

GTW ASSOCIATES



**Service Standardization in the United States  
Overview of current activities and issues**

**As component of the project**

**Service-Standards for Global Markets**

**Supported by the German Federal Ministry for Education and  
Research**

***Standards are important competitive tools that can define,  
limit and even create markets. The shift from national to global  
markets has made global standards strategy an essential  
component of overall national competitive and individual  
business strategy***

**George T. Willingmyre, P.E.  
March 31, 2002**

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## Service Standardization in the United States Overview of current activities and issues

### Executive Summary

The importance of standards for trade in services is being increasingly recognized - especially since the scope of GATT has been extended to include this subject. International activities have been taken up primarily by organizations in the U.S., Asia and Europe.

A project entitled **Service-Standards for Global Markets** is underway supported by the German Federal Ministry for Education and Research. Further information on the project is available at <http://www.service-standards.com/>. The main objective of the project is a long-term improvement participation in national and international services standardization. This includes raising the awareness of all parties involved in order to stimulate their interest in international standards activities. The aim is to build up conditions which enable a free and fair trade, bring forward the competition, support economic growth and contribute to the opening of markets.

Overall project management is in the hands of DIN German Institute for Standardization. The GTW assignment as subcontractor to DIN is to conduct research in the US and prepare this report **Service Standardization in the United States Overview of current activities and issues**. This report is publicly available also on the GTW project web site <http://www.gtwassociates.com/alerts/servicesproject.html>

The United States is the world's largest producer and exporter of services. Encompassing all economic activity other than agriculture, manufacturing, and mining, the service sector is by far the largest component of the U.S. economy, accounting for 79 percent of private sector output. These service sector jobs come from an enormous range of industries, including banking and insurance, travel, entertainment, wholesale and retail trade, legal and other business services, information, telecommunications, healthcare, education, transportation, and energy and environmental services, as well as architecture, construction and engineering services.

DIN requested GTW to address the specific questions below:

- 1) What standards, specifications, regulations etc. exist in the US concerning services in general and more specifically:

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- the specification of services
- the (quality)assessment of services
- the classification of services
- the terminology around services
- the processes around services (buying and selling, business processes, providing services, supply chain, logistics, etc.)
- customer interaction
- consumer protection

2) What standards, specifications, regulations etc. exist in the US in the following service branches?

- e-commerce, e-procurement
- infrastructure services, engineering services, technical services
- public services, e-government
- education and training
- financial services

3) How many and which organizations, associations, institutions, companies etc. are dealing with service standardization in the US?

4) How many working groups are dealing with service standardization in the US, what subjects do they treat, and who are the members?

5) Who is responsible for the co-ordination of standardisation activities?

6) What specific problems and needs do the service industry, the standardization bodies and active organisations face in the standardization of services in the US?

GTW began the research to these questions first through queries to four comprehensive electronic data bases on standards activities in the United States and searching for organizations, committees within organizations and specific standards using the terms “service,” “process,” “training,” “quality,” to identify organizations that may deal with service standardization. Many of these organizations identified developed standards in one of more of the service sectors of interest. This was followed by close examination of the marketplace and relevant industry and governmental organizations for each sector. The GTW research effort revealed that there are no over arching “simple” single answers to these questions in the United States. The main results of the GTW effort to address these questions are found in seven comprehensive tables of data, each of which alone could be a point of departure for extensive further research on the questions.

Chapter One provides background and context for the study and helpful statistical economic data on services in the United States.

Chapter Two **Table 1 US Public and Private Sector Organizations with a horizontal Cross industry segment perspective on US Services Business (in contrast to vertical services industry market segmentation)** identifies the most relevant laws, regulations and public and private sector organizations which apply to services generally in the United States. Seventeen organizations are listed, In many cases these are the same laws which govern the production and sales of products in the US. Noteworthy here is a lack of significant activity that could be called truly “horizontal” particularly to “services” industries in a generalized context.

Chapter Three **Tables Two through Six** identify further organizations in the several vertical service industry sectors of interest:

**Table Two US Public and Private Sector standards, specifications and regulations in the E-Commerce/E-procurement services sector** 34 organizations are listed

**Table Three US Public and Private Sector standards, specifications and regulations in the Infrastructure, engineering and technical services sector** Twenty Five organizations are listed.

**Table Four US Public and Private Sector standards, specifications and regulations in the Public Services, Egovernment services sector** Fifteen organizations are listed.

**Table Five US Public and Private Sector standards, specifications and regulations in the Education and Training services sector** Eighteen organizations are listed.

**Table Six US Public and Private Sector standards, specifications and regulations in the Financial services sector** Twenty Six organizations are listed.

Chapter Four **Table Seven Selected Inventory of Organizations Dealing with Service Standardization in the United States** identifies further organizations dealing with service standardization generally and combines all the data in the previous tables in one consolidated form. One hundred and ten organizations are listed.

Chapter Five on Coordination identifies the ANSI Consumer Interest Council (CIC) as the **one if not the only group in the US taking a horizontal cross sectional approach to the strategic issues of international services standards.** The ANSI CIC is the US link to the **ISO COPOLCO** (Consumer Policy Committee of the International Organization for Standardization). The CIC consists of knowledgeable representatives from consumer organizations, producers, retailers, distributors, industry councils, and government. COPOLCO provides the international forum for

the exchange of information and experience on consumer participation on current work within ISO and IEC including standardization of services.

Chapter Six presents GTW Associates **best efforts to identify horizontal issues and problems to the US services sector and standards developing organizations.** Problems confronting the US services industries and the standardization bodies in this sector were not easy to “generalize.” Much like the challenge in finding “horizontal” characterizations of the specification of services generally where there is far more detail from the “vertical” service industry point of view, here it was similarly difficult to identify and characterize “horizontal” cross cutting problems when the problems of concern were more often more specific to a particular service industry sector. Nevertheless, GTW identified and described the following six problems:

***The Decentralized Sector-specific US approach to standards is both a Strength and Weakness. Distributes activity close to experts and local conditions...decentralization by topic and by locality presents coordination challenges and multiple solutions, often local rather than national requirements***

***Growing number of cross sectoral standards such as for privacy, dispute settlement, security, corporate ethics and social accountability***

***Response to crises...ENRON case draws public and legislative attention to “failings” of “Financial Accounting Standards Board” Comparison of FASB to relevant international criteria would have highlighted conflict of interest***

***Standards as Impediments to Trade in Services... relationship of the GATS to the ATBT and views of US service industry sectors to the barriers they see in global commerce in services***

***Effective representation of consumer interests***

***Role of cross vertical-sector service industry standards paradigm***

# Chapter One

## Background, Focus and Approach to the Assignment

### Background

The importance of standards for trade in services is being increasingly recognized - especially since the scope of GATT has been extended to include this subject. International activities have been taken up primarily by organizations in the U.S., Asia and Europe

A project entitled **Service-Standards for Global Markets** is underway supported by the German Federal Ministry for Education and Research. Further information on the project is available at <http://www.service-standards.com/> The main objective of the project is a long-term improvement participation in national and international services standardization. This includes raising the awareness of all parties involved in order to stimulate their interest in international standards activities. The aim is to build up conditions which enable a free and fair trade, bring forward the competition, support economic growth and contribute to the opening of markets.

Overall project management is in the hands of DIN German Institute for Standardization. DIN ensures that the project results are implemented on a national and international level and provides the necessary infrastructure. In recent years, DIN has, in addition to working in the traditional technical sectors of standardization, become increasingly involved in the service industry sector

The GTW assignment as subcontractor to DIN is to conduct research in the US and prepare this report **Service Standardization in the United States Overview of current activities and issues**

### Focus

DIN requested to GTW to address the specific questions below:

1) What standards, specifications, regulations etc. exist in the US concerning services in general and more specifically:

- the specification of services
- the (quality)assessment of services
- the classification of services
- the terminology around services
- the processes around services (buying and selling, business processes, providing services, supply chain, logistics, etc.)
- customer interaction
- consumer protection

2) What standards, specifications, regulations etc. exist in the US in the following service branches?

- e-commerce, e-procurement
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3) How many and which organizations, associations, institutions, companies etc. are dealing with service standardization in the US?

4) How many working groups are dealing with service standardization in the US, what subjects do they treat, and who are the members?

5) Who is responsible for the co-ordination of standardisation activities?

6) What specific problems and needs do the service industry, the standardization bodies and active organisations face in the standardization of services in the US?

## **Approach**

GTW first reviewed work completed by DIN and others so as to build on, rather than duplicate previous efforts.

GTW leveraged an extensive network of US government; association; standards organization; academic and industry contacts to collect the requested information. The American National Standards Institute (ANSI) cooperated with a November 16, 2001 press release widely circulated to interested parties in the US. See at <http://www.ansi.org/public/news/2001nov/DIN-services.html>. GTW prepared a dedicated web page to the project containing background information and where interim and final results were posted publicly. See at <http://www.gtwassociates.com/alerts/servicesproject.html>

The data collection process included person to person interviews; phone conversations and web searches. GTW searched several national databases on "Standards Activities in the United States." Presentations on the project and interim findings were made to the ANSI Company Member Council (info at [http://www.ansi.org/rooms/room\\_8/](http://www.ansi.org/rooms/room_8/) ) meeting on January 28, 2002 [GTW Presentation "Services Standardization: Strategic Implications for Global Markets" to the ANSI Company Member Council Executive Committee January 28, 2002](http://www.gtwassociates.com/answers/services.ppt) at <http://www.gtwassociates.com/answers/services.ppt> and to the ANSI Consumer Interest Council (info at [http://www.ansi.org/rooms/room\\_7/](http://www.ansi.org/rooms/room_7/) ) meeting of February 6, 2002.

Over the course of the project GTW assembled a list of "interested" parties. These included representatives of government; industry, associations, companies and

consumer interest interests. GTW publicly posted “Interim Findings” to the to the project web site <http://www.gtwassociates.com/alerts/servicesproject.html> on February 25, 2002 and invited public comments from the interested parties and the public to be returned by March 15, 2002. GTW met with DIN project staff on February 25 to present the Interim Findings and collect guidance for the content of the Final Report.

Following the guidance of DIN and incorporating the results of the public review and additional research, GTW completed the FINAL report and posted it to the project web site <http://www.gtwassociates.com/alerts/servicesproject.html> on April 1, 2002.

Further methodology is described in the following chapters.

### **What role do Services play in the US Economy?**

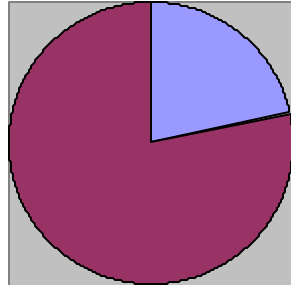
The United States is the world's largest producer and exporter of services. Encompassing all economic activity other than agriculture, manufacturing, and mining, the service sector is by far the largest component of the U.S. economy, accounting for 79 percent of private sector output. These service sector jobs come from an enormous range of industries, including banking and insurance, travel, entertainment, wholesale and retail trade, legal and other business services, information, telecommunications, healthcare, education, transportation, and energy and environmental services, as well as architecture, construction and engineering services

A report of the U.S. International Trade Commission entitled **Recent Trends in U.S. Services 2001** available at [http://www.buyusainfo.net/docs/recent\\_trends\\_in\\_u.s.\\_services\\_2001.pdf](http://www.buyusainfo.net/docs/recent_trends_in_u.s._services_2001.pdf) provides helpful context on services in the United States. The report analyzes trends in United States services for accounting, air transportation, architectural, audiovisual, banking & securities, computer & data processing, construction, education, energy, engineering, environmental, health care, insurance, intangible intellectual property rights, legal, management, maritime, retail services, telecommunications, travel & tourism, and wholesale services.

Selected economic statistics excerpted from this report are portrayed in **Figure One Selected Economic Statistics US Services Sector**. In 1996 when total US cross border trade was \$2.2 Trillion, services accounted for 21% and goods accounted for 79%. Yet within a 1998 Gross Domestic product of \$7.7 Trillion, services accounted for the preponderance of 78% compared to 22% for Goods. In 1998 when total global exports in services was \$1326.8 Billion, The United states lead with a global market share of 20%.

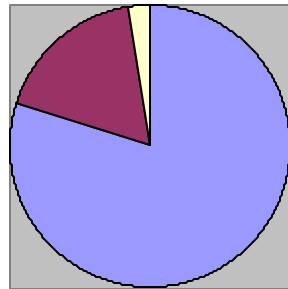
## Figure One

### Selected Economic Statistics US Services Sector



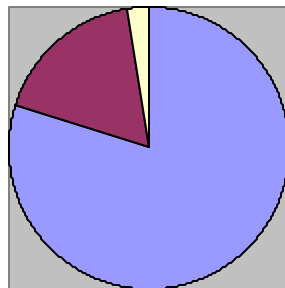
■ Services 21.3%  
■ Goods 78.7%

### US Cross Border Trade By Sector 1999 Total Trade Volume \$2.2 Trillion



■ Services 79.9%  
■ Manufacturing 17.6%  
■ Mining & Agriculture 2.5%

### US Private Sector Gross Domestic Product by Sector 1998 Total Private Sector GDP \$7.7 Trillion



■ Services 79.9%  
■ Manufacturing 17.6%  
■ Mining & Agriculture 2.5%

### World Service Exports by Country, 1998 Total Exports \$1326.8 Billion

Source: International Trade Commission Recent Trends in U.S. Services 2001

[http://www.buyusainfo.net/docs/recent\\_trends\\_in\\_u.s.\\_services\\_2001.pdf](http://www.buyusainfo.net/docs/recent_trends_in_u.s._services_2001.pdf)



## Chapter Two

**What standards, specifications, regulations etc. exist in the US concerning services in general and more specifically:**

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- the (quality) assessment of services
- the classification of services
- the terminology around services
- the processes around services (buying and selling, business processes, providing services, supply chain, logistics, etc.)
- customer interaction
- consumer protection

### Introduction to the Chapter and Table 1

There is no over arching simple single answer to these questions in the United States. **Table 1 US Public and Private Sector Organizations with a horizontal Cross industry segment perspective on US Services Business (in contrast to vertical services industry market segmentation)** identifies the most relevant laws, regulations and public and private sector organizations which apply to services generally in the United States. In many cases these are the same laws which govern the production and sales of products in the US. Chapter 3 identifies further organizations in several vertical service industry sectors and Chapter 4 identifies further organizations dealing with service standardization generally.

**Table 1 US Public and Private Sector Organizations with a horizontal Cross industry segment perspective on US Services Business** contains contact information for organizations playing a major role in the services businesses in the United States. Many of the organizations listed in the Table do not themselves set the standards or regulations applicable to services, yet are the relevant government and private sector entities that would be concerned with such service business matters on a horizontal scale, particularly as they relate to national policy and international trade.

For example the **American Council for Trade in Services (ACTS)** is a trade association with the exclusive purpose of promoting the international business interests of US service providers. The **Association for Services Management International (AFSMI)** is an organization dedicated to furthering the knowledge, understanding, and career development of executives, managers, and professionals in the high-technology services and support industry. The **Coalition of Service Industries. (CSI)** is the leading business organization dedicated to the reduction of barriers to US services exports. The goal of **Sitrends.org** is to provide a clearinghouse for information about the world's service sectors. The **US**

**DOC Office of Service Industries and Finance** works with two Congressionally mandated Industry Sector Advisory Committees (ISAC) --Service Industries (ISAC 13) and **Wholesaling and Retailing (ISAC 17)**-- to ensure industry input in national policy development. The **U.S. International Trade Commission (ITC)** is an independent, nonpartisan, quasi-judicial federal agency that provides trade expertise to both the legislative and executive branches of government. The **Office of the U.S. Trade Representative (USTR)** is responsible for developing and coordinating U.S. international trade, commodity, and direct investment policy, and leading or directing negotiations with other countries on such matters.

**TABLE One**

**US Public and Private Sector Organizations with a horizontal Cross industry segment perspective on US Services Business**

**(in contrast to vertical services industry market segmentation)**

Compiled by [GTW Associates](#) April, 2002

<b>Acronym</b>	<b>Contact Information</b>	<i>Description</i>	<b>Source or web reference</b>
<b>Access Board</b>	<p>The Access Board                      1331 F Street, NW                      Suite 1000                      Washington, DC                      20004-1111</p>	<p>The Access Board is an independent Federal agency devoted to enforcing laws providing for accessibility to goods and services for people with disabilities. It operates with about 30 staff and a governing board of representatives from Federal departments and public members appointed by the President. Several different laws are applicable to operating service businesses in the US::                      Architectural Barriers Act, a law requiring access to facilities designed, built, altered, or leased with Federal funds.                      Rehabilitation Act, which created the Access Board.                      Americans with Disabilities Act, a major civil rights law prohibiting discrimination on the basis of disability in the private and public sectors.                      Telecommunications Act (Section 255), which</p>	<p><a href="http://www.access-board.gov/indexes/aboutindex.htm">http://www.access-board.gov/indexes/aboutindex.htm</a></p>

		<p>requires access to new telecommunications and customer premises equipment where "readily achievable."</p> <p>Rehabilitation Act Amendments which amend section 508 of the Rehabilitation Act to ensure access to electronic and information technology in the Federal sector.</p>	
<b>ACTS</b>	<p>American Council for Trade in Services (ACTS) 1030 15th Street, NW Suite 1030 Washington, DC 20005</p>	<p>ACTS is a nonprofit association incorporated in August 1994 to fill a need, voiced by service industry and government executives, for a single umbrella trade association with the exclusive purpose of promoting the international business interests of US service providers. ACTS is taking a proactive role in trade promotion activities for US services exports.</p>	<p><a href="http://www.acts-talks.com/">http://www.acts-talks.com/</a></p>
<b>ACSI</b>	<p>American Customer Satisfaction Index C/O ASQ 600 North Plankinton Avenue Milwaukee, WI 53203 USA</p>	<p>The American Customer Satisfaction Index (ACSI) is a uniform and independent measure of household consumption experience. ACSI tracks trends in customer satisfaction and provides benchmarking insights of the consumer economy for companies, industry trade associations, and government agencies. The ACSI is produced through a partnership of the University of Michigan Business School, the American Society for Quality (ASQ), and the international consulting firm, CFI Group.</p> <p>The ACSI model is a set of causal equations that link customer expectations, perceived quality, and perceived value to customer satisfaction (ACSI). In turn, satisfaction is linked to consequences as defined by customer complaints and customer loyalty – measured by price tolerance and customer retention. For most companies, repeat customers are major contributors to profit.</p>	<p><a href="http://www.theacsi.org/industry_scores.htm">http://www.theacsi.org/industry_scores.htm</a></p>
<b>AFSMI</b>	<p>Association for Services Management</p>	<p>The Association for Services Management International (AFSMI) is an organization dedicated</p>	<p><a href="http://www.afsmi.org">http://www.afsmi.org</a></p>

	<p>International (AFSMI) 1342 Colonial Blvd., Suite 25 Ft. Myers, Florida, USA 33907</p>	<p>to furthering the knowledge, understanding, and career development of executives, managers, and professionals in the high-technology services and support industry. Goal is to provide leadership and direction that helps our individual and corporate members expand their capabilities to meet the growing complexities and challenges of the industry.</p>	
<p><b>ANSI Accreditation</b></p>	<p>American National Standards Institute (ANSI) Personnel Certifier Accreditation Program ANSI Washington, DC Headquarters 1819 L Street, NW, 6th Fl. Washington, DC, 20036</p>	<p>With the anticipated approval in early 2002 of the proposed ISO/IEC Standard 17024, General Requirements for Bodies Operating Certification Systems of Persons, ANSI will launch its Global Accreditation Program for Personnel Certification Bodies. This new area of accreditation will facilitate mutual recognition of personnel certification programs by providing an internationally recognized framework and evaluation system that operates under the ISO/IEC 17024. In addition, the program will provide increased confidence in the ability of certification bodies to certify that individuals have the necessary knowledge, skills and abilities to perform their work.</p>	<p><a href="http://www.ansi.org/public/news/2001sep/roy_swift.html">http://www.ansi.org/public/news/2001sep/roy_swift.html</a></p> <p>and</p> <p><a href="http://www.ansi.org/public/events/open_forum/Personnel_Cert.html">http://www.ansi.org/public/events/open_forum/Personnel Cert.html</a></p>
<p><b>ANSI CIC</b></p>	<p>American National Standards Institute (ANSI) Consumer Interest Council (CIC) 25 West 43rd Street, 4th Fl. New York, New York, 10036</p>	<p>The ANSI Consumer Interest Council (CIC) facilitates the representation of consumer interests in the voluntary standards process and enhances the effectiveness and credibility of the ANSI Federation. The CIC consists of knowledgeable representatives from consumer organizations, producers, retailers, distributors, industry councils, and government. ANSI CIC is the source for ANSI comments to the ISO Consumer Policy Committee (COPOLCO) work on service sector standardization</p>	<p><a href="http://www.ansi.org/rooms/room_7/">http://www.ansi.org/rooms/room_7/</a></p>
<p><b>CLEAR</b></p>	<p>Council on Licensure, Enforcement and</p>	<p>CLEAR is an association of individuals, agencies and organizations, which comprise the international community of professional and</p>	<p><a href="http://www.clearhq.org/">http://www.clearhq.org/</a></p>

	<p>Regulation 403 Marquis Avenue, Suite 100 Lexington, Kentucky 40502</p>	<p>occupational regulation. CLEAR is a dynamic forum for improving the quality and understanding of regulation in order to enhance public protection. Through conferences, services, and publications and other services, CLEAR provides the resources for ongoing and thorough communication of international licensure and regulation issues among all those interested in the field</p>	
<p><b>CSI</b></p>	<p>Coalition of Service Industries (CSI) 1090 Vermont Ave. NW - Suite 420 Washington DC 20005</p>	<p>CSI is the leading business organization dedicated to the reduction of barriers to US services exports, and to the development of constructive domestic US policies, including tax policies, that enhance the global competitiveness of its members.</p>	<p><a href="http://www.uscsi.org/">http://www.uscsi.org/</a></p>
<p><b>NCCA and NOCA</b></p>	<p>National Commission For Certifying Agencies and National Organization for Competency Assurance 2025 M Street, N.W., Suite 800 Washington, D.C. 20036</p>	<p>The National Commission for Certifying Agencies (NCCA) is the accreditation body of the National Organization for Competency Assurance (NOCA) The NCCA helps to ensure the health, welfare, and safety of the public through the accreditation of a variety of certification programs/organizations that assess professional competency. The NCCA uses a peer review process to: Establish accreditation standards; Evaluate compliance with the standards; Recognize organizations/programs which demonstrate compliance; and Serve as a resource on quality certification.</p> <p>The majority of the NOCA accreditations are for medical professional certification programs,. NOCA accreditation of programs in the financial services and training and education sectors sections are identified separately</p>	<p><a href="http://www.noca.org/ncca/accredorg.htm">http://www.noca.org/ncca/accredorg.htm</a></p>

<p style="text-align: center;"><b>NSSB</b></p>	<p>National Skill Standards Board (NSSB) 1441 L Street NW Suite 9000 Washington, DC 20005 - 3512</p>	<p>The NSSB is a coalition of leaders from business, labor, employee, education, and community and civil rights organizations created in 1994 to build a voluntary national system of skill standards, assessment and certification systems to enhance the ability of the United States workforce to compete effectively in a global economy.</p> <p>The NSSB has categorized the workforce into 15 industry sectors, which, under the guidance of the NSSB, are assembling skill standards, assessment and certification for their respective industries. Additionally NSSB has established four Voluntary Partnerships: the <u>Manufacturing Skill Standards Council (MSSC)</u> and the <u>Sales &amp; Service Voluntary Partnership (S&amp;SVP, Inc.)</u>, the <u>Education and Training Voluntary Partnership (E&amp;TVP)</u> and the <u>Hospitality &amp; Tourism Futures (HTF)</u>,</p> <p>NSSB Certification Recognition was designed to help users of certifications navigate through a confusing maze of certifications by identifying those that meet high professional and technical standards for quality assurance. To receive recognition, a certification must undergo a comprehensive review to ensure that it meets specific quality requirements.</p>	<p><a href="http://www.nssb.org/">http://www.nssb.org/</a></p>
<p style="text-align: center;"><b>OSHA</b></p>	<p>Occupational Safety and Health Administration (OSHA) 200 Constitution Avenue, N.W. Washington, D.C. 20210</p>	<p>OSHA's mission is to ensure safe and healthful workplaces in America. The workplaces of service businesses are subject to OSHA workplace safety regulation. Regulations and Compliance Links provides a comprehensive resource for current OSHA standards and compliance-related information</p>	<p><a href="http://www.osha.gov/comp-links.html">http://www.osha.gov/comp-links.html</a> and <a href="http://www.osha.gov/comp-links.html">http://www.osha.gov/comp-links.html</a></p>

<p><b>SITRENDS</b></p>	<p>C/O The Mark Twain Institute 4708 Dorset Avenue, Chevy Chase, MD 20815</p>	<p>The goal of Sitrends.org is to provide a clearinghouse for information about the world's service sectors. With virtually every country in the world having a service sector at, or over, 50% of employment and 50% of gross domestic product, this site fills a need to look at current events in those service sectors, whether that be the latest books and articles or the latest statistics</p>	<p><a href="http://www.sitrends.org/">http://www.sitrends.org/</a></p>
<p><b>US DOC</b></p>	<p>U.S. Department of Commerce International Trade Administration Office of Service Industries and Finance 14th and Constitution Washington, DC 20230</p>	<p>The US DOC Office of Service Industries and Finance works with two Congressionally mandated Industry Sector Advisory Committees (ISAC) --Service Industries (ISAC 13) and Wholesaling and Retailing (ISAC 17)-- to ensure industry input in policy development. These two Services' ISACs are among 22 advisory committees which are jointly administered by the U.S. Department of Commerce and the Office of the U.S. Trade Representative.</p>	<p><a href="http://www.ita.doc.gov/td/sif/Index.htm">http://www.ita.doc.gov/td/sif/Index.htm</a></p>
<p><b>US DOJ</b></p>	<p>U.S. Department of Justice 950 Pennsylvania Avenue, NW Washington, DC 20530-0001</p>	<p>The Department of Justice ensures fair and impartial administration of justice for all Americans. Service businesses in the US must not unfairly discriminate against classes of customers for their services. There is a long record of anti discrimination legislative history beginning with the 1776 -- Declaration of Independence, "We hold these truths to be self-evident, that all men are created equal, that among these are Life, Liberty, and the pursuit of happiness." Civil Rights Act of 1866 -- "all persons shall have the same rights...to make and enforce contracts, to sue, be parties, give evidence, and to the full and equal benefit of all laws..." 14th Amendment of 1868 -- "All persons born or naturalized in the US...are citizens...nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person...the equal protection of the laws."</p>	<p><a href="http://www.usdoj.gov/">http://www.usdoj.gov/</a></p>

		<p>Equal Pay Act of 1963 -- prohibits sex-based pay differentials on jobs. Civil Rights Act of 1964 -- Title VII prohibits employment discrimination based on race, sex, national origin, or religion. Title VI prohibits public access discrimination, leading to school desegregation. Title VIII is the original "federal fair housing law," later amended in 1988. 1965 Executive Order 11246 -- affirmative action requirements of government contractors and subcontractors. 1967 ADEA prohibits age discrimination for 40-65 year olds, amended in 1986 to remove the 65 year old age cap. Architectural Barriers Act of 1968 -- requires accessibility for disabled in buildings and facilities financed with federal funds. §504 of the Rehab Act of 1973 -- bars federal contractors or subcontractors from employment discrimination on the basis of disability. Fair Housing Amendments Act of 1988-- disabled access required for multi-family housing intended for first occupancy after March 13, 1991. Air Carriers Access Act of 1989 -- disabled access required in construction of terminal facilities owned or operated by an air carrier. 1990 Americans with Disabilities Act -- Title I prohibits disability discrimination by employers. Titles II and III require disability access in all places of public accommodation and business for first occupancy after January 26, 1993 or for occupancy for new alterations, and all state and local government facilities, after January 26, 1992.</p>	
<p><b>US FTC</b></p>	<p>US Federal Trade Commission 6th and Pennsylvania, NW Washington DC 20580</p>	<p>The Federal Trade Commission (FTC) works to ensure that the nation's markets are vigorous, efficient and free of restrictions that harm consumers. FTC's primary mission is to protect consumers.</p>	<p><a href="http://www.ftc.gov">http://www.ftc.gov</a></p>

		<p>The FTC enforces federal consumer protection laws that prevent fraud, deception and unfair business practices. FTC handles addresses consumer complaints and offers guidance on such service sector topics as privacy of customer information.</p> <p>The FTC participates in OECD Committee on Consumer Policy work related to services businesses</p>	
<b>US ITC</b>	<p>US International Trade Commission 500 E street, SW Washington, DC 20277</p>	<p>The U.S. International Trade Commission is an independent, nonpartisan, quasi-judicial federal agency that provides trade expertise to both the legislative and executive branches of government, determines the impact of imports on U.S. industries, and directs actions against certain unfair trade practices, such as patent, trademark, and copyright infringement. The ITC recently completed a relevant study RECENT TRENDS IN U.S. SERVICES TRADE Investigation No. 332-345 (Annual Report) (Publication 3409; May 2001)</p>	<p><a href="http://www.usitc.gov/">http://www.usitc.gov/</a> and <a href="http://www.usitc.gov/wais/reports/arc/w3409.htm">http://www.usitc.gov/wais/reports/arc/w3409.htm</a></p>
<b>USTR</b>	<p>US Trade Representative Executive Office of the President 600 17th Street, NW Washington, DC 20508</p>	<p>The Office of the U.S. Trade Representative (USTR) is responsible for developing and coordinating U.S. international trade, commodity, and direct investment policy, and leading or directing negotiations with other countries on such matters. The U.S. Trade Representative is a Cabinet member who serves as the President's principal trade advisor, negotiator, and spokesperson on trade and related investment matters. USTR represents US interests in WTO GATS discussions</p>	<p><a href="http://www.ustr.gov/sectors/services/services.shtml">http://www.ustr.gov/sectors/services/services.shtml</a></p>

## Specification of services (What are services?)

What is a “**service?**” According to the *Encarta® World English Dictionary* © & (P) 1999,2000 Microsoft Corporation. All rights reserved. Developed for Microsoft by Bloomsbury Publishing Plc. A “**service**” in the context of this study may be any of the following:

*work done for somebody else: work done by somebody for somebody else as a job, a duty, a punishment, or a favor*

*meeting of public need: the system or operation by which people are provided with something they need, for example, public transportation, or the organization that runs such a system*

*government agency: an official organization, especially a government department, or the work performed for such an organization*

*maintenance of machinery: the act of cleaning, checking, adjusting, or making minor repairs to a piece of machinery, especially a motor vehicle, to make sure that it works properly*

*COMMERCE ... work that does not make anything: jobs and businesses such as banking and insurance that provide something for other people but do not produce tangible goods*

*things provided by government: things such as education, health care, and roads that are provided by national or local government and paid for by taxation*

*adjective*

*providing a service not goods: relating to jobs or businesses such as banking and insurance that do something useful for people but that do not manufacture any goods*

*for maintenance and repair: providing maintenance and repair for manufactured products*

However this study found that the term “**service**” is not often used in such general terms and is far more often used in a specific context.

The American Council for Trade in Services (ACTS) office in Washington, DC, occasionally receives inquiries what **specific trade items come under the term "international trade in services."** The ACTS staff has compiled a list of intangible and exportable commodities which may fall under that heading. These are shown in Figure Two as listed on the ACTS web site at <http://www.acts-talks.com/industries.htm>

## Figure Two

Trade items under the term "international trade in services" according to

American Council for Trade in Services at

<http://www.acts-talks.com/industries.htm>

Advertising	Entertainment	Protection and Security Services
Hospitality Services	Equipment Installation and Maintenance	Publishing and Media
Commercial Services	Export Trading	Public Relations
Communications	Financial Services (Banking, Insurance, Investment, etc.)	Real Estate
Computer Technology	Government Relations	Scientific and Technical Services
Construction	Health care	Sports and Games
Consultation and Advice	Information Technology	Technology Transfer
Data Processing	Management Counseling	Telecommunications
Design and Engineering	Performing Arts	Transportation
Distribution Services	Professional Services(Accounting, Medicine, Law, etc.)	Travel and Tourism
Education and Training	Promotion of Goods	Utilities
Electronic Commerce		Wholesale and Retail Trade in Goods
Energy Production		

A report of the U.S. International Trade Commission entitled Recent Trends in U.S. Services 2001 available at

[http://www.buyusainfo.net/docs/recent\\_trends\\_in\\_u.s.\\_services\\_2001.pdf](http://www.buyusainfo.net/docs/recent_trends_in_u.s._services_2001.pdf)

provides a helpful description of what are services industries in the United States. For example the report notes the following service industries accounted for the majority of US exports in services:

*In 1999, travel and tourism services accounted for 29.4 percent of U.S. service exports, the largest share of total service exports accounted for by a single industry .... Other services accounting for large shares of total U.S. exports were those related to intangible intellectual property (reported as royalties and license fees), representing 14.3 percent; business, professional, and technical services(hereafter, professional services), 9.6 percent; maritime and air freight transportation services (including port services), 9.5 percent; and passenger fares (airline and maritime), 7.8 percent. With respect to imports, travel and tourism, maritime and air freight transportation, and passenger fares also figured prominently in 1999, accounting for 33.9 percent, 18.1 percent, and 12.2 percent of total service imports, respectively.*

The Association for Services Management International (AFSMI) is an organization dedicated to furthering the knowledge, understanding, and career development of executives, managers, and professionals in the high-technology services and support industry. AFSMI has posted a paper “**S-Business: Defining the Services Industry**” at <http://www.afsmi.org/> According to AFSMI on the topic of differences between “Services and Products”

*... extreme difference between the two types of products of traditional business and s-businesses. First of all, in most cases, the goods produced by traditional organizations easily can be seen, felt, and described. However, the products of s-business (services and professional services) are intangible. Evert Gummesson probably said it the most eloquently, stating that “services are something that can be bought and sold but can’t be dropped on your foot.” The challenge of dealing with the added complexity of intangibility alone raises the bar. ... These distinctions have a fundamental impact on how one produces, markets, sells, delivers, services, and measures the performance of s-business products and the success of the s-business itself. What may have worked extremely well in managing a traditional goods-based organization will be ineffective in the world of s-business. Hence, different characteristics and competencies in people must be sought, different management support systems created, and different metrics evaluated to reward performance and guide the enterprise.*

**Figure Three**

**Product Comparison: Goods vs. Services**

From "S-Business: Defining the Services Industry" at <http://www.afsmi.org/>

<b>SERVICES</b>	<b>GOODS</b>
Services are performed.	Goods are produced.
The goal of performing services is uniqueness.	The goal of producing goods is uniformity.
The customer often is involved in the service performance.	The customer is not involved in production.
Customers conduct quality control by comparing expectations to experience. If improperly per-formed, apologies and reparation are the only means of recourse.	Internal quality control compares outputs to specifications. If improperly produced, the product can be recalled.
The morale and skill of service providers is critical.	The morale and skill of the production workers is important

Many service industry vertical market segments have standardized their specifications and terminology in order to promote efficiency and compatibility between the various components of a service process. These are identified in Chapter 2 for the specific vertical industry segments.

## Quality assessment of services

The quality assessment of services is very much a vertical services industry sector matter in the United States. It is further often times a local geographical matter. That is to say in any local area there may exist quality assessment services for various vertical service sectors.

**US Services businesses may elect to demonstrate their conformity to International standards such as the ISO 9000 series.** The QSU Publishing Company publishes a list of US services industry companies registered to ISO9000 ISO 9000 Registered Company Directory available at <http://www.qsuonline.com/Body%20pages/RCD.html>

**The American Customer Satisfaction Index (ACSI) is a uniform and independent measure of household consumption experience.** ACSI tracks trends in customer satisfaction and provides benchmarking insights of the consumer economy for companies, industry trade associations, and government agencies. The ACSI is produced through a partnership of the University of Michigan Business School, the American Society for Quality (ASQ), and the international consulting firm, CFI Group.

The ACSI model is a set of causal equations that link customer expectations, perceived quality, and perceived value to customer satisfaction (ACSI). In turn, satisfaction is linked to consequences as defined by customer complaints and customer loyalty – measured by price tolerance and customer retention. The ACSI rating scores of companies in various service industry sectors are posted at [http://www.theacsi.org/industry\\_scores.htm](http://www.theacsi.org/industry_scores.htm)

## Classification of services

In February 1999, the statistical agencies of Canada, Mexico, and the United States launched a joint multi-phase initiative to develop a comprehensive service-orientated product classification system. The industry classification system is known as the **North American Industry Classification System or NAICS**. Further information on NAICS is available at the following web sites <http://www.ita.doc.gov/td/sif/naics.htm> and <http://www.census.gov/eos/www/napcs/napcs.htm>

The objective of NAICS is to identify, define, and classify the final products produced by the industries in each of various service and goods producing industry sectors. Of 358 new industries identified in NAICS, 250 are services-producing industries. The final products of reporting units in a service industry are defined as the products that are created and transacted (sold or transferred) by the establishments or reporting units in the industry to other reporting units, enterprises, institutions or persons; domestic or international. NAICS provides for

comparable economic statistics among the North American countries. 17 service industry categories are listed below:

- 23 Construction
- 44-45 Retail Trade
- 48-49 Transportation and Warehousing
- 51 Information
- 52 Finance and Insurance
- 53 Real Estate and Rental and Leasing
- 54 Professional, Scientific, and Technical Services
- 55 Management of Companies and Enterprises
- 56 Administrative and Support and Waste Management and Remediation Services
- 61 Educational Services
- 62 Health Care and Social Assistance
- 71 Arts, Entertainment, and Recreation
- 72 Accommodation and Food Services
- 81 Other Services (except Public Administration)
- 92 Public Administration

**Appendix One Service Industry Classifications in the United States Extracted from North American Industry Classification System** presents further breakdown of these 17 service industry segments.

### **Terminology around services**

While developing the **North American Industry Classification System** (NAICS) the statistical agencies came to the conclusion that many service industries provide essentially three types of final service products: simple services, composite services, and bundled services. They defined this terminology as follows:

*A simple service product* embodies a single transparent service whose real output can be measured in physical units or counts, such as a traditional haircut (number of hair cuts) or basic phone service (number of minutes).

*A composite service product* embodies several distinct services that are produced together and sold as a unit; the customer is not free to pick and choose among the services in the composite. The services may be produced together by virtue of regulations, the production process, safety or hygiene requirements, or industry practice. Examples include a conventional hotel room rental with maid service, salon haircuts including shampooing, and an office visit to a doctor with required diagnostic tests.

*A bundled service product* contains a collection of services that has been negotiated between the service provider and the customer and whose

composition may vary by customer. Examples include traditional phone service plus call waiting and caller ID, a bundle of information services that can be transmitted through a common medium (cable, satellite) and that may include voice, data and/or visual services. Elsewhere it is common to buy different bundles of janitorial services, legal services, or accounting services, etc.

Many service industry vertical market segments have standardized their specifications and terminology in order to promote efficiency and compatibility between the various components of a service process. These are identified in Chapter 2 for the specific vertical industry segments

**Processes around services (buying and selling, business processes, providing services, supply chain, logistics, etc.)**

Also while developing the NAICS, the statistical agencies found the need for common information about the processes and supply chain applicable in different service sectors. They commissioned experts in various service sector businesses to collect and report these matters in a common format. They used a common approach to describe these service sector characteristics for different service industries. The major information categories in **Figure 3 Common approach to describe service sector characteristics** below are extracted from the **NAICS paper Industry Expert Guide to Information Requirements for NAPCS** available at <http://www.census.gov/eos/www/napcs/papers/Callink2.pdf>

## Figure Three

### Common Approach to Describe Service Sector Characteristics

#### Excerpted from Expert Guide to Information Requirements for NAIPS

##### *A. General Overview of the Industry*

*A discussion of the scope of services provided by the industry.*

*Recent changes/developments in types of services provided.*

*A discussion of the size range and distribution of establishments in the industry including names of the top firms in the industry.*

*The extent to which firms in the industry are engaged in international sales of service products.*

*Information on any restrictions requiring professional licenses, certifications, or degrees to perform specific services in this industry.*

##### *B. A Working Description of the Production Process Typically Followed by Firms in This Industry*

*Information on any government regulations impacting the production of services by this industry.*

*How are the needs of the customer and the service products to be sold to the customer assessed?*

*What are the typical steps followed by a firm in fulfilling the transaction of these services to the customer?*

*What procedures are utilized to formalize the transaction between a firm and a customer? How is a customer billed when the service is completed?*

##### *C. A Description of the Industry's Final Service Products*

*What are the final products produced by this industry?*

*For each of the final products, how does the industry define these products?*

*Are any of these products consumed completely within the reporting unit in another phase of the production process?*

*How standardized are the services products provided in this industry? Are products provided fairly well-defined and uniformly provided to a variety of customers?*

*Within this industry, are particular service products typically sold as a bundle or unit, for a single quoted price that differs from the sum of the individual prices for the products in the bundle? Please identify important bundled service products vended by your industry.*

*What are the service products produced by other industries which are substitutes for those offered by this industry?*

##### *D. Pricing Conventions*

*How is a price determined for the service products of this industry? (fee based on type of staff performing various parts of the production of the service, fee based on type of service only,...)?*

*How is this price conveyed to the customer? (formal contract, letter of engagement, fee per hour)?*

*What is the physical unit that is priced (liters or quarts, kilos or pounds,*

*provide the service, type of specialist that does the work, object rented, number of seats, number of tickets sold, and so forth)? meters or miles, hours worked, type of tools or machine required to*

**E. Record Keeping and Reporting**

*Do firms typically maintain records providing details of the services completed and the invoice or bill presented?*

*What is the appropriate reporting unit in your industry (establishment, regional headquarters, or national office, for example)?*

*Do the reporting units in the industry typically compile information on the value of the detailed service products sold and can they report this information?*

Many service industry vertical market segments have standardized their specifications and terminology in order to promote efficiency and compatibility between the various components of a service process. These are identified in Chapter 2 for the specific vertical industry segments

### **Customer interaction**

Two important crosscutting legal requirements (different than those described below for consumer protection) in the United States address the interaction of service provider(s) with their customer(s).

The US has a long history ensuring fair and impartial administration of justice for all Americans. **Service businesses in the US must not unfairly discriminate against classes of customers for their services.** There is a long record of anti discrimination legislative history beginning with the 1776 -- *Declaration of Independence*, "We hold these truths to be self-evident, that all men are created equal, that among these are Life, Liberty, and the pursuit of happiness." *Civil Rights Act of 1866* -- "all persons shall have the same rights...to make and enforce contracts, to sue, be parties, give evidence, and to the full and equal benefit of all laws..." 14th Amendment of 1868 -- "All persons born or naturalized in the US...are citizens...nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person...the equal protection of the laws." Equal Pay Act of 1963 -- prohibits sex-based pay differentials on jobs. Civil Rights Act of 1964 -- Title VII prohibits employment discrimination based on race, sex, national origin, or religion. Title VI prohibits public access discrimination, leading to school desegregation. Title VIII is the original "federal fair housing law," later amended in 1988. 1965 Executive Order 11246 -- affirmative action requirements of government contractors and subcontractors. 1967 ADEA prohibits age discrimination for 40-65 year olds, amended in 1986 to remove the 65 year old age cap. **The Department of Justice is ultimately responsible for enforcing these anti discrimination requirements**

**There are similar laws intended to provide accessibility to services and goods for people with disabilities.** Service providers must take into

consideration many accessibility requirements. The **Access Board is the federal agency overseeing several accessibility-related laws**

- Architectural Barriers Act, a law requiring access to facilities designed, built, altered, or leased with Federal funds.
- Rehabilitation Act, which created the Access Board.
- Americans with Disabilities Act, a major civil rights law prohibiting discrimination on the basis of disability in the private and public sectors.
- Telecommunications Act (Section 255), which requires access to new telecommunications and customer premises equipment where "readily available"

### **Consumer protection**

Several crosscutting standards and legal requirements apply generally to consumer protection for services. Many more of the consumer protection standards and laws however are industry segment specific.

**The Federal Trade Commission (FTC)** works to ensure that the nation's markets are vigorous, efficient and free of restrictions that harm consumers. **FTC's primary mission is to protect consumers.** The FTC enforces federal consumer protection laws that prevent fraud, deception and unfair business practices. FTC handles addresses consumer complaints and offers guidance on such service sector topics as privacy of customer information. The FTC participates on behalf of the United States in the OECD Committee on Consumer Policy. The FTC web site at <http://www.ftc.gov/ftc/consumer.htm> has many references intended for consumers and service providers about meeting FTC requirements to prevent fraud and deception and maintaining privacy

A recent example how US law works to address unfair claims by service providers well illustrates the system here. A US company Charter Communications Inc. is challenging Southwestern Bell Telephone's (SBT) "Cable Modem Slowdown" ads. Charter alleges SBT has perpetrated a false advertising campaign. Charter claimed that SBT is violating the federal Lanham Act, regarding truth in advertising, and also is violating Missouri common laws regarding preventing injurious falsehoods and illegal and unfair competition. The SBT television, radio and print ads "convey a message that cable modem Internet service slows down during peak usage hours, and that DSL does not," stated the general counsel and secretary for Charter. Last August, Charter sent a letter to SBT officials requesting the ads be pulled. After receiving no response, Charter filed a lawsuit in the U.S. District Court in Missouri. A Federal judge recently issued a preliminary injunction ordering Southwestern Bell to refrain from false and misleading advertising about cable modem service. See <http://www.onlinepressroom.net/chrtr/> and <http://www.cedmagazine.com/cedailydirect/0108/cedaily010829.htm>

**The Occupational Safety and Health Administration OSHA's mission is to ensure safe and healthful workplaces in America.** The workplaces of service businesses are subject to OSHA workplace safety regulation. An OSHA Regulations and Compliance Link at <http://www.osha.gov/comp-links.html> provides a comprehensive resource for current OSHA standards and compliance-related information for service providers.

**There exist three national recognition or accreditation programs for certification programs of professional or skill proficiency.** Many of these certification programs are intended to promote that providers of service have the skills and competence to perform the service they are offering and thus consumer protection. The three have separate requirements and methods of evaluating the certification programs

**The American National Standards Institute (ANSI) Personnel Certifier Accreditation** uses the proposed ISO/IEC Standard 17024, General Requirements for Bodies Operating Certification Systems of Persons. The ANSI program is intended to provide increased confidence in the ability of certification bodies to certify that individuals have the necessary knowledge, skills and abilities to perform their work.

**The National Commission for Certifying Agencies (NCCA) is the accreditation body of the National Organization for Competency Assurance (NOCA)** The NCCA helps to ensure the health, welfare, and safety of the public through the accreditation of a variety of certification programs/organizations that assess professional competency.

The **National Skills Standards Board (NSSB)** is a coalition of leaders from business, labour, employee, education, and community and civil rights organizations created in 1994 to build a voluntary national system of skill standards, assessment and certification systems

**The American National Standards Institute ANSI Consumer Interest Council (CIC) facilitates the representation of consumer interests in the voluntary standards process** and enhances the effectiveness and credibility of the ANSI Federation. ANSI defines Consumers as those individuals who use goods or services to satisfy their individual needs and desires, rather than to resell them or to produce other goods or services with them ("Consumers"). The Consumer Interest Council is composed of knowledgeable representatives from Consumer organizations, producers, retailers, distributors, industry councils and government. Some of the work of the CIC includes reviewing, from the consumer's perspective, national and international voluntary consensus standards; developing informative guides; and encouraging consumer participation in the voluntary standards development process. The ANSI CIC is the advisory group for ANSI participation in the ISO consumer policy committee COPOLCO ( See more at [http://www.ansi.org/rooms/room\\_7/](http://www.ansi.org/rooms/room_7/) )

## **Chapter 3**

### **What standards, specifications, regulations etc. exist in the US in selected service branches?**

- **e-commerce, e-procurement**
- **infrastructure services, engineering services, technical services**
- **public services, e-government**
- **education and training**
- **financial services**

#### **Approach to the question**

GTW began the research to this question first through queries to four comprehensive electronic data bases on standards activities in the United States and searching for organizations, committees within organizations and specific standards using the terms “service,” “process,” “training,” “quality,” to identify organizations that may deal with service standardization. Many of these organizations identified developed standards in one or more of the service sectors above. This was followed by close examination of the marketplace and relevant industry and governmental organizations for each sector. The results of the search for each sector are presented in the following sections and Tables of this chapter.

## **E-commerce, e-procurement**

**Table Two**

**US Public and Private Sector standards, specifications and regulations in the  
E-Commerce/E-procurement services sector**

Compiled by **GTW Associates** April, 2002

Acronym	Contact Information	Description (excerpted from source)	Source or web reference
<b>ABA (ASC X9)</b>	American Bankers Association (ABA) Accredited Standards Committee (ASC) X9 1120 Connecticut Ave., N.W. Washington, DC 20036	Standardization for facilitating financial services operations  Sponsors US TAG TO ISO <b>TC 68</b> banking, securities and other financial services	<a href="http://www.x9.org">www.x9.org</a>  and  <a href="http://www.tc68.org">www.tc68.org</a>
<b>ANSI CIC</b>	American National Standards Institute (ANSI) Consumer Interest Council (CIC) 25 West 43rd Street, 4th Fl. New York, New York, 10036	The ANSI Consumer Interest Council (CIC) facilitates the representation of consumer interests in the voluntary standards process and enhances the effectiveness and credibility of the ANSI Federation. The CIC consists of knowledgeable representatives from consumer organizations, producers, retailers, distributors, industry councils, and government. ANSI CIC is the source for	<a href="http://www.ansi.org/rooms/room_7/">http://www.ansi.org/rooms/room_7/</a>

		ANSI comments to the ISO Consumer Policy Committee (COPOLCO) work on service sector standardization in particular COPOLCO activities related to electronic commerce	
<b>BIC</b>	Business Internet Consortium (BIC) 5440 SW Westgate Drive, Suite 217 Portland OR, 97221	The Business Internet Consortium is an open industry group comprised of leading e-Business technology providers and end users. The mission of the Business Internet Consortium is to accelerate the transition to e-Business. To achieve this mission, the Consortium will serve as an open forum for the exchange of ideas, provide architectural direction and recommend standards and best practices	<a href="http://www.businessinternetconsortium.org/">http://www.businessinternetconsortium.org/</a>
<b>BizTalk.org</b>	BizTalk C/O Microsoft One Microsoft Way Redmond, WA 08052	Promotion of the adoption of XML to enable electronic commerce and application integration. Framework for standards bodies. The BizTalk Framework provides a means for migrating an existing set of industry-interchange standards to XML. This is especially useful for the electronic data interchange (EDI) community.	<a href="http://www.biztalk.org/home/default.asp">http://www.biztalk.org/home/default.asp</a>
<b>BPMI.ORG</b>	BPMI.ORG 1155 S. Havana Street, #11-311 Aurora, CO 80012 USA	To promote and develop the use of Business Process Management (BPM) through the establishment of standards for process design, deployment, execution, maintenance, and optimization. To develop open specifications, assist IT vendors for marketing their implementations, and support businesses for using Business Process Management technologies.	<a href="http://www.bpmi.org/">http://www.bpmi.org/</a>
<b>CommerceNET</b>	CommerceNet 10050 North Wolfe Road SW2-255 Cupertino,CA 95014	To promote Electronic Commerce through Internet. To grow the electronic commerce marketplace through member and market education; to act as an advocate for industry vis à vis legal and public policy issues; to	<a href="http://www.commerce.net/">http://www.commerce.net/</a> and

		<p>promote member capabilities, to demonstrate new technologies and business models for electronic commerce through market-based pilots and test-beds; and to facilitate linkages and networking opportunities for members.</p> <p>CommerceNet announced the formation of a working group to develop standards for enabling interoperable trading between disparate B2B exchanges. It addresses various issues and opportunities for CommerceNet in terms of standards shepherding, interoperability management, and business models, while also providing further information about the landscape for B2B exchanges on the Internet.</p>	<p><a href="http://www.commerce.net/projects/universal_marketplaces.html">http://www.commerce.net/projects/universal_marketplaces.html</a></p>
<p><b>CPEExchange</b></p>	<p>Customer Profile Exchange (CPE) 100 Daingerfield Road Alexandria, VA 22314-2888</p>	<p>CPE is aiming to develop an open standard to facilitate the privacy-enabled interchange of customer information across disparate enterprise applications and systems</p>	<p><a href="http://www.cpexchange.org/">http://www.cpexchange.org/</a></p>

<p><b>DISA (ASC X12)</b></p>	<p>Data Interchange Standards Association, Inc. Accredited Standards Committee (ASC) X12 333 John Carlyle Street, Suite 600 Alexandria, VA 22314</p>	<p>Standardization to facilitate the interbusiness/institutional electronic interchange relating to order placement and processing, shipping and receiving, products and services, invoicing, payment and cash application data.</p> <p>Sponsors US advisory body to ISO <b>TC 154</b> Processes, data elements and documents in commerce, industry and administration data</p> <p>Also relates to the United Nations Center for Trade Facilitation and Electronic Business with scope To improve the ability of business, trade and administrative organizations, from developed, developing and transitional economies, to exchange products and relevant services effectively - and so contribute to the growth of global commerce</p>	<p><a href="http://www.disa.org">www.disa.org</a></p> <p>also</p> <p><a href="http://www.x12.org">http://www.x12.org</a></p> <p>and</p> <p><a href="http://www.unece.org/cefact/">http://www.unece.org/cefact/</a></p>
<p><b>ebXML</b></p>	<p>EbXML C/O Organization for the Advancement of Structured Information Standards (OASIS) Post Office Box 455 Billerica, MA 01821 USA</p>	<p>ebXML, sponsored by UN/CEFACT and OASIS, is a modular suite of specifications that enables enterprises of any size and in any geographical location to conduct business over the Internet. Using ebXML, companies now have a standard method to exchange business messages, conduct trading relationships, communicate data in common terms and define and register business processes</p>	<p><a href="http://www.ebxml.org">http://www.ebxml.org</a></p>
<p><b>E-COMMERCE LAW RESOURCES</b></p>	<p>Baker &amp; McKenzie One Prudential Plaza 130 East Randolph Drive Chicago, IL 60601</p>	<p><b>E-COMMERCE LEGISLATION AND REGULATIONS ENACTED LEGISLATION AND REGULATIONS OVERVIEW</b></p>	<p><a href="http://bmck.com/ecommerce/congress.htm">http://bmck.com/ecommerce/congress.htm</a></p>
<p><b>EPF</b></p>	<p>Electronic Payments Forum (EPF) C/O Corporation for National</p>	<p>The Electronic Payments Forum (EPF) is an alliance of organizations such as consortia and standards bodies, as well as</p>	<p><a href="http://www.epf.net/">http://www.epf.net/</a></p>

	<p>Research Initiatives 1895 Preston White Drive Suite 100 Reston, VA 20191-5434</p>	<p>commercial entities, non-profits, universities, and government agencies, committed to furthering the development of inter-operable electronic payment systems in support of global electronic commerce. Development of interoperable electronic payment systems in support of global electronic commerce.</p>	
<p><b>GBDe</b></p>	<p>Global Business Dialogue on Electronic Commerce</p>	<p>The GBDe recommendations are designed to accelerate the expansion of e-commerce</p> <p>GBDe has working groups on Cyber Security and Consumer Confidence</p>	<p><a href="http://www.gbde.org/index1.html">http://www.gbde.org/index1.html</a></p> <p>and</p> <p><a href="http://www.gbde.org/cybersecurity/">http://www.gbde.org/cybersecurity/</a></p> <p>and</p> <p><a href="http://consumerconfidence.gbde.org/">http://consumerconfidence.gbde.org/</a></p>
<p><b>GISB</b></p>	<p>Gas Industry Standards Board 1100 Louisiana Suite 3625 Houston, TX 77002</p>	<p>The objects and purposes of GISB are to adopt, promulgate, amend, revise, modify, interpret, rescind, and publish and otherwise make available to all interested persons, standards applicable to electronic information exchange and electronic communications necessary to promote more competitive and reliable gas service, including electronic data interchange (EDI) record formats and communications protocols; provided, however that GISB shall not address, adopt, promulgate, amend, revise, modify, interpret, rescind, and publish standards that prescribe the internal business practices of individuals.</p>	<p><a href="http://www.gisb.org/frameset.htm">http://www.gisb.org/frameset.htm</a></p>
<p><b>INCITS</b></p>	<p>InterNational Committee for Information Technology</p>	<p>INCITS's mission is to produce market-driven, voluntary consensus standards in the areas of:</p>	<p><a href="http://www.ncits.org/">http://www.ncits.org/</a></p> <p>and</p>

	<p><b>Standards C/O Information Technology Industry Council (ITI). 1250 Eye Street NW Suite 200 Washington, DC 20005 202-737-8888</b></p>	<ul style="list-style-type: none"> <li>- multimedia (MPEG/JPEG),</li> <li>- intercommunication among computing devices and information systems (including the Information Infrastructure, SCSI-2 interfaces, Geographic Information Systems),</li> <li>- storage media (hard drives, removable cartridges), - database (including SQL3), -security, and - programming languages (such as C++).</li> </ul>	<p><a href="http://www.itic.org/">http://www.itic.org/</a></p>
<p style="text-align: center;"><b>Internet Security Task Force</b></p>	<p><b>Internet Security Task Force C/O Computer Associates International, Inc. One Computer Associates Plaza Islandia, NY 11749</b></p>	<p style="text-align: center;"><b>Internet Security Task Force <i>Initial Recommendations For Conducting Secure eBusiness</i></b></p> <p>The Internet Security Task Force (ISTF) is a forum of vendors, eBusinesses, and internet infrastructure providers (such as ISPs) who collectively and individually understand the real world issues organizations face today in connecting to the internet. These issues are centered around the seemingly conflicting requirements of ensuring limited and controlled access to corporate systems, while also opening those same systems up to a hugely broader range of users employing systems and networks that are inherently insecure (ie. The internet). The ISTF delivers to the industry a vendor neutral set of recommendations in understandable language, concerning what steps organizations can take to secure their environments to a minimum standard using readily available tools, techniques, and services</p>	<p><a href="http://www.ca.com/ISTF/recommendations.htm#3">http://www.ca.com/ISTF/recommendations.htm#3</a></p>

<p><b>NISO</b></p>	<p>National Information Standards Organization (NISO) 4733 Bethesda Avenue, Suite 300 Bethesda, MD 20814</p>	<p>NISO develops, maintains, and publishes technical standards to manage information in our changing and ever-more digital environment.</p> <p>To develop voluntary, consensus technical standards relevant to information systems; products, including hardware and supplies; and services, as they relate to libraries, bibliographic and information services, and publishing.</p> <p>NISO standards apply both traditional and new technologies to the full range of information-related needs, including retrieval, re-purposing, storage, metadata, and preservation</p> <p>NISO services as the <u>US TAG to ISO TC 46 on Information and Documentation</u></p> <p>NISO has approved and published 32 national standards at <a href="http://www.niso.org/standards/index.html">http://www.niso.org/standards/index.html</a></p>	<p><a href="http://www.niso.org/">http://www.niso.org/</a></p>
<p><b>OASIS</b></p>	<p>Organization for the Advancement of Structured Information Standards (OASIS) Post Office Box 455 Billerica, MA 01821</p>	<p>OASIS is a non-profit, international consortium that creates interoperable industry specifications based on public standards such as XML and SGML, as well as others that are related to structured information processing.</p>	<p><a href="http://www.oasis-open.org/">http://www.oasis-open.org/</a></p>
<p><b>OBI consortium</b></p>	<p>Open Buying on the Internet (OBI) Consortium 10050 Wolfe Road SW-2, Ste. 255 Cupertino, CA 95014</p>	<p>To improve and promulgate the OBI standard. To develop other standards and shared business practices for conducting business-to-business Internet Commerce.</p>	<p><a href="http://www.openbuy.org">http://www.openbuy.org</a></p>

<b>ODM Group</b>	Object Data Management (ODM) Group 13504 4th Avenue South Burnsville, MN 55337	To develop and promote standards for object storage  ODMG 3.0The Object Data Standard	<a href="http://www.odmg.org">http://www.odmg.org</a>
<b>OMG</b>	Object Management Group 250 First Avenue, Suite 201 Needham, MA 02494	The OMG was formed to create a component-based software marketplace by the introduction of standardized object software. The organization's charter includes the establishment of industry guidelines and detailed object management standards to provide a common framework for application development.	<a href="http://www.omg.org/news/about/">http://www.omg.org/news/about/</a>
<b>OPA</b>	Online Privacy Alliance Alliance Online Privacy Alliance c/o Christine Varney Hogan and Hartson 555 13th Street NW Washington, DC 20004	Introduction and promotion of business wide actions which create an environment of trust and foster the protection of individuals privacy online.	<a href="http://www.privacyalliance.org/">http://www.privacyalliance.org/</a>
<b>OTA</b>	OpenTravel™ Alliance (OTA). 333 John Carlyle Street, Suite 600 Alexandria, VA 22314	OpenTravel™ Alliance (OTA). A self-funded, non-profit organization, OTA is comprised of major airlines, hoteliers, car rental companies, leisure suppliers, travel agencies, global distribution systems (GDS), technology providers and other interested parties working to create and implement industry-wide, open e-business specifications.	<a href="http://www.opentravel.org/opentravel/index.cfm">http://www.opentravel.org/opentravel/index.cfm</a>
<b>PKI Forum</b>	PKI Forum 401 Edgewater Place, Suite 600 Wakefield, MA 01880	The PKI Forum is an international, not-for-profit, multi-vendor and end-user alliance whose purpose is to accelerate the adoption and use of Public-Key Infrastructure (PKI) products and services.Promotion of interoperability between public key infrastructure security systems.	<a href="http://www.pkiforum.org/">http://www.pkiforum.org/</a>
<b>RosettaNet.</b>	RosettaNet.	RosettaNet. A self-funded, non-profit	<a href="http://www.rosettanet.org/rosettanet/R">http://www.rosettanet.org/rosettanet/R</a>

	1851 E. First St., Suite 1050 Santa Ana, CA 92705	organization, RosettaNet is a consortium of major Information Technology, Electronic Components and Semiconductor Manufacturing companies working to create and implement industry-wide, open e-business process standards. These standards form a common e-business language, aligning processes between supply chain partners on a global basis. Adoption, promotion, and deployment of world-wide open and common business interfaces for the IT industry.	ooms/DisplayPages/LayoutInitial
<b>Smart Card Alliance</b>	Smart Card Alliance 116 John Street, Suite 814 New York, NY 10038	The four main priorities of the Alliance are: -To influence standards that are relevant to smart card adoption and implementation; -To maintain a voice in public policy that affects smart card adoption and implementation; - To serve as an educational resource to its members and the industry; and - To provide a forum for cutting edge discussion projects on issues surrounding smart cards.	<a href="http://www.smartcardalliance.org">http://www.smartcardalliance.org</a>
<b>TOG</b>	The Open Group (TOG) 29B Montvale Ave, Woburn, MA 01801	To aid the development and implementation of a secure and reliable IT infrastructure. To protecting investment in heritage systems while helping organizations evolve their computing architectures to the requirements for a global information infrastructure .	<a href="http://www.opengroup.org/">http://www.opengroup.org/</a>
<b>TPC</b>	Transaction Processing Council (TPC) Presidio of San Francisco Building 572B Ruger St. (surface) P.O. Box 29920 (mail) San Francisco, CA 94129-0920	The TPC is a non-profit corporation founded to define transaction processing and database benchmarks and to disseminate objective, verifiable TPC performance data to the industry.	<a href="http://www.tpc.org/">http://www.tpc.org/</a>

<p style="text-align: center;"><b>US FTC</b></p>	<p>US Federal Trade Commission (US FTC) 6th and Pennsylvania, NW Washington DC 20580</p>	<p>The Federal Trade Commission (FTC) works to ensure that the nation's markets are vigorous, efficient and free of restrictions that harm consumers. The FTC enforces federal consumer protection laws that prevent fraud, deception and unfair business practices.</p> <p>FTC Advisory Committee on Online Access and Security--Report</p> <p>Internet Case List</p> <p>Marketing on the Internet: The Rules of the Road</p> <p>Appliance Labeling Rule Homepage</p> <p>BBB-Online: Code of Online Business Practices</p> <p>Big Print. Little Print. What's the Deal? How to Disclose the Details</p> <p>Disclosing Energy Efficiency Information: A Guide for Online Sellers of Appliances</p> <p>Dot Com Disclosures: Information About Online Advertising</p> <p>Electronic Commerce: Selling Internationally. A Guide for Business How to Comply With The Children's Online Privacy Protection Rule</p> <p>Internet Auctions: A Guide for Buyer and</p>	<p><a href="http://www.ftc.gov">http://www.ftc.gov</a> and in particular</p> <p><a href="http://www.ftc.gov/bcp/menu-internet.htm#bized">http://www.ftc.gov/bcp/menu-internet.htm#bized</a></p> <p>and</p> <p><a href="http://www.ftc.gov/acoas/index.htm">http://www.ftc.gov/acoas/index.htm</a></p>
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<b>US TAG to JTC1</b>	<p>US TAG to JTC1 C/O Information Technology Industry Council (ITI). 1250 Eye Street NW Suite 200 Washington, DC 20005</p>	<p>Sponsors TAG to ISO/IEC <b>JTC 1</b> Standardization in the field of information technology</p>	<p><a href="http://www.jtc1tag.org">www.jtc1tag.org</a></p> <p>and</p> <p><a href="http://www.itic.org/">http://www.itic.org/</a></p>
<b>USG EC</b>	<p>United States Government Electronic Commerce web site</p>	<p><b>U.S. Government Sites on Electronic Commerce Policy</b></p>	<p><a href="http://www.ecommerce.gov/examples.htm">http://www.ecommerce.gov/examples.htm</a></p>
<b>W3C</b>	<p>World Wide Web Consortium (W3C) C/O Massachusetts Institute of Technology Laboratory for Computer Science 200 Technology Square Cambridge, MA 02139</p>	<p>To provide a vendor-neutral leadership in the evolution of the Web, including designing, developing, and promoting common technical standards.</p>	<p><a href="http://www.w3.org">http://www.w3.org</a></p>
<b>XBRL</b>	<p>EXtensible Business Reporting Language C/O American Institute of Certified Public Accountants 1211 Avenue of the Americas</p>	<p>To provide an XML-based framework that the global business information supply chain will use to create, exchange, and analyze financial reporting information including, but not limited to, regulatory filings such as annual and quarterly financial statements, general ledger information, and audit schedules. XBRL was developed by the international</p>	<p><a href="http://www.xbrl.org/Overview.htm">http://www.xbrl.org/Overview.htm</a></p>

	New York, NY 10036	XBRL project committee made up of companies representing the financial information supply chain	
<b>XIWT</b>	Cross Industry Working Team (XIWT) Corporation for National Research Initiatives 1895 Preston White Drive Suite 100 Reston, VA 20191-5434	To foster the understanding, development and application of technologies that cross industry boundaries; -to facilitate the conversion of the National Information Infrastructure vision into real-world implementations; - to facilitate a dialogue among representatives of stakeholders in the private and public sectors _ develop common technological and architectural approaches that bridge industry gaps and match the evolution of information technologies while providing for openness, heterogeneity, interoperability, scalability and ease of use	<a href="http://www.xiwt.org/">http://www.xiwt.org/</a>
<b>XML.org</b>	XML.org PO Box 455 Billerica, MA 01821	<a href="http://www.xml.org">www.XML.org</a> was formed by <a href="http://www.oasis-open.org">OASIS</a> to minimize overlap and duplication in XML languages and XML standard initiatives by providing public access to XML information and XML Schemas.	<a href="http://www.xml.org/xml/news_market.shtml">http://www.xml.org/xml/news_market.shtml</a>



**Infrastructure services, engineering services, technical services**

**Table Three**

**US Public and Private Sector standards, specifications and regulations in the  
Infrastructure, engineering and technical services sector**

Compiled by **GTW Associates** April, 2002

Acronym	Contact Information	Description (excerpted from source)	Source or web reference
AAI	Alliance of American Insurers (AAI) 3025 Highland Parkway, Suite 800 Downers Grove, Illinois 60515-1289	Alliance of American Insurers today represents the interests of more than 325 property-casualty insurers from coast to coast. Our diverse membership includes companies of all sizes, providing automobile, homeowners, professional liability, workers compensation, commercial, and other lines of property-casualty coverages to their policyholders. The American Insurers Safety and Health Standards Alliance provides a mechanism for insurance companies to participate in advancing voluntary safety and health standards by working with the American National Standards Institute. They assist insurers in coordinating voluntary standards activity that benefits the nation's public safety, health and welfare, and establishing criteria for the approval of voluntary consensus standards.	<a href="http://www.allianceai.org/">http://www.allianceai.org/</a>

<p><b>ACEC</b></p>	<p>American Council of Engineering Companies (ACEC) 1015 15th Street, NW Washington, DC 20005 202-347-7474</p>	<p>ACEC provides the executives of private engineering firms with the tools and educational opportunities to be better business owners and managers. ACEC also presents a strong, cohesive voice for the profession in national legislative and policy debates to help ensure that firms can compete fairly in an increasingly aggressive world market. According to STAFF of ACEC, “We do not get into standards and specifications that much. We are almost totally a business and government affairs oriented organization. The main standard writing groups in our industry are the American Society of Civil Engineers (asce.org) and the American Society of Heating, Refrigeration and Air Conditioning Engineers (ashrae.org). We frequently defer to them on these matters.”</p>	<p><a href="http://www.acec.org/">http://www.acec.org/</a></p>
<p><b>AIA</b></p>	<p>The American Institute of Architects (AIA) 1735 New York Ave., NW Washington, DC 20006</p>	<p>The AIA represents the interest of architects. Among priority issues are: the use of qualifications-based selections (QBS) systems for the procurement of architectural services; the support of a strong licensing system in the states that ensures the protection of public health, safety and welfare; the reform of liability laws to promote creative approaches to design while limiting frivolous lawsuits; and the support of safe, effective, and economical building codes</p> <p>In 1888, the AIA published its first contract document, the Uniform Contract for use between an owner and a contractor. That publication was followed in 1911 by the AIA's publication of its first standardized general conditions for construction, the 15th edition of which is AIA Document A201-1997.</p>	<p><a href="http://www.aia.org/">http://www.aia.org/</a></p> <p>and</p> <p><a href="http://www.aia.org/documents/drafting.asp">http://www.aia.org/documents/drafting.asp</a></p> <p>and</p> <p><a href="http://www.aia.org/documents/revpolicy.asp">http://www.aia.org/documents/revpolicy.asp</a></p>

		<p>Today there are more than 75 contracts and administrative forms available from the AIA in both print and electronic versions.</p> <p>AIA Contract Documents' relationship to the industry, being influenced by it while influencing it, is parallel to their relationship to the law. Design and construction contracts case law has, for the past century, been based largely on standard AIA documents' contract language. At the time of publication, each AIA Contract Document provides solid provisions enforceable under the existing law. The AIA regularly revises its documents to account for developments in the construction industry and the law.</p> <p>An explanation of the drafting principles can be found <a href="#">here</a>, and AIA Contract Documents revision policies were addressed by the AIA Contract Documents Committee in a formal statement released in 2001 that you may view <a href="#">here</a>.</p>	
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<b>ALTA/ACSM</b>	American Land Title Association (ALTA) American Congress on Surveying and Mapping (ACSM)	<b>ALTA/ACSM MINIMUM STANDARD DETAIL REQUIREMENTS for LAND TITLE SURVEYS</b>	<a href="http://www.acsm.net/99altawd95.doc">http://www.acsm.net/99altawd95.doc</a>
<b>ANSI Accreditation</b>	American National Institute (ANSI) Personnel Certifier Accreditation ANSI Washington, DC Headquarters 1819 L Street, NW, 6th Fl. Washington, DC, 20036	<b>ISO/IEC Standard 17024, General Requirements for Bodies Operating Certification Systems of Persons</b>	<a href="http://www.ansi.org/public/news/2001sep/roy_swift.html">http://www.ansi.org/public/news/2001sep/roy_swift.html</a> and <a href="http://www.ansi.org/public/events/open_forum/Personnel_Cert.html">http://www.ansi.org/public/events/open_forum/Personnel_Cert.html</a>
<b>ASQ</b>	American Society for Quality (ASQ) 600 North Plankinton Avenue Milwaukee, WI 53203 USA	<u>ISO 9000</u> Standards apply to quality management systems. <u>ISO 14000</u> Standards apply to environmental management systems. <u>QS-9000</u> Requirements developed by the Big Three automakers are based on the ISO 9000 standards. <u>TL 9000/QuEST Forum</u> Standards that define the telecommunications quality system requirements. US TAG to <u>TC 176</u> Quality management and quality assurance	<a href="http://www.asq.org">www.asq.org</a>

<p><b>ASTM Committee D34</b></p>	<p>ASTM Committee D34 on Waste Management 100 Barr Harbor Drive West Conshohocken, Pennsylvania, USA 19428-2959</p>	<p>The promotion of knowledge, stimulation of research, and the development of test methods, specifications, practices, terminology, classifications, and guides relating to the management of wastes. The wastes addressed by this committee are those which are generated by industrial, commercial, residential and institutional sources. Management of such wastes is defined here to include, but not be limited to, generation, storage, transportation, treatment, recovery, and disposal. The committee, with a current membership of approximately 345 industry professionals and experts, currently has jurisdiction over 122 standards</p>	<p><a href="http://www.astm.org/cgi-bin/SoftCart.exe/COMMIT/COMMITTEE/D34.htm?L+mystore+paxe9605+1011740613">http://www.astm.org/cgi-bin/SoftCart.exe/COMMIT/COMMITTEE/D34.htm?L+mystore+paxe9605+1011740613</a></p>
<p><b>ASTM Committee E53</b></p>	<p>ASTM Committee E53 on Property Management Systems 100 Barr Harbor Drive West Conshohocken, Pennsylvania, USA 19428-2959</p>	<p>develops management systems criteria, including performance standards, practices, metrics, and methods of effectiveness for the conduct of management and administration activities for durable &amp; movable assets (personal property management). The committee was formed in 2000 and has approximately 170 members participating on 3 technical subcommittees.</p>	<p><a href="http://www.astm.org/cgi-bin/SoftCart.exe/COMMIT/COMMITTEE/E53.htm?L+mystore+nvzu2680+1011728970">http://www.astm.org/cgi-bin/SoftCart.exe/COMMIT/COMMITTEE/E53.htm?L+mystore+nvzu2680+1011728970</a></p>

<p><b>AWWA</b></p>	<p>American Water Works Association (AWWA) 6666 West Quincy Avenue Denver, CO 80235-3098</p>	<p>The American Water Works Association is dedicated to the promotion of public health and welfare in the provision of drinking water of unquestionable quality and sufficient quantity. AWWA must be proactive and effective in advancing the technology, science, management, and government policies relative to the stewardship of water.</p> <p>Serves as the TA to ISO <u>TC 224</u> Standardization of service activities relating to drinking water supply and sewerage - Quality criteria of the service and performance indicators</p>	<p><a href="http://www.awwa.org">http://www.awwa.org</a></p>
<p><b>BICSI</b></p>	<p>Building Industry Consulting Service International (BICSI) 13101 Williamson Road Buda, TX 78610</p>	<p>Premises telecommunications cabling and networks installation and design methods.</p>	<p><a href="http://www.bicsi.org/">http://www.bicsi.org/</a></p>

<p><b>BOMA</b></p>	<p>Building Owners and Managers Association (BOMA) 1201 New York Ave, NW, Suite 300 Washington, DC 20005</p>	<p><u><a href="#">ANSI/IWCA 1-14.1 Window Cleaning Safety Standard</a></u></p> <p><u><a href="#">StandardWare, The Official Measurement Software</a></u></p> <p><u><a href="#">Safety Standard for Powered Platforms, ANSI A120</a></u></p> <p><u><a href="#">1996 Standard Method for Measuring Floor Area in Office Buildings</a></u></p> <p><u><a href="#">Ventilation for Acceptable Indoor Air Quality--ASHRAE Standard 62-1989</a></u></p> <p><u><a href="#">BOMA's Standard Method for Measuring Floor Area in Office Buildings</a></u></p> <p><u><a href="#">CMAA Standard Construction Management Services &amp; Practice</a></u></p> <p><u><a href="#">Handbook of Property Management</a></u></p> <p><u><a href="#">Cleaning Makes Cents: Benchmarks for Managing Your Cleaning Operations</a></u></p> <p><u><a href="#">How to Design and Manage Your Preventive Maintenance Program</a></u></p> <p><u><a href="#">Are Your Tenants Safe? BOMAs Guide to Security and Emergency Planning</a></u></p> <p><u><a href="#">Safety Standard for Powered Platforms, ANSI A120 Security Planning Guidebook</a></u></p>	<p><a href="http://www.boma.org/toc.htm#mgt">http://www.boma.org/toc.htm#mgt</a></p>
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<p><b>CLEAR</b></p>	<p>Council on Licensure, Enforcement and Regulation (CLEAR) 403 Marquis Avenue, Suite 100 Lexington, Kentucky 40502</p>	<p>CLEAR is an association of individuals, agencies and organizations, which comprise the international community of professional and occupational regulation. CLEAR is a forum for improving the quality and understanding of regulation in order to enhance public protection. Through conferences, services, and publications and other services, CLEAR provides the resources for ongoing and thorough communication of international licensure and regulation issues among all those interested in the field</p>	<p><a href="http://www.clearhq.org/">http://www.clearhq.org/</a></p>
<p><b>EASA</b></p>	<p>Electrical Apparatus Service Association Committee 1331 Baur Road St. Louis, MO 63132</p>	<p>The EASA publishes Recommended Practice for the Repair of Rotating Electrical Apparatus. This document describes recordkeeping, tests, analysis, and general guidelines for the repair of rotating electrical apparatus, including generators and motors.</p> <p>The purpose of EASA documents is to establish requirements in each step of:</p> <p><b>ELECTRICAL APPARATUS REWINDING AND REBUILDING</b></p> <p>And to promote reliability of electrical apparatus by providing good work practice guidance.</p>	
<p><b>IAAMC</b></p>	<p>International Association of Association Management Companies 414 Plaza Drive Suite 209 Westmont, IL 60559</p>	<p>Development of a professional standard of performance for association management companies and their employees. Association Management Companies are referred to as AMCs.</p>	<p><a href="http://www.iaamc.org/">http://www.iaamc.org/</a></p>

<p><b>ITSA</b></p>	<p>Intelligent Transport Society of America (ITSA) 400 Virginia Avenue, SW Suite 800 Washington, DC 20024-2730</p>	<p>The purpose of the Committee is to serve as an oversight and coordinating agency for all standards activities in the U.S. relating to ITS. The Committee does not expect to create or promulgate standards itself, except in cases of last resort. Rather it will rely on other, established standards-generating bodies to carry out the work of defining, publishing, and securing industry acceptance for standards</p> <p>Serves as the TAG to ISO <b>TC 204</b> Transport information and control systems</p>	<p><a href="http://www.itsa.org/">http://www.itsa.org/</a></p>
<p><b>NCARB</b></p>	<p>National Council of Architectural Registration Boards (NCARB) 1801 K Street, NW Suite 1100 Washington, DC 20006</p>	<p>The National Council of Architectural Registration Boards is a non-profit federation of 55 state and territory architectural registration boards in the United States.</p>	<p><a href="http://www.ncarb.org/">http://www.ncarb.org/</a></p>
<p><b>NICET</b></p>	<p>National Institute for Certification in Engineering Technologies 1420 King Street Alexandria, VA 22314-2794</p>	<p>NICET provides nationally-applicable voluntary certification programs covering several broad engineering technology fields and a number of specialized subfields. As of March 24, 2000, over 100,000 engineering technicians and technologists have been certified.</p> <p>NICET's mission is to be an independent, internationally-recognized evaluator of knowledge and experience; to define and support career paths; and to ensure continued professional development of engineering technicians and technologists.</p> <p>NICET's vision is to be the leader in recognizing, through certification, engineering technicians and technologists.</p>	<p><a href="http://www.nicet.org/">http://www.nicet.org/</a></p>

<p><b>NOCA and NCCA</b></p>	<p>National Organization for Competency Assurance and National Commission For Certifying Agencies  2025 M Street, N.W.,  Suite 800  Washington, D.C. 20036</p>	<p>The National Commission for Certifying Agencies (NCCA) is the accreditation body of NOCA. The NCCA helps to ensure the health, welfare, and safety of the public through the accreditation of a variety of certification programs/organizations that assess professional competency. The NCCA uses a peer review process to:</p> <ul style="list-style-type: none"> <li>Establish accreditation standards;</li> <li>Evaluate compliance with the standards;</li> <li>Recognize organizations/programs which demonstrate compliance; and</li> <li>Serve as a resource on quality certification.</li> </ul>	<p><a href="http://www.noca.org/ncca/accredorg.htm">http://www.noca.org/ncca/accredorg.htm</a></p>
<p><b>NSC (ASC A10)</b></p>	<p>National Safety Council (NSC) Accredited Standards Committee (ASC) A10 Committee  Safety Requirements for Construction and Demolition Operations</p> <p>1121 Spring Lake Drive,  Itasca, IL 60143</p>	<p>Standards relating to the protection of employees and the public from hazards arising out of, or associated with, construction and demolition operations</p>	<p><a href="http://www.nsc.org">http://www.nsc.org</a></p>

<p><b>NSPE</b></p>	<p>National Society of Professional Engineers (NSPE) 1420 King St. Alexandria, VA</p>	<p>The National Society of Professional Engineers (NSPE) is the only engineering society that represents individual engineering professionals and licensed engineers (PEs) across all disciplines. Founded in 1934, NSPE strengthens the engineering profession by promoting engineering licensure and ethics</p> <p>The NSPE Government Relations effort targets both federal and state legislative and regulatory issues, focusing on issues important to licensed professional engineers. Primary issue areas include engineering licensure and specialty certification, professional liability and tort reform, infrastructure, construction job site safety, procurement of engineering services, professional standards, engineering education and research</p>	<p><a href="http://www.nspe.org/">http://www.nspe.org/</a></p>
<p><b>NSSB</b></p>	<p>National Skill Standards Board (NSSB) 1441 L Street NW Suite 9000 Washington, DC 20005- 3512</p>	<p>NECA Electrical Construction Industry Skill Standards and Certification Project (ECSSP)</p> <p>Industrial Laundry Uniform and Textile Service Association (UTSA) <u><a href="#">Skill Standards for Maintenance Technicians in the Uniform and Textile Service Industry</a></u></p>	<p><a href="http://www.nssb.org/">http://www.nssb.org/</a></p>
<p><b>PMI</b></p>	<p>Project Management Institute Four Campus Boulevard Newtown Square, PA 19073</p>	<p>Project Management Standards World-wide excellence in the practice of project management through standards which are widely recognized and consistently applied to assist in improving the understanding and competency of experienced and new project management practitioners and customers worldwide.</p>	<p><a href="http://www.pmi.org/standards/">http://www.pmi.org/standards/</a></p>

<p><b>PMI</b></p>	<p>Project Management Institute Four Campus Boulevard Newtown Square, PA 19073</p>	<p>Project Management Standards World-wide excellence in the practice of project management through standards which are widely recognized and consistently applied to assist in improving the understanding and competency of experienced and new project management practitioners and customers worldwide.</p> <p>Operates a “project management” certification program</p>	<p><a href="http://www.pmi.org/standards/">http://www.pmi.org/standards/</a> and <a href="http://www.pmi.org/certification/certprog/CertInfo.htm">http://www.pmi.org/certification/certprog/CertInfo.htm</a></p>
<p><b>US FTC</b></p>	<p>US Federal Trade Commission (USFTC) 6th and Pennsylvania, NW Washington DC 20580</p>	<p>The Federal Trade Commission (FTC) works to ensure that the nation’s markets are vigorous, efficient and free of restrictions that harm consumers. The FTC enforces federal consumer protection laws that prevent fraud, deception and unfair business practices. The Commission also enforces federal antitrust laws that prohibit anticompetitive mergers and other business practices that restrict competition and harm consumers. Whether combating telemarketing fraud, Internet scams or price-fixing schemes, the FTC’s primary mission is to protect consumers.</p>	<p><a href="http://www.ftc.gov">http://www.ftc.gov</a></p>

## **Public services, e-government**

**Table Four**

**US Public and Private Sector standards, specifications and regulations in the**

**Public Services, E-government services sector**

Compiled by [GTW Associates](#) April, 2002

<b>Acronym</b>	<b>Contact Information</b>	<b>Description (excerpted from source)</b>	<b>Source or web reference</b>
<b>ANSI Accreditation</b>	American National Standards Institute (ANSI) Personnel Certifier Accreditation Program ANSI Washington, DC Headquarters 1819 L Street, NW, 6th Fl. Washington, DC, 20036	ISO/IEC Standard 17024, General Requirements for Bodies Operating Certification Systems of Persons,	<a href="http://www.ansi.org/public/news/2001sep/roy_swift.html">http://www.ansi.org/public/news/2001sep/roy_swift.html</a>  and <a href="http://www.ansi.org/public/events/open_forum/Personnel_Cert.html">http://www.ansi.org/public/events/open_forum/Personnel_Cert.html</a>
<b>ASQ</b>	American Society for Quality (ASQ) 600 North Plankinton Avenue Milwaukee, WI 53203 USA	<u>ISO 9000</u> Standards apply to quality management systems. <u>ISO 14000</u> Standards apply to environmental management systems. <u>QS-9000</u> Requirements developed by the Big Three automakers are based on the ISO 9000 standards. <u>TL 9000/QuEST Forum</u> Standards define the telecommunications quality system requirements.	<a href="http://www.asq.org">www.asq.org</a>

		ASQ sponsors US TAG to ISO TC 176 Quality management and quality assurance	
<b>CIO BSPs</b>	<p>The Chief Information Officers (CIO) Council and Federal Agency Security Practices (FASP) web site</p> <p>C/O National Institute of Standards and Technology (NIST), 100 Bureau Drive, Stop 3460, Gaithersburg, MD 20899-3460</p>	<p>The CIO Council serves as the principal interagency forum for improving practices in the design, modernization, use, sharing, and performance of Federal Government agency information resources. The Council's role includes developing recommendations for information technology management policies, procedures, and standards</p> <p>A best security practice (BSP) is a existing method, proven effective and validated by actual experience, that people use to perform a security-related task.</p> <p>The Chief Information Officer Council (CIO), Security Practices Subcommittee initiated the development BSP tools and practices. 20 BSPs were submitted and can be found at the Federal Agency Security Practices (FASP) web site</p>	<p><a href="http://www.cio.gov/">http://www.cio.gov/</a></p> <p>and</p> <p><a href="http://csrc.nist.gov/fasp/">http://csrc.nist.gov/fasp/</a></p>
<b>Defense Electronic Business Program Office</b>	<p>Defense Electronic Business Program Office 8725 John J. Kingman Road Stop 6205 Ft. Belvoir, VA 22060-6205</p>	<p>The Defense eBusiness guiding principles are the tenets and beliefs central to the long-term eBusiness needs of the Department. These principles serve as broad, direction-setting guidelines intended to govern the implementation of Defense eBusiness, regardless of the functional application, and to ensure that the full benefits of eBusiness implementation are achieved.</p>	<p><a href="http://www.defenselink.mil/acq/ebusiness/">http://www.defenselink.mil/acq/ebusiness/</a></p>
<b>e-Government Project</b>	<p>e-Government Project sponsored by Senators Lieberman and Thompson US Senate Committee on Government Affairs 340 Dirksen Senate</p>	<p>The e-Government Project web page is an experimental attempt to involve the digital citizen-as a partner in the legislative process. On this page are a series of ideas how Congress could help to advance the cause of e-Government.</p>	<p><a href="http://www.senate.gov/~gov_affairs/egov/">http://www.senate.gov/~gov_affairs/egov/</a></p>

	<p>Office Building Washington, D.C. 20510</p>	<p>One section addresses Standards</p> <p>Categorizing and Tagging Information</p> <p>Interoperability Standards</p> <p>Wireless Compatibility for Federal Web Sites</p> <p>Public Key Infrastructure</p> <p>Federal Web Access Guidelines for Disabled Individuals</p>	
<p><b>FIPS</b></p>	<p>Federal Information Processing Standards Publications National Institute of Standards and Technology (NIST), 100 Bureau Drive, Stop 3460, Gaithersburg, MD 20899-3460</p>	<p>Under Section 513 of the Information Technology Management Reform Act of 1996 and the Computer Security Act of 1987, Public Law 104-106, NIST develops standards, guidelines, and associated methods and techniques for Federal computer systems.</p> <p>As of February 15, there are 41 FIPs described at <a href="http://www.itl.nist.gov/fipspubs/">http://www.itl.nist.gov/fipspubs/</a> and they fall into the following three categories</p> <p>7 FIPS <u>Hardware and Software Standards/Guidelines (HS)</u> Database Electronic Data Interchange Information Interchange Modeling Techniques</p> <p>11 FIPS <u>Data Standards/Guidelines (DATA)</u> Representations and Codes</p> <p>23 FIPS <u>Computer Security Standards/Guidelines (CS)</u></p>	<p><a href="http://www.itl.nist.gov/fipspubs/">http://www.itl.nist.gov/fipspubs/</a></p>

		Access Control Cryptography General Computer Security Risk Analysis and Contingency Planning Security Labels	
<b>FirstGov</b> TM	<b>Office of FirstGov c/o General Services Administration (GSA), 750 17th Street, N.W., Suite 200, Washington, D.C. 20006-4634</b>	FirstGov is the “official” public gateway to government information on the Internet. It does not contain standards information, but includes helpful search functions	<a href="http://www.firstgov.gov/index.shtml">http://www.firstgov.gov/index.shtml</a>
<b>GBDe</b>	<b>Global Business Dialogue on Electronic Commerce</b>	The GBDe e-Government database comprises reports of e-Government projects in many different countries  GBDe has also prepared private sector recommendations for e-government	<a href="http://www.gbde.org/egovernment/">http://www.gbde.org/egovernment/</a> and <a href="http://www.gbde.org/egovernment/egovernment.pdf">http://www.gbde.org/egovernment/egovernment.pdf</a>

<p><b>NISO</b></p>	<p>National Information Standards Organization (NISO) 4733 Bethesda Avenue, Suite 300 Bethesda, MD 20814</p>	<p>NISO, the National Information Standards Organization identifies, develops, maintains, and publishes technical standards to manage information in our changing and ever-more digital environment.</p> <p>To develop voluntary, consensus technical standards relevant to information systems; products, including hardware and supplies; and services, as they relate to libraries, bibliographic and information services, and publishing.</p> <p>NISO standards apply both traditional and new technologies to the full range of information-related needs, including retrieval, re-purposing, storage, metadata, and preservation</p> <p>NISO services as the <u>US TAG to ISO TC 46 on Information and Documentation</u></p> <p>NISO has approved and published 32 national standards at <a href="http://www.niso.org/standards/index.html">http://www.niso.org/standards/index.html</a></p>	<p><a href="http://www.niso.org/">http://www.niso.org/</a></p>
<p><b>OEG</b></p>	<p>Office of Electronic Government (OEG) within General Services Administration 1800 F Street NW, Washington DC 20405</p>	<p>The Office of Electronic Government in the General Services Administration was formerly named the Office of Electronic Commerce. Electronic government is about using technology to enhance access to and delivery of information and services to citizens, business partners, employees, agencies, and government entities. Welcome to the Office of Electronic Government, serving citizens and helping agencies meet the demand for on-line government</p>	<p><a href="http://egov.gov/">http://egov.gov/</a></p>

<p><b>OFPP/OMB</b></p>	<p>The Office of Federal Procurement Policy (OFPP) Acquisition Reform Network within the Office of Management and Budget (OMB)</p>	<p>The <u>Acquisition Reform Network</u> is an enterprise created to foster and propagate measurable breakthrough improvements in the way that government obtains goods and services.</p> <p>Standard eTransactions establishes standard data elements, business definitions, ownership, behaviors, roles and responsibilities for Government acquisition data.</p> <p>Acquisition has common functions that can be consolidated through a shared services environment. Sharing these processes and their accompanying data will enable government to make more informed procurement, logistical, payment and performance assessment decisions. Several initiatives have been identified to help take the first steps towards evolving to a model that facilitates access and eliminates redundant systems and data collection, while maximizing the e-market opportunities.</p>	<p><a href="http://www.arnet.gov/Notes/">http://www.arnet.gov/Notes/</a></p>
<p><b>OMB interagency task force</b></p>	<p>Office of Management and Budget (OMB)</p>	<p>The Associate Director for Information Technology and e-Government leads an interagency task force to define an action plan and road map in achieving the President's e-government vision. The plan addresses the following elements</p> <p>Service to <i>individuals</i>: deploy easy to find one-stop shops for citizens, including single points of easy entry to access high quality government services;</p> <p>Service to <i>businesses</i>: reduce burden on</p>	<p><a href="http://www.whitehouse.gov/omb/memoranda/m01-28.html">http://www.whitehouse.gov/omb/memoranda/m01-28.html</a></p>

		<p>businesses by using Internet protocols and consolidating the myriad of redundant reporting requirements;</p> <p><i>Intergovernmental affairs:</i> make it easier for States to meet reporting requirements, while enabling better performance measurement and results, especially for grants; and</p> <p><i>Internal efficiency and effectiveness:</i> improve the performance and reduce costs of Federal government administration by using e-business best practices in areas such as supply chain management, financial management, and knowledge management.</p>	
<b>SFEB</b>	<p>The Secretariat for Federal eBusiness (This is a virtual site maintained by NIST)</p> <p>National Institute of Standards and Technology (NIST), 100 Bureau Drive, Stop 3460, Gaithersburg, MD 20899-3460</p>	<p>This is the official repository for approved Electronic Data Interchange Implementation Conventions</p> <p>The site contains links to numerous Federal "ICs"</p>	<p><a href="http://www.antd.nist.gov/fededi/">http://www.antd.nist.gov/fededi/</a></p>
<b>US FEC</b>	<p>US Federal Election Commission (FEC) 999 E Street, NW Washington, DC 20463</p>	<p>FEC administers and enforces the Federal Election Campaign Act (FECA) - the statute that governs the financing of federal elections. On December 13, 2001, the Federal Election Commission (FEC) approved for release to the public drafts of Volumes I and II of the Voting</p>	<p><a href="http://www.fec.gov/pages/vss/vss.html">http://www.fec.gov/pages/vss/vss.html</a></p>

		<b>Systems Standards</b>	
<b>USG EC</b>	United States Government Electronic Commerce web site	<b>U.S. Government Sites on Electronic Commerce Policy</b>	<a href="http://www.ecommerce.gov/examples.htm">http://www.ecommerce.gov/examples.htm</a>

## **Education and training**

**Table Five**

**US Public and Private Sector standards, specifications and regulations in the  
Education and Training services sector**

Compiled by **GTW Associates** April, 2002

<b>Acronym</b>	<b>Contact Information</b>	<b>Description (excerpted from source)</b>	<b>Source or web reference</b>
<b>ACDE</b>	Association of Commercial Diving Educators (ACDE) c/o College of Oceaneering 272 South Fries Avenue Wilmington, CA 90744	The ACDE is the organization of commercial diving educators. Members teach the courses required to enter the diving industry. The standard relates to the minimum training requirement for this training.	<a href="http://www.diveweb.com/acde/">http://www.diveweb.com/acde/</a>
<b>ANSI Accreditation</b>	American National Standards Institute (ANSI) Personnel Certifier Accreditation Program ANSI Washington, DC Headquarters 1819 L Street, NW, 6th Fl. Washington, DC, 20036	ISO/IEC Standard 17024, General Requirements for Bodies Operating Certification Systems of Persons	<a href="http://www.ansi.org/public/news/2001sep/roy_swift.html">http://www.ansi.org/public/news/2001sep/roy_swift.html</a>  and  <a href="http://www.ansi.org/public/events/open_forum/Personnel_Cert.html">http://www.ansi.org/public/events/open_forum/Personnel_Cert.html</a>

<p><b>ASSE (ASC Z590)</b></p>	<p>American Society of Safety Engineers (ASSE) Accredited Standards Committee (ASC) Z590 Competence and Certification in the Safety Profession</p> <p>1800 East Oakton Street Des Plaines, IL 60018-2187</p>	<p>This standard (Z590) establishes, for the safety profession, core competencies, certifications, credentials, levels of qualifications and credentials, learning support resources including, but not limited to, competency, performance assessments, outcomes, and measurement.</p>	<p><a href="http://www.asse.org/">http://www.asse.org/</a></p>
<p><b>ASSE (ASC Z390)</b></p>	<p>American Society of Safety Engineers (ASSE) Accredited Standards Committee (ASC) Z390 Hydrogen Sulfide Safety Training</p> <p>1800 East Oakton Street Des Plaines, IL 60018-2187</p>	<p>This standard sets forth accepted practices for Hydrogen Sulfide ((H<sub>2</sub>S) Safety Training to include: minimum informational content of the course; recommended exercises and drills; instructor credentials; and refresher requirements.</p>	<p><a href="http://www.asse.org/">http://www.asse.org/</a></p>
<p><b>ASSE (ASC Z490)</b></p>	<p>American Society of Safety Engineers (ASSE) Accredited Standards Committee (ASC) Z490 Committee Criteria for Best Practices in Safety, Health and Environmental Training</p> <p>1800 East Oakton Street Des Plaines, IL 60018</p>	<p>Establishment of criteria for best practices for the field of safety, health, and environmental training, including: core competencies, instructor credentials, organizational responsibilities/controls, awarding credit, model curriculums, records maintenance, and facilities/learning support resources, but not limited to instruction, competency methodologies, learning assessments, learning outcomes, and measurement.</p>	<p><a href="http://www.asse.org/safety.html">http://www.asse.org/safety.html</a></p>

<p><b>CEA S-100</b></p>	<p>Council for Educational Accountability</p>	<p>The CEA S-100(1996) Standard is designed to ensure conformance to expressed beliefs and values at Christian educational institutions and service organizations. Conformance and certification to the Standard is voluntary and may be terminated at any time.</p>	<p><a href="http://www.geocities.com/Heartland/7547/ceas100.html">http://www.geocities.com/Heartland/7547/ceas100.html</a></p>
<p><b>Developing Educational Standards web site</b></p>	<p>Wappingers Central School District, 29 Marshall Road, Wappingers Falls, NY 12590</p>	<p>Developing Educational Standards web site serves as a clearinghouse for information about educational standards and curriculum frameworks from throughout the country. Standards are organized by subject and by State</p> <p><u><a href="#">Art and Music</a></u></p> <p><u><a href="#">English/Language Arts</a></u></p> <p><u><a href="#">Family and Consumer Sciences</a></u> <u><a href="#">Foreign Language/ESL</a></u> <u><a href="#">Occupational/Business Education</a></u></p> <p><u><a href="#">Health/Physical Education</a></u></p> <p><u><a href="#">Library Media</a></u> <u><a href="#">Math</a></u></p> <p><u><a href="#">Science</a></u></p> <p><u><a href="#">Social Studies</a></u></p> <p><u><a href="#">Teaching</a></u></p> <p><u><a href="#">Technology</a></u></p>	<p><a href="http://edstandards.org/Standards.html">http://edstandards.org/Standards.html</a></p>
<p><b>DOL</b></p>	<p>Department of Labor Employment and</p>	<p>The Employment and Training Administration seeks to build up the labor market through the</p>	<p><a href="http://www.doleta.gov/">http://www.doleta.gov/</a></p>

	Training Administration	training of the workforce and the placement of workers in jobs through employment services  Occupational Information Network contains comprehensive information on job requirements and worker competencies	and  <a href="http://www.doleta.gov/programs/onet/database.asp">http://www.doleta.gov/programs/onet/database.asp</a>
<b>Go Certify</b>	Anventure att: GoCertify.com 2448 Vincent Rd Winston-Salem, NC 27106	Go Certify is an online resource for certification information, covering hundreds of IT certifications. Contains certification descriptions, costs, requirements, perks, contact information	<a href="http://annemartinez.com/news/">http://annemartinez.com/news/</a>
<b>ITCSC</b>	Information Technology Certification Security Council (ITCSC)	The ITCSC is dedicated to preserving the integrity of the tests, the test items, and test results that are behind any successful certification program in the Information Technology sector	<a href="http://www.certsecurity.org/">http://www.certsecurity.org/</a>
<b>JCSEE</b>	Joint Committee on Standards for Educational Evaluation The Evaluation Center Western Michigan University Kalamazoo, MI 49008	The development and maintenance of standards for evaluations of educational programs, projects, and material, educational personnel and other critical aspects of education.	<a href="http://www.wmich.edu/evalctr/">http://www.wmich.edu/evalctr/</a>
<b>NASBE</b>	National Association of State Boards of Education 277 South Washington Street, Suite 100 Alexandria, VA 22314	The National Association of State Boards of Education (NASBE) is a non-profit association that represents state and territorial boards of education. Our principal objectives include strengthening state leadership in educational policymaking; promoting excellence in the education of all students; advocating equality of access to educational opportunity; and assuring continued citizen support for public education.	<a href="http://www.nasbe.org/">http://www.nasbe.org/</a>
<b>NATABOC</b>	National ATHLETIC TRAINERS ASSOCIATION BOARD OF CERIFICATION (NATABOC)	The Mission of the NATA Board of Certification is to certify athletic trainers and training courses for trainers	<a href="http://www.nataboc.org/">http://www.nataboc.org/</a>

	4223 So. 143 <sup>rd</sup> Circle, Omaha, NE, 68137		
<b>NCITE</b>	National Committee for International Trade in Education (NCITE) One Dupont Circle, NW Suite 515 Washington, DC 20036	The Center for Quality Assurance in International Education submitted a report to the Office of the U.S. Trade Representative (USTR) in response to the April 14, 1999 Federal Register notice requesting public comment regarding negotiations on Market Access and Other Issues in the World Trade Organization (WTO) on barriers to trade in education. This report outlines a variety of barriers to trade in education experienced by U.S. providers.	<a href="http://www.tradeineducation.org/">http://www.tradeineducation.org/</a>
<b>NOCA and NCCA</b>	National Organization for Competency Assurance (NOCA) and National Commission For Certifying Agencies (NCCA) 2025 M Street, N.W., Suite 800 Washington, D.C. 20036	The National Commission for Certifying Agencies (NCCA) is the accreditation body of NOCA. The NCCA helps to ensure the health, welfare, and safety of the public through the accreditation of a variety of certification programs/organizations that assess professional competency.  The NCCA uses a peer review process to: Establish accreditation standards; Evaluate compliance with the standards; Recognize organizations/programs which demonstrate compliance; and Serve as a resource on quality certification.  NOCA has accredited the certification program of the <a href="#">National Athletic Trainer's Association Board of Certification</a> listed elsewhere	<a href="http://www.noca.org/ncca/accredorg.htm">http://www.noca.org/ncca/accredorg.htm</a>
<b>NSSB</b>	National Skill Standards Board (NSSB) 1441 L Street NW Suite 9000 Washington, DC 20005-3512	NSSB funded a Voluntary Partnership and Phase I Implementation Grant to the American Federation of Teachers, AFL-CIO (AFT) for the Education and Training Industry Cluster.  The Education and Training Voluntary Partnership (E&TVP) as the organization's third	<a href="http://www.nssb.org/">http://www.nssb.org/</a>  and <a href="http://www.etvp.org/mission.htm">http://www.etvp.org/mission.htm</a>

		<p>Voluntary Partnership charged with developing a skill standards system for the Training Industry Sector</p> <p>The <u>mission</u> is to develop a national system of voluntary skill standards for front-line workers in the Education and Training industry. In subsequent phases, the E&amp;TVP will develop assessments and certification systems.</p>	
<b>RSTC (ASC Z86)</b>	<p>Recreational Scuba Training Council (RSTC) Accredited Standards Committee (ASC) Z86 3047 Joan Court Land O'Lakes, FL 34639</p>	<p>Standards for safety in skin and scuba (self contained underwater breathing apparatus) diving included, but not limited to, breathing apparatus, air containers, air purity, air pumps, float equipment, methods of recording accidents, methods of teaching and certifying participants.</p>	
<b>US DOE</b>	<p>US Department of Education (US DOE) Washington DC</p>	<p>US Department of Education web site contains links to</p> <p><u><a href="#">FedLaw education-related federal statutes &amp; regulations</a></u></p> <p>and</p> <p><u><a href="#">A capsule view of the history of Federal Education Legislation</a></u></p>	<p><u><a href="http://www.ed.gov/">http://www.ed.gov/</a></u></p> <p>and</p> <p><u><a href="http://www.ed.gov/topics/topicsTier2.jsp?top=Policy&amp;type=T&amp;subtop=Regulations">http://www.ed.gov/topics/topicsTier2.jsp?top=Policy&amp;type=T&amp;subtop=Regulations</a></u></p>
<b>US FTC</b>	<p>US Federal Trade Commission (US FTC) 6th and Pennsylvania, NW Washington DC 20580</p>	<p>The Federal Trade Commission (FTC) works to ensure that the nation's markets are vigorous, efficient and free of restrictions that harm consumers. FTC's primary mission is to protect consumers.</p> <p>The FTC enforces federal consumer protection laws that prevent fraud, deception and unfair business practices. FTC addresses consumer</p>	<p><u><a href="http://www.ftc.gov">http://www.ftc.gov</a></u></p> <p>and</p> <p><u><a href="http://www.ftc.gov/bcp/menu-jobs.htm">http://www.ftc.gov/bcp/menu-jobs.htm</a></u></p>

		<p><b>complaints and offers guidance on such service sector topics as privacy of customer information. FTC issues guides</b></p> <p><b>Choosing a Career or Vocational School</b></p> <p><b>Guides for Private Vocational and Distance Education Schools</b></p>	
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## Financial services

**Table Six**

**US Public and Private Sector standards, specifications and regulations in the  
Financial services sector**

**Compiled by GTW Associates April, 2002**

<b>Acronym</b>	<b>Contact Information</b>	<b>Description (excerpted from source)</b>	<b>Source or web reference</b>
<b>A. M. BEST</b>	<a href="#">A.M. Best Company, Inc.</a> Ambest Road Oldwick, NJ 08858	A.M. Best Company is an insurance Information Source covering all aspects of the insurance industry. Founded in 1899, A.M. Best became the first company in the world to report on the financial condition of insurance companies  List of numerous insurance associations	<a href="http://www.ambest.com/directory/ascdir.html">http://www.ambest.com/directory/ascdir.html</a>

<p><b>AAI</b></p>	<p>Alliance of American Insurers 3025 Highland Parkway, Suite 800 Downers Grove, Illinois 60515-1289</p>	<p>Alliance of American Insurers today represents the interests of more than 325 property-casualty insurers from coast to coast. Our diverse membership includes companies of all sizes, providing automobile, homeowners, professional liability, workers compensation, commercial, and other lines of property-casualty coverages to their policyholders. The American Insurers Safety and Health Standards Alliance provides a mechanism for insurance companies to participate in advancing voluntary safety and health standards by working with the American National Standards Institute. They assist insurers in coordinating voluntary standards activity that benefits the nation's public safety, health and welfare, and establishing criteria for the approval of voluntary consensus standards.</p>	<p><a href="http://www.allianceai.org/">http://www.allianceai.org/</a></p>
<p><b>ABA (ASC X9)</b></p>	<p>American Bankers Association Accredited Standards Committee (ASC) X9 1120 Connecticut Ave., N.W. Washington, DC 20036</p>	<p>Standardization for facilitating financial services operations.</p> <p>US TAG TO ISO <b>TC 68</b> Banking, securities and other financial services</p>	<p><a href="http://www.x9.org">www.x9.org</a> and <a href="http://www.tc68.org">www.tc68.org</a></p>

<p><b>AICPA</b></p>	<p>American Institute of Certified Public Accountants (AICPA) 1211 Avenue of the Americas New York, NY 10036-8775</p>	<p>Accreditation of specialized practice areas is needed as a bold, commercial, marketing venture to provide for the future economic well-being of members and to assure the quality of services being provided in the marketplace. Accreditation provides a mechanism to brand the CPA-provided specialized service, in the mind of the consuming public, as the service of choice. As CPAs continue to migrate their practices toward the delivery of non-traditional and new services, and CPAs in industry and other areas make these same resources available to employers, specialization becomes increasingly important.</p> <p>The National Accreditation Commission (NAC) is a senior AICPA committee made of up eight members from all segments of the profession formed to provide a means for formally identifying, recognizing, advocating, and supporting new areas of specialization that warrant an accreditation program.</p>	<p><a href="http://www.aicpa.org/index.htm">http://www.aicpa.org/index.htm</a></p>
<p><b>AllRegs</b></p>	<p>AllRegs 1020 Discovery Road, Suite 180 Eagan, MN 55121-2094</p>	<p>The most comprehensive, accurate, and up-to-date source of underwriting guidelines, laws, regulations, and forms.</p> <p>State-by-state analyses and interpretive summaries with links to supporting statutes and regulations and references to federal pre-emptions. Covers origination through servicing of first and second mortgages and home equity lines of credit for both lender and broker issues and includes sample disclosures and other forms.</p>	<p><a href="http://www.allregs.com/products.htm">http://www.allregs.com/products.htm</a></p>

<b>ARELLO</b>	Association of Real Estate License Law Officials (ARELLO) POB 230159, Montgomery, AL 36123-0159	ARELLO is a not-for-profit association made up of entities involved in regulating the practice of real estate.	<a href="http://www.arello.org/">http://www.arello.org/</a>
<b>CFP</b>	Certified Financial Planner (CFP) Board of Standards 1700 Broadway, Suite 2100 Denver, Colorado 80290-2101	<p>The mission of the Certified Financial Planner Board of Standards, a professional regulatory organization, is to benefit the public by fostering professional standards in personal financial planning. Certified Financial Planner Board of Standards foster professional standards in personal financial planning so that the public values, has access to and benefits from competent financial planning.</p> <p>The requirements for certification are described in a Guide at <a href="http://www.cfp-board.org/cert_gib.html">http://www.cfp-board.org/cert_gib.html</a></p> <p>Sponsors US TAG to ISO <a href="#">TC 222 Personal financial planning</a></p>	<a href="http://www.cfp-board.org/">http://www.cfp-board.org/</a>  and  <a href="http://www.cfp-board.org/main_abtus.html#boards">http://www.cfp-board.org/main_abtus.html#boards</a>
<b>CLEAR</b>	Council on Licensure, Enforcement and Regulation 403 Marquis Avenue, Suite 100 Lexington, Kentucky 40502	CLEAR is an association of individuals, agencies and organizations, which comprise the international community of professional and occupational regulation. CLEAR is a forum for improving the quality and understanding of regulation in order to enhance public protection. Through conferences, services, and publications and other services, CLEAR provides the resources for ongoing and thorough communication of international licensure and regulation issues among all those interested in the field	<a href="http://www.clearhq.org/">http://www.clearhq.org/</a>
<b>FASB</b>	Financial Accounting Standards Board (FASB)	Financial Accounting Series Most publications issued by the Financial Accounting Standards Board as part of its	<a href="http://www.fasb.org/public/index.html">http://www.fasb.org/public/index.html</a>

	<p><b>401 Merritt 7 P.O. Box 5116 Norwalk, Connecticut 06856-5116</b></p>	<p><b>standards-setting process comprise the Financial Accounting Series, which is available under two subscription plans (see below). Subtitles within the series are:</b></p> <p><b>Statements of Financial Accounting Standards establish new standards or amend those previously issued.</b></p> <p><b>Statements of Financial Accounting Concepts set forth fundamentals on which future financial accounting and reporting standards will be based.</b></p> <p><b>Interpretations clarify, explain, or elaborate on FASB Statements, Accounting Research Bulletins, or APB Opinions.</b></p> <p><b>Technical Bulletins are staff documents that provide guidance on implementation and practice problems.</b></p> <p><b>Exposure Drafts are proposed Statements of Financial Accounting Standards or proposed Interpretations issued for public comment prior to adoption.</b></p> <p><b>Discussion Memorandums and Invitations to Comment are documents issued on major topics for public comment, both in writing and, at times, at a public hearing.</b></p>	
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FRB	Federal Reserve Board (FRB)	<p>The Federal Reserve's duties fall into four general areas: (1) conducting the nation's monetary policy; (2) supervising and regulating banking institutions and protecting the credit rights of consumers; (3) maintaining the stability of the financial system; and (4) providing certain financial services to the U.S. government, the public, financial institutions, and foreign official institutions</p> <p>The Federal Reserve Board January 13, 2002 issued an Order of Assessment of a Civil Money Penalty against Dexia, S.A., Brussels, Belgium; Dexia Bank Belgium, S.A., Brussels, Belgium; and Dexia Credit Local de France, Paris, France. The Order requires them to pay a civil money penalty of \$50,000.</p> <p>The three related foreign banks, without admitting to any allegations, consented to the issuance of the Order for failure to comply with the provisions of the Board's Regulation Y and with the condition imposed in writing in connection with the Board's granting of the banks' request to become financial holding companies requiring them to timely notify the Board if they fall out of compliance with standards for being financial holding companies</p>	<p><a href="http://www.federalreserve.gov/">http://www.federalreserve.gov/</a></p> <p><a href="http://www.federalreserve.gov/boarddocs/press/enforcement/2002/20020114/default.htm">http://www.federalreserve.gov/boarddocs/press/enforcement/2002/20020114/default.htm</a></p>
GBDe	Global Business Dialogue on Electronic Commerce (GBDe)	The GBDe has working groups on consumer confidence related to financial services	<a href="http://consumerconfidence.gbde.org/">http://consumerconfidence.gbde.org/</a>
HIBCC	Health Industry Business Communications Council Committee	standardize identification of the buyers, sellers and products which comprise electronic commerce in the health care industry. It is HIBCC's intent to accomplish this task in	<a href="http://www.hibcc.org/">http://www.hibcc.org/</a>

	(HIBCC) 2525 East Arizona Biltmore Circle Suite 127 Phoenix, AZ 85016	conjunction with other standards development organizations and interested and affected parties, and to create new standards only where they have not been developed within the ANSI framework.	
ICB	Institute of Certified Bankers (ICB) 1120 Connecticut Ave., N.W. Washington, DC 20036	<p>The Institute of Certified Bankers offers eight professional certification programs in the areas of trust and investments, regulatory compliance, lending, retail, and security:</p> <p>Trust and Investment Certifications <b><i>Certified Trust and Financial Advisor® (CTFA)</i></b>: applicable to financial services professionals whose primary function and expertise focuses on the provision of fiduciary services related to trusts, estates guardianships and individual asset management accounts.</p> <p><b><i>Certified Retirement Services Professional® (CRSP)</i></b>: applicable to financial services professionals whose primary function and expertise focuses on the provision of employee benefit and/or retirement plan services.</p> <p><b><i>Certified Securities Operations Professionals® (CSOP)</i></b>: applicable to financial services professionals whose primary function and expertise focuses on the execution of processing operations related to all manner of securities.</p> <p><b><i>Certified Corporate Trust Specialist® (CCTS)</i></b>: applicable to financial services professionals whose primary function and expertise focuses</p>	<a href="http://www.aba.com/icbcertifications/certification_programs.htm">http://www.aba.com/icbcertifications/certification_programs.htm</a>

on the provision of corporate trust services.

Regulatory Compliance Certification *Certified Regulatory Compliance Manager*© (CRCM): applicable to financial services professionals whose primary function and expertise focuses on the application, implementation and maintenance of relevant federal and state regulatory requirements as they relate to a financial services organization's business.

Lending Certification *Certified Lender Business Banker*© (CLBB): applicable to financial services professionals whose primary function and expertise focuses on the provision of credit and financial transaction services to businesses and/or corporations.

Financial Institution Security Certification *Certified Financial Services Security Professional*© (CFSSP): applicable to financial services professionals whose primary function and expertise focuses on management and/or execution of physical safety and security for a financial services organization's facilities, staff, systems, and/or customers.

IRA Certification *Certified IRA Services*

		<b><i>Professional© (CISP):</i></b>	
<b>IFX Forum</b>	Interactive Financial Exchange (IFX) Forum 333 John Carlyle Street, Suite 600 Alexandria, VA 22314-5745	Interactive Financial eXchange (IFX) Forum, where business and technology professionals gather to develop a robust XML framework for the electronic business-to-business exchange of data among financial service institutions around the world.	<a href="http://www.ifxforum.org/ifxforum.org/index.cfm">http://www.ifxforum.org/ifxforum.org/index.cfm</a>
<b>IIA</b>	Institute of Internal Auditors (IIA) Committee 249 Maitland Avenue Altamonte Springs, FL 32701-4201	The Standards for the Professional Practice of Internal Auditing (Standards) are the criteria by which the operations of an internal auditing department are evaluated and measured. They are intended to represent the practice of internal auditing as it should be. The Standards are meant to serve the entire profession in all types of organizations where internal auditors are found.	<a href="http://www.rutgers.edu/Accounting/raw/ii/">http://www.rutgers.edu/Accounting/raw/ii/</a>
<b>INCITS</b>	InterNational Committee for Information Technology Standards C/O Information Technology Industry Council (ITI). 1250 Eye Street NW Suite 200 Washington, DC 20005	INCITS's mission is to produce market-driven, voluntary consensus standards in the areas of: - multimedia (MPEG/JPEG), - intercommunication among computing devices and information systems (including the Information Infrastructure, SCSI-2 interfaces, Geographic Information Systems), - storage media (hard drives, removable cartridges), - database (including SQL3), - security, and -programming languages (such as C++).	<a href="http://www.ncits.org/">http://www.ncits.org/</a> and <a href="http://www.itic.org/">http://www.itic.org/</a>

<p><b>MISMO</b></p>	<p>Mortgage Industry Standards Maintenance Organization (MISMO) 333 John Carlyle Street, Suite 600 Alexandria, VA 22314</p>	<p>The Mortgage Industry Standards Maintenance Organization's mission is to develop, promote, and maintain voluntary electronic commerce standards for the mortgage industry. Established in 1999 by the Mortgage Bankers Association of America, MISMO encourages participation from all sectors of the industry.</p>	<p><a href="http://www.mismo.org/">http://www.mismo.org/</a></p>
<p><b>NAIC</b></p>	<p>The National Association of Insurance Commissioners (NAIC) 2301 McGee Suite 800 Kansas City, MO 64108-2604</p>	<p>The National Association of Insurance Commissioners (NAIC) is the organization of insurance regulators from the 50 states, the District of Columbia and the four U.S. territories. The NAIC provides a forum for the development of uniform policy when uniformity is appropriate.</p> <p>Operates a consumer complaint system</p>	<p><a href="http://www.naic.org/regulator.htm">http://www.naic.org/regulator.htm</a> and <a href="http://www.naic.org/servlet/cis.FileComplaint">http://www.naic.org/servlet/cis.FileComplaint</a></p>
<p><b>NAIC</b></p>	<p>National Association of Insurance Commissioners (NAIC) 2301 McGee Suite 800 Kansas City, MO 64108-2604</p>	<p>The National Association of Insurance Commissioners (NAIC) is the organization of insurance regulators from the 50 states, the District of Columbia and the four U.S. territories. The NAIC provides a forum for the development of uniform policy when uniformity is appropriate.</p> <p>A state regulator's primary responsibility is to protect the interests of insurance consumers, and the NAIC helps regulators fulfill that obligation. That assistance is related to the regulators' shared objectives of financial and market conduct regulation.</p>	<p><a href="http://www.naic.org/regulator.htm">http://www.naic.org/regulator.htm</a></p>
<p><b>NAMB</b></p>	<p>National Association of Mortgage Brokers 8201 Greensboro Drive, Suite 300, McLean, VA 22102</p>	<p>NAMB has submitted to the Department of Housing and Urban Development (HUD) a proposed mortgage originator disclosure form that would be mandatory for all originators. NAMB's disclosure is in response to efforts by HUD to clarify certain methods of compensation paid by wholesale mortgage lenders in mortgage broker transactions</p>	<p><a href="http://www.namb.org">www.namb.org</a></p>

<p><b>NASBA</b></p>	<p>National Association of State Boards of Accountancy (NASBA)  NASBA  150 Fourth Avenue North, Suite 700  Nashville, TN 37219-2417</p>	<p>NASBA serves as a forum for the 54 U.S. boards of accountancy. NASBA sponsors a variety of programs and services designed to enhance the effectiveness of its member boards.</p> <p>To obtain a license from a state board of accountancy, you must meet all of the state's requirements for licensure. Licensure requirements vary from state to state. Most states have education, examination, and experience requirements and some have ethics requirements. You can access a general summary of states' licensure requirements by clicking the link below.</p>	<p><a href="http://www.nasba.org/nasbaweb.nsf/?Open">http://www.nasba.org/nasbaweb.nsf/?Open</a></p>
<p><b>NOCA and NCCA</b></p>	<p>National Organization for Competency Assurance (NOCA) and National Commission For Certifying Agencies (NCCA)  2025 M Street, N.W., Suite 800  Washington, D.C. 20036</p>	<p>The National Commission for Certifying Agencies (NCCA) is the accreditation body of NOCA. The NCCA helps to ensure the health, welfare, and safety of the public through the accreditation of a variety of certification programs/organizations that assess professional competency.</p> <p>The NCCA uses a peer review process to:  Establish accreditation standards;  Evaluate compliance with the standards;  Recognize organizations/programs which demonstrate compliance; and  Serve as a resource on quality certification.</p> <p>NOCA has accredited the certification program of the CFPS listed elsewhere</p>	<p><a href="http://www.noca.org/ncca/accredorg.htm">http://www.noca.org/ncca/accredorg.htm</a></p>
<p><b>NSSB</b></p>	<p>National Skill Standards Board (NSSB)  1441 L Street NW  Suite 9000</p>	<p>The NSSB is a coalition of leaders from business, labor, employee, education, and community and civil rights organizations created in 1994 to build a voluntary national system of skill standards, assessment and</p>	<p><a href="http://www.nssb.org/">http://www.nssb.org/</a></p>

	<p>Washington, DC 20005- 3512</p>	<p>certification systems to enhance the ability of the United States workforce to compete effectively in a global economy. These skills are being identified by industry in full partnership with labor, civil rights and community-based organizations. The standards will be based on high performance work and will be portable across industry sectors.</p> <p>The NSSB has categorized the workforce into 15 industry sectors, which, under the guidance of the NSSB, are assembling skill standards, assessment and certification for their respective industries. Additionally NSSB has established four Voluntary Partnerships: the <u>Manufacturing Skill Standards Council (MSSC)</u> and the <u>Sales &amp; Service Voluntary Partnership (S&amp;SVP, Inc.)</u>, the <u>Education and Training Voluntary Partnership (E&amp;TVP)</u> and the <u>Hospitality &amp; Tourism Futures (HTF)</u>,</p>	
<p><b>US FTC</b></p>	<p>US Federal Trade Commission 6th and Pennsylvania, NW Washington DC 20580</p>	<p>The Federal Trade Commission (FTC) works to ensure that the nation's markets are vigorous, efficient and free of restrictions that harm consumers. FTC's primary mission is to protect consumers.</p> <p>The FTC enforces federal consumer protection laws that prevent fraud, deception and unfair business practices. FTC handles addresses consumer complaints and offers guidance on such service sector topics as privacy of customer information.</p> <p>Gramm-Leach-Bliley Act Financial Privacy and Pretexting</p> <p>Public Law 106-102, Title V, Privacy</p>	<p><a href="http://www.ftc.gov">http://www.ftc.gov</a></p>

**Subtitle A: Disclosure of Nonpublic Personal Information**

15 U.S.C. § 6801-6810 (Financial Privacy)

**Subtitle B: Fraudulent Access to Financial Information**

**Section 4(k)** of the Bank Holding Company Act of 1956

**12 CFR Part 225.28** - List of permissible nonbanking activities (as of November 1999)

**12 CFR Part 225.86** - Activities that are permissible for financial holding companies (as of November 1999)

**Real Estate Settlement Services**

15 U.S.C. § 6821-6827 (Pretexting)

The Federal Trade Commission (FTC) works to ensure that the nation's markets are vigorous, efficient and free of restrictions that harm consumers. The FTC enforces federal consumer protection laws that prevent fraud, deception and unfair business practices.

FTC Advisory Committee on Online Access and Security--Report

Internet Case List

		<p><b>Marketing on the Internet: The Rules of the Road</b></p> <p><b>Appliance Labeling Rule Homepage</b></p> <p><b>BBB-Online: Code of Online Business Practices</b></p> <p><b>Big Print. Little Print. What's the Deal? How to Disclose the Details</b></p> <p><b>Disclosing Energy Efficiency Information: A Guide for Online Sellers of Appliances</b></p> <p><b>Dot Com Disclosures: Information About Online Advertising</b></p> <p><b>Electronic Commerce: Selling Internationally. A Guide for Business</b>  <b>How to Comply With The Children's Online Privacy Protection Rule</b></p> <p><b>Internet Auctions: A Guide for Buyer and Sellers</b></p> <p><b>Selling on the Internet: Prompt Delivery Rules</b></p> <p><b>TooLate.Com: The Lowdown on Late Internet Shipments</b></p> <p><b>Website Woes: Avoiding Web Service Scams</b></p>	
<p><b>US SEC</b></p>	<p><b>US Securities and Exchange Commission (US SEC)</b></p>	<p>The primary mission of the U.S. Securities and Exchange Commission (SEC) is to protect investors and maintain the integrity of the securities markets.</p>	<p><a href="http://www.sec.gov/about/whatwedo.shtml#laws">http://www.sec.gov/about/whatwedo.shtml#laws</a> and</p>

	<p>450 Fifth Street, NW Washington, DC 20549</p>	<p>The "truth in securities" law, the Securities Act of 1933 has two basic objectives:</p> <ul style="list-style-type: none"> <li>• require that investors receive financial and other significant information concerning securities being offered for public sale; and</li> <li>• prohibit deceit, misrepresentations, and other fraud in the sale of securities.</li> </ul>	<p><a href="http://www.law.uc.edu/CCL/sldtoc.html">http://www.law.uc.edu/CCL/sldtoc.html</a></p>
<p><b>US TAG to JTC1</b></p>	<p>US TAG to JTC1 C/O Information Technology Industry Council (ITI) 1250 Eye Street NW Suite 200 Washington, DC 20005</p>	<p>Sponsors the US TAG to ISO/IEC <b>JTC 1</b> Standardization in the field of information technology.</p>	<p><a href="http://www.jtc1tag.org">www.jtc1tag.org</a> and <a href="http://www.itic.org/">http://www.itic.org/</a></p>

Additionally, 12 major U.S. and European banks have developed a uniform, international code of conduct for private bankers. These voluntary guidelines seek to ensure that banks worldwide observe the same standards of due diligence when dealing with customers, in order to prevent the proceeds of criminal activity from entering the global financial system. The banks involved are ABN-Amro, Banco Santander, Barclays, Citigroup, Chase Manhattan Corp., Credit Suisse Group, Deutsche Bank, HSBC Holdings, J.P. Morgan, Societe Generale, UBS AG, and Bankers Trust (part of Deutsche Bank). "Dozen Big Banks Agree Int'l Anti-Laundering Code," *Reuters*, found at Internet address <http://www.kpmginsiders.com/>, retrieved Oct. 23, 2000; and "Banks Agree Money-Laundering Rules," *Financial Times*, Oct. 30, 2000, found at Internet address <http://www.ft.com/>, retrieved Oct. 31, 2000.

## Chapter 6

### **What specific problems and needs do the service industry, the standardization bodies and active organisations face in the standardization of services in the US?**

Problems confronting the US services industries and the standardization bodies in this sector are not easy to “generalize.” Much like the challenge in finding “horizontal” characterizations of the specification of services generally where there is far more detail at the “vertical” service industry point of view, there it was similarly difficult to identify and characterize “horizontal” problems when the problems of concern were more often more narrow. This chapter presents GTW Associates best efforts to identify such horizontal issues.

**1) The Decentralized Sector-specific US approach to standards is both a Strength and Weakness. Distributes activity close to experts and local conditions...decentralization by topic and by locality presents coordination challenges and multiple solutions, often local rather than national requirements**

According to the United States "National Standards Strategy" (see <http://web.ansi.org/public/nss.html>) ***The strength of standardization in the United States is a sectoral focus supported by a dynamic infrastructure.***

*The sectoral focus comes from the companies, government agencies, public interest organizations, talented individuals who understand what is needed in their sector, and the standards developers through which they work to meet those customer needs. The sectoral approach allows interested parties to address their own issues and develop working methods that fit the problems at hand, since no single standardization system can satisfy all needs. This allows efficient standards development and fosters innovation and competition. When cross-sectoral issues arise, sector definitions change, or in venues where a single national voice is required, the infrastructure provided by the American National Standards Institute (ANSI) provides facilitation and mediation.*

*A sectoral approach recognizes that there is no simple recipe that can be handed down to fit all needs. Sectors must develop their own plans; the purpose of a national strategy is to provide guidance, coherence and inspiration to those inside and outside the system without constraining creativity or effectiveness. The U.S.*

*National Standards Strategy therefore consists of a set of strategic initiatives having broad applicability which will be applied according to their relevance and importance to particular sectors. Stakeholders are encouraged to develop their own tactical initiatives where needed and the national strategy suggests some which have widespread applicability.*

**Yet the ever increasing numbers of “consortia” outside of what may be term the “formal standards process” presents tangible resource allocation problems to industry** as they contemplate which of many competing standards projects deserve their participation. A recent email within the ANSI Company member council process states the problem concisely:

*No other industry sector, besides Information and telecommunication, has experienced the extreme rise of new Fora and Consortia. This proliferation causes companies to make difficult choices in man power allocation and budgets to stay informed on real or imagined important developments in all of these entities.*

*At last count there are at least 265 out there with their own web sites.*

**The ANSI CMCEC PERSPECTIVE ON CONSORTIA (Document 96- 72) also presents a consensus of the US industry participants in the ANSI process with respect to the activities of consortia.**

*Particularly in “new economy” sectors electronic commerce the proliferation of non traditional standards developers “consortia” stresses resources of industry to cover multiple relevant activities...challenge to predict which activity will have market relevance...note Congressional testimony and ANSI CMC resolutions*

*Consortia are largely market-oriented which results in quickly developed standards, and broad consensus for decisions. Consortia have established a strong presence in the commercial marketplace in many industry sectors. Their standards are often widely used and recognized. Many producers participate actively in them, and use the standards they produce. Some governments are beginning to recognize consortia-developed standards in procurement specifications.*

*Consortia developed standards clearly have an important influence in many sectors. Nevertheless consortia do not produce American*

*National Standards or formal international standards recognized by either of the two major standardization bodies, the ISO (International Organization for Standardization) or the IEC (International Electrotechnical Commission). The ISO and the IEC have studied how they might adopt or use consortia-developed standards. The ISO/IECJTC 1 has established a trial procedure permitting consortia to submit their standards for designation as formal ISO/IEC standards.*

*The CMCEC believes both consortia-developed standards, and standards developed by formal standards bodies, including the ANSI Federation, and the ISO and IEC, have their place. Both offer benefits to users and producers, and both also have drawbacks. The CMCEC believes ANSI and the SDOs making up the ANSI Federation can benefit from certain aspects of what consortia do and how they operate.*

At the June 28, 2001 - Subcommittee on Environment, Technology, and Standards – **Hearing on *Standards-Setting and United States Competitiveness*** (See <http://www.house.gov/science/ets/etshearings.htm> **One of the Industry witnesses called (see <http://www.house.gov/science/ets/jun28/cargill.pdf> ) for revision of national legislation to formally recognized consortia and to authorise NIST to coordinate their activity**

*To unify U.S. standardization activities in the IT sector, a specific amendment to the Public Law 104-113, the "National Technology Transfer and Advancement Act of 1995" should be proposed.*

- 1. The proposed legislation would have to contain specific language limiting the intent of this change to only the IT community (as defined in Section II).*
- 2. It would deal only with voluntary, market driven IT standardization, and would not impact regulatory standards (such as health, safety, or the environment).*
- 3. It would have as criteria for a "legitimate consortia" the items listed in Section III as attributes of a "good consortium".*
- 4. It would not exclude anyone or any organization from seeking either the ANSI or the ISO imprimatur.*
- 5. It would make exceptions to the legislation difficult to obtain.*
- 6. It would put in place and enforce a tracking mechanism to monitor the use of non-open standards.*

*7. It may be appropriate to include a directive to NIST to expand the role of the National Voluntary Laboratory Accreditation Program (NVLAP) in an effort to "train the trainers" if the private sector demands consortia accreditation.*

**2) Growing number of cross sectoral standards such as for privacy, dispute settlement, security, corporate ethics and social accountability**

Many of the activities identified in the research on standards in the financial services, ecommerce, public service sectors are occurring at a vertical industry sector level, yet they may have horizontal impacts across many service industry sectors not to mention product industry sectors. One study for example of "trust marks" found hundreds of disparate national, regional, and international initiatives.

**3) Response to crises...ENRON case draws public and legislative attention to "failings" of "Financial Accounting Standards Board" Comparison of FASB to relevant international criteria would have highlighted conflict of interest**

A current high visibility "failure" of the current safeguards for financial accounting in the United States is the ENRON bankruptcy and the alleged accompanying complicity of the Anderson consulting firm which audited the ENRON financial accounts. Anderson also consulted for ENRON on many other matters. If the current standards and applicable oversight of the accountancy practices would have been based on current International expectations and guidance of the International Accreditation Forum, the apparent conflict of interest at Anderson would have been exposed and corrected.

The International Accreditation Forum is an international organization hoping to achieve international equivalence between the accreditations of its members. According to IAF:

*Accreditation reduces risk for business and its customers by assuring them that accredited bodies are competent to carry out the work they undertake. Accreditation bodies which are members of the International Accreditation Forum, Inc. (IAF) are required to operate at the highest standard and to require the bodies they accredit to comply with appropriate international standards and IAF Guidance to the application of those standards.*

*Accreditations granted by accreditation body members of the IAF Mutual Recognition Arrangement (MLA), based on the equivalence of their accreditation programmes allows companies with an accredited conformity assessment certificate in one part of the world to have that certificate recognised everywhere else in the world. Therefore certificates in the fields of management systems, products, services, personnel and other similar programs of conformity assessment issued by bodies accredited by members of the IAF MLA are relied upon in international trade.*

Relevant excerpts from IAF Guidance Document IAF Guidance on the Application of ISO / IEC Guide 62:1996 General Requirements for Bodies Operating Assessment and Certification / Registration of Quality Systems Issue 2 (FG62\_2) are reprinted in Appendix Two. **The key requirements that could have but did not play a role in the current ENRON situation are the following:**

*G.2.1.22. Clause 2.1.2.o)<sup>1</sup> of ISO/IEC Guide 62 addresses two separate requirements. Firstly, the certification / registration body shall not under any circumstances provide the services identified in sub-paras 1), 2) and 3) of that clause. Secondly, although there is no specific restriction on the services or activities a related body may provide, these shall not affect the confidentiality, objectivity or impartiality of the certification / registration body.*

*G.2.1.23. Consultancy is considered to be participation in an active creative manner in the development of the quality management system to be assessed by, for example:*

- a) preparing or producing manuals, handbooks or procedures;*
- b) participating in the decision making process regarding management system matters;*

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<sup>1</sup> Clause 2.1.2.o from ISO/IEC Guide 62 General Requirements for Bodies Operating Assessment and Certification / Registration of Quality Systems

ensure that activities of related bodies do not affect the confidentiality, objectivity or impartiality of its certifications/ registrations and shall not offer or provide:

- 1) those services that it certifies / registers others to perform
- 2) Consulting services to obtain or maintain certification / registrations
- 3) Services to design, implement or maintain EMS or related management Systems (see note 3)

Note Three: Other products, processes or services may be offered directly or indirectly provided they do not compromise confidentiality or the objectivity or impartiality of its certification registrations process and decisions

*c) giving specific advice towards the development and implementation of management systems for eventual certification.*

*Note: Management systems as referred to in guidance G.2.1.23. include all aspects of such systems, including financial.*

*G.2.1.29. Certification / registration bodies shall demonstrate how they manage their certification / registration business and any other activities so as to eliminate actual conflict of interest and minimise any identified risk to impartiality. The demonstration shall cover all potential sources of conflict of interest, whether they arise from within the certification / registration body or from the activities of related bodies. Accreditation bodies will expect certification / registration bodies to open up these processes for audit. This may include, to the extent practicable and justified, pursuit of audit trails to review records of both the certification / registration body and its related body for the activity under consideration. In considering the extent of such audit trails account should be taken of the certification / registration body's history of impartial certification. If evidence of failure to maintain impartiality is found there may be a need to extend the audit trail back into the related bodies to provide assurance that control over potential conflicts of interest has been re-established.*

#### **4) Standards as Impediments to Trade in Services... relationship of the General Agreement on Trade in Services (GATS) to the ATBT and views of US service industry sectors to the barriers they see in global commerce in services**

The GATS framework lays out the general obligations for trade in services in much the same way that the General Agreement on Tariffs and Trade (GATT) does for trade in goods. Most-favored-nation treatment, market access and national treatment are three of the important principles included in the general framework of the GATS.

*Market Access and National Treatment:* When a country lists a sector in its schedule and makes a specific commitment in its schedule, that country agrees to allow foreign service suppliers to enter its market to provide a service (market access) and agrees to treat foreign suppliers under the same terms and conditions as it treats its domestic suppliers (national treatment). A country can list limitations on market access and national treatment in this "schedule of commitments."

By making a commitment of MFN, national treatment or market access in a particular service sector, a country agrees to adhere to the principles as defined by the agreement, subject to the limitations listed in its schedule. Just as tariff schedules are commitments not to raise tariffs in the future above the level scheduled, a GATS scheduled commitment means a country has agreed not to become more restrictive in that particular service sector.

Any violations of a country's commitments, including guarantees for MFN, market access and national treatment, can be addressed through the WTO dispute settlement mechanism. Under the dispute settlement mechanism, a country may be required to give compensation in trade benefits if a panel finds that it has not adhered to its commitments and the country does not make the necessary changes to its trade regime.

The key role and contribution of International standards as a tool in eliminating non tariff barriers to trade in goods is well established through the Agreement on Technical Barriers to Trade. The General Agreement on Trade in Services contains not identical, but similar, text which could lead to a similar key role for International Standards in the services sector.

According to the SECOND TRIENNIAL REVIEW OF THE OPERATION AND IMPLEMENTATION OF THE AGREEMENT ON TECHNICAL BARRIERS TO TRADE November 2000:

*The Committee noted that minimizing the use of mandatory technical regulations and utilising voluntary international standards, where appropriate, rather than preparing separate domestic standards, could reduce the regulatory burden and open-up market access opportunities. In cases where technical regulations were required, that in accordance with Article 2.4, Members were obliged to use relevant international standards or relevant parts of them as a basis for their technical regulations except when such international standards or relevant parts would be an ineffective*

There exists text comparable to the TBT article 2.4 in the General Agreement on Trade in Services (GATS)

*...with a view to ensuring that measures relating to qualification requirements and procedures, technical standards and licensing requirements do not constitute unnecessary barriers to trade in services, the Council for Trade in Services shall, through appropriate bodies it may establish, develop any necessary disciplines*

*...the Member shall not apply licensing and qualification requirements and technical standards that nullify or impair such specific commitments*

*...In determining whether a Member is in conformity with the obligation under paragraph 5(a), account shall be taken of international standards of relevant international organizations<sup>[1]</sup> applied by that Member.<sup>[1]</sup>The term "relevant international organizations" refers to international bodies whose membership is open to the relevant bodies of at least all Members of the WTO.*

*...Members shall work in cooperation with relevant intergovernmental and non-governmental organizations towards the establishment and adoption of common international standards and criteria for recognition and common international standards for the practice of relevant services trades and professions.*

According to the office of US Trade Representative ( See <http://www.ustr.gov/sectors/services/gat.htm>) Regulation of services is a key barrier to trade in services

*Why is regulation important to services? What are the major barriers to services trade?*

*A major barrier to services trade is discriminatory or non-transparent regulatory policy. Service industries are heavily regulated. From telecommunications to finance to medicine, government regulation plays an integral role in defining the industry and determining how many firms can participate and under what terms and conditions. The ongoing waves of "deregulation" are indicative of a regulatory shift in favor of market mechanisms, but the fundamental regulatory functions endure.*

*Foreign service firms can be adversely affected by explicit discriminatory policies (e.g., foreign equity caps) or market access limitations (e.g., economic needs tests), as well as less clearly defined limitations that result from a non-transparent policy process (e.g., regulations change without notice, publication, or any input into the process).*

**Another view of the difficulties US service exporters face in global markets is that of the US Coalition of Services Industries (See <http://www.uscsi.org/robert-vastine.pdf> )**

*Foreign companies entering new markets often face formidable barriers in the form of arbitrary and nontransparent regulations and regulatory processes. These too often deny foreign companies the opportunity to compete on an equal basis with domestic firms. They can negate the benefits of trade liberalization commitments secured through trade agreements. Transparent and fair regulatory systems are important for every service sector. In general, such systems should incorporate rules regarding standard setting, regulatory application processes, and judicial, arbitral, and administrative tribunals. Every regulated service sector has unique features that may require different rules regarding a transparent and fair regulatory system, including broader regulatory reform as necessary and appropriate. Such special rules should be provided for in future GATS*

- Implement and enforce all GATS commitments and in particular the services agreements already negotiated. All WTO members should undertake and implement commitments to open markets for the supply of telecommunication services and adopt the regulatory principles of the reference paper. All signatories of the Financial Services Agreement should ratify and implement their commitments under that agreement.*
- Secure binding commitments in as many sectors as possible for market access and national treatment.*
- Give priority to reviewing MFN exemptions to exclude only the most sensitive issues from liberalization, and ensure that exemptions are precise, transparent, temporary, and limited to the minimum required for their purpose.*
- Seek to use innovative, time saving negotiation techniques to obtain market opening commitments including horizontal commitments and agreement on models for sectoral liberalization.*
- Horizontal disciplines for domestic regulation that result in transparent and predictable regulatory institutions and outcomes, and the imposition of the least burdensome or least trade restrictive rules based on objective criteria, should be developed under Article VI of the GATS.*
- On a sector by sector basis where appropriate, regulatory principles that promote competition and open and efficient markets should be developed.*
- Make all possible efforts to progressively eliminate barriers to the free movement of key business personnel.*

The Global Services Network (GSN) is an informal, private sector-led, on-line network that gathers the global services community of business people, government officials, academics, and others committed to increased trade and investment in services, and a rule-based, multilateral trading system. The GSN at <http://www.worldservicescongress.com/wscframes.cfm> has the following recommendations about reducing barriers to trade in services

- *WTO members should reaffirm that existing commitments are technology-neutral and that financial service providers may use any protocol, including the Internet to supply a service.*
- *A technological infrastructure of connectivity between the Internet “backbone”, Internet service providers, and end users is also necessary.*
- *A legal infrastructure of certification, disclosure, payment and privacy standards is also important.*
- *WTO members should recognize that national-based regulation of items such as safety and soundness and consumer protection can pose barriers to cross-border provision of financial services. Review of best practices, harmonization of regulatory standards, mutual recognition of regulatory regimes, and recognition of the greater sophistication of wholesale customers as compared to retail customers would help reduce these barriers.*
- *WTO members should therefore evaluate how well their regulation of financial services providers advances the goals of competition, fairness, and transparency.*

## **5) Effective representation of consumer interests**

A horizontal issue impacting all standards activities in the United States is the competing pressure for the active participation of consumer interests in the standards process with the pressure to financially support such participation when it may not be possible for the consumer interests to do so themselves. The importance of consumer participation in the process is both to assure relevancy of the resulting standard and to promote a full vested equity stake in the process by consumer interests. Yet consumer organizations may not have the financial wherewithal to participate in the standards setting process as might an industrial representative

## **6) Role of cross vertical-sector service industry standards paradigm**

There exists a relatively well integrated and experienced system and process for US exporters of goods to understand, contemplate and respond to the global threats and opportunities presented by standards in the global market place. In large measure this system and process mirrors the role for international standards in trade of goods reflected in the standards text of the Agreement on Technical Barriers to Trade. This process in the United States rests largely on the foundation of the formal standards processes and infrastructure supported by organizations such as the American National Standards Institute.

**By selecting similar language to that in the TBT with respect to standards, authors of the General Agreement on Trade in Services anticipated that International Standards could play a similar role in promoting a global market for services.** However this study found no horizontal broad based US government or private sector organization viewing international, regional and foreign national service standards initiatives from a strategic “service industry sector” paradigm. Nor did it find a level of awareness not competency in the “formal process” similar to what exists in the US “product” sector. **This could prove to be a major error should strategically minded global competitors prevail in establishing relevant international service standards that place US services businesses at competitive disadvantage.** Or it could **prove to be the correct “market-oriented” US response** that rests on the “strength of the US system” previously described as **“The sectoral approach allows interested parties to address their own issues and develop working methods that fit the problems at hand, since no single standardization system can satisfy all needs.”**

**Time will tell**

## Appendix One

### Service Industry Classifications in the United States Extracted from North American Industry Classification System -- Revisions for 2002 found February, 2002 at

Original Data found at <http://www.census.gov/epcd/naics02/naicod02.htm>

<b>23</b>	<b>Construction</b>
<b>236</b>	<b>Construction of Buildings</b>
<b>237</b>	<b>Heavy and Civil Engineering Construction</b>
<b>238</b>	<b>Specialty Trade Contractors</b>

<b>44-45</b>	<b>Retail Trade</b>
<b>441</b>	<b>Motor Vehicle and Parts Dealers</b>
<b>442</b>	<b>Furniture and Home Furnishings Stores</b>
<b>443</b>	<b>Electronics and Appliance Stores</b>
<b>444</b>	<b>Building Material and Garden Equipment and Supplies Dealers</b>
<b>445</b>	<b>Food and Beverage Stores</b>
<b>446</b>	<b>Health and Personal Care Stores</b>
<b>447</b>	<b>Gasoline Stations</b>
<b>448</b>	<b>Clothing and Clothing Accessories Stores</b>

The Transportation and Warehousing sector description found at <http://www.census.gov/eos/www/napcs/sec4849descript.htm> includes industries providing transportation of passengers and cargo, warehousing and storage for goods, scenic and sightseeing transportation, and support activities related to modes of transportation. Establishments in these industries use transportation equipment or transportation related facilities as a productive asset. The type of equipment depends on the mode of transportation. The modes of transportation are air, rail, water, road, and pipeline. Many of the establishments in this sector often operate on networks, with physical facilities, labor forces, and equipment spread over an extensive geographic area.

<b>48-49</b>	<b>Transportation and Warehousing</b>
<b>481</b>	<b>Air Transportation</b>
<b>482</b>	<b>Rail Transportation</b>

483	<b>Water Transportation</b>
484	<b>Truck Transportation</b>
485	<b>Transit and Ground Passenger Transportation</b>
486	<b>Pipeline Transportation</b>
487	<b>Scenic and Sightseeing Transportation</b>
488	<b>Support Activities for Transportation</b>

491	<b>Postal Service</b>
492	<b>Couriers and Messengers</b>
493	<b>Warehousing and Storage</b>

The Information sector description found at <http://www.census.gov/eos/www/napcs/sec51descript.htm> comprises establishments engaged in the following processes: (a) producing and distributing information and cultural products, (b) providing the means to transmit or distribute these products as well as data or communications, and (c) processing data.

The main components of this sector are the publishing industries, including software publishing, and both traditional publishing and publishing exclusively on the Internet; the motion picture and sound recording industries; the broadcasting industries, including traditional broadcasting and those broadcasting exclusively over the Internet; the telecommunications industries; the industries known as Internet service providers and web search portals, data processing industries, and the information services industries.

The expressions "information age" and "global information economy" are used with considerable frequency today. The general idea of an "information economy" includes both the notion of industries primarily producing, processing, and distributing information, as well as the idea that every industry is using available information and information technology to reorganize and make themselves more productive.

For the purpose of developing NAICS, it is the transformation of information into a commodity that is produced and distributed by a number of growing industries that is at issue. The Information sector groups three types of establishments: (1) those engaged in producing and distributing information and cultural products; (2) those that provide the means to transmit or distribute these products as well as data or communications; and (3) those that process data. Cultural products are those that directly express attitudes, opinions, ideas, values, and artistic creativity; provide entertainment; or offer information and analysis concerning the past and present. Included in this definition are popular, mass-produced,

products as well as cultural products that normally have a more limited audience, such as poetry books, literary magazines, or classical records.

The unique characteristics of information and cultural products, and of the processes involved in their production and distribution, distinguish the Information sector from the goods-producing and service-producing sectors. Some of these characteristics are:

1. Unlike traditional goods, an "information or cultural product," such as a newspaper on-line or television program, does not necessarily have tangible qualities, nor is it necessarily associated with a particular form. A movie can be shown at a movie theater, on a television broadcast, through video-on-demand or rented at a local video store. A sound recording can be aired on radio, embedded in multimedia products, or sold at a record store.
2. Unlike traditional services, the delivery of these products does not require direct contact between the supplier and the consumer.
3. The value of these products to the consumer lies in their informational, educational, cultural, or entertainment content, not in the format in which they are distributed. Most of these products are protected from unlawful reproduction by copyright laws.
4. The intangible property aspect of information and cultural products makes the processes involved in their production and distribution very different from goods and services. Only those possessing the rights to these works are authorized to reproduce, alter, improve, and distribute them. Acquiring and using these rights often involves significant costs. In addition, technology is revolutionizing the distribution of these products. It is possible to distribute them in a physical form, via broadcast, or on-line.
5. Distributors of information and cultural products can easily add value to the products they distribute. For instance, broadcasters add advertising not contained in the original product. This capacity means that unlike traditional distributors, they derive revenue not from sale of the distributed product to the final consumer, but from those who pay for the privilege of adding information to the original product. Similarly, a directory and mailing list publisher can acquire the rights to thousands of previously published newspaper and periodical articles and add new value by providing search and software and organizing the information in a way that facilitates research and retrieval. These products often command a much higher price than the original information.

The distribution modes for information commodities may either eliminate the necessity for traditional manufacture, or reverse the conventional order of manufacture-distribute: A newspaper distributed on-line, for example, can be

printed locally or by the final consumer. Similarly, it is anticipated that packaged software, which today is mainly bought through the traditional retail channels, will soon be available mainly on-line. The NAICS Information sector is designed to make such economic changes transparent as they occur, or to facilitate designing surveys that will monitor the new phenomena and provide data to analyze the changes.

Many of the industries in the NAICS Information sector are engaged in producing products protected by copyright law, or in distributing them (other than distribution by traditional wholesale and retail methods). Examples are traditional publishing industries, software and directory and mailing list publishing industries, and film and sound industries. Broadcasting and telecommunications industries and information providers and processors are also included in the Information sector, because their technologies are so closely linked to other industries in the Information sector.

<b>51</b>	<b>Information</b>
<b>511</b>	<b>Publishing Industries (except Internet)</b>
<b>512</b>	<b>Motion Picture and Sound Recording Industries</b>
<b>515</b>	<b>Broadcasting (except Internet)</b>
<b>516</b>	<b>Internet Publishing and Broadcasting</b>
<b>517</b>	<b>Telecommunications</b>
<b>5173</b>	<b>Telecommunications Resellers</b>
<b>5174</b>	<b>Satellite Telecommunications</b>
<b>5175</b>	<b>Cable and Other Program Distribution</b>
<b>5179</b>	<b>Other Telecommunications</b>
<b>518</b>	<b>Internet Service Providers, Web Search Portals, and Data Processing Services</b>
<b>5181</b>	<b>Internet Service Providers and Web Search Portals</b>
<b>5182</b>	<b>Data Processing, Hosting, and Related Services</b>
<b>519</b>	<b>Other Information Services</b>

The Finance and Insurance sector description found at <http://www.census.gov/eos/www/napcs/sec52descript.htm> comprises establishments primarily engaged in financial transactions (transactions involving the creation, liquidation, or change in ownership of financial assets) and/or in facilitating financial transactions. Three principal types of activities are identified:

Raising funds by taking deposits and/or issuing securities and, in the process, incurring liabilities. Establishments engaged in this activity use raised funds to acquire financial assets by making loans and/or purchasing securities. Putting themselves at risk, they channel funds from lenders to borrowers and transform

or repackage the funds with respect to maturity, scale and risk. This activity is known as financial intermediation.

Pooling of risk by underwriting insurance and annuities. Establishments engaged in this activity collect fees, insurance premiums, or annuity considerations; build up reserves; invest those reserves; and make contractual payments. Fees are based on the expected incidence of the insured risk and the expected return on investment.

Providing specialized services facilitating or supporting financial intermediation, insurance, and employee benefit programs.

In addition, monetary authorities charged with monetary control are included in this sector.

<b>52</b>	<b>Finance and Insurance</b>
<b>521</b>	<b>Monetary Authorities - Central Bank</b>
<b>522</b>	<b>Credit Intermediation and Related Activities</b>
<b>523</b>	<b>Securities, Commodity Contracts, and Other Financial Investments and Related Activities</b>
<b>524</b>	<b>Insurance Carriers and Related Activities</b>
<b>5241</b>	<b>Insurance Carriers</b>
<b>5242</b>	<b>Agencies, Brokerages, and Other Insurance Related Activities</b>
<b>525</b>	<b>Funds, Trusts, and Other Financial Vehicles</b>

<b>53</b>	<b>Real Estate and Rental and Leasing</b>
<b>531</b>	<b>Real Estate</b>
<b>5311</b>	<b>Lessors of Real Estate</b>
<b>5312</b>	<b>Offices of Real Estate Agents and Brokers</b>
<b>5313</b>	<b>Activities Related to Real Estate</b>
<b>532</b>	<b>Rental and Leasing Services</b>
<b>5321</b>	<b>Automotive Equipment Rental and Leasing</b>
<b>5322</b>	<b>Consumer Goods Rental</b>
<b>5323</b>	<b>General Rental Centers</b>
<b>5324</b>	<b>Commercial and Industrial Machinery and Equipment Rental and Leasing</b>
<b>533</b>	<b>Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)</b>

The Professional, Scientific, and Technical Services sector description found at <http://www.census.gov/eos/www/napcs/sec54descript.htm> comprises establishments that specialize in performing professional, scientific, and technical activities for others. These activities require a high degree of expertise and training. The establishments in this sector specialize according to expertise and provide these services to clients in a variety of industries and, in some cases, to households. Activities performed include: legal advice and representation; accounting, bookkeeping, and payroll services; architectural, engineering, and specialized design services; computer services; consulting services; research services; advertising services; photographic services; translation and interpretation services; veterinary services; and other professional, scientific, and technical services.

<b>54</b>	<b>Professional, Scientific, and Technical Services</b>
<b>541</b>	<b>Professional, Scientific, and Technical Services</b>
<b>5411</b>	<b>Legal Services</b>
<b>5412</b>	<b>Accounting, Tax Preparation, Bookkeeping, and Payroll Services</b>
<b>5413</b>	<b>Architectural, Engineering, and Related Services</b>
<b>5414</b>	<b>Specialized Design Services</b>
<b>5415</b>	<b>Computer Systems Design and Related Services</b>
<b>5416</b>	<b>Management, Scientific, and Technical Consulting Services</b>
<b>5417</b>	<b>Scientific Research and Development Services</b>
<b>5418</b>	<b>Advertising and Related Services</b>
<b>5419</b>	<b>Other Professional, Scientific, and Technical Services</b>

<b>55</b>	<b>Management of Companies and Enterprises</b>
<b>551</b>	<b>Management of Companies and Enterprises</b>

The administrative and management activities described at <http://www.census.gov/eos/www/napcs/sec56descript.htm> are performed by establishments in this sector on a contract or fee basis. These activities may also be performed by establishments that are part of the company or enterprise.

However, establishments involved in administering, overseeing, and managing other establishments of the company or enterprise, are classified in Sector 55, Management of Companies and Enterprises. These establishments normally undertake the strategic and organizational planning and decisionmaking role of the company or enterprise.

The Administrative and Support and Waste Management and Remediation Services sector comprises establishments performing routine support activities for the day-to-day operations of other organizations. These essential activities are often undertaken in-house by establishments in many sectors of the economy. The establishments in this sector specialize in one or more of these support activities and provide these services to clients in a variety of industries and, in some cases, to households. Activities performed include: office administration, hiring and placing of personnel, document preparation and similar clerical services, solicitation, collection, security and surveillance services, cleaning, and waste disposal services.

<b>56</b>	<b>Administrative and Support and Waste Management and Remediation Services</b>
<b>561</b>	<b>Administrative and Support Services</b>
<b>5611</b>	<b>Office Administrative Services</b>
<b>5612</b>	<b>Facilities Support Services</b>
<b>5613</b>	<b>Employment Services</b>
<b>5614</b>	<b>Business Support Services</b>
<b>5615</b>	<b>Travel Arrangement and Reservation Services</b>
<b>5616</b>	<b>Investigation and Security Services</b>
<b>5617</b>	<b>Services to Buildings and Dwellings</b>
<b>5619</b>	<b>Other Support Services</b>
<b>562</b>	<b>Waste Management and Remediation Services</b>
<b>5621</b>	<b>Waste Collection</b>
<b>5622</b>	<b>Waste Treatment and Disposal</b>
<b>5629</b>	<b>Remediation and Other Waste Management Services</b>

The Educational Services sector described at <http://www.census.gov/eos/www/napcs/sec61descript.htm> comprises establishments that provide instruction and training in a wide variety of subjects. This instruction and training is provided by specialized establishments, such as schools, colleges, universities, and training centers. These establishments may be privately owned and operated for profit or not for profit, or they may be publicly owned and operated. They may also offer food and accommodation services to their students.

Educational services are usually delivered by teachers or instructors that explain, tell, demonstrate, supervise, and direct learning. Instruction is imparted in diverse settings, such as educational institutions, the workplace, or the home through correspondence, television, or other means. It can be adapted to the particular needs of the students, for example sign language can replace verbal language for teaching students with hearing impairments. All industries in the sector share this commonality of process, namely, labor inputs of instructors with the requisite subject matter expertise and teaching ability.

<b>61</b>	<b>Educational Services</b>
<b>611</b>	<b>Educational Services</b>
<b>6111</b>	<b>Elementary and Secondary Schools</b>
<b>6112</b>	<b>Junior Colleges</b>
<b>6113</b>	<b>Colleges, Universities, and Professional Schools</b>
<b>6114</b>	<b>Business Schools and Computer and Management Training</b>
<b>6115</b>	<b>Technical and Trade Schools</b>
<b>6116</b>	<b>Other Schools and Instruction</b>
<b>6117</b>	<b>Educational Support Services</b>

The Health Care and Social Assistance sector described at <http://www.census.gov/eos/www/napcs/sec62descript.htm> comprises establishments providing health care and social assistance for individuals. The sector includes both health care and social assistance because it is sometimes difficult to distinguish between the boundaries of these two activities. The industries in this sector are arranged on a continuum starting with those establishments providing medical care exclusively, continuing with those providing health care and social assistance, and finally finishing with those providing only social assistance. The services provided by establishments in this sector are delivered by trained professionals. All industries in the sector share this commonality of process, namely, labor inputs of health practitioners or social workers with the requisite expertise. Many of the industries in the sector are defined based on the educational degree held by the practitioners included in the industry.

<b>62</b>	<b>Health Care and Social Assistance</b>
<b>621</b>	<b>Ambulatory Health Care Services</b>
<b>6211</b>	<b>Offices of Physicians</b>
<b>6213</b>	<b>Offices of Other Health Practitioners</b>

<b>6214</b>	<b>Outpatient Care Centers</b>
<b>6215</b>	<b>Medical and Diagnostic Laboratories</b>
<b>6216</b>	<b>Home Health Care Services</b>
<b>6219</b>	<b>Other Ambulatory Health Care Services</b>
<b>622</b>	<b>Hospitals</b>
<b>623</b>	<b>Nursing and Residential Care Facilities</b>
<b>624</b>	<b>Social Assistance</b>

The Arts, Entertainment, and Recreation sector 71 described at <http://www.census.gov/eos/www/napcs/sec7172descript.htm> includes a wide range of establishments that operate facilities or provide services to meet varied cultural, entertainment, and recreational interests of their patrons. This sector comprises (1) establishments that are involved in producing, promoting, or participating in live performances, events, or exhibits intended for public viewing; (2) establishments that preserve and exhibit objects and sites of historical, cultural, or educational interest; and (3) establishments that operate facilities or provide services that enable patrons to participate in recreational activities or pursue amusement, hobby, and leisure time interests.

<b>71</b>	<b>Arts, Entertainment, and Recreation</b>
<b>711</b>	<b>Performing Arts, Spectator Sports, and Related Industries</b>
<b>712</b>	<b>Museums, Historical Sites, and Similar Institutions</b>
<b>713</b>	<b>Amusement, Gambling, and Recreation Industries</b>

The Accommodation and Food Services sector described at <http://www.census.gov/eos/www/napcs/sec7172descript.htm> comprises establishments providing customers with lodging and/or preparing meals, snacks, and beverages for immediate consumption. The sector includes both accommodation and food services establishments because the two activities are often combined at the same establishment.

Excluded from this sector are civic and social organizations; amusement and recreation parks; theaters; and other recreation or entertainment facilities providing food and beverage services.

<b>72</b>	<b>Accommodation and Food Services</b>
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**721 Accommodation**  
**7211 Traveler Accommodation**  
**7212 RV (Recreational Vehicle) Parks and Recreational Camps**  
**7213 Rooming and Boarding Houses**  
**722 Food Services and Drinking Places**

**81 Other Services (except Public Administration)**  
**811 Repair and Maintenance**  
**8111 Automotive Repair and Maintenance**  
**8112 Electronic and Precision Equipment Repair and Maintenance**  
**8113 Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance**  
**8114 Personal and Household Goods Repair and Maintenance**  
**812 Personal and Laundry Services**  
**813 Religious, Grantmaking, Civic, Professional, and Similar Organizations**  
**814 Private Households**

**92 Public Administration**  
**921 Executive, Legislative, and Other General Government Support**  
**922 Justice, Public Order, and Safety Activities**  
**923 Administration of Human Resource Programs**  
**924 Administration of Environmental Quality Programs**  
**925 Administration of Housing Programs, Urban Planning, and Community Development**  
**926 Administration of Economic Programs**  
**927 Space Research and Technology**  
**928 National Security and International Affairs**

## Appendix Two

### **Excerpts from IAF Guidance Document *IAF Guidance on the Application of ISO / IEC Guide 62:1996 General Requirements for Bodies Operating Assessment and Certification / Registration of Quality Systems Issue 2 (FG62\_2)***

Accreditation reduces risk for business and its customers by assuring them that accredited bodies are competent to carry out the work they undertake. Accreditation bodies which are members of the International Accreditation Forum, Inc. (IAF) are required to operate at the highest standard and to require the bodies they accredit to comply with appropriate international standards and IAF Guidance to the application of those standards.

Accreditations granted by accreditation body members of the IAF Mutual Recognition Arrangement (MLA), based on the equivalence of their accreditation programmes allows companies with an accredited conformity assessment certificate in one part of the world to have that certificate recognised everywhere else in the world. Therefore certificates in the fields of management systems, products, services, personnel and other similar programs of conformity assessment issued by bodies accredited by members of the IAF MLA are relied upon in international trade.

G.2.1.22. Clause 2.1.2.o) of ISO/IEC Guide 62 addresses two separate requirements. Firstly, the certification / registration body shall not under any circumstances provide the services identified in sub-paras 1), 2) and 3) of that clause. Secondly, although there is no specific restriction on the services or activities a related body may provide, these shall not affect the confidentiality, objectivity or impartiality of the certification / registration body.

G.2.1.23. Consultancy is considered to be participation in an active creative manner in the development of the quality management system to be assessed by, for example:

- a) preparing or producing manuals, handbooks or procedures;
- b) participating in the decision making process regarding management system matters;
- c) giving specific advice towards the development and implementation of management systems for eventual certification.

Note: Management systems as referred to in guidance G.2.1.23. include all aspects of such systems, including financial.

G.2.1.24. Certification / registration bodies can carry out the following duties without them being considered as consultancy or necessarily creating a conflict of interests. However, all potential conflicts of interests should be dealt with in accordance with G.2.1.29:

- a) certification / registration including information meetings, planning meetings, examination of documents, auditing (not internal auditing) and follow up of nonconformities;
- b) arranging and participating as a lecturer in training courses, provided that where these courses relate to quality assurance, management systems or auditing they should confine themselves to the provision of generic information and advice which is freely available in the public domain, i.e. they should not provide company specific advice which contravenes the requirements of G.2.1.23.c);
- c) making available or publishing on request information on the basis for the certification / registration body's interpretation of the requirements of the assessment standards;
- d) activities prior to audit aimed solely at determining readiness for assessment; but such activities should not result in the provision of recommendations or advice that would contravene guidance G.2.1.23. and the certification / registration body should be able to confirm that such activities do not contravene these provisions and that they are not used to justify a reduction in the eventual assessment duration;
- e) performing second and third party audits according to other standards or regulations than those being part of the scope of accreditation;
- f) adding value during assessments and surveillance visits, e.g., by identifying opportunities for improvement, as they become evident, during the audit without recommending specific solutions.

G.2.1.25. Activities under clause 2.1.2.o) of ISO/IEC Guide 62 by a related body and certification / registration should never be marketed together and nothing should be stated in marketing material or presentation, written or oral, to give the impression that the two activities are linked. It is the duty of the certification / registration body to ensure that none of its clients is given the impression that the use of such activities and certification / registration would bring any business advantage to the client so that the certification / registration remains, and is seen to remain, impartial.

G.2.1.26. Nothing should be said by a certification / registration body that would suggest that certification / registration would be simpler,

easier or less expensive if any specified consultancy or training services were used.

G.2.1.27. A related body, as referred to in clause 2.1.2.o) of ISO/IEC Guide 62, is one which is linked to the certification / registration body by common ownership or directors, contractual arrangement, common elements in the name, informal understanding or other means such that the related body has a vested interest in the outcome of an assessment or has a potential ability to influence the outcome of an assessment.

G.2.1.28. The certification / registration body should analyse and document the relationship with such related bodies to determine the possibilities for conflict of interest with provision of certification / registration and identify those bodies and activities that could, if not subject to appropriate controls, affect confidentiality, objectivity or impartiality.

G.2.1.29. Certification / registration bodies shall demonstrate how they manage their certification / registration business and any other activities so as to eliminate actual conflict of interest and minimise any identified risk to impartiality. The demonstration shall cover all potential sources of conflict of interest, whether they arise from within the certification / registration body or from the activities of related bodies. Accreditation bodies will expect certification / registration bodies to open up these processes for audit. This may include, to the extent practicable and justified, pursuit of audit trails to review records of both the certification / registration body and its related body for the activity under consideration. In considering the extent of such audit trails account should be taken of the certification / registration body's history of impartial certification. If evidence of failure to maintain impartiality is found there may be a need to extend the audit trail back into the related bodies to provide assurance that control over potential conflicts of interest has been re-established.

G.2.1.30. The requirements of clause 2.1. and clause 2.2.3. of ISO/IEC Guide 62 mean that people who have provided consultancy, including those acting in a managerial capacity, should not be employed to conduct an audit as part of the certification / registration process if they have been involved in any consultancy activities towards the organization in question, (or any company related to that organization), within the last two years. Situations such as an employer's involvement or previous involvement with the organization being assessed may present individuals involved in any part of the certification / registration process with a conflict of interest. The certification / registration body has a responsibility to identify and

evaluate such situations and to assign responsibilities and tasks so as to ensure that impartiality is not compromised.

G.2.1.31. The senior executive, staff and/or personnel mentioned in clause 2.1.2. of ISO/IEC Guide 62 need not necessarily be full-time personnel, but their other employment shall not be such as to compromise their impartiality.

G.2.1.32. The certification / registration body should require all assessment sub-contractors or external assessors/auditors to give undertakings regarding the marketing of any consultancy services equivalent to those required by guidance G.2.1.25. and G.2.1.26.

G.2.1.33. The certification / registration body should be responsible for ensuring that neither related bodies, nor sub-contractors, nor external assessors / auditors operate in breach of the undertakings that they have given. It should also be responsible for implementing appropriate corrective action in the event such a breach is identified.

G.2.1.34. The certification / registration body should be independent from the body or bodies (including any individuals) which provide the internal audit of the organization's quality management system subject to certification / registration.