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Report

concept of global positioning system.

The global positioning system (GPS), originally NAVSTAR GPS, is a satellite based radionavigation system owned by the United States government & operated by the United States space force. It is one of the global navigation satellite systems that provides geolocation & time information to a GPS receiver anywhere on or near the Earth where there is an unobstructed line of sight to four or more GPS satellites. Obstacles such as mountains & buildings block the relatively weak GPS signals. The GPS doesn't require the user to transmit any data, & it operates independently of any telephonic or internet reception. Those technologies can enhance the usefulness of the GPS positioning information. The GPS provides critical positioning capabilities to military, civil & commercial users around the world. The United States government created the system, maintains it & makes it freely accessible to anyone with a GPS receiver.

The GPS project was started by the US Department of Defense in 1973, with the first prototype space craft launched in 1978. The full constellation of 24 satellites operational in 1993. Originally limited to use by the United States military, civilian use was allowed from the 1980s following an executive order from President Ronald Reagan. Advances in technology & new demands on the existing system have now

led to efforts to modernize the GPS & implement the next generation of GPS Block IIIA satellites & next generation operational control system (OCX) Announcements from vice president Al Gore & the White House in 1998 initiated these changes. In 2000 the US Congress authorized the modernization effort, GPS III. During the 1990s, GPS quality was degraded by the United States government in a program called "selective availability"; this was discontinued in May 2000 by a law signed by president Bill Clinton.

The GPS service is provided by the United States government, which can selectively deny access to the system, as happened to the Indian military in 1999 during the Kargil war, or degrade the service at any time.