Global E-Government, 2003

by Darrell M. West
67 George St.
Center for Public Policy
Brown University
Providence, Rhode Island 02912-1977
United States
Darrell_West@brown.edu
(401) 863-1163
www.InsidePolitics.org

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Executive Summary

This report presents the third annual update on global e-government, i.e., the delivery of public sector information and online services through the Internet. Using a detailed analysis of 2,166 government websites in 198 different nations, we measure the information and services that are online, chart the variations that exist across countries, and discuss how e-government sites vary by region of the world. We also see how the 2003 results compare to 2001 and 2002.

Among the more important findings of the research are:
1) 16 percent of government websites offer services that are fully executable online, up from 12 percent in 2002.
2) 89 percent of websites provide access to publications and 73 percent have links to databases.
3) 12 percent (down from 14 percent in 2002) show privacy policies, while 6 percent (down from 9 percent in 2002) have security policies.
4) 14 percent of government websites have some form of disability access, meaning access for persons with disabilities.
5) English has become the most commonly used language of e-government. Seventy-four percent of national government websites have an English version.
6) 51 percent of sites are multilingual, meaning that they offer information in two or more languages.
7) Countries vary enormously in their overall e-government performance based on our analysis. The most highly ranked nations include Singapore, United States, Canada, Australia, Taiwan, Turkey, Great Britain, Malaysia, the Vatican, and Austria.
8) There are major differences in e-government performance based on region of the world. In general, countries in North America score the highest, followed by Asia, Western Europe, Pacific Ocean Islands, Middle East, Eastern Europe, Russia and Central Asia, South America, Central America, and Africa.

A Note on Methodology

In our analysis of websites, we look for material that would aid an average citizen logging onto a governmental site. This includes material enabling a citizen to find information, services, and databases, features that would facilitate e-government access by special populations such as the disabled and non-native language speakers, interactive features that would facilitate outreach to the public, and visible statements that would reassure citizens worried about privacy and security over the Internet. During the course of our study, we look at a wide variety of political and economic systems, from monarchies, federated systems, and presidential democracies to parliamentary systems, dictatorships, and communist countries. In each system analyzed, we employ the same type of criteria in order to be able to compare the results across countries.

The data for our analysis consist of an assessment of 2,166 national government websites for the 198 nations around the world (see Appendix for the full list of countries). We analyze a range of sites within each country to get a full sense of what is available in particular nations. Among the sites analyzed are those of executive offices (such as a president, prime minister, ruler, party leader, or royalty), legislative offices (such as Congress, Parliament, or People's Assemblies), judicial offices (such as major national courts), Cabinet offices, and major agencies serving crucial functions of government, such as health, human services, taxation, education, interior, economic development, administration, natural resources, foreign affairs, foreign investment, transportation, military, tourism, and business regulation. Websites for subnational units, obscure boards and commissions, local government, regional units, and municipal offices are not included in this study. The analysis was undertaken during June, July, and August, 2003 at Brown University in Providence, Rhode Island. Tabulation for this project was completed by Adam Deitch, Vanessa Wellbery, Joanne Chiu, Erica Dreisbach, Toby Stein, Fredi Chango, Umut Ones, Irina Paley, and Yen-Ling Chang. National government website addresses can be found at www.InsidePolitics.org/world.html.

The regional breakdowns for the websites we studied are 21 percent from Western European countries, followed by 17 percent from Africa, 12 percent from Asia, 11 percent Eastern Europe, 8 percent the Middle East, 8 percent South America, 7 percent Pacific Ocean countries (meaning those off the Asian continent, 6 percent from Central America, 6 percent North America (which included Canada, the United States, and Mexico), and 5 percent Russia and Central Asia (such as the areas of the former Soviet Union).

Regardless of the type of system or cultural background of a country, websites are evaluated for the presence of various features dealing with information availability, service delivery, and public access. Features assessed included the name of the nation, region of the world, and having the following features: online publications, online database, audio clips, video clips, non-native languages or foreign language translation, commercial advertising, premium fees, restricted areas, user payments, disability access, privacy policy, security features, presence of online services, number of different services, digital signatures, credit card payments, email address, comment form, automatic email updates, website personalization, personal digital assistant (PDA) access, and an English version of the website.

For e-government service delivery, we look at the number and type of online services offered. Features are defined as services only if the entire transaction can occur online. If a citizen has to print out a form and then mail it back to the agency to obtain the service, we do not count that as a service that can be fully executed online. Searchable databases count as services only if they involved accessing information that result in a specific government service response.

Where national government websites are not in English, our research team employed foreign language readers who translate and evaluate national government websites. In some cases, we have made use of foreign language translation software available online through http://babelfish.altavista.com. Some of the non-English websites are assessed in part through English translations of portions of the websites.

Online Information

In looking at specific features of government websites, we want to see how much material was available that would inform citizens. Most agencies have made extensive progress at placing information online for public access. Eighty-nine percent of government websites around the world offer publications that a citizen could access (up from 77 percent in 2002), and 73 percent (down from 83 percent last year) provided databases.

Percentage of Websites Offering Publications and Databases

	2001	**2002**	**2003**
Phone Contact Info.	70%	77%	--
Address Info	67	77	--
Links to Other Sites	42	82	--
Publications	71	77	89
Databases	41	83	73
Audio Clips	4	8	8
Video Clips	4	15	8

Most public sector websites do not incorporate audio clips or video clips on their official sites. Despite the fact that these are becoming much more common features of e-commerce and private sector enterprise, only 8 percent of government websites provide audio clips and 8 percent have video clips. A common type of audio clip is a national anthem or a musical selection.

Services Provided

Fully executable, online service delivery benefits both government and its constituents. In the long run, such services have the potential to lower the costs of service delivery and make services more widely accessible to the general public, because they no longer have to visit, write, or call an agency in order to execute a specific service. As more and more services are put online, e-government will revolutionize the relationship between government and citizens.

Of the websites examined around the world, however, 16 percent offer services that are fully executable online, which is up from 12 percent in 2002. Of this group, 9 percent offer one service, 3 percent have two services, and four percent have three or more services. Eighty-four percent have no online services.

Number of Online Services

	2001	**2002**	**2003**
None	92%	88%	84%
One	5	7	9
Two	1	2	3
Three or more	2	3	4

The most frequently found service on government websites are forms for making complaints, ordering publications, applying for jobs, applying for passports, and renewing vehicle licenses.

North America (including the United States, Canada, and Mexico) is the area offering the highest percentage of online services. Forty-five percent (up from 41 percent last year) had fully executable, online services. This was followed by Asia (26 percent), the Middle East (24 percent), the Pacific Ocean islands (17 percent), and Western Europe (17 percent). Only 1 percent in Russia/Central Asia, 5 percent in Africa, and 6 percent of sites in Eastern Europe offer online government services.

Percentage of Government Sites Offering Online Services by Region of World

	2001	**2002**	**2003**
North America	28%	*41%*	45%
Pacific Ocean Islands	19	*14*	17
Asia	12	*26*	26
Middle East	10	*15*	24
Western Europe	9	*10*	17
Eastern Europe	--	*2*	6
Central America	4	*4*	9
South America	3	*7*	14
Russia/Central Asia	2	*1*	*1*
Africa	2	2	5

One of the features that has slowed the development of online services has been an inability to use credit cards and digital signatures on financial transactions. On commercial sites, it is becoming a more common practice to offer goods and services online for purchase through the use of credit cards. However, of the government websites analyzed, only 2 percent accept credit cards and one-tenth of 1 percent allowed digital signatures for financial transactions (similar to last year). Among the sites

having a capacity for digital signatures are the Singapore governmental office of statistics and Denmark's portal site.

Services by Top Nations

Of the 198 nations analyzed, there is wide variance in the number of online services provided by different governments. The country with the largest number of services is Singapore, with an average of 7.8 services across its government agencies. This is followed by the United States (4.8 services), Turkey (3.2 services), Hong Kong (3.1 services, and Taiwan (2.4 services). It is important to keep in mind that our definition of services included only those services that were fully executable online. If a citizen has to print out a form and mail or take it to a government agency to execute the service, we do not count that as an online service.

Number of Online Services

Singapore	7.8	United States	4.8
Turkey	3.2	Hong Kong	3.1
Taiwan	2.4	Bahrain	1.8
Saudi Arabia	1.2	China	1.2
Guinea-Bissau	1.0	Philippines	0.8
Oman	0.7	Switzerland	0.7
Venezuela	0.7	Spain	0.7
Yemen	0.6	Gambia	0.6
Great Britain	0.6	Canada	0.6

Privacy and Security

Public opinion surveys in various countries place concerns over privacy and security at the top of the list of citizen worries about e-government. Having visible statements outlining what the site is doing on privacy and security are valuable assets for reassuring a fearful population and encouraging citizens to make use of e-government services and information. However, few global e-government sites offer policy statements dealing with these topics. Only 12 percent (about the same as the 14 percent in 2002) of examined sites have some form of privacy policy on their site, and 6 percent have a visible security policy. Both of these are areas that government officials need to take much more seriously. Unless ordinary citizens feel safe and secure in their online information and service activities, e-government is not going to grow very rapidly.

	2001	2002	2003
Privacy	6%	14%	12%
Security	3	9	6

Security by Top Nations

Despite the importance of security in the virtual world, there are wide variations across nations in the percentage of websites showing a security policy. The countries most likely to show a visible security policy are Singapore (90 percent of its sites), Canada (65 percent), and the United States (62 percent). This was followed by Australia (39 percent), New Zealand (30 percent), St. Lucia (25 percent), Great Britain (21 percent), Japan (15 percent), and Taiwan (12 percent). Most other nations do not have sites with a security statement.

Privacy by Top Nations

Similar to the security area, there are widespread variations across the nations in providing privacy policies on their websites. The countries with the highest percentage of websites offering a visible privacy policy are Australia and Dominica (each with 100 percent of its sites). These nations were followed by Canada (97 percent), Singapore (93 percent), China (83 percent), United States (75 percent), St. Lucia (50 percent), New Zealand (47 percent), Great Britain (45 percent), and Taiwan (42 percent). Most other countries do not offer privacy statements online.

Disability Access

This year, we altered our test of disability access by examining the actual accessibility of government websites, not just claims of accessibility. In the past, we looked at whether sites displayed TTY (Text Telephone) or TDD (Telephonic Device for the Deaf) phone numbers which allows hearing-impaired individuals to contact the agency by phone, provided text labels for graphics, or claimed that they were disability-accessible. This approach has the obvious disadvantage of not providing an actual test of accessibility so this year we use the automated online "Bobby" service at http://bobby.watchfire.com to test actual accessibility.

We use the standard of compliance with the Priority Level One standards recommended by the World Wide Web Consortium (W3C). For this test, we enter the URL of the particular agency being evaluated and use this "Bobby" analysis to determine whether the website complies with the W3C guidelines. Sites are judged to be either in compliance or not in compliance based on the results of this test.

According to this test, 14 percent of government websites are accessible to the disabled. This is lower than comparable numbers for the United States national government (47 percent), U.S. state government (33 percent), and U.S. urban government (20 percent).

Foreign Language Access

Fifty-one percent of national government websites have foreign language features that allow access to non-native speaking individuals. By foreign language feature, we mean any accommodation to the non-native speakers in a particular country, such as text translation into a different language. Many have no language translation on their site other than their native tongue.

	2001	2002	2003
Foreign Language Translation	45%	43%	51%

Ads, User Fees, and Premium Fees

Many nations are struggling with the issue of how to pay for electronic governance. When defining an advertisement, we eliminate computer software available for free download (such as Adobe Acrobat Reader, Netscape Navigator, and Microsoft Internet Explorer) since they are necessary for viewing or accessing particular products or publications. Links to commercial products or services available for a fee were included as advertisements as were banner, pop-up, and fly-by advertisements.

As shown below, only 2 percent of government websites in 2003 rely on ads (down from 8 percent last year). There also is little reliance on (0.2 percent) or premium fees (0.2 percent).

The countries with the greatest reliance on advertisements include Sri Lanka, Tuvalu, Bhutan, Antigua, and Guinea-Bissau (each with 100 percent of its government websites having ads). This is followed by St. Vincent (50 percent), Belize (50 percent), and Russia (37 percent).

Examples of ads include the Laos Ministry of Tourism (hotel booking services), Maldives Tourism (advertisement for advertisers), Mongolia Foreign Affairs (mongolmedia.com), Pakistan

Railway (advertisements for advertisers), Paraguay Tourism (Portugal Investment portugalinbusiness.com pop-up), Russian Federation Agriculture, Information, Economy, Finance, Foreign Affairs, Railway Transport, Tourist Office (Rambler's Top 100, spylog.com, and love boat singles cruise), Saint Vincent and the Grenadines Nat'l Broadcasting (newmontrosehotel.com), Tuvalu Portal (allcasinoworld.com and jane's oceana page), Uruguay Portal/President (ITUraguay.com—"It's business. It's Uraguay."), Uruguay Tourism (vacation planning web sites with large banner ads for vende Uraguay), Belize Tourism and Trade (Radisson, KPMG, law offices), Vietnam Finance (accounting firm banner ad), Vietnam News Agency (magazine and newspaper advertising and econet banner ads), Yugoslavia Investment/Export (real estate services, KPMG banner ads), Bhutan Portal (tourist agencies), Taiwan Transport/Communications (tourist agencies and television station), Antigua and Barbuda Portal/Tourism (TNT Vacations, Jolly Roger Pirate Ship banner ads), Germany Environment (banner ad), Guinea-Bissau Portal (Intership Limited shipping company and WorldNews ads), Iran Tourism (travel agencies, private e-greetings site), Kazakhstan Economy (geocities pop-up), Kenya Investment Promotion (search-related ads), Korea Portal (correctkorea.net, learn to speak Korean online, travel agency banner ads), and Kyrgystan Mineral Resources (jewellernet.ru).

For user fees, the nation with the greatest employment is Taiwan, with 8 percent of its sites having user fees. Other nations relying on user fees are Oman (5 percent of its sites), Singapore (3 percent), and Switzerland (3 percent).

The only countries having premium fee areas are Afghanistan (100 percent), Barbados (25 percent), Taiwan (8 percent), and Canada (3 percent).

	2001	2002	2003
Ads	4%	8%	2%
User Fees	--	1	0.2
Premium Fees	--	0	0.2

Restricted Areas

There has been no increase in countries having restricted areas on their websites that require a username and password for accessibility. This year, 6 percent of government websites across the world have restricted areas, the same as last year.

Examples of countries with website restricted areas include the Congo (100 percent of its sites), Madagascar (50 percent), Cook Islands (50 percent), Taiwan (42 percent), China (33 percent), Kuwait (33 percent), United States (30 percent), Oman (26 percent), Laos, Bahrain, Barbados, Belize, and Iran (each with 25 percent),

Public Outreach

E-government offers the potential to bring citizens closer to their governments. Regardless of the type of political system that a country has, the public benefits from interactive features that facilitate communication between citizens and government. In our examination of national government websites, we look for various features that would help citizens contact government officials and make use of information on websites.

Email is an interactive feature that allows ordinary citizens to pose questions of government officials or request information or services. In our study, we find that 84 percent (up from 75 percent in 2002) of government websites offered email contact material so that a visitor could email a person in a particular department other than the Webmaster.

Percentage of Government Websites Offering Public Outreach

	2001	**2002**	**2003**
Email	73%	75%	84%
Search	38	54	--
Comments	8	33	31
Email Updates	6	10	12
Broadcast	2	2	--
Website Personalization	--	1	1
PDA Access	--	--	2

Thirty percent offer areas to post comments (other than through email), the use of message boards, and chat rooms. Websites using these features allow citizens and department members alike to read and respond to others' comments regarding issues facing the department. Twelve percent (up from 10 percent last year) of government websites allow citizens to register to receive updates regarding specific issues. With this feature, web visitors can input their email addresses, street addresses, or telephone numbers to receive information about a particular subject as new information becomes available. The information can be in the form of a monthly e-newsletter highlighting a prime minister's views or in the form of alerts notifying citizens whenever a particular portion of the website is updated. One percent of sites allow websites to be personalized to the interests of the visitor, and two percent provide personal digital assistant (PDA) access.

Top E-Government Countries

In order to see how the 198 nations ranked overall, we create a 0 to 100 point e-government index and apply it to each nation's websites based on the availability of publications, databases, and number of online services. Four points are awarded to each website for the presence of the following features: publications, databases, audio clips, video clips, foreign language access, not having ads, not having premium fees, not having restricted areas, not having user fees, disability access, having privacy policies, security policies, allowing digital signatures on transactions, an option to pay via credit cards, email contact information, areas to post comments, option for email updates, option for website personalization, and PDA accessibility. These features provide a maximum of 76 points for particular websites.

Each site then qualifies for a bonus of 24 points based on the number of online services executable on that site (1 point for one service, two points for two services, three points for three services, and on up to twenty-four points for twenty-four or more services).   The e-government index runs along a scale from zero (having none of these features and no online services) to 100 (having all features plus at least 24 online services). Totals for each website within a country were averaged across all of that nation's websites to produce a zero to 100 overall rating for that nation.

The top country in our ranking is Singapore at 46.3 percent. This means that every website we analyzed for that nation has nearly half of the features important for information availability, citizen access, portal access, and service delivery. Other nations that score well on e-government include United States (45.3 percent), Canada (42.4 percent), Australia (41.5 percent), Taiwan (41.3 percent), Turkey (38.3 percent), Great Britain (37.7 percent), Malaysia (36.7 percent), the Vatican (36.5 percent), and Austria (36.0 percent). The Appendix lists e-government scores for each of the 198 countries, plus comparisons between 2002 and 2003.

Differences by Region of World

There are some differences in e-government by region of the world. In looking at the overall e-government scores by region, North America scores the highest (40.2 percent), followed by Asia (34.3 percent), Western Europe (33.1 percent), Pacific Ocean Islands (32.1 percent), Middle East (32.1

percent), Eastern Europe (32.0 percent), Russia and Central Asia (29.7 percent), South America (29.5 percent), Central America (28.6 percent), and Africa (27.6 percent).

E-Government Ratings by Region

	2001	**2002**	**2003**
North America	51.0%	60.4	40.2
Western Europe	34.1	47.6	33.1
Eastern Europe	--	43.5	32.0
Asia	34.0	48.7	34.3
Middle East	31.1	43.2	32.1
Russia/Central Asia	30.9	37.2	29.7
South America	30.7	42.0	29.5
Pacific Ocean Islands	30.6	39.5	32.1
Central America	27.7	41.4	28.6
Africa	23.5	36.8	27.6

In looking at regional differences by particular feature, North America, Asia, and the Middle East rank most highly on services, while North America, Russia, and South America score highest on access to databases. The areas providing the greatest degree of accessibility through personal digital assistants (PDAs) is the Middle East.

	Nor Am	**Cent Am**	**S. Am**	**Wes Eur**	**Eas Eur**	**Rus**	**Mid Eas**	**Afri**	**Asia**	**Pac Oc**
Publication	96	87	94	96	92	98	80	79	90	82
Database	87	77	83	78	74	85	56	60	78	72
Audio Clip	18	10	7	6	6	4	10	6	10	7
Video Clip	17	4	8	9	7	4	8	2	18	3
Foreign Lang	26	9	8	64	100	60	78	33	67	25
Ads	1	4	2	0	1	10	2	1	5	1
Prem Fee	1	1	0	0	0	0	1	0	1	0
User Fee	0	0	0	0	0	0	1	0	1	0
Restrict	17	5	5	3	3	2	16	4	13	5
Privacy	57	5	1	7	0	1	7	3	26	33
Security	43	2	0	2	0	0	3	0	14	14
Disability	38	5	6	16	10	4	22	10	9	29
Services	45	9	14	17	7	1	24	5	26	17
Credit Cards	17	0	0	2	0	0	3	0	2	5
Digital Sign	0	0	0	0	0	0	0	0	0	0
Email	94	87	91	92	87	80	71	72	82	85
Comment	50	33	29	36	19	12	32	20	43	31
Updates	33	6	14	15	6	5	10	6	14	16
Personal	3	0	0	1	0	0	1	0	0	0
PDA Access	0	0	0	0	0	0	16	0	2	2

Conclusions

To summarize, we find that progress has been made over the past year in the extent to which helpful material has been placed online. More countries have put a number of services online. For

example, Singapore and the United States are two countries that are especially impressive in the range of e-services provided. The web site with the best access to services (and with the most number of services of all web sites evaluated) was the "eCitizen" site of Singapore (www.ecitizen.gov.sg). The site offers a total of 104 services ranging from inquiring about housing loans to applying for a visa.

In evaluating international website performance, however, there were a number of problems. The difficult that most impeded efficient browsing was the slow loading speed of many sites. Slow servers made it very difficult and time-consuming to effectively ascertain information about a country and almost impossible to execute online transactions.

In addition, sites that do not have privacy policies should post them; those that do should make them more visible. Whereas the expectation is that a link to a privacy policy is included on the bottom of every page of a web site, this was often not the case. On some sites, use of a site's search option was required to find the privacy policy. Many sites have legal statements like disclaimers or copyrights that define the webmaster or government's legal liabilities. They rarely include pertinent details regarding the rights of the user.

Many web sites have links to "services" and "e-services" that are not actually either. These links typically lead a user to details about a manual service offered by the department or ministry or to a form in PDF-format that one can download and then mail in. While a step toward online government, the fact that these documents are not fully executable online limits their utility.

Some sites boasted that they were approved by the "Bobby" disability access test, but were not accessible in reality. Others had special links to disability-friendly versions of the site that also did not pass the Bobby test. Overall, few international websites were accessible for the disabled. While disability access is an e-government priority in some countries, it is obviously not considered when most countries design and edit their web sites.

The most emphatic recommendation in regard to many sites is regular updates. Many web sites were blatantly outdated, both in appearance and content. Though updated aesthetics are not necessarily imperative, old information is not very useful. Some sites included a "Last Updated On" date that rendered the site unaltered for more than three or four years. The inclusion of the date on which a site was last updated is a valuable means by which a site can maintain citizen interest, unless, of course, this option proves a web site ancient.

Some web sites offered the ability to e-mail some or all members of a department or ministry directly from the site, without the need for the user to have his or her own e-mail address. By clicking on the name or address of an employee, the citizen is directed to an online comment form. Such an option increases the accessibility of the site and does not limit the response options to those with e-mail addresses.

Many international web sites include "Kid's Pages"—parts of the site with games, interactive quizzes, and animated characters aimed at attracting and educating children. Though a few of these sections proved unhelpful, many have interesting and informative content.

Appendix

Note: The following table shows e-government rank orderings for the 198 countries, from most highly ranked to least highly ranked.

Table A-1 E-Government Rankings by Country, 2003			
Singapore	46.3	United States	45.3
Canada	42.4	Australia	41.5
Taiwan	41.3	Turkey	38.3
Great Britain	37.7	Malaysia	36.7
Vatican	36.5	Austria	36.0
Switzerland	35.9	China	35.9
New Zealand	35.5	Finland	35.5
Philippines	35.5	Denmark	35.5
Maldives	35.2	St. Lucia	35.0
Hong Kong	34.5	Germany	34.4
Netherlands	34.3	Iceland	34.3
Japan	34.2	Tajikistan	34.0
Belgium	34.0	Colombia	33.9
Czech Republic	33.8	France	33.8
Bahrain	33.8	Mexico	33.7
Portugal	33.6	Israel	33.3
Cyprus (Republic)	33.3	Norway	33.2
Italy	33.2	Croatia	33.2
Slovakia	32.8	Romania	32.8
Brunei	32.8	East Timor	32.6
Nepal	32.5	Thailand	32.4
Yugoslavia	32.3	Tunisia	32.2
Poland	32.2	Azerbaijan	32.0
Bahamas	32.0	Palau	32.0
Qatar	32.0	Sao Tome and Principe	32.0
Slovenia	32.0	Somalia	32.0
Somaliland	32.0	Syria	32.0
Togo	32.0	Belize	32.0
Uzbekistan	32.0	Chile	32.0
Congo (Dem. Rep.)	32.0	Cote d'Ivoire	32.0
North Korea	32.0	Sweden	31.8
South Africa	31.8	Saudi Arabia	31.8
Djibouti	31.7	Ukraine	31.6
Bulgaria	31.4	Spain	31.3
Peru	31.3	Cambodia	31.0
Latvia	30.9	Estonia	30.9
Greece	30.9	Armenia	30.9
Georgia	30.8	Jordan	30.8
Lebanon	30.7	Bangladesh	30.7
Kuwait	30.7	Lithuania	30.5
Micronesia	30.5	Vietnam	30.5
Fiji	30.4	Ethiopia	30.3
Bosnia and	30.1	India	30.1

Herzegovina			
Belarus	30.0	Sudan	30.0
Botswana	30.0	Haiti	30.0
South Korea	30.0	Hungary	29.9
Oman	29.8	Trinidad and Tobago	29.5
Ireland	29.4	Argentina	29.4
Gambia	29.4	Brazil	29.4
Andorra	29.3	Russia	29.3
Nicaragua	29.2	Pakistan	29.1
Nigeria	29.0	Barbados	29.0
Guinea-Bissau	29.0	Yemen	28.9
Morocco	28.9	Jamaica	28.9
Luxembourg	28.7	Venezuela	28.7
Dominican Republic	28.7	Mongolia	28.6
Uruguay	28.5	Kazakhstan	28.4
Albania	28.3	Ecuador	28.3
Honduras	28.2	El Salvador	28.1
Afghanistan	28.0	Macedonia	28.0
Mali	28.0	Mauritania	28.0
Moldova	28.0	Myanmar	28.0
Niue	28.0	Panama	28.0
St. Kitts	28.0	St. Vincent	28.0
Samoa	28.0	Senegal	28.0
Seychelles	28.0	Turkmenistan	28.0
Tuvalu	28.0	Bolivia	28.0
Burundi	28.0	Algeria	28.0
Comoros	28.0	Cyprus (Turkish Republic)	28.0
Egypt	28.0	Antigua and Barbuda	28.0
Guatemala	28.0	Iran	28.0
Uganda	27.7	Malta	27.6
Burkina Faso	27.4	Arab Emirates	27.4
Kiribati	27.0	Kyrgyzstan	26.9
Dominica	26.7	Paraguay	26.7
Liechtenstein	26.5	Mauritius	26.5
Cape Verde	26.4	Ghana	26.3
Cuba	26.2	Namibia	26.2
Zambia	26.1	Niger	26.0
Guyana	26.0	Kenya	25.7
Mozambique	25.5	Rwanda	25.3
Cameroon	25.1	Swaziland	25.0
Grenada	25.0	Monaco	24.5
San Marino	24.2	Libya	24.0
Madagascar	24.0	Sierra Leone	24.0
Sri Lanka	24.0	Tonga	24.0
Zimbabwe	24.0	Benin	24.0
Bhutan	24.0	Central Africa	24.0
Chad	24.0	Congo (Republic)	24.0
Cook Islands	24.0	Costa Rica	24.0
Angola	24.0	Equatorial Guinea	24.0

Eritrea	24.0	Indonesia	24.0
Iraq	24.0	Tanzania	23.3
Malawi	22.7	Guinea	22.7
Papua New Guinea	22.4	Lesotho	21.7
Liberia	20.0	Marshall Islands	20.0
Suriname	20.0	Vanuatu	20.0
Solomon Islands	19.2	Laos	19.0
Nauru	16.0	Gabon	16.0

Table A-2 E-Government Country Ratings, 2002 and 2003		
Country	2002	2003
Afghanistan	32.0%	28.0%
Albania	34.0	28.3
Algeria	35.2	28.0
Andorra	39.0	29.3
Angola	44.0	24.0
Antigua	36.0	28.0
Arab Emirates	38.0	27.4
Argentina	41.8	29.4
Armenia	43.3	30.9
Australia	58.3	41.5
Austria	47.4	36.0
Azerbaijan	41.3	32.0
Bahamas	40.0	32.0
Bahrain	52.0	33.8
Bangladesh	29.3	30.7
Barbados	38.0	29.0
Belarus	33.2	30.0
Belgium	45.3	34.0
Belize	48.0	32.0
Benin	26.0	24.0
Bhutan	28.0	24.0
Bolivia	32.0	28.0
Bosnia	42.7	30.1
Botswana	48.0	30.0
Brazil	41.8	29.4
Brunei	35.5	32.8
Bulgaria	41.1	31.4
Burkina Faso	38.4	27.4
Burundi	24.0	28.0
Cambodia	40.8	31.0
Cameroon	34.9	25.1
Canada	61.1	42.4
Cape Verde	42.0	26.4
Central Africa	32.0	24.0
Chad	36.0	24.0
Chile	60.0	32.0
China	56.3	35.9

Colombia	48.0	33.9
Comoros	34.0	28.0
Congo (Rep)	24.0	24.0
Congo Dem Rep	28.0	32.0
Cook Islands	38.7	24.0
Costa Rica	40.7	24.0
Croatia	43.4	33.2
Cuba	48.0	26.2
Cyprus (Turkish Rep)	40.0	28.0
Cyprus-Republic	38.0	33.3
Czech Republic	44.6	33.8
Denmark	47.0	35.5
Djibouti	40.0	31.7
Dominican Republic	40.0	28.7
Dominica	16.0	26.7
East Timor	24.0	32.6
Ecuador	47.0	28.3
Egypt	41.0	28.0
El Salvador	47.0	28.1
Equatorial Guinea	32.0	24.0
Eritrea	36.0	24.0
Estonia	48.0	30.9
Ethiopia	40.0	30.3
Fiji	52.0	30.4
Finland	48.8	35.5
France	50.9	33.8
Gabon	32.0	16.0
Gambia	32.0	29.4
Georgia	38.7	30.8
Germany	52.6	34.4
Ghana	32.0	26.3
Great Britain	54.8	37.7
Greece	41.5	30.9
Grenada	44.0	25.0
Guatemala	38.7	28.0
Guinea	37.3	22.7
Guinea-Bissau	20.0	29.0
Guyana	42.7	26.0
Haiti	44.0	30.0
Honduras	36.0	28.2
Hong Kong	51.3	34.5
Hungary	42.3	29.9
Iceland	49.8	34.3
India	45.1	30.1
Indonesia	40.8	24.0
Iran	44.0	28.0
Iraq	33.6	24.0
Ireland	48.0	29.4
Israel	50.9	33.3

Italy	48.3	33.2
Ivory Coast	28.0	32.0
Jamaica	40.0	28.9
Japan	52.0	34.2
Jordan	46.3	30.8
Kazakhstan	36.0	28.4
Kenya	44.0	25.7
Kiribati	36.0	27.0
Kuwait	32.0	30.7
Kyrgyzstan	45.3	26.9
Laos	40.0	19.0
Latvia	46.9	30.9
Lebanon	45.0	30.7
Lesotho	36.0	21.7
Liberia	40.0	20.0
Libya	32.0	24.0
Liechtenstein	48.0	26.5
Lithuania	48.4	30.5
Luxembourg	44.6	28.7
Macedonia	45.1	28.0
Madagascar	36.0	24.0
Malawi	45.3	22.7
Malaysia	51.5	36.7
Maldives	48.0	35.2
Mali	34.0	28.0
Malta	47.2	27.6
Marshall Islands	48.0	20.0
Mauritania	37.3	28.0
Mauritius	40.6	26.5
Mexico	52.0	33.7
Micronesia	40.0	30.5
Moldova	40.0	28.0
Monaco	32.0	24.5
Mongolia	37.1	28.6
Morocco	40.9	28.9
Mozambique	44.0	25.5
Myanmar	34.9	28.0
Namibia	28.0	26.2
Nauru	24.0	16.0
Nepal	44.0	32.5
Netherlands	44.0	34.3
New Zealand	42.3	35.5
Nicaragua	32.0	29.2
Niger	32.0	26.0
Nigeria	32.0	29.0
Niue	30.0	28.0
North Korea	36.0	32.0
Norway	47.7	33.2
Oman	36.0	29.8

Pakistan	37.3	29.1
Palau	36.0	32.0
Panama	39.5	28.0
Papua New Guinea	25.3	22.4
Paraguay	40.0	26.7
Peru	36.0	31.3
Philippines	42.4	35.5
Poland	45.1	32.2
Portugal	36.4	33.6
Qatar	52.0	32.0
Romania	42.0	32.8
Russia	36.8	29.3
Rwanda	36.0	25.3
Samoa	36.0	28.0
San Marino	36.0	24.2
Sao Tome	36.0	32.0
Saudi Arabia	38.0	31.8
Senegal	47.0	28.0
Seychelles	39.0	28.0
Sierra Leone	32.0	24.0
Singapore	53.5	46.3
Slovakia	40.5	32.8
Slovenia	41.7	32.0
Solomon Islands	30.4	19.2
Somalia	32.0	32.0
Somaliland	36.0	32.0
South Africa	42.0	31.8
South Korea	64.0	30.0
Spain	44.9	31.3
Sri Lanka	38.7	24.0
St. Kitts	36.0	28.0
St. Lucia	47.3	35.0
St. Vincent	36.0	28.0
Sudan	44.0	30.0
Suriname	32.0	20.0
Swaziland	46.2	25.0
Sweden	49.1	31.8
Switzerland	55.4	35.9
Syria	40.0	32.0
Taiwan	72.5	41.3
Tajikistan	40.0	34.0
Tanzania	33.8	23.3
Thailand	44.0	32.4
Togo	52.0	32.0
Tonga	40.0	24.0
Trinidad	46.4	29.5
Tunisia	44.0	32.2
Turkey	46.0	38.3
Turkmenistan	28.0	28.0

Tuvalu	40.0	28.0
Uganda	47.2	27.7
Ukraine	32.0	31.6
United States	60.1	45.3
Uruguay	32.0	28.5
Uzbekistan	27.3	32.0
Vanuatu	52.0	20.0
Vatican	52.0	36.5
Venezuela	48.0	28.7
Vietnam	38.0	30.5
Yemen	50.0	28.9
Yugoslavia	40.0	32.3
Zambia	52.0	26.1
Zimbabwe	36.0	24.0

Note: The following table shows the percentage of websites in each country that have each feature, such as online services, publications, databases, privacy policies, security policies, and disability accessibility.

Table A-3 Individual Country Profiles for Selected Features, 2003						
	Online Services	*Publica tions*	*Data bases*	*Privacy Policy*	*Security Policy*	*W3C Disability Accessibility*
Afghanistan	0%	100%	0%	0%	0%	0%
Albania	0	92	58	0	0	0
Algeria	0	62	41	3	0	32
Andorra	10	100	80	0	0	0
Angola	0	100	75	0	0	0
Antigua	0	100	100	0	0	0
Arab Emirates	20	80	60	0	0	0
Argentina	18	94	82	6	0	18
Armenia	11	100	78	11	0	0
Australia	16	100	94	100	39	71
Austria	0	100	100	0	0	0
Azerbaijan	0	100	100	0	0	0
Bahamas	0	100	0	0	0	0
Bahrain	25	75	75	0	0	0
Bangladesh	0	67	100	0	0	17
Barbados	0	100	50	0	0	0
Belarus	0	100	83	0	0	0
Belgium	8	100	92	15	0	0
Belize	0	100	75	0	0	0
Benin	0	100	0	0	0	0
Bhutan	0	100	0	0	0	0
Bolivia	0	100	100	0	0	0
Bosnia	22	78	56	0	0	0
Botswana	0	100	50	0	0	0
Brazil	15	100	95	0	0	0

Brunei	0	60	60	0	0	0
Bulgaria	0	100	57	0	0	0
Burkina Faso	20	80	100	0	0	20
Burundi	0	100	100	0	0	0
Cambodia	0	88	75	0	0	13
Cameroon	0	73	55	0	0	9
Canada	45	97	87	97	65	61
Cape Verde	14	86	57	0	0	0
Central Africa	0	0	0	0	0	0
Chad	0	100	100	0	0	100
Chile	0	100	93	7	0	7
China-Mainland	67	100	100	83	8	0
China -Taiwan	100	100	100	42	12	0
Colombia	30	100	100	0	0	10
Comoros	0	100	100	0	0	0
Congo-Dem Rep	0	100	100	0	0	0
Congo-Rep	0	100	100	0	0	0
Cook Islands	0	100	50	0	0	0
Costa Rica	0	100	0	0	0	0
Cote d'Ivoire	0	100	100	0	0	0
Croatia	17	100	67	0	0	33
Cuba	0	44	67	0	0	22
Cyprus-Rep	7	100	93	0	0	7
Cyprus-Turk	0	100	100	0	0	0
Czech Rep	6	100	89	0	0	56
Denmark	13	93	67	7	0	27
Djibouti	10	100	80	0	0	10
Dominica	0	100	0	100	0	0
Dominican Rep	0	100	100	0	0	0
East Timor	0	79	71	0	0	0
Ecuador	7	100	87	0	0	7
Egypt	0	100	100	0	0	0
El Salvador	11	89	89	0	0	0
Eq Guinea	0	0	0	0	0	100
Eritrea	0	0	0	0	0	100
Estonia	0	100	64	0	0	0
Ethiopia	0	86	71	0	0	0
Fiji	17	92	92	0	0	8
Finland	7	100	100	0	0	13
France	16	100	94	0	0	6
Gabon	0	0	0	0	0	0
Gambia	20	60	80	0	0	0
Georgia	0	90	60	0	0	30
Germany	37	100	73	0	0	20
Ghana	0	93	71	0	0	0
Great Britain	24	100	93	45	21	48
Greece	0	100	64	9	9	0

Grenada	0	75	50	0	0	0
Guatemala	0	100	70	0	0	0
Guinea	0	67	67	0	0	0
Guinea-Bissau	100	100	100	0	0	0
Guyana	0	50	50	0	0	50
Haiti	0	50	50	0	0	100
Honduras	17	100	67	0	0	17
Hong Kong	15	10	90	30	0	40
Hungary	5	75	60	0	0	15
Iceland	5	100	80	0	0	30
India	5	95	85	0	0	0
Indonesia	0	100	0	0	0	0
Iran	0	75	0	0	0	0
Iraq	0	100	0	0	0	0
Ireland	16	100	16	26	0	26
Israel	6	88	50	25	0	13
Italy	0	95	90	0	0	20
Jamaica	15	85	60	5	0	0
Japan	0	100	100	15	15	25
Jordan	20	75	65	5	5	0
Kazakhstan	0	100	100	0	0	0
Kenya	6	47	41	0	0	6
Kiribati	33	33	0	0	0	67
Korea, North	0	100	0	0	0	0
Korea, South	0	93	29	7	0	0
Kuwait	8	83	25	0	0	58
Kyrgyzstan	0	100	100	0	0	0
Laos	0	0	25	25	0	0
Latvia	0	55	36	0	0	18
Lebanon	0	67	56	0	0	22
Lesotho	0	100	0	0	0	43
Liberia	0	0	0	0	0	0
Libya	0	100	0	0	0	0
Liechtenstein	50	50	50	0	0	0
Lithuania	8	85	69	0	0	15
Luxembourg	10	85	80	10	0	10
Macedonia	0	100	0	0	0	0
Madagascar	0	50	0	0	0	0
Malawi	0	50	50	0	0	33
Malaysia	0	100	67	17	0	33
Maldives	0	80	40	0	0	40
Mali	0	100	100	0	0	0
Malta	20	80	60	40	0	0
Marshall Islands	0	100	0	0	0	0
Mauritania	0	100	67	0	0	0
Mauritius	0	92	46	0	0	8
Mexico	15	100	95	0	0	5
Micronesia	50	100	100	0	0	50

Moldova	0	100	0	0	0	0
Monaco	50	0	0	0	0	50
Mongolia	0	71	86	0	0	0
Morocco	5	86	91	0	0	0
Mozambique	0	88	13	0	0	0
Myanmar	0	67	67	0	0	33
Namibia	0	85	77	8	0	0
Nauru	0	0	0	0	0	0
Nepal	0	88	63	0	0	13
Netherlands	17	90	70	13	0	30
New Zealand	23	100	100	47	30	57
Nicaragua	9	91	91	0	0	0
Niger	0	0	50	0	0	0
Nigeria	0	88	75	13	0	0
Niue	0	100	100	0	0	100
Norway	0	97	73	0	0	3
Oman	21	84	26	5	0	58
Pakistan	13	83	78	4	4	4
Palau	0	100	100	0	0	0
Panama	13	80	87	0	0	3
Papua New Guinea	8	58	42	0	0	0
Paraguay	4	74	61	0	0	4
Peru	13	100	93	0	0	3
Philippines	30	97	87	13	0	0
Poland	3	97	77	3	0	3
Portugal	13	100	83	3	0	20
Qatar	0	67	33	0	0	67
Romania	4	92	85	0	0	4
Russia	0	100	95	5	0	0
Rwanda	0	75	50	0	0	8
Sao Tome	0	100	100	0	0	0
St. Kitts/Nevis	0	100	33	0	0	33
St. Lucia	0	100	100	50	25	25
St. Vincent	0	100	0	0	0	0
Samoa	0	100	60	0	0	0
San Marino	20	80	0	0	0	0
Saudi Arabia	24	76	58	6	0	27
Senegal	0	100	92	0	0	0
Seychelles	0	43	43	0	0	0
Sierra Leone	0	100	0	0	0	0
Singapore	67	97	77	93	90	13
Slovakia	10	100	86	0	0	14
Slovenia	10	90	71	0	0	3
Solomon Islands	0	16	5	0	0	0
Somalia	0	100	0	0	0	100
Somaliland	0	100	100	0	0	0
South Africa	17	100	97	7	0	7

Spain	33	100	93	3	0	10
Sri Lanka	0	0	100	0	0	0
Sudan	0	100	50	0	0	25
Suriname	0	0	0	0	0	0
Swaziland	0	50	0	0	0	0
Sweden	10	100	80	0	0	0
Switzerland	40	10	90	3	0	17
Syria	0	100	100	0	0	0
Tajikistan	0	100	50	0	0	50
Tanzania	0	45	9	0	0	0
Thailand	0	100	78	0	0	0
Togo	0	100	100	0	0	0
Tonga	0	0	0	0	0	0
Trinidad	16	89	74	16	11	0
Tunisia	20	100	60	0	0	0
Turkey	73	97	97	13	13	0
Turkmenistan	0	100	0	0	0	0
Tuvalu	0	100	0	0	0	0
Uganda	11	89	44	0	0	0
Ukraine	5	100	89	0	0	0
United States	67	100	95	75	62	47
Uruguay	20	93	87	0	0	7
Uzbekistan	0	100	100	0	0	0
Vanuatu	0	100	0	0	0	0
Vatican	50	100	100	0	0	0
Venezuela	28	92	76	0	0	4
Vietnam	0	100	100	0	0	13
Yemen	7	43	36	0	0	36
Yugoslavia	6	100	88	0	0	0
Zambia	13	100	63	0	0	0
Zimbabwe	0	50	50	0	0	0

Note: The following table shows the percentage of websites in each country that have each feature, such as foreign language translation, advertisements, premium fees, restricted areas, user fees, and search engines.

Table A-4 Individual Country Profiles for Selected Features, 2003						
	For Lang	*Ads*	*Prem Fee*	*Restrict Area*	*User Fee*	*Comments*
Afghanistan	100%	0%	100%	0%	0%	0%
Albania	100	0	0	0	0	0
Algeria	70	0	0	11	0	24
Andorra	40	0	0	0	0	10
Angola	0	0	0	0	0	0
Antigua	0	100	0	0	0	100
Arab Emirates	100	0	0	20	0	20
Argentina	6	0	0	0	0	6
Armenia	100	11	0	11	0	22
Australia	13	3	0	6	0	29

Austria	0	0	0	0	0	100
Azerbaijan	100	0	0	0	0	0
Bahamas	0	0	0	0	0	100
Bahrain	100	0	0	25	0	25
Bangladesh	100	0	0	0	0	17
Barbados	25	25	25	25	0	75
Belarus	67	0	0	0	0	0
Belgium	54	0	0	8	0	62
Belize	25	50	0	25	0	75
Benin	0	0	0	0	0	0
Bhutan	100	100	0	0	0	0
Bolivia	0	0	0	0	0	0
Bosnia	100	11	0	0	0	11
Botswana	0	0	0	0	0	50
Brazil	10	0	0	10	0	40
Brunei	100	0	0	0	0	100
Bulgaria	100	0	0	0	0	14
Burkina Faso	20	0	0	20	0	20
Burundi	0	0	0	0	0	0
Cambodia	100	13	0	0	0	13
Cameroon	0	0	0	0	0	18
Canada	3	0	3	6	0	39
Cape Verde	0	0	0	0	0	14
Central Africa	0	0	0	0	0	100
Chad	0	0	0	0	0	0
Chile	7	0	0	7	0	40
China-Mainland	46	0	0	33	0	33
China -Taiwan	100	4	8	42	8	54
Colombia	0	0	0	0	0	70
Comoros	0	0	0	0	0	0
Congo-Dem Rep	100	0	0	0	0	0
Congo-Rep	0	0	0	100	0	0
Cook Islands	0	0	0	50	0	0
Costa Rica	0	0	0	0	0	0
Cote d'Ivoire	0	0	0	0	0	0
Croatia	100	0	0	0	0	0
Cuba	67	0	0	0	0	0
Cyprus-Rep	100	0	0	0	0	29
Cyprus-Turk	100	0	0	0	0	0
Czech Rep	100	0	0	6	0	6
Denmark	100	0	0	0	0	20
Djibouti	0	0	0	0	0	40
Dominica	0	0	0	0	0	100
Dominican Rep	17	0	0	17	0	17
East Timor	93	0	0	0	0	86
Ecuador	0	0	0	7	0	20
Egypt	100	0	0	0	0	0

El Salvador	0	0	0	11	0	22
Eq Guinea	100	0	0	0	0	0
Eritrea	100	0	0	0	0	0
Estonia	100	0	0	0	0	9
Ethiopia	100	0	0	0	0	14
Fiji	8	0	0	8	0	33
Finland	100	0	0	0	0	53
France	56	0	0	0	0	22
Gabon	0	0	0	0	0	0
Gambia	0	0	0	0	0	40
Georgia	100	0	0	0	0	0
Germany	50	3	0	3	0	57
Ghana	0	0	0	0	0	14
Great Britain	21	0	0	0	0	55
Greece	100	0	0	0	0	9
Grenada	0	0	0	0	0	0
Guatemala	0	0	0	10	0	30
Guinea	0	0	0	0	0	0
Guinea-Bissau	100	100	0	0	0	0
Guyana	0	0	0	0	0	0
Haiti	0	0	0	0	0	0
Honduras	0	0	0	0	0	17
Hong Kong	0	0	0	5	0	20
Hungary	100	0	0	5	0	20
Iceland	100	0	0	0	0	40
India	0	0	0	0	0	50
Indonesia	0	0	0	0	0	0
Iran	100	25	0	25	0	50
Iraq	100	0	0	0	0	0
Ireland	5	0	0	0	0	53
Israel	81	6	0	13	0	31
Italy	50	0	0	5	0	25
Jamaica	0	0	0	5	0	55
Japan	100	0	0	0	0	15
Jordan	100	0	0	15	0	30
Kazakhstan	89	22	0	11	0	0
Kenya	100	6	0	6	0	12
Kiribati	0	0	0	0	0	33
Korea, North	100	0	0	0	0	0
Korea, South	100	21	0	0	0	43
Kuwait	83	0	0	33	0	58
Kyrgyzstan	43	14	0	0	0	0
Laos	50	25	0	25	0	25
Latvia	100	0	0	0	0	36
Lebanon	100	0	0	11	0	78
Lesotho	0	0	0	0	0	0
Liberia	0	0	0	0	0	0
Libya	100	0	0	0	0	0
Liechtenstein	100	0	0	0	0	0

Country					
Lithuania	100	0	0	0	0	8
Luxembourg	5	0	0	5	0	20
Macedonia	100	0	0	0	0	0
Madagascar	100	0	0	50	0	0
Malawi	0	0	0	0	0	0
Malaysia	100	17	0	17	0	83
Maldives	100	20	0	20	0	80
Mali	0	0	0	0	0	0
Malta	0	0	0	20	0	20
Marshall Islands	0	0	0	0	0	0
Mauritania	33	0	0	0	0	0
Mauritius	23	0	0	0	0	0
Mexico	45	0	0	10	0	60
Micronesia	0	0	0	0	0	50
Moldova	100	0	0	0	0	0
Monaco	100	0	0	0	0	0
Mongolia	100	14	0	0	0	0
Morocco	27	0	0	9	0	23
Mozambique	50	0	0	0	0	0
Myanmar	100	0	0	0	0	0
Namibia	0	0	0	0	0	0
Nauru	0	0	0	0	0	0
Nepal	100	0	0	0	0	42
Netherlands	100	0	0	0	0	43
New Zealand	0	0	0	10	0	37
Nicaragua	9	0	0	4	0	30
Niger	100	0	0	0	0	0
Nigeria	0	0	0	0	0	38
Niue	0	0	0	0	0	100
Norway	100	0	0	0	0	52
Oman	89	0	0	26	5	32
Pakistan	9	4	0	9	0	52
Palau	100	0	0	0	0	0
Panama	3	0	0	3	0	30
Papua New Guinea	0	0	0	0	0	0
Paraguay	4	4	0	0	0	26
Peru	20	0	0	0	0	33
Philippines	100	0	0	0	0	60
Poland	100	0	0	0	0	17
Portugal	47	3	0	3	0	53
Qatar	83	0	0	0	0	17
Romania	100	0	0	0	0	31
Russia	63	37	0	0	0	0
Rwanda	0	0	0	8	0	25
Sao Tome	0	0	0	0	0	0
St. Kitts/Nevis	0	0	0	0	0	33
St. Lucia	0	0	0	0	0	50

St. Vincent	0	50	0	0	0	100
Samoa	0	0	0	0	0	20
San Marino	0	0	0	0	0	20
Saudi Arabia	88	3	0	18	0	33
Senegal	8	0	0	8	0	8
Seychelles	100	0	0	0	0	29
Sierra Leone	0	0	0	0	0	0
Singapore	0	0	0	17	3	67
Slovakia	100	0	0	0	0	5
Slovenia	100	0	0	10	0	23
Solomon Islands	0	0	0	0	0	0
Somalia	100	0	0	0	0	100
Somaliland	100	0	0	0	0	0
South Africa	0	0	0	7	0	50
Spain	27	0	0	13	0	20
Sri Lanka	100	100	0	0	0	0
Sudan	100	0	0	0	0	0
Suriname	0	0	0	0	0	0
Swaziland	100	0	0	0	0	0
Sweden	100	0	0	0	0	7
Switzerland	93	0	0	0	3	47
Syria	100	0	0	0	0	0
Tajikistan	100	0	0	0	0	50
Tanzania	100	0	0	0	0	0
Thailand	100	0	0	11	0	22
Togo	0	0	0	0	0	100
Tonga	100	0	0	0	0	62
Trinidad	0	0	0	0	0	42
Tunisia	80	0	0	0	0	60
Turkey	10	0	0	13	0	27
Turkmenistan	100	0	0	0	0	0
Tuvalu	0	100	0	0	0	100
Uganda	0	0	0	11	0	78
Ukraine	68	5	0	11	0	37
United States	40	2	0	30	0	52
Uruguay	7	13	0	7	0	7
Uzbekistan	100	0	0	0	0	0
Vanuatu	0	0	0	0	0	0
Vatican	100	0	0	0	0	0
Venezuela	4	4	0	12	0	24
Vietnam	100	25	0	13	0	25
Yemen	86	0	0	0	0	14
Yugoslavia	100	6	0	0	0	6
Zambia	0	13	0	0	0	13
Zimbabwe	0	0	0	0	0	0

Table A-5 Best Practices of Top Government Sites

1) Singapore (http://www.ecitizen.gov.sg/)

Singapore's wide array of sites is highlighted by an e-service portal. Virtually all Singaporean web sites have links to this clearinghouse of citizen services and information. The "eCitizen" site boasts over one hundred services (the most of all web sites evaluated in this study). Other sites contain a large amount of press releases, speech texts, and databases. The relative prevalence of privacy statements, audio and video clips, and PDA access also distances Singapore's web sites from those of other nations. Two other notable web sites are that of the Housing and Development Board and the Singapore Police Force (SPF), offering 38 and 17 e-services, respectively.

2) United States (http://www.firstgov.gov/)

The United States offers the most organized portal web site of any country. Information and services are easy to find and logically placed. It is also the quintessential portal because it effectively agglomerates publications, databases, and services from all governmental web sites and provides accessible links to them. Whereas most portal web sites provide an eclectic sampling of documents and links to the home pages of government departments and ministries, the United States portal is defined by navigable links to well-defined information and services. Except for many of the judicial web sites, privacy policies are both detailed and easy to find. Two especially notable departmental web sites are that of the Securities and Exchange Commission (SEC) and the Postal Service (USPS), offering 64 and 20 online services, respectively.

3) Canada (http://www.gc.ca/)

The Canadian web portal is another example of a site defined by functionality and ease of use. Perusal of reports, guides, and other publications is simplified by search and organization options; one can browse by title, subject, or order of release. The Canadian portal also offers updates and customization options. Regarding all of Canada's web sites, all but one contain a visible privacy statement and more than half comply with disability access standards.

4) Australia (http://www.fed.gov.au/KSP/)

Like the portals of the United States and Canada, that of Australia proves to be well-organized and designed. The ability for the user to categorize him/herself as a student, business, or other governmental organization mimics similar options at the two aforementioned portals and provides a neat way to narrow the site. Unlike those sites, however, the Australian portal excels aesthetically in its successful incorporation of color without diminishing its disability access compliance. In fact, an overwhelming majority of Australian web sites comply with current online disability standards. Remarkable, too, is the fact that one hundred percent of Australian web sites accessed in this study contain visible privacy statements. An impressive percentage of sites also offer the option to receive e-mail updates on events and publications.

5) Taiwan (http://www.mof.gov.tw/)

Taiwan offers an excellent array of web sites. Among the data collected on Taiwan's e-government capabilities, most impressive is that one hundred percent of the sites evaluated offer services that are fully executable online. One especially distinguished site is that of the Ministry of Finance, which offers several e-services as well as a wide assortment of publications and databases. Though no single site offers more than a few e-services, the universal ability to complete a variety of transactions online continues to set Taiwan apart from other countries. Additionally, all sites evaluated contain both publications and databases, rendering each site especially useful to the average citizen.