

# ***WITSA Public Policy Report***

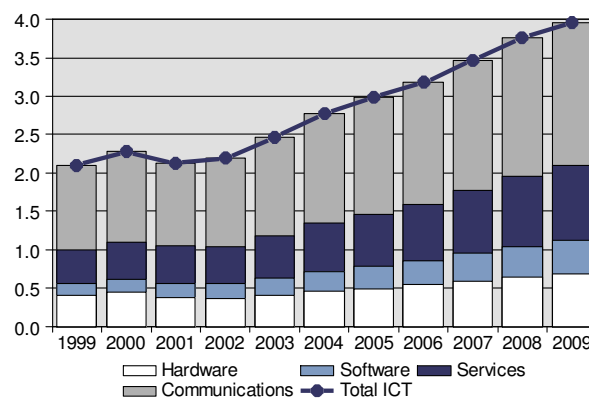
***2007***



# INTRODUCTION

The information and communication technology (ICT) industry is an important and robust industry. In fact, it is one of the most dynamic creators of jobs and income in the world. Perhaps that is why total global ICT spending has added \$1 trillion in five years, from \$2.1 trillion in 2001 to \$3.1 trillion in 2006. If the marketplace remains on course, the forecast is that this growth in spending will reach \$3.9 trillion by 2009. ICT represents 6.8 percent of global GDP over the period 2001-2005.<sup>1</sup>

**Global ICT Spending 1999-2009 (\$US Trillions)**



Keeping the global ICT marketplace on course is the mission of the World Information Technology and Services Alliance (WITSA), WITSA is dedicated to advocating policies that advance the industry's growth and development; facilitating international trade and investment in IT products and services; and strengthening national ICT industry associations through the sharing of knowledge, experience, and critical information.

The World Information Technology and Services Alliance (WITSA) is a consortium of over 60 information technology (IT) industry associations from economies around the world. As the global voice of the IT industry, WITSA is dedicated to:

- advocating policies that advance the industry's growth and development;
- facilitating international trade and investment in IT products and services;
- strengthening WITSA's national industry associations through the sharing of knowledge, experience, and critical information;
- providing members with a vast network of contacts in nearly every geographic region of the world;
- hosting the World Congress on IT, the premier industry sponsored global IT event;
- hosting the Global Public Policy Conference; and

<sup>1</sup> WITSA's Digital Planet 2006.

- hosting the Global Information Security Summit.

Founded in 1978 and originally known as the World Computing Services Industry Association, WITSA has increasingly assumed an active advocacy role in international public policy issues affecting the creation of a robust global information infrastructure, including:

- **increasing competition** through open markets and regulatory reform;
- protecting **intellectual property**;
- encouraging cross-industry and government cooperation to enhance **information security**;
- bridging the education and **skills gap**;
- **reducing tariff and non-tariff trade barriers** to IT goods and services; and
- safeguarding the viability and continued growth of the **Internet** and **electronic commerce**.

WITSA has a real impact on the global ICT public policy environment. It strengthens the industry at large by promoting a consistent legal and regulatory environment. WITSA voices the concerns of the global ICT industry at an international level with such organizations as the World Trade Organization (WTO), the Organization for Economic Cooperation and Development (OECD), the World Bank, the Asia Pacific Economic Cooperation (APEC), the international Telecommunications Union (ITU), the World Summit on the Information Society (WSIS), the Internet Governance Forum (IGF), and other international forums where public policies affecting industry interests are discussed, developed, or implemented.

To highlight its public policy activities in 2007, WITSA is holding its Global Public Policy Conference in Cairo, Egypt. This flagship event, with several hundred senior executives, government officials and policymakers from around the world, addresses such key issues as Internet governance, the role of the private sector in ensuring the reliability and stability of the Internet, e-government, and the building of a global ICT public policy environment that encourages investment, innovation, new businesses, and economic development.

This **2007 Policy Report** is a summary of the positions taken by WITSA on global ICT issues. These papers are used by the industry in our dialogue with governments and multilateral institutions concerning their decision-making process with regard to important issues of concern to the ICT industry, including health information technology, next generation networks, radio frequency identifiers (RFID), voice over Internet protocols (VoIP), grid computing, global sourcing, e-commerce, information security and privacy, ICT trade and tariffs, taxation, e-government, the ICT infrastructure, Internet Governance, and the use of ICT for economic development. Full versions of WITSA's statements can be found at <http://www.witsa.org/papers/>

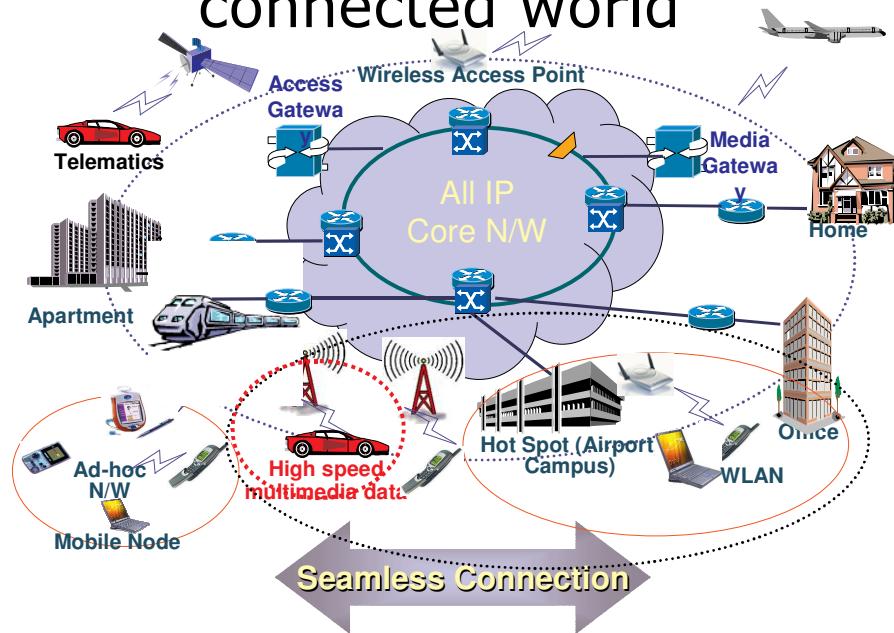
***David A. Olive***  
***Public Policy Chairman***

## Index

<b>I. Facilitating the ICT Infrastructure and the Digital Economy</b>	<b>4</b>
• Next Generation Networks and the Policy Implications	5
• Health Care and ICTs	7
• Radio Frequency Identification (RFID)	9
• Open Source Software: Public Policy Implications	11
• Grid Computing and Technologies	13
• Voice over Internet Protocols (VoIP)	14
• Global Sourcing Issues	15
<b>II. Taxation</b>	<b>19</b>
• Consumption Taxation and Electronic Commerce	20
• VAT Exemptions	21
<b>III. Information Security</b>	<b>22</b>
• Information Security at the OECD and APEC	23
• Joint Principles	23
• Government Principles	23
• Industry Principles	24
• Traffic Data Requirements and Law Enforcement	24
<b>IV. ICT for e-Government</b>	<b>28</b>
• ICT to Enable e-Government	28
• WITSA E-Government 2006 Survey Results	28
• Government Procurement and E-Procurement	29
<b>V. International Technical Coordination</b>	<b>32</b>
• Objectives for ICANN's Continued Evolution	33
<b>VI. International Trade Negotiations –ICT Products and Services</b>	<b>37</b>
• Current ICT Trade Issues	37
• Computer and Related Services	37
• Electronic Commerce	41
• Treatment of Software	41
• ICT Industry Goals	42
<b>VII. Sizing Digital Opportunities for Economic Development</b>	<b>45</b>
• World Summit on the Information Society (WSIS)	46
• Internet Governance Forum (IGF)	47
• ICT for Economic Development	48

# I. FACILITATING THE ICT INFRASTRUCTURE AND THE DIGITAL ECONOMY

An Always On, and always connected world



The pace of change and the emerging state of the digital economy has heightened the risks associated with premature or unnecessary government regulation. This has increased the responsibility of business to promote a trustworthy environment through self-regulation and technological innovation. Business has a strong market incentive to foster the empowerment of users, but can only make the necessary infrastructure investments if it can trust that governments will recognize and

reinforce the leadership of business in responding to the highly dynamic nature of the global digital economy.

Whereas today's framework of rules for the traditional business model have been developed and refined over many decades in an organic fashion, the consensus for global rules for electronic business to move quickly in reviewing how, where and when new rules are necessary is not as well developed. As these rules must take into account the constantly evolving and inherently international nature of electronic commerce and business, any changes should be implemented only after a thorough discussion with all the parties involved and governments should support business-led rules development where possible.

Should government regulation be necessary, the regulations ought to be internationally coordinated, as incompatible national laws create a fragmented global market with significant uncertainty as to what rules apply? In addition, extraterritorial application of a country's laws, and claims for far-reaching application of a country's regulatory schemes, poses a significant problem to business, users and consumers and is a threat to electronic commerce. Therefore, non-discriminatory treatment of regulatory schemes affecting electronic commerce (e.g., financial industry including capital and securities markets, financial services, insurance and banking, transport, advertising, consumer protection schemes, taxes) is crucial. Jurisdiction, choice of law agreements, and enforcement issues must be dealt with in a responsible manner and with full involvement of commercial actors.

### **◆ Next Generation Networks and the Policy Implications**

WITSA's paper focuses attention on five trends fundamental to understanding this process and its implications:

- Greater delegation of control from the center to the edge of the network.
- The proliferation of multi-access, multi-use devices.
- Always-on, anywhere, and ubiquitous communications.
- The rise of Internet Protocol (IP) networks – further decoupling of what type of data gets transmitted from how this happens.
- Future challenges and public policy issues.

As this list suggests, market forces and technology innovations will shape the Next Generation Networks. These are largely evolutionary in nature, playing out over the course of years. These advancements, however, will not take place in a vacuum. Public policy decisions may have an immediate impact, and so critical issues here must also be considered. Dominating the discussion are security, privacy, spam, competition policy, spectrum availability, and standards. How society deals with these challenges will determine whether the NGN is indeed able to reach its fullest possible potential.

Meanwhile, users are likely to enjoy a variety of new services and lower costs for existing products. Increased IT productivity, the combination of once distinct products, and industry consolidation could cause a digital deflation, reducing IT spending and employment.

Next Generation Networks will also force society to confront a number of important challenges, including policy issues into the future:

**Interoperability and reliability across diverse applications** – Interoperability and standards are key to the success of Next Generation Networks and the coexistence and cooperation among standards bodies has to be a much higher priority.

**Security** - While legacy networks tend to be secure because of their simplicity, as networks migrate to Next Generation Networks this will make security challenges more complex. The packet-based architecture can be vulnerable to many forms of malicious activity. While industry is working to address these vulnerabilities, implementation on Next Generation Networks will need to incorporate security solutions.

**Privacy** - Next Generation Networks pose privacy concerns. Consumer expectations will need to be addressed with tools and other options that allow users to enforce their privacy preferences.

**Spam/SPIT** - Unwanted communication, in the form of spam, or SPIT (Spam over Internet Telephone) are more than just nuisances. Much, if not most, of this traffic relies on various form of deception to reach consumers. Strong enforcement and technical tools can help consumers avoid this problem.

**Competition Issues** - Policies to promote competition among multiple broadband network operators will enhance the extent of consumer choice and the scope of the consumer's right to connect. Such competition is the best safeguard against discrimination by network operators against the services and applications of edge providers, for example, through port blocking.

**Spectrum Issues** - The added mobility that users will benefit from the Next Generation Networks will depend upon the availability of adequate spectrum – both licensed and unlicensed. Inefficient and duplicative use of spectrum needs to be phased out to optimize this valuable resource. The Digital TV transition is a good example of improved spectrum use.

**IPv6 (Internet Protocol Version 6) and ENUM** – IPv6 is the latest level of the Internet Protocol (IP) and is now included as part of IP support in many products including the major computer operating systems. Formally, IPv6 is a set of specifications from the Internet Engineering Task Force (IETF). Marketplace adoption of this standard has been slow so far in the U.S. ENUM is a related technology protocol that allows the translation of normal telephone numbers into a format that can be used to store and retrieve Internet addressing information, which can in turn be used to route communications over the Internet.

#### **◆Health Care and Information and Communications Technologies: Challenges and Opportunities**

WITSA developed a paper on the use of information and communications technologies and health care. Most countries are at some stage of health sector reform to try to provide expanded and equitable access to quality services while reducing or at least controlling the rising cost of health care. Health reform processes

have many facets and there is no single model being adopted by all countries. However, ICTs have the potential to make a major contribution to improving access and quality of services while containing costs. Improving health involves improving public health and medical programs designed to provide elective, emergency and long-term clinical care, educating people, improving nutrition and hygiene, and providing more sanitary living conditions. These in turn ultimately involve massive social and economic changes, as many health challenges go well beyond the health sector.

The health sector has always relied on technologies. According to the World Health Organization,<sup>2</sup> technologies form the backbone of the services to prevent, diagnose and treat illness and disease. ICTs are only one category of the vast array of technologies that may be of use. Given the right policies, organization, resources and institutions, ICTs can be powerful tools in the hands of those working to improve health.

WITSA suggests using the following definitions:

- ICTs are defined as ***tools that facilitate communication and the processing and transmission of information and the sharing of knowledge by electronic means***. This encompasses the full range of electronic digital and analog ICTs, from radio and television to telephones (fixed and mobile), computers, electronic-based media such as digital text and audio-video recording, and the Internet.
- E-health is an emerging field of health informatics, referring to the organization and delivery of health services and information using the Internet and related technologies. In a broader sense, the term characterizes not only a technical development, but also a new way of working, an attitude, and a commitment for networked, global thinking, to improve health care locally, regionally, and worldwide by using information and communication technology.<sup>3</sup>

### ***Health Care Information Technology Opportunities***

In addition to containing costs, advanced information technologies furnish health care providers with the opportunity to improve patient care by streamlining clinical processes and creating a seamless flow of information. Currently, health care providers use paper-based records to record a patient's receipt of health care services. Unfortunately, the use of such records leads to the inadequate documentation of the care-giving process, a severe disruption in the flow of patient related information, and a substantial delay in the delivery of health care services. Advanced information technologies - such as computer-based patient records, portable computers, and expert information systems - alter this situation by providing clinicians with real-time access to patient information at the point of

---

<sup>2</sup> WHO, 2004. eHealth for Health-care Delivery: Strategy 2004-2007. Geneva: WHO [www.who.int/eht/en/EHT\\_strategy\\_2004-2007.pdf](http://www.who.int/eht/en/EHT_strategy_2004-2007.pdf).

<sup>3</sup> World Bank 2006. Connecting People, Improving Health: the Role of ICTs in the Health Sector of Developing Countries, pp 5-6.



care.

Some of the leading information technology developments that will assist health care organizations in achieving their objectives are in the following areas:

- **Computer-based Patient Records (electronic health records (EHR))**
- **Data Warehousing**
- **Document Imaging**
- **Internet Solutions**
- **Expert Information Systems**

### ***Barriers to Implementing Health Care Related Information Technologies***

Others barriers have been identified as obstacle to implementing health care related information technologies, including:

- **Lack of Industry Standards**
- **Administrative Simplification**
- **The Need to Protect the Privacy, Security, and Confidentiality of Computerized Information**
- **Physicians and Nurses Inexperience in Dealing with Advanced Information Technologies**
- **Political and Legal Barriers**

### **◇Background Paper on Radio Frequency Identification (RFID)**

WITSA updated its earlier paper explaining that radio frequency identification is a subset of a group of technologies, often referred to as automatic identification, that are used to help machines identify objects, and which include bar codes and smart cards. An RFID system typically will include a chip attached to the object that contains a number identifying the object (and perhaps other information) and which is connected to an antenna, forming an RFID transponder or RFID tag.

Several developments have increased the potential for the pervasive use of RFID and the creation of what has been called an "Internet for things."

The most important development is that it has become possible to dramatically reduce the cost of the chips, something of critical importance if billions and even trillions of chips need to be attached to objects. While technology advances allow greater functionality to be achieved on the same size chip, it also allows the same functionality to be achieved on progressively smaller chips. Tags now being produced are roughly the size of a grain of rice, and cost is estimated between 5 and 10 cents each when produced in volume; even smaller tags are being developed and with new printing and antenna technologies it is estimated that prices could fall to a penny a tag or less. At the same time, the costs for readers, and network transmission and storage are all declining, following the trends common to information technology

products. These price declines and increases in the capabilities of RFID system components have provided an exciting environment for RFID development.

Three other applications have also heightened interest in RFID:

- Faced with increased concern about the diversion of drugs such as oxycontin and the introduction of counterfeit drugs into the pharmaceutical supply chain, the U.S. Food and Drug Administration is exploring the possibility of utilizing RFID systems for the purposes of tracking and tracing drugs. A number of states have already required new systems to provide the 'pedigree' for pharmaceutical products and it is possible that the FDA will require RFID labeling for track and trace purposes which would bring RFID systems directly into the pharmacy.
- In another major development, U.S. financial institutions have begun to issue "contactless" credit and debit cards. Rather than swiping a card's magnetic stripe through a reader, the card is held close to a reader with which it communicates by radio waves. This speeds customers through the check out process. The security measures taken in these systems reflect the sensitivity of the financial information involved. The tags embedded in the contactless cards are more expensive and capable chips allowing for encryption and authentication; the read ranges in the system are much shorter (2-3 inches) than those used in the EPC systems for inventory control.
- A last development worth noting is the growth in the use of RFID for identification documents. While a number of private sector employers have utilized RFID enabled identification documents for access control purposes, it was the decision of the U.S. government to issue RFID enabled passports and other RFID enabled identification documents that has increased the focus on policy related issues. Unlike supply chain systems that are designed to track objects, RFID identification documents would potentially be used to track people; unlike commercial uses of RFID which due to commercial competition provide consumers with some ability to make choices about their use of RFID, governmental uses of RFID technology in identification documents would be mandatory. The initial U.S. RFID passport proposal was severely criticized, but a series of changes by the U.S. government has led to substantially improved privacy and security protection.

## **POLICY ISSUES**

Overall, RFID systems are used for four general purposes: 1) to track objects such as the EPC inventory management system; 2) to track people such as prisoners, hospital patients, or even school children; 3) to provide services such as toll-taking systems on highways; and 4) as internal components of other systems such as in car keys where the RFID system is used to authorize the use of the specific key to start a specific car. Systems used for these various purposes differ considerably in the cost and sophistication of the components, the levels and sources of power, the communications protocols and the read ranges between tags and readers.

A number of important policy issues have been raised by the increasing, and potentially pervasive deployments of various RFID systems involving, among others,

privacy, security, access to radio frequency spectrum, possible health effects, and labor practices. Any sophisticated analysis of the public policy implications of an RFID system will need to look at its specific uses and system characteristics because systems differ as described above and, most importantly, in the sensitivity of the information they generate. The principle characteristic that all systems share is the use of radio frequencies to communicate between tags and readers; these communications may be subject to unauthorized interception and use including the reading of tags by unauthorized readers.

It would be highly desirable for RFID systems to operate under a single set of rules governing the collection, retention, protection, and utilization of information involving the linkage of personally identifiable information and information generated by the use of RFID. A great deal of work has been done in this area involving the development of best practices, which should inform the development of company policies in this area including the OECD's Guidelines on the Protection of Privacy and Trans-border Flows of Personal Data.

### **◆Open Source Software: Recent Developments and Public Policy Implications**

According to the WITSA paper, "open source" software has become a topic of great interest in the press and among policymakers. Open source software, both as a type of software and as a software development and licensing model, is an emerging business reality that needs to be better understood. It is appropriate to address this subject in a balanced way and to look at the practical, pragmatic issues surrounding the emergence of this software development model in the marketplace, and the public policy implications.

Following are a few of the drivers behind a more widespread adoption of open source software:

- *The advent of the Internet.* One driver of open source development is the availability of the modern Internet to serve as a mechanism for the growth in open source development communities that are necessary for successful development and continued improvements in the programs.
- *Software license cost.* There is a perception that open source software products cost less than products developed by companies following a closed source software development model. Both software development models are in flux today as each works to serve the needs of customers by focusing on different pricing models; licensing is only part of the total value equation.
- *Flexibility.* Supporters frequently argue that because the source code is viewable to all, the underlying technology can be used in many innovative ways, offering a flexible platform to meet present and future software needs.
- *Global innovation.* With many more developers able to view the source code, supporters argue that the pace of innovation is greater as the barriers to software modification are lower.

- *Security.* Source code transparency is argued to promote more secure software because a wider group of people may inspect the software for flaws.
- *Customer involvement.* Supporters suggest that open source development models may provide more opportunities for customer-driven innovation than the traditional proprietary approach.

Arguments persist over whether some of the advantages identified on this list are real or merely perceived.

## **Public Policy Implications of Open Source Software**

### *Procurement Preferences*

Since the late 1990's, governments have considered changing their public sector procurement laws to give preference to the open source development model by either creating barriers to acquisition of commercial software (or preferences for acquisition of open source software) or making the purchase of commercial software by government outright illegal. WITSA does not favor government-mandated preferences at any level. Governments, like all potential and existing customers, should choose software on a technology-neutral and vendor-neutral basis, examining the merits of the technology, its advantages and its total cost, not by banning software based on its licensing or development model. A blanket policy can never allow a competent software buyer to effectively weigh all factors. Whenever possible, WITSA and its member associations will help raise awareness among state institutions and, especially among international donor organizations about the availability of open source and proprietary software solutions.

### Funding for Research and Development

Many governments provide funding to government and academic institutions so they may undertake basic software research. The interest of these public institutions in research and development is often to use the created innovations for the benefit of society and is often the foundation of many commercial products. This funding often comes with guidelines that encourage, or ensure, the transfer of the technology into the private sector. Overly restrictive licensing terms can interrupt this smooth flow of innovation and deny its benefits to the public. When the public has funded R&D work on the technologies, the public should be certain that appropriate guidelines are followed to ensure technology transfer that permits further development and commercialization of the technology. Public funding should not favor any particular model of software development. Software companies should be able to continue to benefit from commercialization of these publicly funded innovations.

As open source software begins to emerge as a business reality in many markets, policymakers will begin to address the public policy implications for both the private and public sectors. WITSA suggests that policymakers consider these principles:

- Intellectual property has value as determined by a competitive marketplace without undue regulatory interference, such as arbitrarily restrictive procurement guidelines.

- Software should be procured for government, industry, or individual use based on its merits, its evaluation as the “best value” to the customer, not on its license or development model category. Such procurement decisions should be made on a technology neutral basis.

### ◆Background Paper on the Grid Computing and Technologies

According to WITSA’s paper, increased network bandwidth, more powerful computers, and the acceptance of the Internet have driven the on-going demand for new and better ways to compute. Commercial enterprises, academic institutions, and research organizations continue to take advantage of these advancements, and constantly seek new technologies and practices that enable them to seek new way they conduct business. However, many challenges remain increasing pressure on development and research costs, faster time-to-market, greater throughput, and improved quality and innovation are always foremost in the minds of administrators, while computational needs are outpacing the ability of organizations to deploy sufficient resources to meet growing workload demands.

On top of these challenges is the need to handle dynamically changing workloads. The truth is that flexibility is key. In a world with rapidly changing markets, both research institutions and enterprises need to quickly provide compute power where it is needed most. Indeed, if systems could be dynamically created when they are needed, teams could harness these resources to increase innovation and better achieve their objectives.

Grid Computing delivers on the potential in the growth and abundance of network connected systems and bandwidth: computation, collaboration and communication over the Advanced Web. At the heart of Grid Computing is a computing infrastructure that provides dependable, consistent, pervasive and inexpensive access to computational capabilities. By pooling federated assets into a virtual system, a grid provides a single point of access to powerful distributed resources.

Researchers working to solve many of the most difficult scientific problems have long understood the potential of such shared distributed computing systems. Development teams focused on technical products, like semiconductors, are using Grid Computing to achieve higher throughput. Likewise, the business community is beginning to recognize the importance of distributed systems in applications such as data mining and economic modeling.

With a grid, networked resources, desktops, servers, storage, databases, and even scientific instruments, can be combined to deploy massive computing power wherever and whenever it is needed most. Users can find resources quickly, use them efficiently, and scale them seamlessly.

The paper makes the following observations:

- The Grid -- the IT infrastructure of the future -- promises to transform computation, communication, and collaboration. Over time, these will be seen in the context of grids -- academic grids, enterprise grids, research grids, entertainment grids, community grids, and so on. Grids will become service-driven with lightweight clients accessing computing resources over the

- Internet. Data centers will be safe, reliable, and available from anywhere in the world. Applications will be part of a wide spectrum of network-delivered services that include compute cycles, data processing tools, accounting and monitoring, and more.
- Grid computing and related technologies will only be adopted by commercial users if they are confident that their data and privacy can be adequately protected and that the Grid will be at least as scaleable, robust and reliable as their own in-house IT systems. Thus, new Internet technologies and standards such as IPv6 take on even greater importance. Needless to say, users of the Grid want easy, affordable, ubiquitous, broadband access to the Internet.
  - Similar to the public policy issues raised by the development of electronic commerce and electronic government, Grids raise a number of public policy issues: data privacy, information and cyber security, liability, antitrust, intellectual property, access, taxes, tariffs, as well as usage for education, government, and regional development.

### ◆Background Paper on Voice over Internet Protocol (VoIP)

WITSA's paper looks at the nature and benefits of Voice over Internet Protocol (VoIP) and describes the changes that need to take place to reach its full potential. It also identifies the key questions on the regulatory front that present VoIP's greatest challenges.

Voice over Internet Protocol is more a capability than a single service or device. In standard analog voice service, signals travel over the public switched network. With Voice over Internet Protocol, voice traffic is converted into a digital signal and transmitted over the Internet (including intranets or private IP networks) using packet technology. The distinction is critical—encompassing significant upsides and downsides for successful VoIP introduction.

Today, VoIP communication takes place in one of two basic ways: computer to computer or computer to telephone. In the case of the former, the computer (equipped with sound card, phone software and microphone) converts the analog voice signal to IP; in the latter, a telephone on the public switched network uses a VoIP gateway to make the conversion. In the future, telephone-to-telephone communication using VoIP may become the norm, again using VoIP gateways to move to and from an IP network. As IP pervades the networks, some VoIP calls will be all IP. The VoIP possibilities are by no means limited to telephone handsets, however. Future connections will no doubt include:

- Cell phones  
With VoIP, cell phones will not only route telephone calls over the Internet but also become "click to talk" intercoms for immediate access to friends or family.
- PDA and Wi-Fi phones  
Personal Digital Assistants will not only be used to make phone calls, but also, when part of a Wi-Fi network, they will be used to create a private, in-house phone system; walk from room to room and transfer the call from IP device to IP device.
- Cable and DSL modems

Take laptops or desktops, add software and a headset, and start making calls right from the screen. Attach an adapter and legacy phones become IP phones for flat rate domestic calling; add free or low cost features like call waiting, caller ID or personalize a local exchange so that long distance become local calls.

- PBXs  
Like an Internet server, an IP-enabled PBX allows users to dial in with IP phones or laptops and reach the Internet. In disaster situations, an off-site IP PBX could help assure continuity of business operations.
- Other hardware and software devices  
Telephone companies will use intelligent routing, IP Centrex and other technologies to create software-defined networks.

IP networks make all of this “device diversity” possible. IP blurs the functional distinctions between devices: cell phones become personal digital assistants; SIP phones become Java computing devices; Wi-Fi handsets are transformed into endpoints for SIP calls. Just as with other types of Internet traffic, IP renders distance irrelevant for voice traffic as an application and can make phone numbers location independent of geography. IP also decouples voice as an application from traditional telecommunications networks, thus making it also potentially available on cable, fixed wireless, fiber, satellite and other transmission modalities.

WITSA recommends the following principles:

- Service providers must have non-discriminatory interconnection from the broadband provider at fair and reasonable term and prices.
- The wide resources of the Internet should be available, without discrimination by the broadband provider, while respecting applicable law.
- Service providers should not be liable for the actions of end-users.
- Device and application developers should adhere to open, interoperable standards.
- Users should have their choice of devices, services and applications independent of which broadband provider they use.
- Users should respect copyright laws and other legal obligations related to the use of applications and networks.
- Users should show respect for other users and their ISP by using firewalls, anti-virus software, anti-spam filters, not monopolizing bandwidth or otherwise degrading the network.

### ◆Global Sourcing Issues

WITSA’s paper wishes to start a dialogue on the Increasing attention that is being paid to the movement of Information Technology (IT) and IT-Enabled Services (ITES) work, such as call-centers, from one country to another. The destination country receiving the most attention is India, though China, the Philippines, Russia and the Ukraine are all countries, among many others, seeking to capitalize on the phenomena. Some definitions are in order:

- **Outsourcing** is the process of contracting to have work done outside a business or agency that could be done by the organization itself. The work can either be work that is currently being done by the organization, or it may be work that is new to the organization.

- **Offshoring** occurs when the outsourced work is performed outside the home country.

The range of services is quite broad, however, from information technology services and consulting to software programming; financial services such as tax returns, mortgage application review and check processing; architectural services such as compliance of architectural drawings with local building codes; health care such as reading x-rays or other imaging analysis; and call-centers.

One WITSA member, the National Association of Software and Service Companies (NASSCOM), estimates worldwide ITES spending at US\$712 billion. The Americas clearly dominate the market accounting for 63 percent of worldwide ITES spending. Asia-Pacific accounts for merely 15 percent of worldwide ITES spending. However NASSCOM estimates that by 2006 Asia-Pacific will be the largest growth market, with growth of 14.7 percent (compound annual growth rate).

Offshore outsourcing is now a "mega-trend", according to Gartner analysts quoted in the *India Times* news daily. Gartner anticipates that in the U.S. the backlash will continue in the short term, as concern in local communities grows, offshore service providers should not get too alarmed, because the backlash is an inevitable part of the process and will dissipate as the economy improves<sup>4</sup>. The impact of such a backlash remains to be seen.

Most experts seem to agree that offshore outsourcing is here to stay, and global backlash is unlikely to stem its tide. Major global companies in most industry sectors, including ICT are moving to global sourcing policies, seeking best value services from any location. One aspect of offshore outsourcing that is just beginning to be explored is its potentially positive impact on a country's economy as a whole. Catherine L. Mann, Senior Fellow at the Institute for International Economics, reported that:

*Globalization of IT hardware production is a model for the global evolution of IT services and software. Although technological change is the most important driver of IT price declines, globalized production and international trade made IT hardware some 10 to 30 percent less expensive than it otherwise would have been. These lower prices translated into higher productivity growth and an accumulated \$230 billion in additional GDP (1995-2002). Real GDP growth might have averaged 0.3 percentage points less per year from 1995 to 2002, if globalized production of IT hardware had not occurred.<sup>5</sup>*

Some commentators have advocated government action to limit offshore outsourcing. This movement appears to be particularly strong in the U.S. and to a

---

<sup>4</sup> Chohan et al, April 2003, *Management Update: Job-Loss Backlash won't Stop the Offshore BPO Trend*

<sup>5</sup> Mann, *Globalization of IT Services and White Collar Jobs: The Next Wave of Productivity Growth*, International Economics Policy Briefs, December 2003, Institute for International Economics



lesser, but growing degree in countries such as the U.K. and Australia. Some U.S. States are considering legislation that would restrict offshore outsourcing for government contracts, according to the National Conference of State Legislatures, a bipartisan U.S. association that tracks legislation at the state level. Recent Federal legislation in the U.S. limits competition for work currently being done by government employees to U.S. workers. U.S. Federal regulators may also consider imposing limitations on the sort of work that regulated private sector corporations take offshore.

It is clear that these markets are both large and growing. Increasingly concern is being expressed by many individuals, organizations, and governments that work being performed in a country other than its origin is detrimental to the workforce and the economy. As the discussion on this issue continues, WITSA notes that:

- Open markets will foster a level playing field and will result in the opening of new markets as countries develop and fully utilize ICT. Open markets will also improve investment globally and develop transparent and fair global markets.
- Stakeholders should be aware that the ICT industry is global, companies who are unable to realize offshoring gains run the risk of becoming uncompetitive. It is also important to note that offshoring provides companies with more resources to utilize in areas such as R&D, and therefore they are able to generate more products and services.
- Governments need to be fully informed on the pros and cons of offshoring. More importantly they need to be aware of the detrimental affect of legislating against offshoring. In addition, national security powers should not be abused and used as an inhibitor to offshoring.

WITSA encourages additional studies to examine the implications of offshoring on the global ICT industry and how it will cause the global ICT industry to change.

## WITSA Statements

- WITSA Background Paper on Radio Frequency Identification (RFID) and the Public Policy Implications; July 2006 [[PDF](#)]
- WITSA Statement: Next Generation Networks and the Policy Implications; July 2006 [[PDF](#)]
- WITSA Statement: "Health Care and Information and Communications Technologies: Challenges and Opportunities" June 2006 [[DOC](#); [PDF](#)]
- WITSA Statement on Open Source Software: Recent Developments and Public Policy Implications; December 2004 [[DOC](#); [PDF](#)]

- WITSA Background Paper on Grid Computing; September 2004 [[DOC](#); [PDF](#)]
- WITSA Statement on Voice over Internet Protocol (VoIP); September 2004 [[DOC](#); [PDF](#)]
- WITSA Global Sourcing Issues Paper; February 2004 [[DOC](#); [PDF](#)]
- WITSA Background Paper on Radio Frequency Identification (RFID) and the Public Policy Implications; February 2004 [[DOC](#); [PDF](#)]
- WITSA Statement on Levies, Oct. 2003 [[MS Word](#); [PDF](#)]
- [A Global Action Plan for Electronic Commerce 3rd Edition](#), July 2002
- [A Global Action Plan for Electronic Commerce 2nd Edition](#), October 1999
- [A Global Action Plan for Electronic Commerce](#), September 17, 1998
- WITSA [Statement On Privacy](#), August, 1998
- WITSA [Statement On Convergence](#), May, 1998
- WITSA Statement on [Facilitating the Digital Economy](#), May 26, 1998
- WITSA Statement on [The Global Impact of Year 2000 Computer Processing Problems on Citizens, Businesses and Governments](#) 1997

## II. TAXATION



Many taxation issues are not new or unique to electronic commerce but have already developed in conventional commerce, which increasingly relies on new modes of communications and increasingly crosses national borders. The mode of doing business through electronic commerce may add new layers of difficulty and may require solutions to both the problem of no taxation or double taxation and to the problem of administrative burden.

Simplicity, clarity, and fairness must be promoted in both national tax regimes and supranational tax regimes (e.g. the European Union's value-added tax system), as well as bilateral tax agreements for the avoidance of double taxation based on international models, in order to allow for the global trading potential of electronic commerce. Tax rules everywhere should be understandable and user-friendly to allow for the potential increase in cross-border sales by companies. Application of existing taxation principles to the electronic medium must also be built upon tools that businesses already use or are required to develop to meet their market needs. Tax obligations should especially fit into the new streamlined processes found in electronic commerce. It is only in this way that high tax compliance can be sustained with the least burden and the fewest economic distortions.

Differing rules on the application of indirect taxes may have a more adverse effect on e-commerce than direct taxation – such as income taxes. Burdensome and costly tax withholding requirements and the threat of double taxation are caused by current inconsistencies between governments on definitions, classification, levy, assessment, and collection. In addition, there should be no discriminatory government taxes, charges or fees on electronic commerce transactions. Transactions conducted using electronic commerce should receive neutral tax treatment in comparison to transactions using non-electronic means. Internet specific taxes will stifle the development of on-line business.

WITSA is of the opinion that a global perspective is required when addressing this subject, as electronic commerce cuts across national boundaries to a greater degree than traditional forms of business. Therefore, consistent taxation approaches at the

international level are absolutely critical to ensure the effectiveness of tax treatment in the digital economy and the avoidance of double taxation.

#### ◆WITSA Statement on Consumption Taxation and Electronic Commerce

WITSA adopted on June 15, 2001 a [Statement](#) on the application of consumption taxes to products and services sold online, but warned that further work was urgently needed to prevent disparate national and local rules from stifling the growth of electronic commerce. On specific issues, the statement commented on:

- **Taxation at the Place of Consumption**  
We applaud the OECD for moving forward in this area and creating draft guidelines on the definition of the place of consumption for cross-border services and intangible property. We believe that more work is needed in certain areas including further refining of definitions and classifications, rules for determining when and where tax is due and compliance procedures, including how refunds and credits will be handled.
- **Consumption Tax Collection: Services and Intangible Property**  
Countries apply different consumption tax rules to different types of services and intangible property, such as, telecommunications, broadcast, consulting, engineering, training and education, data processing, supply of information, access to databases, entertainment, and content of various types. WITSA would like to stress the importance of developing consistent definitions, classifications, and tax rates for these types of transactions.
- **Classification of Digitized Products**  
There is a view that the on-line supply of digitized products should not be treated as a supply of goods, but presumably as a supply of services. It is inconsistent to treat a digitized product differently from its conventional counterpart (e.g., products such as books, software, images, music, or information). We encourage a policy that applies the same rate of taxation regardless of the method of delivery to ensure neutrality. If digitized products are treated as services, then further guidance is needed to specify which of the many different sources of supply rules for services shall govern.
- **International cooperation**  
WITSA urges the OECD to continue to broaden its dialogue with the business community and non-OECD member countries. To foster consumption tax cooperation, consideration should be given to include indirect taxation in the tax treaty process.
- **Simplification**  
We recommend that significant attention be given to simplification of consumption tax rules for all commerce not those limited to digitally deliverable goods and services. The current inconsistencies among definitions, classification, treatment of combined or bundled services, source of supply rules, registration requirements, invoicing requirements, payment procedures, reporting, record retention, reverse charges, levy, assessment, and collection (including consumption tax withholding obligations of the customer) are widely cited by businesses of all sizes as a significant burden on international commerce.

## ◆VAT Exemptions

VAT exemption for industries and firms inhibits the use of outsourcing for information technology services by creating a price differential between the cost of contracting and performing services in-house. This, in turn, provides a disincentive for such firms to seek outside expertise and negatively impacts their competitiveness in the global marketplace. As outlined in its [Statement on the Impact of VAT Exemption on IT Outsourcing](#) (September 1999) and updated in 2001, the most notable example of this situation is the financial services industry in Europe, though other countries have raised the issue as well. Since the global IT market in financial services exceeds US \$200 Billion, any disincentive for outsourcing is significant. Governments wishing to provide the effect of tax exemption to particular industries or firms have a number of options:

- They could “zero rate” them with respect to VAT. Under this scenario, the institution would charge VAT to customers at a zero rate but, therefore, be technically capable of recovering VAT paid to suppliers.
- Depending on the nature of the VAT regime, the provisions of IT services could be deemed to be an acquisition for a “credible purpose”, for VAT exempt organizations. This would enable the organizations to reclaim any VAT paid on the acquisition of IT services.
- In the case of financial services, they could require financial institutions to charge VAT on service fees, such as transaction fees, loan fees and so on. This would enable the financial institutions to reclaim all or part of the VAT paid on its inputs such as IT services.

### WITSA Statements

- WITSA Statement on VAT Outsourcing Considerations, Oct. 2003 [[MS Word](#); [PDF](#)]
- [Statement on Consumption Taxation Issues and Electronic Commerce](#) June 2001. See also press release [[HTML](#), [PDF](#)] and OECD's July 18 [response](#).
- [Impact of VAT Exemption on Information Technology Outsourcing](#) September 1999

# III. INFORMATION SECURITY



Information technology has changed the way we do business, and is present in every aspect of the economy, from banking and finance, transportation and utilities, to food production and distribution, government, and nearly everything else of importance to economic and physical well being. In an automation-reliant society, there is no real physical or economic security without information security. This reality is becoming ever starker every day, as the global information infrastructure - and the physical infrastructures it supports, comes under attack from hackers and cyber criminals.

Information technology is ubiquitous, that is, computers, networks and software operating everywhere at once, and thus so are vulnerabilities. One challenge is the prevalence of criminal cyber attacks: computer viruses and other malicious code damage or destroy files and data; network intruders steal secrets or other sensitive information; distributed denial of service (DDOS) attacks restrict or eliminate access to the Internet. And, as more sensitive and classified information is made available to more and more users, the insider threat will increase exponentially, making it possible for trusted insiders to engage in criminal activity, including terrorism and economic espionage.

But information technology is not just vulnerabilities and targets, but also offers potent tools for protecting against and responding to attacks, analyzing them and mitigating their damage. Private industry owns and operates the vast majority of the world's information infrastructure. Protecting global cyber assets is the job of the private sector and the public sector working in partnership as appropriate to secure cyber assets.

In both the public and private sectors, information security challenges must be met with a combination of factors, namely: People, Processes and Technology. Individuals must be vigilant in maintaining the security processes laid out by organizations; organizations must implement and enforce security processes and procedures; and business and government must use multiple layers of security technology to deter threats. All three are necessary to minimize risk.

Technology is ever-changing; business models and processes, and the information systems that support them, are widely varied; and human interaction with those technologies and processes that provide security is complex and subject to error. But information security is indeed everyone's business, and WITSA encourages a strong public private partnership to catalyze those synergies. Solutions developed collaboratively by industry and public policy makers can help minimize the threat of attack and ensure that our systems remain protected from a new brand of criminal – the cyber criminal.

Without concerted attention to cyber security, in the form of investment, awareness and training, research, information sharing, and other activities, the world's information will continue to come under ever more sophisticated attack, with costly and potentially catastrophic impact.

### **International Efforts**

Due to the global nature of the Internet and communications, failure to protect critical information systems and infrastructure at the national, local or even individual level can have global implications. In a networked world, information security is as strong as its weakest link. Countering hacking, allowing strong encryption software, providing mechanisms to deal with viruses, and protecting the privacy of Internet users are all priorities that need to be addressed globally. It is of vital importance that governments and international organizations work closely together and cooperate fully with the private sector.

### **◆Information Security Discussions at the OECD and APEC**

Two international organizations -- the Organization for Economic Cooperation and Development (OECD) and the Asia Pacific Economic Cooperation forum (APEC) – have been actively discussing information security issues.

Economies are also working together to implement Computer Emergency Response Teams (CERTs) as an early warning defense system against cyber attacks. Training is being provided to a number of economies, and guidelines have been developed for establishing and operating CERTs. The protection of small and medium enterprises is a priority under this strategy. Practical tools to protect small businesses, as well as home users, from attacks and spreading viruses, have been developed, including advice on how to use the Internet securely, safety issues relating to wireless technologies and safe e-mail exchanges.

### **◆Suggested Principles**

In developing industry positions on global Information security issues, WITSA suggests an initial list of general principles that should guide the development of future policy.

### **Joint Principles**

- The Internet and electronic commerce are inherently global in nature; therefore, information security will require collaboration among international bodies and a

recognition by government of the challenges faced by industry in these areas.

- Industry and government share an interest in the proliferation of a free and open Internet, electronic commerce, other value-added networks, and an efficient, effective information infrastructure generally.
- Positive interaction between government and industry is essential. Among issues that will require on-going communication and assessment is the need to balance an individual's right to privacy with national security concerns.
- Emergency response organizations must gain sufficient situational awareness and disaster recovery expertise to minimize the effect of catastrophic events on the information infrastructure.

### **Government Principles**

- The assurance of national information infrastructure must be based on the minimum amount of government (national, state/province, and local) regulation as is feasible.
- The cost of protecting national information infrastructure must be commensurate with the threat and consequences of the attack.
- Governments must work together internationally to coordinate their own information security and critical infrastructure assurance programs and activities.
- Where corrective information security action is required to protect the public good, government must identify such instances and create appropriate research, development and funding mechanisms.
- In creating and maintaining the information infrastructure and its associated tools and technologies, industry must be provided safe harbor assurances when it has made reasonable efforts and its works viewed as incidental to losses caused by criminal or malicious misbehavior or natural disasters.
- Distinctions must be made among cyber-mischief, cyber-crime and cyber-war to clarify jurisdictional issues and determine appropriate responses. The adequacy of current laws to prevent these threats must be reviewed.
- Existing laws must be adapted as necessary to allow appropriate levels of information sharing among companies, and between the private sector and government.
- Current policy in areas such as the tax credits for research, software encryption, workforce training and long-term government research and development funding, must be reviewed in light of common information security goals and objectives. Law enforcement agencies on a global basis must gain sufficient cyber-crime expertise to combat specific threats and to investigate specific criminal acts. Also, legal statutes must be updated since in some countries cyber crime is a novelty unrecognized by criminal statutes while the possibility of such crimes being committed is real.

### **Industry Principles**

- Industry owns and operates most of the world's information infrastructures, so should have primary responsibility for information security requirements, design and implementation.
- Industry will be guided by business continuity considerations to protect itself against physical and cyber-attack as the threats to the information infrastructure grow.
- Industry should cooperate both internally and with government in reporting and exchanging non-proprietary information concerning threats, attacks and protective measures. Coordination among principals must facilitate creation of early warning systems.



- Make security a top priority and put security at the heart of the design process, and where possible, use government, industry and international standards.
- Work with home users, small businesses and large enterprises (including government agencies and educational institutions) in a continual process of improving the security, maintenance and reliability of products that maximize users' productivity.
- Continue to improve the engineering, development, testing and training processes and methods that reduce defects in systems specification, design, implementation and remediation (patching). Partner with government and academia to develop automated tools for evaluating software quality and security.
- Identify, adopt, train and deploy information security best practices with clearly assigned cyber security roles and responsibilities for all employees and organizational leadership.

### **◆Background Paper on Traffic Data Requirements and Cooperation with Law Enforcement Authorities**

WITSA has consistently urged governments to rely on the preservation rather than retention of communication data for law enforcement purposes. Data preservation orders would allow for specific data to be 'frozen' until law enforcement agents can access it using a legal warrant. Such orders would apply to all communications of a specific individual, device or address for a finite, specified period. This was in fact the investigative information gathering measure agreed upon in the Council of Europe Convention on Cybercrime. (See Council of Europe, Convention on Cybercrime (Budapest, 23.XI.2001), at Title 2, Article 16.)

As the European Union and other governments review additional ways to protect communications, an open dialogue between governments and industry is paramount to ensure that law enforcement authorities get the support they need from communication providers while avoiding exorbitant technical and financial burdens on business. In this spirit, WITSA offers some specific commentary and recommendations.

WITSA does not support the establishment of a mandatory data retention policy for criminal investigation purposes. The storage and data retrieval costs attributable to mandatory retention are very high, are still being measured, and would increase significantly if a service provider is subject to variable retention requirements in different jurisdictions where it operates. The reasons the costs are continually being measured are simple. However, it is possible to isolate two primary factors that drive such costs:

- The cost to both store and search data stored from a network increases exponentially over time.
- The ability to effectively search retained bulk data decreases exponentially over the same period.

WITSA has consistently recommended that governments utilize the preservation rather than retention of communication data for law enforcement purposes.

An open dialogue between governments and industry is paramount to ensure that law enforcement authorities get the support they need from

communication providers while avoiding exorbitant technical and financial burdens on business.

Inconsistent and disproportionately heavy traffic data requirements will drain limited resources without strengthening either the cooperative bond between law enforcement authorities and communication service providers or the investigative utility of information retrieved from such measures.

WITSA recommends:

- Governments to rely on data preservation as an alternative to the wide-scale, mandatory rules imposed by communications data retention.
- Any assessment of traffic data requirements must include certain criteria in order to be proportionately implemented and effective for its intended investigative purpose. (*ICC Common Industry Statement on Storage of Traffic Data for Law Enforcement Purposes*, 4 June 2003)
- Governments should seek advice and opinions from key industry stakeholders before considering any proposed traffic data regime. Insufficient public input and lack of international harmonisation will result in policies that not only harm providers of communications services and their end-users but also impair the IT services market to citizens.

## WITSA Statements

- WITSA Statement on Information Security; June 2005 [[PDF](#)]
- WITSA Background Paper on Traffic Data Requirements and Cooperation with Law Enforcement Authorities; November 2004 [[DOC](#); [PDF](#)]
- [Statement on Information Security](#) May 2002
- [Statement on the Council of Europe Draft Convention on Cyber-Crime](#) November 2000 See also [press release](#)
- [WITSA Letter to G-8 Heads of Delegations](#) on Certain Provisions Contained in the Council of Europe's Draft International Cyber-Crime Convention, May 12, 2000
- [Critical Information Protection \(CIP\): A Framework for Government / Industry Dialogue](#) June 1999
- [Government and Law Enforcement Access to Transmitted Information In the Digital Environment](#), August, 1998

## IV. ICT FOR E-GOVERNMENT



Online delivery of government services has never been higher on the political agenda than it is today. Governments are talking about the significant benefits that can be realized by moving traditionally paper-based and face-to-face services to the Internet. Governments also understand these services must be customer focused, cost effective, easy to use and value-added for citizens, businesses and the governments themselves. Traditionally, the interaction between a citizen or business and a government agency took place in a government office. With emerging information and communication technologies it is possible to locate service centers closer to the citizens. Such centers may consist of an unattended kiosk in the government agency, a service kiosk located close to community centers, or the use of a personal computer in the home or office.

Technology will change government more in the next decade than it has in the past century. E-government will not only transform current laws and create new laws and policies but it will change the way government is organized and will create new value in the government's relationship with its citizens. E-government will be government.

Barriers do exist that slow the adoption of ICT by the public sector just as they do for the private sector in certain countries. These include: higher costs of ICT introduction due to the scale of public organizations; paper documents required for approval processing; security and concerns; confidentiality of information; obsolete regulations and laws; lack of understanding and computer skills; difficulties of carrying out organizational change; and the nature of public sector financing and procurement practices. More work is needed to better understand these and other factors, and how to address them.

## **◆Information and Communications Technologies (ICT) To Enable E-Government**

WITSA is focusing attention on the complex issues surrounding the implementation of e-government and to suggest that the public and private sectors work together to deliver appropriate information and communications technology solutions needed to change the way government is organized and create new value in the government's relationship with its citizens. E-Government refers to the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and government. These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management. The resulting benefits can be less corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions.

### **◆WITSA E-Government Survey Project**

E-government has not developed to the extent hoped for around the world, it has not been the panacea many of us expected, but it still holds the key to phenomenal government transformation, modernization and improvement to citizen services. Nonetheless, there have been great strides towards the application of citizen-centric Internet based applications, and public service modernization and transformation due to the availability of new technologies, and the world wide interest in using the Internet to improve government services.

All governments need to advance and make progress in e-government in order to modernize their governments, improve services to citizens using the opportunities now available through the Internet, and be recognized in the global community. Developing and advancing e-government is extremely difficult; perhaps more so than originally envisioned and all countries could benefit from the experiences and lessons learned from their WITSA counterparts who have faced similar situations.

WITSA conducted a survey of its members to understand the progress and issues in e-government. In addition, the product of this survey will share success and create a network for WITSA members to contact and learn from one another, and thereby hopefully allow individual countries to leapfrog into e-government success and transformation by 'standing upon the shoulders' of their WITSA colleagues.

The 2006 WITSA survey reported the following as the major inhibiting factors:

1. complexity of transformative and innovative solutions;
2. lack of skilled staff and leadership qualifications;
3. government interdependencies;
4. organizational and bureaucratic opposition;
5. lack of political support and adequate funding; and,
6. focus on technological drivers instead of business drivers.

What emerged from our survey is that there was agreement that:

1. co-ordination and the interdependencies across agencies and with stakeholders are complex, and difficult to manage;
2. cultural change and organizational resistance is significant;
3. user take-up is a challenge; and,
4. leadership and the required skill set are ultimately lacking.

### ◆Government Procurement and E-Procurement

WITSA has a strong interest in making the government procurement processes in general, and information technology procurements in particular, more transparent and open. Governments around the world, both central and local, are significant purchasers of goods and services. A recent OECD analysis estimated that the value of potentially contestable government procurement markets was in excess of \$2 trillion. According to the same study, the value of local procurements exceeded the value of central government procurements by a factor of 2 to 3. (*The Size of Government Procurement Markets*, OECD, April 19, 2002)

In its April 2004 Statement on Best Practices in Government Procurement, WITSA is striving to provide governments at all levels with a guide and set of best practices for developing a procurement system that enables them to procure the best value for their investment in ICT. The document outlines both a process and a rationale for the conduct of government bids that, if adopted, will lead to more open, transparent, non-discriminatory, competitive and technology-neutral procurements.

The Guide is consistent with the WTO Government Procurement Agreement (GPA) that WITSA encourages all member countries to sign.

The procurement process consists of a number of steps:

- Needs Definition / Requirements
- Request for Information (RFI)
- Request for Comments
- Request for Proposal
- Proposal
- Live Test and Demonstration
- Best and Final Offer
- Award
- Protest Procedures

Depending on the size and complexity of the procurement, a given acquisition may contain some or all of these stages. From a bidder's viewpoint, resources assigned to the effort start out relatively low and then increase dramatically during the proposal development stage. Thus, work done by an acquiring agency early will go a long way to keeping bidders in the process during the latter stages. Bidders are particularly susceptible to dropping out if there are delays in the procurement or changes to the RFP late in the process.

WITSA also noted and explained a number of Best Practices that are listed below:

- Obtain Top Management Support

- Involve End Users
- Market to Vendors
- Use Input from RFC
- Consider Vendor Comments
- Evaluate Experience
- Issue Functional Specifications
- Balance Risk
- Eliminate Ambiguity
- Publish Evaluation Criteria
- Insure Ability to Select Best Bid
- Disseminate All Information
- Continue Communication after RFP
- Allow Sufficient Time for Proposal Preparation
- Require LTD Only If Necessary
- Schedule Cost Proposal after Management
- Narrow to Competitive Bids Early
- Hold Oral Presentations
- Allow Time for BAFO
- Debrief Losing Vendors

WITSA concluded that government procurements are typically large and complex. Adding to the complexity generally is a plethora of laws and regulations that govern such procurements. These conditions create in most cases procurements that are lengthy and expensive for both government and bidders. It is hoped, however, that by understanding the process better as described in this document and by incorporating many of its suggestions the end result will be successful procurements that will benefit all parties.

### WITSA Statements

- 2006 WITSA eGovernment Survey - Key Findings The report on the key findings, including responses from 36 countries [[PDF](#)], notes that the problems and experiences shared between the countries were remarkably similar in both developed and underdeveloped economies, and that most have made impressive advancements in the implementation of eGovernment over the past few years.
- WITSA Statement on Best Practices in Government Procurement; February 2004 [[DOC](#); [PDF](#)]
- WITSA Background Paper on E-Government Trends in 2003: Local Governments Using ICT, Oct. 2003 [[MS Word](#); [PDF](#)]
- [Statement on the Use of Information and Communications Technologies \(ICT\) to Enable E-Government](#) May 2002

# V. INTERNET TECHNICAL COORDINATION



The Internet has become an essential component of economic activity and will assume an even larger role in trade and commerce in coming years. The Internet is changing not only in access technology, but also in the breadth and spread of its distribution, as well as in the applications that it is able to access and transport. Today, the Internet reaches a billion users; in a few short years, it will undoubtedly reach the 1.5 billion mark.

To date, the Internet has grown in a largely unregulated environment, and has shown an ability to thrive in a wide variety of market environments under competitive conditions. This freedom from centralized and heavy regulations has produced impressive results over a relatively short period of time, delivering innovation, productivity and opportunity to a growing numbers of users in all parts of the world. Notably, the Internet has grown fastest in markets where there is competition for the provision of underlying telecommunications facilities, as well as for access and related services.

The International Corporation for Assigned Names and Numbers (ICANN), a private sector led international organization, based on multistakeholder participation, is responsible for coordinating the unique technical indicators for the Internet and for the development of relevant policies related to its technical mission and functions. ICANN is a multi stakeholder organization built on bottom up participation of interested parties. ICANN provides a number of mechanisms by which an organization, business, NGO, government or individual can participate.

Throughout the WSIS, much emphasis was placed on the role of the private sector and whether intergovernmental oversight was needed as the Internet has become increasing important to commerce and communications. After extensive debate and discussion over the four-year period of the WSIS, the WSIS documents give support to the continued leadership of the private sector.

WITSA sees the evolution and acceptance of ICANN and its role within the international community of organizations as a very positive outcome that has been built on the good will, hard work, and collaboration of the stakeholders themselves. WITSA also acknowledges that, as the Internet evolves and grows, ICANN informational resources to support informed and meaningful participation must continue to improve and be easily accessible by the diverse range of interested stakeholders.

As a relatively young organization, ICANN has established credibility with the support of global Internet stakeholders and with the good will and support of a number of Internet-friendly governments. This credibility is built on the stakeholders' commitment and participation in ICANN. Of course, broad, informed participation is still evolving and needs further support and enhancement. This is under examination within ICANN's formal processes and should be given a chance to evolve.

WITSA supports **The Internet Corporation for Assigned Names and Numbers (ICANN)** and its consultative approach to managing the Internet's domain names and related services. Following the adoption of earlier reforms, WITSA recognized ICANN's positive steps such as the established and effective mechanisms for dispute resolution, the continuing introduction of registrar competition, and above all an improved and transparent review process. At that time, WITSA called for continued evolutionary changes in accountability, transparency and bottom up participation to ensure ICANN's success as the means of managing the Internet's technical coordination issues.

In late 2006, the U.S. Government's Memorandum of Understanding was reviewed, with broad public comment via a formal Notice of Inquiry. Over 900 comments were received, including a number from global entities and governments. ITAA and WITSA members submitted comments as part of the public comment process. On September 29, 2006, ICANN and the U.S. Department of Commerce published the "Joint Partnership Agreement."

The Joint Partnership Agreement is broadly in agreement with WITSA's previous positions, and provides a three-year period for ICANN to achieve the evolution to full private sector management. WITSA did not believe that ICANN was yet fully developed in several areas, and continues its support for ICANN's continued evolution, as described below:

### **WITSA's Objectives for ICANN Continued Evolution:**

#### ***Stability and Security***

ICANN's first priority must continue to be the operational stability and security of the Internet.

#### ***Competition***

ICANN has made progress in introducing competition into the registrar services segment. It is further examining how to promote and enhance competition in the provision of registry services in an environment that is not yet fully competitive. Extensive consultations with the community have continued to raise the need for further support for an environment that enables the emergence of competition.

ICANN should enhance its consultations with experts from competition and antitrust, as well as with competition and antitrust authorities, and provide mechanisms for



providing such expertise to the policy development and board level decision making. It should also strengthen and increase with the broader ICANN community, as it examines how to promote development and evolution of fair, balanced and stable competitive environment in registry services.

### ***Bottom-up Coordination***

The policy development process and ICANN's overall legitimacy as the steward of the globally unique indicators is founded on bottom-up coordination and consensus-based policy development. Both should be maintained and respected. Further enhancement and improvement is desirable in these areas. ICANN must strengthen its support to the existing ICANN organizations and structures in its efforts to broaden and deepen participation. In particular, care should be taken to ensure that ICANN builds on its existing structures and participation mechanisms in an evolutionary, not revolutionary manner.

### ***Representation and informed participation***

It remains critical to ICANN's legitimacy to continually encourage informed participation by all interested stakeholders, including present stakeholders and parties who are not yet engaged. However, the use of the term *representation* needs to be fully examined and considered for its meaning and how best to address *representation* in the ICANN processes. It is possible that a priority objective for ICANN is to focus on enhancing the means to ensure 'informed participation;' and examining what representation means in a globally diverse and distributed Internet world.

In creating ICANN, there was a commitment to ensuring geographical diversity and broad representation of interested sectors, and this commitment must continue as ICANN evolves.

### ***Outreach and Communication***

Many players, including the technical community, commercial and non-commercial users, governmental agencies, NGOs and individual users seek a greater understanding of ICANN's role and activities, including the policy development process, in order to enable their informed participation. In particular, ICANN should:

- Support building from the strength of its existing base of supporters as it broadens outreach initiatives. These outreach initiatives must remain focused and consistent with ICANN's narrow technical mission.
- Seek a balance across stakeholder views as it continues to define its role in the universe of international entities, mindful of its unique private sector leadership role, its consensus-based decision-making process and the importance of informed participation from a disparate and increasing base of stakeholders.
- Continue to seek collaboration and cooperation with other bodies, such as UNESCO, WIPO, and the ITU, and other relevant international organizations and relevant standards entities as consistent with ICANN's mission and core values.

### ***Transparency and Accountability***

ICANN must continue to improve its overall transparency and accountability and interact in a responsive, timely manner with stakeholders on decisions that affect ICANN's stability, and indeed, the stability of the Internet. Accordingly, WITSA supports the need for improved mechanisms in both transparency and in

improvements in accountability mechanisms that provide robust accountability mechanisms, drawn from proven models and informed by views of experts, and that reflect input and buy in of the broad ICANN community. Safeguards of this nature will help to increase ICANN's credibility and acceptance by all stakeholders, including governments.

### ***Independent role***

ICANN has shown tremendous growth in its ability to carry out its existing mandate and must continue to evolve and improve, as it addresses its existing mission, guided by the informed consensus of ICANN stakeholders and safeguarded against capture by parties whom it governs via contract, or by special interests of any segment of the stakeholders, including governments and technical experts of the DNS. It is the careful balance of interests that best protects ICANN and ensures the stability of its role. In maintaining this careful balance, principles of transparency and accountability, supported by new procedures will support ICANN's continued improvement and evolution.

### ***WHOIS database***

Certain milestones in the earlier MOU that were not complete, and remain highly relevant, such as the accuracy of WHOIS data, were extended into the Joint Partnership Agreement. WHOIS is a valuable community resource, relied upon by individuals, organizations, and governmental agencies as a resource in dealing with a wide variety of legitimate needs, including consumer protection, network attacks, trademark collisions, and illegal actions on the Internet. ICANN was tasked to continue the availability of the gTLD WHOIS data and to take steps to continue to improve accuracy. There is an active WHOIS policy development process underway to examine what changes, if any might emerge. WITSA supports the need for careful examination before any changes, which might displace the availability of WHOIS data.

### ***Internationalization***

ICANN should enhance efforts at continued internationalization in order to increase the opportunity for informed participation in its relevant role and contribution to the Internet's accessibility to users around the world; this should include a more direct focus and identification of the importance of internationalized domain names. ICANN is presently finalizing policy for the introduction of further ASCII TLDs and continuing the examination of the policy and technical issues related to IDNs. In the area of further gTLDs, WITSA recommends increased priority and support be given to addressing the technical and policy issues related to the introduction of Internationalized Domain Names (IDNs); ref. <http://forum.icann.org/lists/biz-tld-agreement/msg00837.html>.

### ***Conclusion***

An ICANN led by the private sector, based on bottom-up participation, collaboration and cooperation with other global stakeholders and that draws on the advice, participation and support of governments through their advisory role in the Government Advisory Committee (GAC) continues to be the best model for ICANN as it transitions to full private sector management.

We believe that the future arrangement for ICANN must ensure that there is no reduction but an expansion of roles for the participation of civil society and industry players. This will ensure that future governance will be efficient and responsive to

societal needs and technological changes, while ensuring at the same time that governments will continue to play an advisory and consultative role.

Therefore, WITSA supports further evolution toward a transition of the DNS management to ICANN as a private sector body, advised, supported, and with participation by governments.

Achieving an ICANN that is a trusted, transparent, and accountable party responsible for the technical management and coordination of the unique indicators of the Internet remains a high priority to our members.

WITSA supports ICANN's continued narrow technical mission and core values and we are fully committed to continuing private sector leadership as embodied in the white paper that led to ICANN's creation.

ICANN has created a President's Advisory Committee on Strategy to examine strategic futures for ICANN, in a post MOU world. WITSA applauds ICANN undertaking consideration of options that advance broad internationalization and enhanced global acceptance.

WITSA further recommends that ICANN develop and publish a defined work plan and timeline to achieve the continued goal of the transition to full private sector management.

## WITSA Statements

- WITSA Statement on Objectives for ICANN Continued Evolution, October 2006.
- WITSA Statement on Recent Developments within the Internet Corporation for Assigned Names and Numbers (ICANN); February 2004 [[DOC](#); [PDF](#)]
- WITSA Statement on the Internet and the International Telecommunications Union, Oct. 2003 [[MS Word](#); [PDF](#)]
- WITSA Letter Supports ICANN: See WITSA's April 9, 2002 [letter](#) to ICANN President Stuart Lynn regarding the Internet technical management body's "Case for Reform," outlining key challenges for ICANN and suggesting possible solutions.
- [Statement of Support for the Internet Corporation for Assigned Names and Numbers \(ICANN\)](#) November 2000. See also [press release](#)

# VI. INTERNATIONAL TRADE NEGOTIATIONS AND ICT PRODUCTS AND SERVICES



WORLD TRADE ORGANIZATION  
ORGANISATION MONDIALE DU COMMERCE  
ORGANIZACIÓN MUNDIAL DEL COMERCIO

WITSA recognizes the World Trade Organization ([WTO](#)) as the international body dealing with the rules of trade between nations and its objectives in creating an open trading system free of barriers. WTO agreements provide the legal ground-rules for international commerce and for trade policy. These multilateral agreements have three main objectives: to help trade flow as freely as possible, to achieve further liberalization gradually through negotiation, and to set up an impartial means of settling disputes. A number of simple, fundamental principles run throughout all the WTO agreements: non-discrimination ("most-favored-nation" treatment and "national" treatment), freer trade, predictable policies, and encouraging fair competition. With stability and predictability, the multilateral trading system should encourage trade and investment flows, create jobs, and provide consumers the benefits of competition - expanded choice and lower prices.

WTO Director-General Pascal Lamy, in his report on the Doha Round to the General Council on October 9, 2007, said "we have regained a good level of momentum in our work, and the challenge now is to accelerate it in the days and weeks ahead, so that the necessary compromises can be found." He warned that "now more than ever, time is running against us." Let me reiterate that the only possible path to an ambitious, balanced and development-oriented outcome to the Round is not only to establish full modalities in Agriculture and NAMA, which are needed to start scheduling, but also to make commensurate progress in other areas of the negotiations in line with the full Doha mandates, the July 2004 Decision and the Hong Kong Ministerial Declaration.

Ministers need to put aside past differences and entrenched positions in favor of achieving progress for the benefit of all nations. WITSA supports an aggressive agenda aimed at bringing a successful conclusion to the Round in as short a time as possible. Continued brinkmanship is counter-productive and prevents progress in achieving positive results in bringing real improvement to the lives of many.

## ◆Computer and Related Services Commitments

The backbone of ICT services commitments falls into the category of Computer and Related Services. The Figure below lists the applicable W/120 codes along with the corresponding United Nations Provisional Central Product Classification (CPC) codes as identified by the UN Statistics Division. Although there was no requirement to do so, most countries used one or the other in making their commitments in the Uruguay Round.

**Computer and Related Services Codes**

<b>W/120 Code</b>	<b>W/120 Description</b>	<b>Provisional CPC Code</b>
<i>1.B.</i>	<i>Computer and Related Services</i>	84
1.B.a.	Consultancy services related to the installation of computer hardware	841
1.B.b.	Software implementation services	842
1.B.c.	Data processing services	843
1.B.d.	Data base services	844
1.B.e.	Other	845+849

While not specifically Computer and Related Services, other services such as CPC 865 and 866 (Management Consultancy) are closely related. Thus, one should consider that this discussion is also applicable to them.

IT services, as listed above form the keystone of the ICT industry. Opening markets for these services benefits not only companies directly engaged in these services, but also those engaged in other segments of the industry. Expanding business in these areas provides additional business for hardware companies because new applications generally require additional hardware to operate. Expanding applications also require additional telecommunications capacity and infrastructure. Thus, by expanding commitments in this area, a range of industry sectors benefit.

Generally many countries made commitments in these services in the Uruguay Round. There were a number of key countries, however, that made either no commitments or only partial commitments.

WITSA feels that full market access and national treatment in all Computer and Related Services is essential. This means achieving full commitments for countries that currently have no commitments as well as for those that have only partial commitments.

## **Internet Related Services**

The previous section considered the improvement of existing commitments from the Uruguay Round and accessions since its conclusion. This section will examine the treatment of services that have evolved from services that were commonplace at the time of the conclusion of the Uruguay Round. For example, the Internet, which is ubiquitous today, was in its infancy when the Uruguay Round concluded. Many of the services that have evolved and are being delivered via the Internet could simply have not been provided in the same manner prior to its inception.

The Internet represents the latest stage in the continuing evolution of computing. Starting with mainframe computing that filled large, centralized data centers with computer hardware and support personnel, the computer age has evolved through mini-computers, desktop personal computing, and client-server computing. Continual improvements in the speed and power of computers and networks have enabled these new models of computing and made possible greatly enhanced software applications. But while these models of computing have evolved, their fundamental purpose has remained the same: facilitating the processing and storing of information.

Like the underlying computer technology, computer services have also evolved and improved to take advantage of advances in technology. The Internet is the latest implementation of these services, providing a convenient way to package and deliver them so that users can share information and applications easily and cost-effectively on a global basis. Over time, data base storage and online retrieval systems evolved into a number of internet-based services. This evolution has been made possible because of advances in the power and speed of computer processors, the capacity of information storage devices, and the speed and flexibility of networking. What we call the Internet "revolution" is in fact the result of applying these highly evolved computer and networking technologies in different ways.

The Internet has made sophisticated information and services previously available only to large corporations available to small businesses and individuals in every nation. The advanced capabilities of today's information technology tools have made Internet-based computer services very powerful and flexible. Although the current generation of computer services represents the same spectrum of services large businesses have used for years, the Internet is allowing the benefits of these services to become more visible to individuals around the world.

Some examples follow that illustrate the evolution of traditional services in the Computer and Related Services Sector into the services we are familiar with today. In many instances, as will be shown, there is a one-to-one correlation to the traditional services. In other instances, the new service is a combination of traditional services.

### **Application Hosting**

Traditionally, if a company wanted to outsource, for example, its customer data base operations, it would hire an outside expert in customer database software, and that expert would set up the necessary computer systems to track customer information and make it available to members of the company's sales force. The expert companies would set-up the necessary hardware and software, and also provide

support and maintenance of the system. The services being provided were clearly consultancy, software, database and data processing.

Now, over the Internet, Application Service Providers (ASPs) allow the same kinds of functions to be provided online through *Application Hosting*. Like an outsourcing expert, the ASP will typically provide a software application and accompanying support, but instead of physically setting up a customized software system specifically for the company, it will provide access to a standard application through an Internet browser. The ASP model is more efficient for many types of operations and is often a much less costly method for providing computer and related services. The ASP model also makes it possible for businesses and individuals in remote areas and developing countries to access technology that would be prohibitively expensive or physically impractical under an outsourcing model.

Application hosting services could be classified under a combination of data processing services, data base services and software implementation services under the existing W/120 classification system.

### **Electronic Procurement Hosting**

There have been a number of different systems for businesses to exchange information over private (leased line) networks. Procurement systems, for example, have allowed suppliers to bid on jobs from governments and businesses. These services were previously part of software, data processing and database.

Recently, Internet-based *electronic procurement hosting* services allow posting, accepting and pricing of trade opportunities when the underlying supply and distribution services are permitted across borders. These marketplaces have begun to create new opportunities for small businesses in developing countries and in the developed world to access markets that were previously closed due to the impossibility of obtaining access to information regarding sales opportunities. Producers benefit as well, because they have easy access to a virtual shopping mall and can compare the quality and price of goods from suppliers all over the world.

Electronic procurement hosting could be classified under data processing services and data base services.

### **Web Site Hosting Services**

In the past, when a corporation wanted to display and distribute information, they created either pre-determined or customized reports and then distributed that information to recipients electronically, by mail or by other means. Today, the Internet provides another means of storing and displaying information. The information is displayed on web sites and the service of storing and displaying it is known as *web hosting*. The service that could encompass web hosting is data base services under the existing W/120 classification system.

The examples above demonstrate the underlying point that Computer and Related Services today have simply evolved from and are basically the same as the Computer and Related Services that were prevalent at the conclusion of the Uruguay Round. The Internet has improved our ability to deliver a number of services, and

new names have been developed for some services, but fundamentally they are the same services. The Figure below shows the correlation between the services discussed above and the corresponding services negotiated in the Uruguay Round.

### Correlation of Selected Internet Services to Provisional CPC Codes

IT Internet-Based Service Examples	Provisional CPC Codes					
	841	842	843	844	845	849
Application hosting		X	X	X		
E-procurement hosting			X	X		
Web hosting				X		

Since these services are either the same services as previously negotiated, or combinations of these services, WITSA believes that Internet related services are covered in current agreements. In order to indicate this and to preclude future questions or disputes, WITSA proposes that Computer and Related Services be scheduled at the Provisional CPC, 2-digit level (84).

#### ◆Electronic Commerce

WITSA maintains that electronic commerce does not constitute a sector in itself. Rather, it is simply a means of delivering services electronically that had previously been delivered by other means. WITSA continues to hold that position and urges all countries to resist any efforts to create a sector designated "electronic commerce".

On the other hand, electronic commerce does represent significant opportunities for global business. There is a growing market in Internet commerce, and it is important that the market remains open for all businesses.

Electronic commerce also depends on the ability to access communications networks for the provision of services. WITSA continues to support positions to ensure cost-based, non-discriminatory access to basic telecommunications networks and services, including leased lines and other communications platforms. Such access remains important to the conduct of electronic commerce. Further, stronger protections are necessary to prevent dominant operators from abusing their positions either directly or through downstream affiliates.

Similarly, liberalization of other services needed to initiate and complete an electronic commerce transaction is also important. These areas include advertising, on-line payment, and distribution including express delivery services. Along these same lines, it is important that trade liberalizing commitments be secured in digitally downloadable products such as entertainment, news, publishing, etc. Notwithstanding theoretical debates about whether such product is a good or a service, trade liberalization should ensure maximum market access and national treatment.

It is also important to understand that electronic commerce implies much more than simply selling merchandise electronically. Many services that we are familiar with today can also be provided electronically. Legal services, architectural services,



entertainment services including movies and music, health services, educational services, financial services and engineering services, to name a few, can all be delivered across borders electronically. To do so, however, countries must make Mode 1 and 2 commitments for all of these sectors and others that have the potential of electronic delivery.

#### **◆Trade Treatment of Software**

A vast array of business models has evolved since the conclusion of the Uruguay Round, including the online delivery of software and other digital products previously delivered exclusively on a physical medium. These developments have brought important benefits for consumers, industry and the global economy, and represent a natural evolution in the ability to distribute products. The online delivery of software increases productivity across all sectors of the economy by eliminating many inefficiencies associated with more traditional, physical means of distribution. It also creates additional opportunities for competition and allows companies to offer greater choices for consumers.

To realize these benefits, however, it is critical that software delivered online enjoy the same trade treatment that WTO members currently extend to software when delivered on a physical medium. Software delivered on a physical medium is subject to the trade rules that apply to goods -- i.e., full market access, national treatment, MFN protections and commitments under the Agreement on Technical Barriers to Trade and the Agreement on Government Procurement.

This is not to suggest that electronically-delivered software must be classified as a good in order to retain existing trade benefits, or that in lieu of a goods classification, software must be treated as a service. Our position is that software downloads should be treated no less favorably than software imports, not that they be treated "as" software imports.

The classification debate should not be allowed to jeopardize the existing liberal trading environment for software, merely because the method of distribution has changed. We therefore believe it is in the interests of all WTO members to ensure that the existing trade benefits and trade protections for software extend to the on-line world, as an essential element of the Doha Development Agenda, and as a package with strong liberalization of Computer and Related Services. WTO Members should resist vigorously any proposal that would lead to the creation of trade barriers for software delivered online and ensure such software receives treatment no less favorable than these products enjoy when they are delivered on a physical medium.

#### **◆Recommendations**

WITSA recommends all countries commit to making the Hong Kong Ministerial meeting a success by putting aside past differences and committing to actively supporting the Doha Round negotiations. Further, WITSA recommends an aggressive schedule to concluding the Round so that its benefits can be made available as soon as possible.

In the ICT area, WITSA recommends full commitments for Computer and Related Services at the 2-digit level, and substantive commitments in other sectors to benefit

the growth of electronic commerce. In particular, we continue to support the following positions:

- ❑ **Computer and Related Services:** Opening markets in Computer and Related Services benefits not only companies directly engaged in these services, but also those engaged in other segments of the industry. A number of key countries have made no commitments or only partial commitments in the Uruguay Round.

All countries should:

- a) offer full market access and national treatment commitments for computer and related services on a technology neutral basis;
  - b) apply these commitments to electronically delivered goods and services; and
  - c) apply liberalization for the full range of services that are essential for initiating and completing e-commerce transactions, to also include - advertising services, online payment services, content-based services and express delivery services.
- ❑ **Evolved Services:** Many Computer and Related Services today have evolved from and are essentially the same that were prevalent at the conclusion of the Uruguay Round. WITSA supports countries making clear in their offers that Uruguay Round commitments for Computer and Related Services apply to evolved Internet services.
  - ❑ **Telecommunications Services:** Ensure non-discriminatory access to and use of public telecom networks and services; achieve cost-based access to leased lines; and promote binding rules on technology neutrality throughout the telecommunications sector, including in mobile telecommunications.
  - ❑ **E-Commerce:** Governments must provide broad national treatment and most favored nation (MFN) commitments, so products sold electronically receive fair and non-discriminatory treatment; i.e., treatment no less favorable than their physical equivalents, where such equivalents are relevant.
  - ❑ **Cross-border Services:** Governments should recognize that the development of e-commerce depends on cross-border transactions in all industry sectors and must liberalize cross-border services during the negotiations.
  - ❑ **Government Procurement:** Governments should offer government procurement commitments that apply to all WTO member countries, and that require open, competitive, transparent, non-discriminatory and technology neutral procurement of goods and services across national and sub-national entities.
  - ❑ **Intellectual Property:** Governments must achieve effective implementation and enforcement of the protection standards currently in the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).
  - ❑ **Tariffs:** WTO members should seek to eliminate tariffs on electronics; become signatories to the WTO Information Technology Agreement (ITA); and promote zero duties for entire chapters of the Harmonized Tariff System relating to ICT

(e.g., Chapters 84, 87 and 90), while allowing specific exceptions with or phased-in implementation for specific products.

#### WITSA Statements

- Fate of the Doha Round [[PPT](#)] Presentation by Ms. Junko Kawauchi of Japan Information Technology Services Industry Association ([JISA](#)), at the May 18, 2007, WITSA Public Policy meeting in Kuala Lumpur, Malaysia.
- WITSA's May 2, 2006 Letter to Trade Ministers in support for the goals of the Doha Round of the WTO trade talks.
- WITSA Statement on the Upcoming Hong Kong Ministerial October 2005 [[DOC](#); [PDF](#)]
- WTO: "Successful Conclusion of the Doha Development Round Is Critically Important" [[PPT](#)] Presentation by Joe Tasker, General Counsel, Information Technology Association of America ([ITAA](#)), at the May 5, 2005, WITSA Public Policy Committee meeting in Austin, Texas.
- WITSA Recommendations for WTO Multilateral Trade Negotiations Dec. 2003 [[DOC](#); [PDF](#)]
- WITSA Report: International Trade Negotiations & ICT Products and Services; Sept. 2003 [[PDF](#)]
- Background Paper on the World Trade Organization's Negotiations and Issues Regarding Information and Communications Technology (ICT) December 2002 [[PDF](#)]
- [Statement on Negotiating Information and Communication Technology Services](#) May 2002
- [Statement on the Third WTO Ministerial Conference](#) September 1999
- [WTO and Electronic Commerce](#) September 1999
- [WTO Negotiations on Transparency in Government Procurement](#). 1999
- [A Discussion Paper by the Alliance for Global Business on Trade-Related Aspects of Electronic Commerce](#), April 1999. See also [press release](#)
- [WTO Financial Services Negotiations](#), September 15, 1997
- [Resolution to Support Telecommunications Commitments by Countries Seeking Accession to the World Trade Organization \(WTO\)](#) September 9, 1997
- [Statement on the World Trade Organization Basic Telecommunications Services Negotiations](#) February 1997

# VII. SEIZING DIGITAL OPPORTUNITIES FOR ECONOMIC DEVELOPMENT



Business has been working hard through independent projects to provide assistance to disadvantaged economic groups, localities, regions or countries, aimed at transforming the digital divide into a **digital opportunity**. Almost any sizeable company today has taken up some local or regional responsibility in bridging the digital divide.

Developing countries can reap these benefits resulting from the technological innovations that have led to the commercialization of the Internet -- they can leapfrog technologies and become active participants in the online global economy. However, these assistance programs will become a digital opportunity only if governments adopt a policy framework that ensures that access to digital information and communication networks is a viable option for the citizenry at large.

Currently, public policy discussions which are carried out under the catch word of "digital divide" seem overly focused on the divide, as a result rather than a risk, and do not stress sufficiently either the opportunity aspect or an understanding of the conditions under which inadequate endowment turns into a *trap*. In order to reduce the risk that discussions on the "digital divide" become a self-fulfilling prophecy, discussion needs to focus on developing greater understanding of how to advance digital opportunities.

## ◆ The World Summit on the Information Society (WSIS) and the Internet Governance Forum (IGF)

The World Information Technology and Services Alliance (WITSA) has supported and participated in preparatory meetings for the World Summit on the Information Society (WSIS) since its inception.

WITSA has issued several Statements in the past representing its views with regard to the Summit. In November 2002, WITSA released its Statement, *Building an Information Society: A Roadmap for the World Summit on the Information Society* that advocated a three-focus approach for WSIS. WITSA proposed that WSIS concentrate on basic education, the underlying telecommunications infrastructure, and applications that benefit society such as e-health and e-education.

In May of 2003, WITSA expanded on this approach in the WITSA Statement on the *World Summit on the Information Society Draft Declaration of Principles and Action Plan*. In this document, WITSA reiterated its belief that governments, in preparation for WSIS, should identify and focus on a set of priority issues that highlight the fundamental building blocks of an information society. Focusing on these priority issues would create a meaningful framework for demonstrable progress toward the long-term sustainability of a truly global information society.

WITSA was satisfied with the final decisions made by the Tunis Summit, in particular those that continued support for the security and stability of the Internet. WITSA was also pleased WSIS delegates called upon the U.N. Secretary General to convene a meeting of an Internet Governance Forum wherein governments, business and other civil society interests, academicians, and researchers can convene to discuss and render recommendations about public policy challenges to the continued evolution, and expansion of the Internet to parts of the world not yet touched by it. In particular, we praise the decision that private sector representatives be able to participate in the proposed Internet Governance Forum (IGF) on an equal basis with governments and other stakeholders.



### **Internet Governance Forum (IGF)**

WITSA continues its involvement in the IGF and believes that all stakeholders should identify and focus on a set of priority issues that highlight the fundamental building blocks of an information society, including the Internet. Focusing on these priority issues will create a meaningful framework for demonstrable progress toward the long-term sustainability of a truly global information society.

The value of the IGF is its open and informative nature, allowing a variety of views to be expressed, and the full range of experience and expertise to be shared so that all can continue to learn more about how to use, grow and expand, and protect the key communications and information resource that the Internet has become. As such,

the IGF should remain consistent with its mandate for facilitating a dialogue and not engaging in the negotiation of formal documents.

We also support the importance of the IGF's focus on engagement with developing countries and seek ways to encourage participants from those countries to participate in the IGF process and annual forum. Such participation is supported by continuing to ensure timely and frequent publication of useful and informative materials on the IGF website as well as participation in the annual forums.

The second IGF meeting to be held in Rio de Janeiro in November 2007 will include the four themes from the first meeting in Athens – Access, Diversity, Openness, and Security -- as well as a discussion of critical Internet resources and emerging issues.

On August 20, 2007, the mandate of the Advisory Group was renewed. The UN Secretary-General's Special Adviser for Internet Governance Nitin Desai, and Hadil da Rocha Vianna, Director for Scientific and Technological Affairs in Brazil's Ministry of External Relations, representing the Host Country, were appointed as co-chairs of the Advisory Group. The 47 Advisory Group members serve in their personal capacity. They have been chosen from governments, the private sector and civil society, including the academic and technical communities, from all regions.

In recent years, WITSA has expressed its view that the global business community is committed to speeding the development of a truly worldwide information society that can foster economic growth and social well-being for all. It recognizes that capabilities based on information and communications technologies (ICTs) and the Internet can serve as vital tools for sustainable economic development, knowledge sharing, societal interaction and freedom of expression, particularly in the world's least developed countries. WITSA suggested a ten-point plan for achieving those goals, and feels such a proposal is still valid to the discussion of the first IGF meeting with its main themes of openness, security, diversity, and access.

1. Assemble and provide the fundamental building blocks of the Information Society:
  - reliable access to secure information and communications networks and services;
  - sound and broadly available education and training systems to build human capacities; and
  - appropriate integration of ICTs in the provision by governments of essential citizen services, such as health care and other systems, to expand capabilities, reduce costs, and improve productivity and the quality of life for people.
2. Establish national legal systems that are predictable, transparent, clear to everyone and that respect the principle of non-discrimination.
3. Ensure that public policies and regulations governing national systems promote competition as a preferred means of governing markets for ICT services and products.
4. Create a legal, policy and regulatory environment that stimulates the needed private investment in ICTs including:

- strong intellectual property protection consistent with existing international agreements;
  - trade liberalization;
  - technology neutrality with respect to user choice; and
  - respect for negotiation and implementation of commercial, value-based agreements between businesses.
5. Make sure that policymaking is based on effective communication between governments and business at national, regional and international levels.
  6. Remove barriers that hinder innovation, entrepreneurship and the creation of new businesses, including small and medium size enterprises.
  7. Use public-private partnerships to create educational and training facilities, and access points, capable of developing the skills people need to participate in the Information Society. Information and communications technologies should be included in the curriculum at all levels of educational systems and as part of worker continuing education and national education strategies.
  8. Expand programs to encourage businesses of all sizes to integrate ICTs in their operations and thereby improve the performance and the productivity of their employees.
  9. Combat Cybercrime with a global culture of information and communications network security and an appropriate legal framework.
  10. Work to incorporate ICTs into national and international social and economic development strategies that promote an Information Society for all.

#### ◆ICT for Economic Development

WITSA still believes that attention is still needed on:

- The role of government in introducing competition and providing a favorable regulatory environment to enable the development and deployment of an underlying Information and Communications Technology (ICT) infrastructure.
- Education, both basic and in the use of information technology products and applications.
- Benefits of applications to improve the lives of citizens, specifically e-government, e-health and e-learning.

**Development/Deployment of the Infrastructure:** An underlying ICT infrastructure is essential to benefiting from the information society. Without such an infrastructure, including access devices, it will be impossible to connect to the Internet from which many of the benefits of the information society come. Thus, the WSIS should focus first on the role of governments in introducing competition and providing a favorable regulatory environment to create the framework necessary to ensure such deployment/development by the private sector.

**Education:** Education is necessary in order to obtain sustainable benefit from the information society. Without the requisite education, including basic tools such as literacy and more targeted tools such as computer literacy, the citizenry will not be able to utilize the deployed infrastructure and equipment necessary to access the Internet.

**Benefits of Applications:** Applications are the tools that allow citizens to derive the benefit from the information infrastructure. ICT applications can play an important role in advancing general economic development and living standards. For example, the UNICT Task Force is currently supporting an approach that emphasizes the importance of ICT in development. In fact, Kofi Annan, the UN Secretary General, has stated his intentions to exploit ICTs to meet the Millennium Development Goals. In this regard, we recognize three primary uses of ICT:

- e-Learning: closely linked to the education section above, this recognizes the potential for ICT to advance/enhance education.
- e-Health: ICT can greatly enhance health care delivery systems by connecting health care professionals around the world, including online networks of expertise, and access to information about health issues confronting countries.
- e-Government: WSIS could also serve as an important forum to address e-Government. Such a focus could ensure that governments better serve their constituencies. Moreover, e-Government initiatives will enhance participation in the information society and enable private sector development in ICT.

The private sector is the primary investor in and innovator of infrastructure, products and services. Effective markets are therefore essential to ensuring a sustainable information society. The priorities set forth above support the creation of markets by fostering a connected, educated and healthy population that can increasingly become engaged in the information society. Such engagement begins through the use of ICT for development and then builds upon itself as development proceeds. WITSA believes that public/private partnerships can often play an important role in facilitating these applications.

The global business community is committed to speeding the development of a truly worldwide information society that can foster economic growth and social well-being for all. It recognizes that capabilities based on information and communications technologies (ICTs) can serve as vital tools for sustainable economic development, knowledge sharing, societal interaction and freedom of expression, particularly in the world's least developed countries. Only if business and governments work together with other partners can people everywhere be assured of access to ICT tools and the knowledge and empowerment they deliver.

WITSA members are committed to building upon existing public-private ICT partnerships and to the creation of enabling environments. This will stimulate private investment in the infrastructure necessary to support the sustainable development of the Information Society. Business can thus fulfill its role through a comprehensive approach that incorporates both short-term and long-term strategies.

#### ◆WITSA and Capacity Building



WITSA participated in a joint program designed to develop sustainable ICT associations in developing countries. The program, which has designated more than \$1 million over three years, provides educational experiences and opportunities to attend global meetings, policy workshops and agenda setting initiatives to executives of information technology associations in developing countries throughout Africa, the Middle East, and Asia. The program also provides training in association organization and management, in developing effective association programs, in public policy development and other specific topics of general interest to the industry.

To date the program has resulted in increased outreach to IT groups in the developing world. Eleven countries are actively participating in the program. Five new ICT associations have been formed in Cambodia, Rwanda, Senegal, Tanzania and Uganda. In addition, WITSA was instrumental in the creation of an Arab regional ICT association, and an African federation of ICT associations.

Several workshops have been developed as a part of the program. One is designed for countries where there is no ICT association in existence, or where the industry associations are fragmented and ineffective. It explores the need for developing a broad-based industry association and outlines the fundamentals of an effective organization.

Another workshop is for associations that are already in place, or as the second phase for countries where no previous association existed. It is effectively a strategic planning workshop that results in a set of prioritized activities to create an effective, sustainable organization.

In early 2005, a marketing workshop specifically for small and medium sized companies was developed and conducted initially with a number of incubator companies that were part of the Casablanca Technopark in Morocco. Since then the workshop has also been conducted in Nepal and Sri Lanka.

A very successful activity of the alliance has been its workforce survey projects. Piloted initially in the Philippines, the project assists the associations to conduct a survey of the current ICT workforce skills and those that are expected to be needed in the future. Working with the government and education communities in their country, the association is able to help plan for the future and make recommendations to improve workforce skills.

As a project under the IT Mentors Alliance Program (ITMA), WITSA developed two toolkits to assist information and communication technology (ICT) associations (a) develop a vibrant advocacy program to promote policies that benefit the ICT industry and that sector of the economy in their countries, and (b) building a robust information security program to promote policies that benefit the ICT sector nationally. While most applicable for associations that either have no advocacy program, or one in its formative stages, the toolkits employ methodologies and techniques that can be employed in even the most advanced programs.

Advocacy: Making Voices Heard - A Toolkit for Associations  
[http://www.witsa.org/ITMA/Advocacy\\_Toolkit\\_Final.doc](http://www.witsa.org/ITMA/Advocacy_Toolkit_Final.doc)

Information Security: Building a Sustainable Program - A Toolkit for Associations  
[http://www.witsa.org/ITMA/Final\\_InfoSec\\_Toolkit.doc](http://www.witsa.org/ITMA/Final_InfoSec_Toolkit.doc)

## WITSA Statements

- Internet Governance - Towards Rio de Janeiro [[PPT](#)] Presentation by Mr. Waudo Siganga, Chairman of the Computer Society of Kenya ([CSK](#)) and WITSA Vice Chairman for Africa, at the May 18, 2007, WITSA Public Policy meeting in Kuala Lumpur, Malaysia.
- WITSA [statement](#), which has been submitted as a contribution to the February 13, 2007 Internet Governance Forum stock-taking [session](#) in Geneva, Switzerland. The statement provides specific advice related to the November 12-15 IGF meeting in Rio de Janeiro.
- WITSA Statement on the First Internet Governance Forum in Athens, Greece, November 2006
- WITSA Statement in Preparation for the World Summit on the Information Society Phase II - Tunis, November 2005 [[DOC](#); [PDF](#)]
- WITSA Statement on the World Summit on the Information Society (WSIS) Nov. 2003 [[DOC](#); [PDF](#)]
- WITSA Statement on the World Summit on the Information Society Draft Declaration of Principles and Action Plan May 2003 [[MS Word](#); [PDF](#)]
- Information Society: A Roadmap for the World Summit on the Information Society November 2002 [[PDF](#), [HTML](#)]
- [Seizing Digital Opportunities: A Business Perspective](#). Joint statement prepared by the Alliance for Global Business (AGB) on the occasion of the Business-Government Forum, and Emerging Market Forum on Electronic Commerce. Dubai, 15-17 January, 2001 See also AGB press release: [Business-Government Forum on Electronic Commerce: Maximizing the Digital Opportunity](#). Dubai, January 14, 2001.