

Beidou Satnav System Operational



On 27th December 2011, Chinese officials confirmed that the country's Beidou satellite navigation system is now operational, albeit mainly in China, and on track to achieve the goal of offering free, global coverage by 2020. At a press conference, the China Aerospace Science and Technology Corporation said that Beidou is providing location data and SMS messaging using a network of ten satellites currently in orbit, and another six launches are planned for 2012.

Once fully operational, they should cover most of the Asia/Pacific region, and will form the backbone of a global system of over 30 satellites that should be in place by 2020.

According to Ran Cheng of China Aerospace Science and Technology Corporation, the Beidou service would be free to all and said that the Chinese would be working on interoperability with the US GPS system, Russia's GLONASS and the forthcoming EU Galileo network. An initial version of the interface control documentation has been published online.

He said that the initial service was operating within 25 metres accuracy between 84 degrees to 160 degrees east longitude, 55 degrees south latitude to 55 degrees north latitude, at velocity accuracy of 0.8 metres per second and within 50 nanoseconds for timing. Around 100,000 users are using the service so far, and accuracy will be brought down to 10 metres by next year.

China plans to add many more satellites for a variety of purposes over the coming years, and wants 100 in orbit under the current schedule, according to spokesman Zhao Xiao-chun. Last year China had 19 launches he said, compared to 18 from the US, but behind Russia with 36.

Having its own global positioning system will give Chinese global ambitions a fillip, since the vast bulk of the world currently runs on the US GPS network. Russia has spent billions upgrading and adding to its GLONASS satellite system, initially constructed in the 1980s but which fell into disrepair during the post-Cold War collapse, and this should be operational within a year or so.

The news of China's plans will be causing some furrowed brows at the Pentagon. Global positioning is vital for modern warfare and some of the more excitable members of the military have been suggesting that having an alternative system would let China destroy GPS if war ever came, and the US already has plans for satellites to monitor orbital war.