Vice President Al Gore today announced that two new civilian signals will be provided by the satellite-based U.S. Global Positioning System (GPS).

"The additional civilian signals will significantly improve navigation, positioning and timing services to millions of users worldwide -- from backpackers and boaters to farmers and fishermen, from airline pilots to telecommunications providers, and from scientists to surveyors," Vice President Gore said. "GPS has become an engine of economic growth and efficiency as businesses and consumers are continually developing new and creative applications of the system. We will continue to do everything we can to protect these GPS signals and promote GPS applications for commercial, public safety and national security purposes."

Providing this new civilian signal free of charge to consumers, businesses and scientists around the world will be a major step in the evolution of GPS as a global information utility, the Vice President added. Much like the Internet, the value of GPS is becoming more and more evident as large numbers of people and businesses throughout the United States and around the world make use of it, he said.

"This decision by the Interagency GPS Executive Board (IGEB) reinforces the continuing U.S. commitment to provide the most capable, efficient and reliable system for use by all the world's nations well into the 21st century," Secretary of Defense William S. Cohen said.

"Addition of the two new civil signals represents a strong commitment by the United States to civil GPS users worldwide," Secretary of Slater said. "This decision demonstrates that we can successfully balance the needs of civilian users with national security. The addition of the new signals will have profound effects on the civilian transportation system and the people who use it, saving time, cutting costs, enhancing safety and providing unprecedented mobility."
Today's announcement fulfills a pledge made last March by the Departments of Defense (DOD) and Transportation (DOT) to reach a decision on a second civil frequency within a year. The decision was made by the IGEB which was created by President Clinton in 1996 to manage GPS and its U.S. government augmentations. The IGEB is co-chaired by DOT and DOD and includes representatives from the Office of the Secretary of Defense, the Joint Chiefs of Staff, and the Departments of Transportation, Commerce, Interior, Agriculture and other agencies.

The most immediate benefit of a second civil signal is expected to be in public safety applications, particularly in international aviation, land transportation and maritime uses. Recognizing these benefits, the United States is committed to making this signal available by the year 2005, the Vice President said. A lead time of several years is needed because the new signal capability will have to be built into the next generation of GPS replacement satellites. The addition of a second signal will greatly enhance the accuracy, reliability and robustness of civilian GPS receivers by enabling them to make more effective corrections for the distorting effects of the earth's atmosphere on the signals from space.

GPS always has made two signals available for military users. Today's announcement marks a new era in which civilians soon will have access to the same type of capability.

The addition of a second civilian frequency has been recommended by a number of expert safety panels. Most recently, the White House Commission on Aviation Safety and Security, which was chaired by Vice President Gore, included this in its report to President Clinton last year. The third civil frequency will be of particular benefit to scientific users and surveyors. The addition of a third frequency will add to the speed with which users can obtain GPS positions and timing, and improve the overall accuracy and reliability of the system. Creation of this signal also has been proposed by GPS experts and user groups.

Today's decision provides that one of the new signals will be located in the frequency of the current GPS L2 signal, which previously has been used only for military purposes. Separate civil and military signals can coexist on this frequency, as they already do at the GPS L1 frequency. The frequency for the third civil signal remains to be defined over the next several months.

There are several important details of the new signal system that remain to be developed over the next several months. These include the structure of the signals, the protections against interference from other sources to be provided for each of them, cost and cost sharing, and other issues. The government will consult with the user community and Congress as these questions are addressed. In particular, there will be consultations with international user interests such as the International Civil Aviation Organization, as well as with the European Union, Japan, Russia and other governments which already are committed to use of GPS. One of the key questions will be which of the new frequencies will receive the international frequency allocation and protection needed to enable it to meet safety of life requirements.

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