their rapidly expanding expertise in computers, software and networks to build larger and more sustainable middle class societies.

Our common trans-Atlantic dilemma is determining how to build these distant markets without tearing down our own. And our shared commitment to democracy and a civil society constantly pushes us to seek public policy solutions that balance the need to protect profits and privacy, national security and commercial practice, including, most often, keeping government out of the way.

Meanwhile some countries—and China, unfortunately, continues to be a prime example--seek to protect their domestic markets from potential trading partners and focus primarily on gaining access to other people's markets with little reciprocation. With that in mind the U.S. and the E.U. must resolve our minor differences—quickly.

What's at stake? Total ICT spending is expected to grow to more than $3.2 trillion by 2007, from $2.4 trillion in 2003, according to the latest study on global ICT spending published by WITSA, *Digital Planet 2004*. Asia, and China, in particular, represent a growing portion of that spend. Among the top ten nations in ICT spending, China is projected to be the fastest growing, with a compound annual growth rate of 13.9 percent during the years 2003 through 2007. They will be 6th fastest among all nations, including many in the developing world that are starting from near zero. India, meanwhile, ranks tenth in growth overall at 13.44 percent.

For the U.S., overall exports to China have increased dramatically since China joined the WTO in 2001.[1] U.S. exports to China totaled $35 billion in 2004, close to double the total for 2001. In fact, from 2001 to 2004, U.S. exports to China increased nearly 8 times faster than U.S. exports to the rest of the world. As a result, China rose from our ninth largest export market in 2001 to our fifth largest export market in 2004.

[1] Statement of Charles W. Freeman III Assistant U.S. Trade Representative of China Affairs, Office of the U.S. Trade Representative Committee on House Ways and Means, April 14, 2005

While the opportunity within Chinese borders is clear, it is hardly free to all comers. To put it succinctly, China is not playing by the rules of global trade, and in fact, may be trying to change the game entirely. For example, China's implementation of its WTO commitments has lagged in areas in which the U.S. and Europe have competitive advantage, particularly where innovation or technology plays a key role. Their recent proposal to have a "buy China" policy for software purchased by the Chinese government is one extremely unfortunate example.

With so much in common, the U.S. and E.U. must work together through our respective governments and industries to address what are — in the greater context — small problems. To that end ITAA, and its sister association in the United Kingdom, Intellect, along with the European American Business Council, recently hosted a conference in London between high-level industry and government officials. Ambassador David Gross led the U.S. government delegation and did an excellent job explaining the challenges and opportunities from the U.S. government perspective. Officials from the European Union and from the U.K. government joined us.

Our objective was to discuss ways to advance our common interests and further what must be our common purpose: the delivery of information technology to solve the world's most pressing problems in security, healthcare, education, environmental protection, law enforcement, and economic development. At the end of those talks, we committed to continued cooperation in a public declaration, which I have attached to my statement. We will continue to work together and with our respective governments to contribute to resolving these issues. However, I would like to emphasize that, from industry's perspective, the list of troubling issues was much too long for comfort. Too many obstacles exist between the E.U. and U.S. to permit the full achievements possible.

Today's hearing comes at a particularly opportune time. President Bush will host European Council President Jean-Claude Juncker and European Commission President Jose Manuel Barroso at the annual U.S.-E.U. summit in Washington on June 20th. Among the many other important issues that they discuss that day, it is my hope that these challenges related to ICT will be discussed with timely resolutions in mind.

Now I would like to discuss several of the issues over which we can either continue to fuss and feud or form a more perfect foundation for global trade in information and communication technology.

Trade

Technology trade is one area where the U.S. and the E.U. have much at stake. Though fundamentally allies, there are a number of vexing issues where we are at odds with one another to the detriment of advancing what should be our common interests. Various bilateral trade differences continue to hinder trade between the two economic powers and the liberalization of ICT services in other countries.

Aggressive efforts to resolve these differences in a timely manner would spur economic activity in both the U.S. and E.U., and in the rest of the world for E.U. and U.S. companies. Yet instead of joining forces and securing improved commitments from more countries, we are engaged in bilateral squabbling over a number of specifics.

For example, the Doha round of World Trade Organization negotiations appear to be poised to move forward, particularly in services. However, we disagree on the classification of software, the status of downloadable products, and how best to define telecommunication services. Movement of highly skilled people between the U.S. and E.U. remains difficult. And various labor laws frequently found in European countries—though not all E.U. member countries—continue to be major inhibitors to U.S. services companies expanding their operations in Europe.

Internet Governance

Internet governance is an area of particular frustration, as the E.U. seems to support the hasty installation of an international governing body for the Internet, an ill-conceived idea, if ever I have heard one. The issues potentially in play represent international regulation of the Internet in areas that extend far beyond the technical coordination currently exerted by the Internet Corporation for Assigned Names and Numbers (ICANN). Mr. Chairman, given that so much Internet traffic travels through your home state, you know better than most what a truly bad idea it would be for regulators in Geneva or any other location to decide the future of one of the greatest inventions of humankind.

The Working Group on Internet Governance is currently considering recommendations for the second phase of the World Summit on the Information Society to be held in Tunis this November. In the Summit, the U.S. and the E.U. have adopted a common agenda to promote freedom of information internationally. But they should also jointly oppose efforts to move control of the Internet to government regulation from the global, collaborative, private sector-led approach that currently works so well.

However, the E.U. appears focused on the internationalization of Internet governance, calling it one of the core topics besides the "organization and administration of naming and numbering, including the operation of the root server system" and "the stability, dependability and robustness of the Internet, including the impact of spam."

Through this process, we should also agree to take steps to encourage the widespread deployment of broadband, RFID (radio frequency identification), and other innovative technologies to extend the economic and security benefits of ICT, again, without heavy handed and unnecessary government interference. Instead, the E.U. has initiated a privacy review of RFID that, by its very nature, creates uncertainty and dampens the widespread adoption of this critical technology. Finally, we should redouble our efforts to promote telecommunications liberalization, which continues to produce positive results in countries that adopt it.

Nanotechnology

Common technology policy interests and objectives are difficult enough to establish between global regions when technologies are well understood and their applications accepted. In many technical areas, however, we stand at the threshold. The possibilities are vast and the outcomes unknowable. Nanotechnology is one such area. Even as we struggle to understand the broad outlines of what this field entails, countries are rushing to claim leadership in nanotechnology expertise.

The Organization for Economic Cooperation and Development (OECD) estimates that over 30 nations have funded nanotechnology research programs. The OECD goes on to report that between 1997 and 2000, nanotech research and development (R&D) funding jumped from approximately $114 million to over $210 million in the E.U., $102 million to $293 million in this country, and from $93.5 million to $189 million in Japan.[2]

If we compare the relative positions of the U.S. and E.U. in nanotechnology with other regions of the world, the advantages of the West are enormous. We are the first movers in the marketplace. We are performing the bulk of the research. We have the history of productive collaboration between government agencies and research universities. We have the culture of risk capital and entrepreneur-driven innovation. We have the twin traditions of public domain knowledge and intellectual property protection. Nanotechnology is an interdisciplinary science, most prominently affecting industries like aerospace, biotechnology, defense, electronics, energy and other high tech fields. As home to many of the world-class corporations in these industries, the U.S. and E.U. have the critical mass of private sector firms with the ability and incentive to support both nanotechnology research and to provide investment capital.[3]

What is critical, again, is collaboration, particularly among leading researchers in academic institutions and laboratories, without unjustified interference from well-intentioned but ultimately interfering public officials.

Information Security

The U.S. and E.U. share common concerns about information security. If we look across the globe, we quickly see that our respective regions represent the most mature ICT markets. We are, therefore, the most reliant on their unimpeded performance. Given this reliance, information security means national economic security. And in an era of global terrorism and the possibility of cyber warfare, information security may mean national security itself.

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[2] OECD Science, Technology and Industry Scoreboard 2003 - Towards a knowledge-based economy

[3] J.S.A. Bhat, "Concerns of New Technology Based Industries—the Case of Nanotechnology," Technovation, 2005

As a result, we share a common goal of protecting our information infrastructures from attack. This commonality of purpose entails best practice approaches to vulnerability assessment and intrusion detection, attack prevention and cyber hygiene, incident investigation and computer forensics and cybercrime prosecution. We advocate additional collaboration by U.S. and E.U. government agencies to achieve these goals, a process that should at a minimum incorporate law enforcement, intelligence, harmonized regulatory approaches, education, investment and appropriate statutory frameworks.

Encouraging people to keep their cyber doors locked remains one of our largest common challenges, whether at home or on the job. If it is impractical to export cyber security awareness campaigns, certainly we can share the good ideas, lessons learned and insights into what works can be pooled and exploited for the benefit of both societies.

Because the nature of the cyber threat is constantly changing, additional information security R&D by experts in both the U.S. and E.U. should be encouraged, funded and, where appropriate, shared.

And I must not miss this occasion to once again encourage this Committee and the Senate to take favorable action at the earliest possible moment to ratify the Council of Europe Convention on Cybercrime that sets a solid framework for all countries around the world to fight cybercrime.

Research & Development

Information security is not the only arena for enhanced cooperation in research and development. In the U.S., federal government support for research and development has slipped substantially. In the aftermath of the Soviet Union's Sputnik launch, federal R&D funding of basic research swelled to 75 percent of all such spending. Seventy cents of every R&D dollar now comes from the private sector.[4] Federal R&D spending creates jobs for scientists and engineers directly and for professionals in business, law, accounting and many other fields indirectly. This support also underwrites the development of valuable intellectual property that, through a process of technology transfer from the public domain to the private sector, forms the basis of still more capital investment, job creation and wealth creation.

Federal funding for leading science and technology government agencies has also slipped. Increases in the federal R&D budget will fail to keep pace with inflation for the first time in ten years, up in FY 2006 a barely perceptible 0.1 percent. Most non-defense agencies performing R&D will see their budgets decline. National Science Foundation research grants will be reduced for the second consecutive year.[5]

To turn a blind eye to R&D is to turn a blind eye to the future. Less government R&D means less basic research; less basic research means a society with less potential for

[4] John A. Douglass, R&D and the U.S. Economy: A Sputnik Reflection, University of California, Berkeley
[5] American Association for the Advancement of Science, AAAS Analysis of R&D in the FY 2006 Budget, March 9, 2005

innovation, inspiration and commercial success. Less potential translates to fewer career opportunities for individuals to make a difference in science and technology. And fewer individuals striving for breakthroughs in fields like aerospace, energy, the environment, healthcare, nanotechnology, optics, robotics and more means fewer such breakthroughs are likely. We will not know what we do not know—and we will not even be asking the questions.

Math and Science Education

Cutbacks in R&D may already be having an impact on the science, technology, engineering and math education pipeline. While the number of undergraduate degrees awarded in the U.S. is rising, the number of degrees awarded to science and engineering students is falling. Between 1985 and 2000, bachelor's degrees awarded in engineering, math, computer sciences, physical sciences and geological sciences fell 18.6 percent.[6] Comparing the graduate enrollments of U.S. citizens and permanent residents in 1983 and 2001, totals have dropped in physical sciences; earth, atmospheric and ocean sciences; agricultural sciences; mathematics and engineering.

In China, the situation is just the reverse. In 2001, 39 percent of all undergraduate degrees awarded in China went to engineers; in the U.S., that percentage was five percent. Almost 220,000 Chinese students received engineering degrees in 2001, compared to just under 60,000 in the U.S.[7] India and China produce 125,000 computer science graduates annually, twice the number of the European Union.[8]

Collaborative efforts to increase student interest in the basic STEM fields—science, technology, engineering, and mathematics—is certainly a worthy topic of discussion between the U.S. and the EU.

Telecommunications Reform

Both the U.S. and the E.U. find themselves at a fork in the road in terms of their overall telecommunications regulatory environment. Next year, the E.U. will consider its telecommunications framework and the implementation of the 2001 directives. Similarly, Congress has begun to assess the 1996 Telecommunications Act and consider possible revisions. We call on the Federal Communications Commission and the European Regulators Group to initiate a collaborative dialogue and work towards "light touch" regulatory approaches that emphasize competition, innovation, capital investment and market demand.

Sadly, instead of making common cause, the U.S. and E.U. appear to be at loggerheads over fine-grained aspects of telecommunications trade policy. The WTO Doha

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[6] Ibid, page 16

[7] President's Council of Advisors on Science and Technology, "Maintaining the Strength of Our Science & Engineering Capabilities," June 2004

[8] Lachlan Carmichael, "Blair pledges to boost Britons' skills to compete with China, India," Agence France Presse, April 28, 2005

negotiations, particularly in the area of services, appear to be poised to move forward. Yet instead of joining forces and securing improved commitments from more countries, we are engaged in bilateral squabbling over a number of specifics. For example, the E.U. has proposed a new definition of telecommunications that many companies feel will allow countries to slide on previous commitments. Rather than introducing new, controversial mechanisms, the E.U. and the U.S. should jointly encourage new and better commitments from all countries.

Device Accessibility

If we are truly committed to building ICT markets that promote values like competition, innovation, and capital investment, the U.S. and E.U. should likewise avoid implementing disparate standards, particularly in the area of device accessibility. Technology should be used aggressively to help seniors and those with disabilities live fuller, richer lives. Government mandated technical specifications for device accessibility create rather than eliminate barriers to swift deployment.

ITAA is proud to have played a major role in the formation of the provisions incorporated in the "Electronic and Information Technology Accessibility Standards" in the U.S. Some of ITAA's member companies were represented on the Access Board's Electronic and Information Technology Accessibility Advisory Committee that formulated the standard that underlies Section 508. ITAA consulted with members, drafted and submitted industry comments on the regulation during its development, and facilitated alignment between the positions of the government, industry, and the stakeholder organizations in the community of people with disabilities. We consider this alignment between the parties concerned with ICT accessibility to be of significant value. We hope that as Europe looks at the topic of ICT accessibility, they will consider the principles underlying the approach taken in the U.S. standard.

Unfortunately, however, they seem to be heading in a different direction, a direction that will end up with companies having to face two different worlds—one in the U.S. and one in Europe—and that will ultimately lessen the ability of companies to improve accessibility for individuals with disabilities.

We are pleased that the U.S. Commerce Department is currently participating in the U.S.-E.C. ICT Standards Dialogue in an effort to steer clear of mandated technical specifications. When governmental bodies adopt accessibility requirements for government ICT purchases, these requirements should strike an appropriate balance between encouraging the design, development, and provision of products and services that address accessibility on one hand, while ensuring that accessibility requirements do not impede the rapid advancement of information technology.

Thus, ITAA is a champion of performance-based, open standards intended to facilitate innovation and desired outcomes. We believe that the U.S. and E.U. must work towards a single, global standard that reflects these values and gives all users of information and communications technology the ability to enjoy its maximum benefits.

Conclusion: From Common Goals to Collaborative Action

We often hear China referred to as a waking giant. The commitment of the Chinese government to a national technology policy and to leverage comparative advantage in science and technology for global competitive advantage strongly suggests that the giant is not only awake but on the move. I would argue that we in the West are the slumbering giants, perhaps lulled into complacency by 60 years of unprecedented scientific and technological success.

The U.S. and E.U. need to assess systematically those aspects of their public policy that have nurtured high tech innovation and investment, and those which have lost effectiveness in light of the new competitive reality.

Instead of looking for areas to regulate, I strongly encourage governments on both sides of the Atlantic to look to areas to deregulate, to remove barriers to ICT growth.

With this knowledge, we must form a persistent collaboration dedicated to removing regulatory barriers, facilitating competition, promoting technology convergence and, through this process, accentuating the comparative advantages of the world's most developed ICT markets.

Most of all, we must stop arguing about how to build a better sand castle and set our collective sights on the economic tsunami headed in this direction. In recent times, the U.S. and E.U. countries have disagreed on privacy rights, the value added tax, the definition of telecommunications, how to classify software, the status of downloadable products and other issues. We have done a terrific job understanding individual trees; we have done a terrible job standing back and viewing the global forest.

The Information Technology Association of America is committed to working with counterpart organizations in the E.U. to achieve policies that foster growth, innovation and security. ITAA believes that U.S. and E.U. officials should develop a dialogue on high tech policy issues in keeping with these goals.

Attachment

Conclusions of the Transatlantic High-Tech Business Initiative - Governments Listening to Business, held on Monday, April 11, 2005 at Intellect's offices in London.

There needs to be persistent collaboration between the EU and the US on ICT issues. The meeting noted that the TABD (Trans Atlantic Business Dialogue) does not currently address ICT issues in sufficient detail. It was proposed that the group assembled by EABC, ITAA and Intellect should fulfill the function of a TABD for ICT issues (whether informal, or formally recognised). It was agreed that future meetings should be held alternately in Brussels and Washington. They must be held every six months if the goal of persistent collaboration is to be achieved. ITAA, Intellect and EABC will plan the next meeting for October 2005.

We seek to have included in the forthcoming EU-US summit a declaration on Information and Communications Technology. A proposed draft is shown below.

Proposed draft declaration on ICT for the EU/US summit.

The EU/US relationship on technology is a critical area of mutual importance that impacts economic security, national security and the interdependency of all critical sectors. US and EU ICT policies must:

- **stimulate investment and growth in the availability of the products and services of the ICT sectors**
- **support the innovations that advance these technologies**
- **seek commonality in their regulatory regimes**
- **assure a secure environment for their use**
- **assure continued private sector leadership of the technical components of the Internet.**

To achieve this ITAA and EABC will work through Ambassador David Gross and Intellect will work through Fabio Nasarre de Letosa, EICTA and the UK Government's DTI.

Further background on the above draft is contained in the sections below.

Telecommunications – the Infrastructure for a Knowledge Economy

There is a unique opportunity to bring together the overall regulatory climate in the EU and US. In 2006 the EU will be reviewing the telecommunications framework and the implementation of the 2001 directives. Concurrently the US will be drafting new telecommunication legislation to account for new technologies. An over riding principle must be the need to stimulate investment and innovation.

Persistent co-operation is required between the US and the Commission. The FCC and the ERG (European Regulators Group) need to link their work. There is a need for more formal and more frequent issue based communication. We need to decouple social and regulatory issues.

The meeting was concerned at the current state of VoIP regulation in the EU. Maximum possible regulatory convergence between the EU and US should be a goal. One specific example is the need for a common mobile handset conformance testing regime. (This can be treated as a trade or telecoms issue).

Information Technology (IT): Enabling the Innovation Ecosystem

The information technology environment:

- needs to have policy addressed on an urgent basis
- is global in nature, with emerging new significant policy voices (China/India)
- depends on public-private collaboration
- must focus on the role/impact on citizens/customers/consumers of IT services
- is characterized by rapid commoditisation of its technologies
- needs to enhance role of sector as an effective employer

Trade in ICT goods and services

The ICT Trade environment needs to:

- Resolve bilateral differences on
  - Telecommunications definition
  - Software classification
  - Inclusion of Internet services
  - Status of downloadable products
- Promote ICT services WTO commitments aggressively
- Address China and India trade issues uniformly as a single entity

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Further background:

Growth

- Government must become educated on technology
- Regulators should
  - commence a deregulatory review and impact analysis
  - forbear from regulation unless clear need emerges
  - assure multilateral consistency in any regulatory measures

- Non—tariff trade barriers (NTTBs) must be dismantled
- Government's role in affirmatively fostering technology innovation and investment must be expressed through
    - tax policy
    - intellectual property protection
    - h/r policies that promote skilled worker mobility
    - role of government as customer
    - adherence to industry led oversight of the technical co-ordination of the Internet

Technology

- Emergence of Next Generation Networks (NGNs) as primary artifact (includes edge/access/mobile networks)
- Intellectual property (IP) protections must be maintained and consistent
- Research (R&D) is the source of innovation; investment in research must grow

Security

- The sine qua non of the networked ecosystem
- Law enforcement's role in maintaining security must be supported with education, investment and statutory frameworks that empower effective prosecution
- Multilateral cooperation
- Research investment for security must be encouraged, collaborative and supported by government investment (7th Framework Programme/US R&D institutions)
- Security education and awareness of all stakeholders must expand