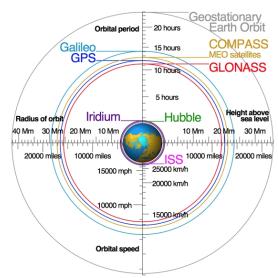
Google plans to spend more than \$1 Billion on a fleet of satellites to bring internet access to unwired parts of the globe, according to the Wall Street Journal. The project will use small, high-capacity low-Earth orbit satellites that sit closer to the ground than traditional geostationary satellites, reducing lag times.



Internet services by satellite are widely available today from operators such as Astra and Eutelsat, operating in geostationary orbits at approximately 36,000 km altitude. At a rather lower level, the Iridium satellite network offers a global network from about 800km height, and is widely used for satellite phones and maritime services. Google is reported to be looking at orbits of only 160 km high, with the potential to remove any notable lag for the connection.

This project can be seen from several angles. At one level it is an altruistic effort to connect the digitally disenfranchised peoples of the globe, while other might describe it as a bid for first-mover advantage for the next wave of internet growth.

Yet again, it could be a longer-term play to bypass the stranglehold that the carriers hold over internet access today. Such a move would be difficult for Google to make in one step, as it would take time to implement, and the company needs the continuing support of these carriers for its core business. However long term expansion of such a satellite network could introduce a real external challenge to the telcos that would reinvigorate competition through both pricing and services.

Most significantly from an international - and in particular a European perspective - a satellite

Google's Satellite Plan for the Internet

Written by Nick Graves 04 June 2014

network does not recognise borders. The impact on the fragmented and hugely inefficient European telco market could be huge.

Steve Jobs is reported to have wanted to bypass the telcos with Apple's own wifi-based network for the first iPhone. The scale of that task proved beyond the company then, but this low-orbit satellite approach could yet deliver on Steve's vision.

Go Wall Street Journal

Go Astra Satellite

Go **Eutelsat**

Go <u>Iridium</u>