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Global E-Government, 2005

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Table of Contents

Executive Summary 3

A Note on Methodology 3

Online Information 4

Electronic Services 5

Privacy and Security 6

Disability Access 7

Foreign Language Access 7

Ads, User Fees, and Premium Fees 8

Public Outreach 9

Top E-Government Countries 9

Differences by Region of World 10

Conclusion 11

Appendix 12

Table A-1 E-Government Rankings by Country, 2005

Table A-2 E-Government Country Ratings, 2004 and 2005

Table A-3 Individual Country Profiles for Services, Privacy, Security, and Disability Access, 2005

Table A-4 Individual Country Profiles for Foreign Language Translation, Ads, User Fees, and Electronic Updates, 2005

Table A-5 Best Practices of Top Government Sites, 2005

Executive Summary

In this report, I present the fifth annual update on global e-government. Using a detailed analysis of 1,797 government websites in 198 different nations undertaken during Summer, 2005, I chart the variations that exist across regions and countries, and discuss the pace at which e-government is unfolding around the world.

In looking at electronic government from 2001 to 2005, I find that progress is being made, albeit at an incremental pace. Governments are showing steady progress on several important dimensions, but not major leaps forward. On several key indicators, e-government performance is edging up. However, movement forward has not been more extensive in some areas because budget, bureaucratic, and institutional forces have limited the extent to which the public sector has incorporated technology into their mission.

Among the significant findings of the research are:

- 1) 19 percent of government websites offer services that are fully executable online.
- 2) 89 percent of websites this year provide access to publications and 53 percent have links to databases.
- 3) 18 percent (up from 14 percent in 2004) show privacy policies, while 10 percent have security policies (up from 8 percent in 2004).
- 4) 19 percent of government websites have some form of disability access, meaning access for persons with disabilities, up from 14 percent in 2004.
- 5) Countries vary enormously in their overall e-government performance based on our analysis. The most highly ranked nations include Taiwan, Singapore, United States, Hong Kong, China, Canada, Germany, Australia, and Ireland.
- 6) 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, South America, Russia and Central Asia, Central America, and Africa.

A Note on Methodology

The data for our analysis consist of an assessment of 1,797 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 and July, 2005 at Brown University in Providence, Rhode Island. Tabulation for this project was completed by Amy Goins, Emily Lewis-Lamonica, Zhizhan Gu, Devon Dear, Masha Kirasirova, Mark Severs, Ethan Burton, Jeff Tiell, and Ramadan Hussein. National government website addresses can be found at www.INSidePolitics.org/world.html.

The regional breakdowns for the websites we studied are 20 percent from Western European countries, followed by 14 percent from Africa, 13 percent from the Middle East, 12 percent from Asia, 9 percent Eastern Europe, 8 percent South America, 7 percent Pacific Ocean countries (meaning those off the Asian continent), 7 percent from Central America, 5 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).

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, 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. Where national government websites are not in English, our research team employed foreign language readers to evaluate government 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 (the same as in 2004), and 53 percent provided databases (down from 62 percent last year).

Percentage of Websites Offering Publications and Databases

	2001	2002	2003	2004	2005
<i>Phone Contact Info.</i>	70%	77%	--	--	--
<i>Address Info</i>	67	77	--	--	--
<i>Links to Other Sites</i>	42	82	--	--	--
<i>Publications</i>	71	77	89	89	89
<i>Databases</i>	41	83	73	62	53
<i>Audio Clips</i>	4	8	8	12	9
<i>Video Clips</i>	4	15	8	13	11

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 nine percent of government websites provide audio clips and 11 percent have video clips.

Electronic Services

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.

Of the websites examined around the world, however, 19 percent offer services that are fully executable online, which compares to 21 percent in 2004, 16 percent in 2003 and 12 percent in 2002. Of this group, eight percent offer one service, three percent have two services, and eight percent have three or more services. Eighty-one percent have no online services.

Number of Online Services	2001	2002	2003	2004	2005
None	92%	88%	84%	79%	81%
One	5	7	9	11	8

Two	1	2	3	4	3
Three or more	2	3	4	6	8

North America (including the United States, Canada, and Mexico) is the area offering the highest percentage of online services. Fifty-six percent (up from 53 percent last year) had fully executable, online services. This was followed by Asia (38 percent), Pacific Ocean islands (24 percent), Western Europe (20 percent), and the Middle East (13 percent). Only 3 percent in Russia/Central Asia, 7 percent in Africa, and 4 percent of sites in Eastern Europe offer online government services.

Percentage of Government Sites Offering Online Services by Region of World

	2001	2002	2003	2004	2005
<i>North America</i>	28%	41%	45%	53%	56%
<i>Pacific Ocean Islands</i>	19	14	17	43	24
<i>Asia</i>	12	26	26	30	38
<i>Middle East</i>	10	15	24	19	13
<i>Western Europe</i>	9	10	17	29	20
<i>Eastern Europe</i>	--	2	6	8	4
<i>Central America</i>	4	4	9	17	15
<i>South America</i>	3	7	14	10	19
<i>Russia/Central Asia</i>	2	1	1	2	3
<i>Africa</i>	2	2	5	8	7

Many sites offer services such as job placement searches, filing for licenses, and gaining subscription to various publications. Great Britain's Parks Service offers "e-cards" that provide access to electronic services; Andorra offers the same service. The Great Britain Environmental Agency offered a function that allows users to search for property and housing that is "eco-friendly," and assesses the environmental risks of potential property purchases.

Countries with economies that depend heavily on tourism provide vacation-booking services on their websites. Dominica and the Bahamas both offer these services on their portal sites. While these services are very useful for tourists, they are not geared toward the citizenry of the country itself. Another example of a well-intentioned attempt at e-services is Germany's portal site. It offers a huge amount of online subscriptions, but no actual bureaucratic services or paperwork-eliminating processes. The portal site for the government of Thailand provides a link to a live traffic map, which can be downloaded to a PDA or mobile phone and accessed continuously.

An interesting example of creating incentives to use e-services is found on Malaysia's site, which offers to waive all processing fees for the extensive range of services and government paperwork available to be completed online. This effort to encourage the use of e-services and conserve resources, creates an incentive to access government services via the internet, while making the use of the internet seem more widely accepted and easily facilitated. In addition, this site maintains an online survey to obtain public opinion on the impediments of using online services, and how to improve them and facilitate their use more frequently, by providing online surveys for e-service users to complete. While the Malaysian site facilitates citizen-government communication with their internet feedback surveys, the government in the Philippines can be contacted through text-messaging. Many of the assessed sites also featured chat rooms and message boards which citizens could use to communicate with government officials, as well as each other.

Although some sites featured video content, only a few offered live video transmissions. The following sites offered webcams that featured live video feed: the Slovenian National Assembly, the

British Parks Service, the Chilean Presidency site, which featured live feed of the Presidential Palace, and Panama's Panama Canal site.

Great Britain, Singapore, Taiwan, and Canada have an extensive range of e-services. In addition to the e-cards, these sites offer features such as healthcare referrals, driver's license applications and renewals, insurance recommendations, birth certificate ordering, a zoning reference guide, and e-tax filing. The website for the Nigeria Bureau of Public Enterprises has a Flash introduction explaining the features of its website. After the introduction, users are able easily and quickly to access the information, and features specific to that site.

One feature 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 5 percent (up from 4 percent in 2004) accept credit cards and 2 percent allowed digital signatures for financial transactions.

Privacy and Security

Having visible statements outlining what the site is doing on privacy and security are valuable assets for reassuring a fearful population to make use of e-government services and information. However, few global e-government sites offer policy statements dealing with these topics. Only 18 percent (up from 14 percent in 2004) of examined sites have some form of privacy policy on their site, and 10 percent have a visible security policy (up from 8 percent). 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.

There was a plagiarism problem on the Saint Vincent website. The site for its Ministry of Tourism displays a link at the bottom of the page to the site's privacy policy. The privacy policy, though, is actually copied word for word from a medical website on how to manage chemotherapy-induced nausea and vomiting.

	2001	2002	2003	2004	2005
Privacy	6%	14%	12%	14%	18%
Security	3	9	6	8	10

In order to assess particular aspects of privacy and security, we evaluated the content of these publicly posted statements. For privacy policies, we look at several features: whether the privacy statement prohibits commercial marketing of visitor information; use of cookies or individual profiles of visitors; disclosure of personal information without the prior consent of the visitor, or disclosure of visitor information with law enforcement agents.

In general, we found weak protections of visitor privacy. For example, only 12 percent of government websites prohibit the commercial marketing on visitor information; just eight percent prohibit cookies, 12 percent prohibit sharing personal information, and 8 percent share information with law enforcement agents. And in regard to security policies, 9 percent indicate that they use computer software to monitor traffic.

Disability Access

We tested disability access by examining the actual accessibility of government websites through the automated "Bobby 5.0" software produced by Watchfire, Inc. (<http://bobby.watchfire.com>). This commercial firm offers software that tests websites against standards of compliance with the standards recommended by the World Wide Web Consortium (W3C).

For our test, we used the Priority Level One standard and evaluated each government agency regarding whether it 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 our Bobby analysis, 19 percent of government websites are accessible to the disabled, up from 14 percent last year.

A few websites had links to accessible versions for disabled users: the website for the Spanish Army, the portal for the government of Switzerland, and the portal for the government of Sweden. The Swiss portal also has a built-in text reader. The Indian Presidential site failed the Bobby/W3cdis, but is speech enabled. This provided a link to speech-enable the site for the visually impaired.

Foreign Language Access

Forty-nine percent of national government websites have foreign language features that allow access to non-native speaking individuals, about the same as the 50 percent last year. 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. Seventy-seven percent offer at least some portion of their websites in English.

Several sites had an interesting foreign language feature. For example on the Latvian portal, the site automatically displays the webpage in the language of previously viewed site. The same helpful feature was accessible on the Japanese sites.

	2001	2002	2003	2004	2005
Foreign Language Translation	45%	43%	51%	50%	49%

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 4 percent of government websites in 2005 rely on ads (the same as last year). A majority of the advertisements on the government sites were on agency sub-sites, such as those belonging to Communications or Tourism sites. The Bahamian portal site featured an ad for a "Book Now" service, maintained by Expedia, that doubles as an ad for Expedia's service and a service by the Bahamian tourism sector. A similar type of advertisement was observed on the Congolese site. The Vietnamese and Zambian Tourism sites also featured advertisements for their national tourism sector. Countries such as Morocco and the Netherlands featured advertisements geared toward tourists as well, from different tour companies and airlines to rental car companies. The Algerian telecommunications site featured advertisements for television channels and shows, as well as television schedules.

Great Britain's Department of Transportation site featured a small square ad that doubled as a link that read "Back the [Olympic] Bid 2012." The same ad was on Great Britain's Education site. Another British site, the Passport Agency, involves an independent business as an option in obtaining and renewing one's passport. Paperwork can be filed at any High Street Partners location, which is a commercial firm used to expedite government paperwork and decrease the time and frustration involved in obtaining an authorized passport.

	2001	2002	2003	2004	2005
Ads	4%	8%	2%	4%	4%
User Fees	--	1	0.2	1.3	2

Premium Fees	--	0	0.2	0.7	1
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In general, user fees remain relatively scarce among the sites we examined. Most services and databases could be completed or obtained by mail or in person at no additional charge. The few that were found (2 percent of all sites) included charges applied in order to access publications or databases, or to register for a particular database. One percent of sites had premium sections that charged fees.

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 80 percent (down from 88 percent in 2004) 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	2004	2005
<i>Email</i>	73%	75%	84%	88%	80%
<i>Search</i>	38	54	--	--	--
<i>Comments</i>	8	33	31	16	37
<i>Email Updates</i>	6	10	12	16	16
<i>Broadcast</i>	2	2	--	--	--
<i>Website Personalization</i>	--	1	1	2	2
<i>PDA Access</i>	--	--	2	1	4

Thirty-seven percent offer areas to post comments (other than through email), the use of message boards, and chat rooms, up from 16 percent the preceding year. Websites using these features allow citizens and department members alike to read and respond to others' comments regarding issues facing the department.

Sixteen percent 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.

Two percent of sites allow websites to be personalized to the interests of the visitor, and four percent provide personal digital assistant (PDA) access, up from one percent. Some sites have started to take advantage of mobile phone access (WAP). One such site that had WAP access was the Electoral Commission of Pakistan. This is a good way to adapt local technology to digital 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 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 72 points for particular websites.

Each site then qualifies for a bonus of 28 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-eight points for twenty-eight 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 28 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 Taiwan at 57.2 percent. This means that every website we analyzed for that nation has more than half of the features important for information availability, citizen access, portal access, and service delivery. Other nations that score well on e-government include Singapore, United States, Hong Kong, China, Canada, Germany, Australia, and Ireland. The Appendix lists e-government scores for each of the 198 countries, plus comparisons between 2004 and 2005.

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 (47.3 percent), followed by Asia (37.3 percent), Western Europe (29.6 percent), Pacific Ocean Islands (27.9 percent), Middle East (27.4 percent), Eastern Europe (27.1 percent), South America (25.9 percent), Russia and Central Asia (25.0 percent), Central America (24.1 percent), and Africa (22.0 percent).

E-Government Ratings by Region

	2001	2002	2003	2004	2005
North America	51.0%	60.4%	40.2%	39.2%	47.3%
Western Europe	34.1	47.6	33.1	30.0	29.6
Eastern Europe	--	43.5	32.0	28.0	27.1
Asia	34.0	48.7	34.3	31.6	37.3
Middle East	31.1	43.2	32.1	28.1	27.4
Russia/Central Asia	30.9	37.2	29.7	25.3	25.0
South America	30.7	42.0	29.5	24.3	25.9
Pacific Ocean Islands	30.6	39.5	32.1	29.9	27.9
Central America	27.7	41.4	28.6	24.1	24.1
Africa	23.5	36.8	27.6	22.0	22.0

Conclusion

Because the internet is such a visual medium, the most important step governments can take to improve e-government is to refine their sites. Each site should have a clearly visible link to a sitemap on the portal or index page. A clear and detailed site map made navigating the site much easier.

Ideally, the standardization of sites would emphasize the organization started by the sitemap, but the likelihood of global website standardization simply to increase ease of use is not likely. Instead, government agencies should agree upon a national format for all of the government websites of one country. Citizens would become familiar with the layout and functions of the different sites of their government, and this would at least increase citizen ease of use within their own country's sites.

Site maintenance is also very important, and often overlooked. With proper and frequent site maintenance, the number of broken links encountered could be greatly reduced. It would also eliminate the confusion around alternative websites. With proper maintenance and updating, this confusion could be avoided.

In terms of aesthetics, simpler is better for websites. Too much animation or poor color choice can greatly detract from the ease of use and official appearance of a website. The Chilean Ministry of Agriculture's site has 11 dynamic or animated links on it, and this kind of distraction takes away from the content of the site. The same "less-is-more" approach is true with color choice. For instance, the South African Department of Arts and Culture had a link to a disclaimer at the bottom of its page. The link was in pale peach font, and was almost illegible against the white background of the page.

The area where there is the largest amount of room for improvement is e-services. All of the services should be listed on one page, together. The same applies for downloadable forms – they should all be listed together, on one page. E-services should be geared toward citizens as well as tourists.

A number of sites already provide services revolving around tourism, such as hotel and flight bookings. If the same range of services were provided online to citizens, a huge amount of the paper trail involved in government functions could be eliminated, as well as a shorter turn-around time for service completion.

While some sites have taken the steps to outline the procedures for completing these services, or provided the paperwork to be filled out and then *printed and mailed in to the agency*, the biggest increase in efficiency would be to provide online services that could be completed entirely over the internet, saving on time, money, and labor. Additionally, steps such as those Malaysia has taken to provide financial incentives to complete government services online will also help to increase the use of e-services.

Appendix

Taiwan	57.2	Singapore	54.5
United States	50.5	Hong Kong	46.2
China	44.3	Canada	43.3
Germany	35.3	Australia	35.1
Ireland	34.6	Vatican	34.5
Great Britain	34.3	Bahamas	34.0
Chile	32.1	Macedonia	32.0
Chad	32.0	Estonia	32.0
Finland	32.0	Guinea-Bissau	32.0
Netherlands	31.4	Switzerland	31.2
Liechtenstein	31.0	Bahrain	31.0
Belize	31.0	Israel	31.0
Iran	30.7	New Zealand	30.4
Qatar	30.1	Arab Emirates	30.1
Syria	30.0	Denmark	29.7
Mexico	29.7	Benin	29.3
Iceland	29.3	Norway	29.2
Saint Lucia	29.0	Swaziland	29.0
Tuvalu	29.0	Brunei	29.0
Colombia	29.0	Andorra	29.0
Dominica	29.0	Malta	28.8

East Timor	28.7	Portugal	28.7
Bosnia and Herzegovina	28.6	Slovenia	28.6
Czech Republic	28.6	France	28.5
Brazil	28.5	Cook Islands	28.5
Slovakia	28.4	Albania	28.4
Italy	28.3	Japan	28.3
Sweden	28.2	Serbia and Montenegro	28.1
Laos	28.0	Liberia	28.0
Austria	28.0	Madagascar	28.0
Moldova	28.0	Mongolia	28.0
Tonga	28.0	Burundi	28.0
Congo (Democratic Republic)	28.0	Antigua and Barbuda	28.0
Ghana	28.0	Haiti	28.0
Egypt	27.8	Turkey	27.7
Jordan	27.5	Saudi Arabia	27.4
Lebanon	27.3	Cyprus (Republic)	27.1
Peru	27.1	Vietnam	27.0
Botswana	27.0	Kuwait	27.0
Philippines	27.0	Nepal	26.9
Iraq	26.8	Luxembourg	26.8
Latvia	26.6	Romania	26.4
Argentina	26.3	Korea (Republic)	26.2
Lithuania	26.1	Spain	26.0
Oman	26.0	Algeria	26.0
Gambia	26.0	Poland	25.9
Ukraine	25.8	Maldives	25.8
Jamaica	25.5	Uganda	25.5
Pakistan	25.5	Nigeria	25.4
Afghanistan	25.3	Myanmar	25.3
Greece	25.1	El Salvador	25.0
India	24.8	Morocco	24.6
Belgium	24.6	South Africa	24.5
Trinidad and Tobago	24.4	Ecuador	24.4
Hungary	24.4	Croatia	24.2
Russian Federation	24.2	Thailand	24.1
Zambia	24.1	Fiji	24.1
Libya	24.0	Marshall Islands	24.0
Mauritania	24.0	Azerbaijan	24.0
Monaco	24.0	Mozambique	24.0
Bangladesh	24.0	Saint Kitts and Nevis	24.0
Saint Vincent and the Grenadines	24.0	Sierra Leone	24.0
Sri Lanka	24.0	Belarus	24.0
Uzbekistan	24.0	Bulgaria	24.0
Cambodia	24.0	Cote d'Ivoire	24.0
Dominican Republic	24.0	Eritrea	24.0
Ethiopia	24.0	Indonesia	24.0
Armenia	24.0	Nicaragua	23.6

Tunisia	23.6	Panama	23.5
Venezuela	23.5	Senegal	23.4
Uruguay	23.2	Kazakhstan	23.0
Kyrgyzstan	23.0	Yemen	22.9
Angola	22.7	Burkina Faso	22.4
Paraguay	22.0	Gabon	22.0
Djibouti	21.9	Malawi	21.3
Georgia	21.3	Micronesia	21.0
Namibia	21.0	Guatemala	21.0
Mauritius	20.9	Rwanda	20.9
Malaysia	20.8	Samoa	20.8
Kenya	20.7	Honduras	20.2
Nauru	20.0	Niue	20.0
Somaliland	20.0	Tajikistan	20.0
Togo	20.0	Turkmenistan	20.0
Zimbabwe	20.0	Cape Verde	20.0
Central Africa	20.0	Comoros	20.0
Congo (Republic)	20.0	Costa Rica	20.0
Cyprus (Turkish Republic)	20.0	Guinea	20.0
Guyana	20.0	Seychelles	19.7
San Marino	19.3	Cuba	19.1
Barbados	18.7	Sudan	18.7
Bhutan	18.0	Papua New Guinea	17.1
Mali	16.0	Niger	16.0
Palau	16.0	São Tomé and Príncipe	16.0
Suriname	16.0	Vanuatu	16.0
Bolivia	16.0	Cameroon	16.0
Equatorial Guinea	16.0	Grenada	16.0
Korea (Democratic People's Republic)	16.0	Tanzania	15.2
Lesotho	14.7	Solomon Islands	14.0
Somalia	12.0	Kiribati	12.0

Table A-2 E-Government Country Ratings, 2004 and 2005

Country	2004	2005
Afghanistan	26.0	25.3
Albania	25.6	28.4
Algeria	22.8	26.0
Andorra	26.2	29.0
Angola	20.0	22.7
Antigua	20.0	28.0
Arab Emirates	24.0	30.1
Argentina	23.5	26.3
Armenia	27.5	24.0
Australia	36.7	35.1
Austria	28.2	28.0
Azerbaijan	16.0	24.0
Bahamas	27.0	34.0

Bahrain	33.0	31.0
Bangladesh	26.8	24.0
Barbados	24.3	18.7
Belarus	24.7	24.0
Belgium	31.1	24.6
Belize	28.0	31.0
Benin	20.0	29.3
Bhutan	17.0	18.0
Bolivia	32.0	16.0
Bosnia	25.3	28.6
Botswana	25.0	27.0
Brazil	24.4	28.5
Brunei	22.4	29.0
Bulgaria	26.3	24.0
Burkina Faso	22.6	22.4
Burundi	20.0	28.0
Cambodia	26.5	24.0
Cameroon	17.9	16.0
Canada	40.3	43.3
Cape Verde	22.0	20.0
Central Africa	12.0	20.0
Chad	24.0	32.0
Chile	29.2	32.1
China	37.3	44.3
Colombia	24.8	29.0
Comoros	24.0	20.0
Congo (Rep)	26.0	20.0
Congo Dem Rep	20.0	28.0
Cook Islands	22.0	28.5
Costa Rica	16.0	20.0
Côte d'Ivoire	24.0	24.0
Croatia	27.2	24.2
Cuba	21.8	19.1
Cyprus (Turkish Rep)	24.0	20.0
Cyprus-Republic	26.8	27.1
Czech Republic	30.9	28.6
Denmark	30.6	29.7
Djibouti	23.6	21.9
Dominican Republic	24.0	24.0
Dominica	33.0	29.0
East Timor	20.0	28.7
Ecuador	23.2	24.4
Egypt	28.0	27.8
El Salvador	26.1	25.0
Equatorial Guinea	16.0	16.0
Eritrea	12.0	24.0
Estonia	28.5	32.0
Ethiopia	24.0	24.0
Fiji	22.8	24.1

Finland	29.1	32.0
France	32.8	28.5
Gabon	21.0	22.0
Gambia	26.0	26.0
Georgia	25.3	21.3
Germany	35.0	35.3
Ghana	23.0	28.0
Great Britain	33.0	34.3
Greece	28.1	25.1
Grenada	20.3	16.0
Guatemala	21.3	21.0
Guinea	20.0	20.0
Guinea-Bissau	20.0	32.0
Guyana	28.0	20.0
Haiti	22.0	28.0
Honduras	21.7	20.2
Hong Kong	33.7	46.2
Hungary	25.4	24.4
Iceland	28.1	29.3
India	29.6	24.8
Indonesia	32.0	24.0
Iran	29.0	30.7
Iraq	34.0	26.8
Ireland	29.9	34.6
Israel	32.3	31.0
Italy	33.2	28.3
Jamaica	23.4	25.5
Japan	30.8	28.3
Jordan	29.7	27.5
Kazakhstan	24.0	23.0
Kenya	20.0	20.7
Kiribati	12.0	12.0
Korea (Dem Rep)	28.0	16.0
Korea (Rep)	30.5	26.2
Kuwait	30.1	27.0
Kyrgyzstan	19.4	23.0
Laos	25.3	28.0
Latvia	28.0	26.6
Lebanon	29.0	27.3
Lesotho	16.7	14.7
Liberia	12.0	28.0
Libya	24.0	24.0
Liechtenstein	33.0	31.0
Lithuania	27.3	26.1
Luxembourg	29.6	26.8
Macedonia	24.0	32.0
Madagascar	26.0	28.0
Malawi	19.3	21.3
Malaysia	26.2	20.8

Maldives	29.0	25.8
Mali	22.0	16.0
Malta	31.4	28.8
Marshall Islands	32.0	24.0
Mauritania	26.0	24.0
Mauritius	22.2	20.9
Mexico	29.6	29.7
Micronesia	16.0	21.0
Moldova	32.0	28.0
Monaco	39.0	24.0
Mongolia	25.7	28.0
Morocco	25.6	24.6
Mozambique	22.3	24.0
Myanmar	28.0	25.3
Namibia	20.0	21.0
Nauru	12.0	20.0
Nepal	23.2	26.9
Netherlands	31.0	31.4
New Zealand	33.6	30.4
Nicaragua	23.9	23.6
Niger	20.0	16.0
Nigeria	24.0	25.4
Niue	24.0	20.0
Norway	27.0	29.2
Oman	28.5	26.0
Pakistan	24.6	25.5
Palau	29.0	16.0
Panama	26.4	23.5
Papua New Guinea	19.9	17.1
Paraguay	21.2	22.0
Peru	26.7	27.1
Philippines	27.6	27.0
Poland	28.6	25.9
Portugal	26.0	28.7
Qatar	28.3	30.1
Romania	27.5	26.4
Russia	23.3	24.2
Rwanda	21.2	20.9
Samoa	20.2	20.8
San Marino	23.0	19.3
São Tomé and Príncipe	16.0	16.0
Saudi Arabia	30.7	27.4
Senegal	21.6	23.4
Serbia and Montenegro	27.5	28.1
Seychelles	19.3	19.7
Sierra Leone	24.0	24.0
Singapore	43.8	54.5
Slovakia	27.9	28.4
Slovenia	27.7	28.6

Solomon Islands	19.0	14.0
Somalia	12.0	12.0
Somaliland	20.0	20.0
South Africa	24.2	24.5
Spain	26.5	26.0
Sri Lanka	24.0	24.0
St. Kitts	17.3	24.0
St. Lucia	27.0	29.0
St. Vincent	32.0	24.0
Sudan	26.3	18.7
Suriname	16.0	16.0
Swaziland	22.0	29.0
Sweden	29.8	28.2
Switzerland	27.6	31.2
Syria	20.0	30.0
Taiwan	44.3	57.2
Tajikistan	20.0	20.0
Tanzania	17.0	15.2
Thailand	27.6	24.1
Togo	36.0	20.0
Tonga	16.0	28.0
Trinidad	23.8	24.4
Tunisia	23.2	23.6
Turkey	27.6	27.7
Turkmenistan	24.0	20.0
Tuvalu	12.0	29.0
Uganda	21.8	25.5
Ukraine	25.8	25.8
United States	41.9	50.5
Uruguay	21.7	23.2
Uzbekistan	28.3	24.0
Vanuatu	16.0	16.0
Vatican	26.0	34.5
Venezuela	23.2	23.5
Vietnam	26.5	27.0
Yemen	24.5	22.9
Zambia	22.7	24.1
Zimbabwe	22.0	20.0

Table A-3 Individual Country Profiles for Selected Features, 2005

	<i>Online Services</i>	<i>Publications</i>	<i>Data bases</i>	<i>Privacy Policy</i>	<i>Security Policy</i>	<i>W3C Disability Accessibility</i>
Afghanistan	0%	100%	0%	0%	0%	0%
Albania	0	100	80	0	0	0
Algeria	0	100	61	0	0	0
Andorra	100	100	100	0	0	0
Angola	0	100	67	0	0	0
Antigua	0	0	0	0	0	0

Arab Emirates	33	100	75	0	0	0
Argentina	0	100	50	7	0	0
Armenia	0	100	0	0	0	0
Australia	32	100	65	94	10	68
Austria	0	100	40	0	0	80
Azerbaijan	0	100	0	0	0	0
Bahamas	100	100	0	0	0	0
Bahrain	25	100	88	25	0	0
Bangladesh	0	83	33	0	0	17
Barbados	0	100	0	0	0	0
Belarus	0	100	83	0	0	0
Belgium	17	92	42	8	0	58
Belize	0	75	75	25	25	0
Benin	0	67	33	0	0	0
Bhutan	100	0	0	0	0	0
Bolivia	0	0	100	0	0	0
Bosnia	13	75	75	0	0	13
Botswana	50	100	100	0	0	0
Brazil	29	100	100	0	0	0
Brunei	20	60	40	0	0	0
Bulgaria	0	80	40	0	0	0
Burkina Faso	0	80	40	0	0	0
Burundi	0	100	100	0	0	0
Cambodia	0	60	60	0	0	0
Cameroon	0	22	0	0	0	67
Canada	27	93	60	100	100	70
Cape Verde	0	100	50	0	0	0
Central Africa	0	0	0	0	0	100
Chad	0	100	100	0	0	100
Chile	31	85	38	15	8	8
China- Mainland	70	100	100	78	61	0
China -Taiwan	77	100	100	77	85	92
Colombia	89	78	56	0	0	0
Comoros	0	100	0	0	0	0
Congo-Dem Rep	0	100	0	0	0	0
Congo-Rep	0	0	0	0	0	0
Cook Islands	50	100	50	0	0	100
Costa Rica	0	100	0	0	0	0
Cote d'Ivoire	0	100	0	0	0	100
Croatia	20	80	60	0	0	0
Cuba	0	11	44	0	0	22
Cyprus-Rep	0	89	44	0	0	22
Cyprus-Turk	0	0	0	0	0	0
Czech Rep	7	87	53	0	0	67
Denmark	0	100	64	0	0	71
Djibouti	11	89	11	0	0	0
Dominica	100	0	0	100	0	100

Dominican Rep	0	100	50	0	0	0
East Timor	14	71	29	43	14	29
Ecuador	23	100	46	0	0	0
Egypt	5	100	57	0	0	5
El Salvador	25	100	50	0	0	0
Eq Guinea	0	0	0	0	0	0
Eritrea	0	100	0	100	0	0
Estonia	0	100	100	0	0	0
Ethiopia	0	50	50	0	0	0
Fiji	13	75	50	0	0	0
Finland	13	93	80	0	0	33
France	26	97	48	0	0	23
Gabon	0	100	0	0	0	0
Gambia	0	75	25	0	0	0
Georgia	0	67	0	0	0	33
Germany	25	100	63	38	0	50
Ghana	0	100	0	0	0	0
Great Britain	32	93	82	64	4	68
Greece	25	75	50	0	25	0
Grenada	0	0	0	0	0	100
Guatemala	0	75	50	0	0	0
Guinea	0	100	100	0	0	0
Guinea-Bissau	0	100	0	0	0	0
Guyana	0	50	50	0	0	50
Haiti	0	100	100	0	0	100
Honduras	17	83	33	0	0	0
Hong Kong	65	100	100	85	65	15
Hungary	7	86	29	7	0	7
Iceland	0	89	39	0	0	61
India	11	94	56	0	0	6
Indonesia	0	100	0	0	0	0
Iran	0	67	33	0	0	0
Iraq	17	83	50	0	0	0
Ireland	11	95	68	63	0	89
Israel	27	93	53	7	0	0
Italy	22	100	56	17	00	22
Jamaica	29	94	18	18	0	0
Japan	5	100	50	20	0	35
Jordan	0	88	63	0	0	0
Kazakhstan	0	88	75	0	0	0
Kenya	23	77	38	0	0	23
Kiribati	0	0	0	0	0	0
Korea, North	0	0	0	0	0	0
Korea, South	25	75	42	0	0	0
Kuwait	0	92	50	0	0	0
Kyrgyzstan	0	92	83	0	0	0
Laos	0	100	100	0	0	0
Latvia	13	100	0	0	0	0
Lebanon	0	100	33	0	0	0

Lesotho	0	50	0	0	0	0
Liberia	0	100	0	0	0	0
Libya	0	0	0	0	0	0
Liechtenstein	100	100	0	0	0	0
Lithuania	8	92	25	0	0	0
Luxembourg	17	100	61	0	0	28
Macedonia	0	100	100	0	0	0
Madagascar	0	100	0	0	0	0
Malawi	0	100	50	0	0	0
Malaysia	0	100	0	0	0	0
Maldives	20	100	20	0	0	0
Mali	0	0	0	0	0	0
Malta	40	100	20	80	0	0
Marshall Islands	0	100	0	0	0	0
Mauritania	0	50	0	0	0	0
Mauritius	15	100	46	0	0	0
Mexico	20	100	60	0	0	0
Micronesia	100	100	0	0	0	100
Moldova	0	100	100	0	0	0
Monaco	0	100	0	0	0	0
Mongolia	0	100	60	0	0	20
Morocco	0	92	38	0	0	0
Mozambique	0	50	50	0	0	0
Myanmar	0	33	67	0	0	0
Namibia	0	83	50	8	0	0
Nauru	0	100	0	0	0	0
Nepal	5	71	52	0	0	10
Netherlands	28	90	45	34	3	41
New Zealand	39	96	50	46	14	64
Nicaragua	12	88	65	0	0	0
Niger	0	100	0	0	0	0
Nigeria	14	86	57	14	0	0
Niue	0	100	0	0	0	0
Norway	10	90	20	0	0	47
Oman	0	100	50	0	0	0
Pakistan	27	73	64	14	14	5
Palau	0	0	0	0	0	0
Panama	11	89	47	5	0	0
Papua New Guinea	0	36	36	0	0	0
Paraguay	0	88	56	0	0	6
Peru	15	100	70	5	0	5
Philippines	18	89	71	7	0	11
Poland	4	83	42	4	0	13
Portugal	5	95	74	16	16	0
Qatar	36	100	45	0	0	0
Romania	0	88	35	0	0	0
Russia	6	100	76	6	0	0

Rwanda	10	70	30	0	0	10
Sao Tome	0	0	0	0	0	0
St. Kitts/Nevis	0	67	33	0	0	0
St. Lucia	0	100	75	25	25	25
St. Vincent	0	0	0	100	0	0
Samoa	0	80	20	0	0	0
San Marino	33	100	0	0	0	33
Saudi Arabia	0	100	89	0	0	0
Senegal	0	100	29	57	0	0
Serbia and Montenegro	7	93	27	0	0	0
Seychelles	17	50	50	0	0	17
Sierra Leone	0	100	100	0	0	0
Singapore	77	100	100	100	100	13
Slovakia	0	100	53	0	0	26
Slovenia	4	79	46	11	0	18
Solomon Islands	0	0	0	0	0	0
Somalia	0	0	0	0	0	0
Somaliland	0	100	100	0	0	0
South Africa	17	100	28	17	7	7
Spain	35	83	30	4	0	30
Sri Lanka	0	100	0	0	0	0
Sudan	0	100	0	0	0	0
Suriname	0	0	0	0	0	0
Swaziland	0	100	25	100	0	0
Sweden	22	78	30	0	0	52
Switzerland	23	100	58	4	4	15
Syria	100	0	0	0	0	0
Tajikistan	0	0	100	0	0	0
Tanzania	0	29	10	0	0	0
Thailand	14	100	43	0	0	0
Togo	0	100	0	0	0	0
Tonga	0	100	100	100	0	100
Trinidad	21	100	43	14	7	0
Tunisia	40	80	40	0	0	0
Turkey	26	100	78	0	9	0
Turkmenistan	0	100	0	0	0	0
Tuvalu	100	0	100	0	0	0
Uganda	0	88	50	0	0	0
Ukraine	0	100	91	0	0	0
United States	75	100	95	82	64	44
Uruguay	8	100	58	0	0	0
Uzbekistan	0	67	67	0	0	0
Vanuatu	0	100	0	0	0	0
Vatican	50	50	100	50	0	0
Venezuela	9	100	36	0	0	0
Vietnam	0	88	50	0	0	13
Yemen	0	100	29	0	0	0

Zambia	13	75	63	13	13	0
Zimbabwe	0	50	0	0	0	50

	<i>For Lang</i>	<i>Ads</i>	<i>User Fee</i>	<i>Comme nts</i>	<i>Updates</i>	
Afghanistan	100%	0%	0%	100%	33%	
Albania	100	0	0	30	20	
Algeria	100	17	0	11	0	
Andorra	100	0	0	0	0	
Angola	100	0	0	0	0	
Antigua	100	0	0	100	100	
Arab Emirates	92	17	25	42	8	
Argentina	21	7	0	50	14	
Armenia	100	0	0	0	0	
Australia	0	0	0	71	23	
Austria	80	0	0	20	0	
Azerbaijan	100	0	0	0	0	
Bahamas	0	100	0	0	100	
Bahrain	88	13	0	25	0	
Bangladesh	100	0	0	17	0	
Barbados	0	0	0	33	0	
Belarus	0	0	0	33	0	
Belgium	33	0	0	17	0	
Belize	25	25	0	75	75	
Benin	67	0	0	100	33	
Bhutan	0	0	0	0	0	
Bolivia	0	100	0	0	0	
Bosnia	100	0	0	13	13	
Botswana	100	0	0	0	0	
Brazil	21	0	0	0	7	
Brunei	100	0	0	100	20	
Bulgaria	100	0	0	20	0	
Burkina Faso	20	0	0	60	20	
Burundi	0	0	0	0	0	
Cambodia	60	0	0	60	0	
Cameroon	11	0	0	0	0	
Canada	0	0	0	57	27	
Cape Verde	0	0	0	0	0	
Central Africa	0	100	0	100	0	
Chad	0	0	0	100	0	
Chile	23	0	0	69	23	
China- Mainland	65	35	48	91	70	
China -Taiwan	100	4	23	96	73	
Colombia	11	0	0	44	11	
Comoros	0	0	0	0	0	
Congo-Dem	100	0	0	100	0	

Rep					
Congo-Rep	0	100	0	100	100
Cook Islands	0	0	0	50	0
Costa Rica	0	0	0	0	0
Cote d'Ivoire	0	0	0	0	0
Croatia	80	0	0	0	0
Cuba	44	0	0	11	0
Cyprus-Rep	100	0	0	33	0
Cyprus-Turk	0	0	0	100	0
Czech Rep	100	0	0	20	0
Denmark	100	0	0	14	43
Djibouti	11	22	0	33	11
Dominica	0	0	0	100	0
Dominican Rep	0	0	0	50	0
East Timor	100	0	0	43	0
Ecuador	8	0	0	54	8
Egypt	81	14	0	33	0
El Salvador	25	0	0	0	25
Eq Guinea	100	0	0	0	0
Eritrea	100	0	0	0	0
Estonia	100	0	100	0	0
Ethiopia	100	0	0	0	0
Fiji	0	0	0	63	13
Finland	100	0	0	80	7
France	45	0	0	48	32
Gabon	0	0	0	50	0
Gambia	100	0	0	50	25
Georgia	100	0	0	0	0
Germany	100	0	0	100	38
Ghana	0	0	0	100	0
Great Britain	18	14	0	50	14
Greece	100	0	0	13	0
Grenada	0	0	0	0	0
Guatemala	0	0	0	0	0
Guinea	0	0	0	0	0
Guinea-Bissau	100	100	0	100	100
Guyana	50	50	0	0	0
Haiti	100	0	0	0	0
Honduras	0	0	0	0	0
Hong Kong	100	0	15	15	10
Hungary	86	0	0	21	7
Iceland	89	0	0	67	0
India	0	0	0	50	6
Indonesia	100	0	0	0	0
Iran	100	33	0	100	33
Iraq	100	0	0	17	17
Ireland	0	0	0	53	11
Israel	93	0	0	47	20
Italy	28	6	0	67	22

Jamaica	0	0	0	65	12
Japan	100	0	0	20	20
Jordan	100	0	0	38	0
Kazakhstan	25	13	0	38	13
Kenya	0	0	0	15	0
Kiribati	0	0	0	0	0
Korea, North	0	0	0	0	0
Korea, South	25	0	0	67	25
Kuwait	58	8	0	8	17
Kyrgyzstan	42	0	0	8	0
Laos	100	0	0	0	0
Latvia	100	0	0	50	25
Lebanon	83	0	0	42	17
Lesotho	0	0	0	0	0
Liberia	0	0	0	100	100
Libya	100	0	0	0	0
Liechtenstein	100	0	0	100	0
Lithuania	100	0	0	25	8
Luxembourg	0	0	0	61	17
Macedonia	100	0	0	100	0
Madagascar	50	0	0	100	50
Malawi	0	0	0	0	0
Malaysia	0	0	0	40	0
Maldives	100	0	0	20	0
Mali	100	0	0	0	0
Malta	0	0	0	100	0
Marshall Islands	0	0	0	100	0
Mauritania	100	0	0	50	50
Mauritius	0	0	0	0	0
Mexico	55	0	0	65	10
Micronesia	0	0	0	0	0
Moldova	100	0	0	0	0
Monaco	100	50	0	0	50
Mongolia	100	20	0	40	0
Morocco	38	8	0	46	15
Mozambique	100	0	0	0	0
Myanmar	100	0	0	33	0
Namibia	0	0	0	8	0
Nauru	0	0	0	100	0
Nepal	100	0	0	33	5
Netherlands	97	3	0	41	31
New Zealand	7	0	0	11	46
Nicaragua	18	6	0	6	0
Niger	0	0	0	0	0
Nigeria	0	0	0	43	14
Niue	0	0	0	0	0
Norway	100	0	0	63	7
Oman	73	9	0	5	18

Pakistan	0	0	0	55	5
Palau	0	0	0	0	0
Panama	16	0	0	26	16
Papua New Guinea	0	0	0	9	0
Paraguay	0	13	0	19	6
Peru	15	0	0	50	15
Philippines	0	0	0	68	14
Poland	100	0	0	13	13
Portugal	42	0	0	5	5
Qatar	82	0	18	45	18
Romania	100	0	0	18	12
Russia	6	6	0	24	12
Rwanda	0	0	0	30	0
Sao Tome	0	0	0	0	0
St. Kitts/Nevis	0	0	0	67	0
St. Lucia	0	0	0	50	25
St. Vincent	0	50	0	100	0
Samoa	0	0	0	20	0
San Marino	0	0	0	0	0
Saudi Arabia	79	0	0	11	11
Senegal	0	0	0	14	0
Serbia and Montenegro	100	0	0	33	27
Seychelles	0	0	0	0	0
Sierra Leone	0	0	0	0	0
Singapore	40	13	33	83	50
Slovakia	95	0	0	21	0
Slovenia	100	0	0	32	14
Solomon Islands	0	50	0	0	0
Somalia	0	0	0	0	0
Somaliland	100	100	0	0	0
South Africa	0	0	0	38	17
Spain	57	0	0	22	4
Sri Lanka	100	0	0	0	0
Sudan	0	33	0	0	0
Suriname	0	0	0	0	0
Swaziland	0	25	0	100	25
Sweden	100	0	0	11	7
Switzerland	81	4	0	58	46
Syria	100	0	0	100	100
Tajikistan	0	0	0	0	0
Tanzania	0	5	0	5	0
Thailand	100	0	0	0	0
Togo	0	100	0	0	100
Tonga	0	0	0	0	0
Trinidad	0	7	0	50	0
Tunisia	60	0	0	20	0

Turkey	52	0	0	30	9	
Turkmenistan	100	0	0	0	0	
Tuvalu	0	0	0	100	100	
Uganda	13	13	0	75	0	
Ukraine	36	9	0	18	9	
United States	51	0	0	25	44	
Uruguay	8	0	0	17	8	
Uzbekistan	100	0	0	0	0	
Vanuatu	0	0	0	0	0	
Vatican	100	0	0	0	0	
Venezuela	0	0	0	45	18	
Vietnam	100	13	0	63	0	
Yemen	57	0	0	0	0	
Zambia	13	25	0	63	0	
Zimbabwe	0	0	0	50	0	

Table A-5 Best Practices of Top Government Sites, 2005

1) Taiwan

Taiwan received the highest marks in our e-government study. Taiwan's government websites were all very user-friendly and easy to navigate. Taiwanese citizens who have difficulty accessing information can view a site map on most sites. The websites of the various governmental agencies Almost all of its sites had a link to a fully-featured English version. Most sites featured links to a privacy policy. Many sites allow users to sign up for updates or newsletters via email. Some sites also offer PDA access. Taiwan also has a website called MyEGov which centralizes access to all government websites. Taiwan's websites also received high marks for disability access. Taiwan's websites seem to have been designed with its users in mind, and this is reflected in the ease of use and usefulness of their websites.

2) Singapore

Singapore also has a highly sophisticated e-government system. Singapore has an outstanding portal called eCitizen, which serves as a gateway to all government services available online. The site is easy to navigate and aesthetically pleasing. It also features links to information customized for businesspeople or nonresidents. The sites of the various government agencies are content-rich; many include publications, press releases, video clips and databases. Almost all websites included contact information and online services, and all featured privacy statements. The Ministry of Education website has links so that students, parents, teachers, and partners can view information tailored to their needs; this kind of personalization mirrors the efforts of many private-sector websites and is an easy way to direct citizens to the information they are seeking.

3) United States

The United States portal FirstGov provides citizens with a convenient collection of information and services, such as finding the cheapest gas prices in your region. The site is easy to navigate and the websites of the various government agencies are user-friendly as well. Most feature an ample amount of information available in the forms of publications and databases, and have audio/video clips, webcasts, interactive maps, and user surveys. Almost all websites included contact

information, updates, online services, and all featured privacy and security statements. Accessibility is a highlight of the vast majority of the United States sites as well. The portal's many services are highlighted in a list found front and center on the homepage. The portal can be translated into over 30 languages.

4) Hong Kong

The strength of the government sites of Hong Kong lies in their emphasis on accessibility. The portal site offers traffic and weather updates frequently, as well as a list of A-Z links, and email and telephone directories. Every site is available in traditional Chinese and English, with a majority also being offered in simplified Chinese. None of the sites display any advertisements, demonstrating their focus on content and ease of use. Every site also maintains at least some sort of document or publication, as well as at least one database. A majority of the sites provide extensive online services, from job postings and address change forms, to small business registrations and appointments with government agencies. The prevalence of privacy and security policies encourages the use of these services, as citizens feel comfortable disclosing personal and financial information over the internet with these policies in place. Few of these services require the payment of user fees.

5) China

China's position in the top five e-government sites is made secure by a focus on thoroughness. All of the sites have publications and databases available to visitors, and a number are available in English. A majority of the Chinese government sites provide e-services, with less than half requiring the payment of user fees. A majority of the sites maintain security and privacy policies, creating a safe environment that encourages citizens to utilize services available online. Nearly all of the sites provide forms which citizens can use to submit questions and feedback about the site or the government agency in general electronically. Many also allow for users to sign up for updates or subscriptions to publications related to the site and/or agency.