19-101 Project Guidelines
Spring 2001

You are advising a policy-maker such as a member of congress who is confronted with an issue involving information technology. There is a decision to make. You and a partner will write a briefing that will help the policy-maker with this decision.

Assume that your reader is intelligent, but knows little about the subject. Your briefing must define the issue. It should indicate who the stake-holders are, and how they are affected. If there are other relevant initiatives, they should be described. For example, if you are advising a senator on a bill, your briefing should mention any closely related bills that have been introduced. The briefing should also identify the alternatives open to the policy-maker, and their relative advantages and disadvantages.

Above all, your briefing must be balanced and objective. The goal is to produce a neutral briefing that will allow the policy-maker to make a decision. A partisan report that advocates for one position and presents only one side of the issue is not useful.

Any conclusions you reach must be grounded in solid evidence. This evidence may come from appropriate sources that you reference, or from your own analysis. The policy-maker is not interested in your unsubstantiated opinions, or positions based in your own personal values.

When your briefing is graded, the evaluation criteria will include
1. the quality and usefulness of any analysis you performed, any novel or creative contribution you made (e.g. a new framework to define the issue, or a new way to evaluate the advantages of one of the options)
2. the relevant information you were able to uncover, and the quality and quantity of your information sources
3. the extent to which your writing is balanced, and declares its own limitations
4. the organization and logical flow
5. the writing style, e.g. whether it is clear, concise, interesting, free of spelling and grammatical errors, etc.

References and Bibliography

Any thing that you write which is not your idea, and is not fairly common knowledge, should be referenced. (If you present a fact that is not widely known without a reference, your readers must assume that you made it up.)

Your briefing should also include an annotated bibliography that will help the policy-maker if he or she wants to read further. In this bibliography, you will list the readings that you believe are useful, with a brief description of what each reference contains and how each is useful for this topic.

For example:
[1] Pamela Samuelson, "Liability for Defective Electronic Information," *Communications of the ACM*, Volume 36, Number 1, January 1993.
    This paper describes the four basic models of computer product liability as discussed in Section 2 of this paper.
[2] James Johnson, Center for Democracy and Technology, www.cdt.org/privacy/medical, October 23, 2000.
    This web site presents the issue of privacy in medical records from the perspective of a privacy advocate. It includes a useful assessment of Senate bill 32 that contrasts sharply with the industry position.

Two tips on information sources:
1. Think critically about what you read. Does this make sense? Does the author have expertise in this area? Is the author biased? (Biased information can still be useful, but you need to know.) The WWW is particularly well stocked with misinformation. Use your common sense.
2. Your work will be stronger if you draw information from the wide range of sources available. This is likely to include academic journals, popular magazines, books, stakeholder web sites, government reports, and personal interviews with experts, just to name a few possible sources. If all of your references are from one kind of source, e.g. just web pages, or just magazine articles, then this is probably a sign that you have not done thorough research. Graders will notice this.

Team Work

You will save time and effort if you and your partner establish a good division of labor, which includes splitting up the writing. However, your work should be well integrated. The paper should not look like it was written by more than one person. This can generally only be achieved efficiently if you work together to develop an outline in advance, and then read and edit each other's work after the writing has begun. Good communications between partners is essential.

Length of Briefing

The actual length of the paper is far less important than how much it has to say. In fact, if you increase the paper's length through verbose writing, through irrelevant digression, or through repetition, redundancy, or repeating yourself, it will detract from your paper, and your grade.

My best guess is that an average paper, excluding bibliography, might be around 20 double-spaced pages with reasonable margins and font size. Your mileage may vary.

Choosing a Topic

Below are several suggested topic. You also have the option of choosing your topic, but it must be approved by a professor. An acceptable topic must
- involve an important policy *decision* that is likely to be made by a real policy-maker in the near future (within the next two years)
- require some technical knowledge involving computers, communications systems, or related information technologies
- not be a topic covered in detail class (e.g. disposal of computers)

Topic: Low-Power Radio
Policy-maker: member of House Commerce Committee representing Chicago
Decision: Should the congressman support legislation that would make it easier, or harder, for a low-power radio station to get permission to broadcast?
Issue: Some argue that low-power radio stations give voice to minorities groups, or faith-based organizations, that have been left out. Others argue that there is no problem with the current system, and making it easy for low-power radio stations would simply increase interference for those who listen to today's radio stations.
Status: This issue has been hotly debated in Congress and at the Federal Communications Commission in 2000, and it is likely to come up again in 2001-2.

Topic: Internet Voting
Policy-maker: member of Pennsylvania legislature
Decision: Should a state senator from Pittsburgh support legislation that would require all precincts in Pennsylvania to accept votes made over the Internet in the next gubernatorial election, so citizens could vote from any computer that is connected to the Internet.
Issue: Some argue that Internet voting would increase participation from citizens. Some argue that it would disenfranchise the poor. It may increase or decrease voter fraud
Status: Several state and local governments have experimented with Internet voting. It has never been tried in a Pennsylvania state-wide election. Problems in the presidential election have increased pressure to reexamine voting mechanisms, and upcoming federal legislation may help support efforts to modernize.

Topic: Internet Privacy
Policy-maker: member of Senate Commerce Committee from California
Decision: Should the senator introduce or support legislation that would require the Federal Trade Commission to impose regulations on all commercial web sites, where these regulations are designed to protect the privacy of users? If so, what should be the content of those regulations?
Issue: Some argue that consumers need better privacy protection. Others argue that regulations would interfere with growth in this dynamic market.
Status: Several industry groups claim that they are now addressing on-line privacy issues. Congressional hearings have been held, and some bills have been introduced. More bills are expected in the next two years.

Topic: Internet Gambling
Policy-maker: member of Senate Judiciary Committee from New York
Decision: Should the senator introduce or support legislation that would attempt to prohibit some forms of gambling over the Internet. If so, who should be held liable for illegal activities, and who should enforce the laws?
Issue: Existing laws allow states to decide whether to allow casino or sports gambling in their own jurisdiction. However, the Internet has changed the concept of jurisdiction, in that citizens in a state where gambling is illegal can access casinos in other states, and other countries. Congress has jurisdiction over interstate and international commerce.
Status: There have been serious discussions about legislation in this area in Congress, and some important court rulings. More legislation may be coming.

Topic: Telemarketing
Policy-maker: member of House Commerce Committee
Decision: Should the senator introduce or support legislation that would force telemarketers to make their identity observable to people who have caller ID?
Issue: Many people now screen their calls using caller ID, but many telemarketing calls do not reveal the phone number or the identity of the caller. Some telemarketers argue that there are technical problems that make doing so expensive or impractical. Others also raise constitutional issues such as free speech.
Status: Congress, the Federal Communications Commission, and the Federal Trade Commission have all wrestled with telemarketing issues.

Topic: Internet over Cable
Policy-maker: Commissioner from the Federal Communications Commission
Decision: Should the commissioner support regulations that would require cable companies to "open up" their networks, i.e. make it easier for other content providers and other service providers to offer their wares to the cable company's customers, and make it easier for consumers to use the system as they wish?
Issue: Cable companies have spent a great deal of money to upgrade their systems to support Internet access, and they believe that they should be able to use this infrastructure as they wish, and offer the services they wish. Others fear that cable companies may use their control over this connection to limit what consumers can do.
Status: The Federal Communications Commission has solicited input on this issue, and it has also come up in the AOL-Time Warner merger proceedings. There has been legislation in Congress, and important court cases, such as Portland vs. AT&T.

If you want to choose your own topic, you should write a brief summary for faculty and be prepared to discuss it. You should indicate what the decision is, and who the major stake-holders are. Clearly identify a policy-maker. Your policy-maker could be legislative, executive, or regulatory; federal, state, or local; US or non-US. What matters is that your policy-maker is tasked with serving the public, and that your policy-maker is responsible for making the decision you want to write about. Be prepared to convince the professor that this is an issue that your policy-maker is reasonable likely to face within the next two years. (This, for example, "Should the US Justice Department enforce US software patents on systems operating exclusively on Mars?" is not a good topic.) Also, be sure that there is information out there on your topic.

Here are a few other possible examples, in less (and *insufficient*) detail.

Other Possible Issues	Possible Policy-Makers to Advise
Deterring spam, i.e. the practice of sending unwanted and unsolicited email.	Congress Federal Trade Commission
Making the Internet more widely available • to low-income individuals, • to rural areas, or • to Native American reservations. (Those are three different topics.)	Congress Federal Communications Commission State of Montana Government of Kenya
Deterring computer viruses	Congress
Information Warfare	Congress Defense Department
Digital government - putting more government functions on line.	City of Pittsburgh State of Pennsylvania
Liability of certificate authorities (when something goes wrong in an electronic signature)	Congress
Telehealth - using telecommunications networks to provide health care in areas with few providers	Congress Governor of Alaska Jamaican Minister of Health
Determining the rights of trademark-holders to domain names (e.g. who gets www.ford.com)	ICANN US Commerce Department
Sale of liquor over the Internet. Or sale of guns over the Internet	Congress

Schedule

You will hand in	Date
the name of your partner, or a request for us to assign you a partner	Jan 31
the decision you will address in your briefing, and the specific policy-maker you are advising. If this is not from the list, it should have been approved by one of the professors. Please list both a first choice and a second choice.*	Feb. 7
a list of useful sources of information that you plan to use. There should be at least ten, from diverse sources, covering different aspects of your briefing.	Feb. 21
a detailed outline of your report. A typical line in the outline will represent a paragraph or two in the report.	March 13
a final draft	April 10
oral presentation	last two weeks of semester

*Because your work will be presented orally, we may have to limit the number of projects on the same topic.

Do not miss these deadlines unless you have an extension from a professor; there will be penalties.