Issue
Many electronic systems rely upon computer codes or embedded microprocessors that are unable to process the change in date from 1999 to 2000 -- the so-called Y2K computer problem. Industry and governments around the world have been working together for years to minimize the impact of this problem.

Impact
There are four principal challenges resulting from the Y2K "millennium bug":
- Ensuring that all products are Year 2000 compliant;
- Minimizing disruption to internal information systems and processes;
- Minimizing disruption in delivery of services and assistance to publics; and
- Minimizing disruption to economic growth by limiting exposure and resources devoted to Y2K-related legal liability action.

According the U.S. Department of Commerce, American businesses and the government have spent over $100 billion preparing for the 2000 date change already.

Position
Cisco Systems supported bipartisan efforts in Congress to encourage information disclosure and minimize frivolous lawsuits. At the same time Cisco has taken steps to contractually address publics' needs while also presenting a viable plan to correct any problems. Advanced planning and preparation by the private and public sectors should allow for smooth management of the process.

Background
For decades, computer programmers routinely used two digits rather than four to refer to years (i.e. 19__) to save scarce memory space. When these programs advance from 12/31/99 to 1/1/00, they may mistakenly read the year "00" as 1900 rather than 2000. This problem could result in administrative errors, machinery malfunctions or even computer crashes.

Although this year 2000 ("Y2K") problem is generally software related, it also exists in many hardware components where microprocessor chips and other integrated circuits store and process data.

Status
Cisco Systems has taken a number of actions with respect to its own Y2K readiness that are fully discussed.

In addition, Cisco supported bipartisan Congressional efforts to encourage information disclosure and minimize the incidence and impact of frivolous lawsuits:
- First, in 1998 Cisco endorsed the Year 2000 Information and Readiness Disclosure Act (S.2392) - a bill to encourage companies to share information on Y2K by limiting liability for such disclosures.
- This year Cisco supported the Year 2000 Readiness and Responsibility Act (H.R. 775) - a bill to encourage remediation rather than litigation of Y2K problems.

Both measures were passed by Congress and signed into law.

Involvement
Cisco worked with its partners and associations such as the Information Technology Industry Council to encourage fair and sensible legislation. Internally, Cisco appointed an executive steering committee to oversee the company's own compliance and remediation efforts.
Fast Facts:
- American businesses and the government have spent over $100 billion preparing for the 2000 date change. (U.S. Dept of Commerce Y2K Cost Report, Nov. 1999).
- Y2K spending in the U.S. & 11 European countries doubled from $256 billion in April 1998 to $494 billion by November. (Cap Gemini America tracking poll 11/1998).
- Nearly 60 percent of all available IT labor resources have been focused on Year 2000 activity. (Cap Gemini America tracking poll, 11/1998).
- 56% of large corporations expect 100% of their critical systems to be compliant by year's end as of 9/1999, up from 48% in 8/1999. 38% expect that between 76%-99% of their systems will be compliant. (Cap Gemini America tracking poll, 9/22/1999).
- It costs between $450 and $600 to fix each Y2K computer program (Gartner Group).
- Companies spent 29% of their computer budgets on Y2K in 1998; in 1999 costs are predicted to rise to

44% (Gartner Group).
- The cost of addressing Y2K issues will total between $150-$225 billion in the US, and $300 to $600 billion worldwide (Gartner Group).

Useful Y2K Links
- President's Council on the Year 2000 Conversion
- U.S. Federal Government Gateway for Year 2000 Information Directories
- Y2K Information for Children sites include Y2Kids.net and GSA's Y2K for Kids.
- U.S. Senate Special Committee on the Year 2000 Problem.
- U.S. House of Representatives Y2K Subcommittee.
- U.S. Small Business Administration's Year 2000 Web Site.
- U.S. Government Accounting Office Reports & Publications.
- Government Executive Magazine's Year 2000 Managers' Toolbox.
- International Year 2000 Conference on IT.

http://www.cisco.com/web/about/gov/archive/y2k.html

quote
The risk of failure is not limited to an organization's internal information systems, but includes the potential Year 2000 failures of others, such as business partners. One weak link in the chain of critical dependencies and even the most successful Year 2000 program will fail to protect against major disruption of business operations. Because of these risks, agencies must start business continuity and contingency planning now in order to reduce the risk of Year 2000-induced business failures.

DEPARTMENT OF THE INTERIOR
Year 2000 Computing Crisis
Presents Risk of Disruption
to Key Operations
GAO/T-AIMD-98-149

Quote
While this reported progress is notable, OMB also noted that 10 agencies have mission-critical systems that were not yet compliant.[7] In addition, as we testified in April, some of the systems that were not yet compliant support vital government functions.[8] For example, some of the systems that were not compliant were among the 26 mission-critical systems that the Federal Aviation Administration (FAA) has identified as posing the greatest risk to the National Airspace System—the network of equipment, facilities, and information that supports U.S. aviation operations.

Additionally, not all systems have undergone an independent verification and validation process. For example, in April 1999 the Department of Commerce awarded a contract for independent verification and validation

[7]The 10 agencies were the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Justice, Transportation, and the Treasury and the National Aeronautics and Space Administration and the U.S. Agency for International Development.