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Open Source Center

Report

The Google Controversy – Two Years Later

Two years have passed since Google startled the world with its free, online, high-resolution mapping products of the world. Foreign governments expressed their shock and concern about such detailed imagery in the hands of the general populace; their facilities and state secrets exposed to the world. "Today, with the advent of civilian satellites here and abroad, we have opened wide the window on places and events that, not so long ago, only spies could see," writes Sharon Weinberger.[1]

As the initial shock wore off, five main responses to the "Google threat" emerged from nations around the world: negotiations with Google, banning Google products, developing a similar product, taking evasive measures, and nonchalance. This report discusses foreign reporting and government response to the online mapping revolution after the initial brouhaha.

Negotiations with Google

Early on, many suspected that Google Earth would be a valuable tool in the hands of terrorists. As one government official put it[2] **"**In view of the altered threat picture and terrorists, this is not to our advantage." But in April 2006 a Google spokesperson remarked "Google Earth presents no appreciable threat to security, given the wide commercial availability of high-resolution satellite and aerial imagery of every country in the world."[3] Terrorism expert Dick Leurdijk said later that year, "Potential terrorist targets could be made more vulnerable to terrorists thanks to the detailed images created from satellites and aircrafts available via Google Earth…free access to such images lowers the [terrorism] threshold."[4]

By then OSC had begun monitoring discussions about the use of Google Earth on jihadist forums. It wasn't until 14 July 2006 that actual footage was obtained showing its use for tactical planning: US military targets in Iraq.[5] And subsequently, in September 2006, Al Qaeda-linked militants in Yemen exploded four car bombs in a failed attack on oil facilities, planned with the aid of Google Earth.[6]

In January 2007 it was reported that terrorists attacking British bases in Basra were using Google Earth imagery. Photo print-outs of buildings inside the base, and other vulnerable areas were

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[1] Discover article "Can You Spot the Chinese Nuclear Sub?" 21 July 2008
[2] *Aftenposten* article ""Seeking To Hide Norwegian Installations," 06 April 2006
[3] Google defends website against Indian security concerns, 02 April 2006
[4] Article by Gediminas Stanisauskas: "Lithuania Helpless Against Eye in Space" 15 September 2005
[5] OSC Feature : Iraqi Insurgency Group Utilizes 'Google Earth' for Attack Planning, 19 July 2006
[6] *Yemen Observer* article "Terrorists used Google Earth to plan attacks," 31 October 2006

among documents seized from the insurgents. Written on the back of one set of photographs taken of the Shatt al Arab Hotel, headquarters for the 1,000 men of the Staffordshire Regiment battle group, officers found the camp's precise longitude and latitude. *The Daily Telegraph* reported that Google then took the rare step of replacing the images of military positions there with others taken before the war. Google announced only that it had opened channels of communication with the military in Iraq but would not go into details of those conversations.[7]

After the Basra incident, Google Earth seemingly became more open to dealing directly with foreign governments to assuage their security concerns. It agreed to blot out British bases in Iraq and other sensitive UK installations such as the eavesdropping base at Cheltenham and the Trident nuclear submarine pens in Faslane, Scotland.[8]

In 2007, the Chinese government created an online geographical information security management and coordination group to regularly browse online map sites, including Google Earth. When problems are discovered, they are raised either with Google's China headquarters or through diplomatic channels. "Google has been very cooperative in the course of communications," a Chinese spokesman stated.[9]

Joanne Irene Gabrynowicz, director of the National Center for Remote Sensing, Air and Space Law at the University of Mississippi, in response to the Google Earth controversy stated "I believe you should start with a presumption of openness. That is, all things being equal, you presume data and images should be available. Then you go from there on a case by case basis."

IT Security online recently published a list of "51 Things You Aren't Allowed to See on Google Maps"[10] that summarizes those areas on earth for which the Google imagery has been deliberately altered.

Banning Google Products

In August 2006, Bahrain's Ministry of Information instructed all ISPs to block access to Google Earth servers. The ban lasted three days and may have been ordered to prevent exposure of elaborate residences and land holdings of the country's rich. Activists retaliated by circulating a .pdf file containing annotated Google Earth screenshots highlighting the inequity of wealth distribution in the country.

In 2008, China began a systematic crackdown on illegal mapping sites. Min Yiren, Deputy Director of the State Bureau of Surveying and Mapping (SBSM), said there were nearly 10,000 online map websites in China, most of them showing unapproved maps. Those websites will be

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[7] *The Daily Telegraph* article "Terrorists 'Use Google Maps To Hit UK Troops," 13 January 2007
[8] *The Daily Telegraph* article ""Google Blots out Iraq Bases on Internet," 20 January 2007
[9] *Zhongguo Tongxun She* article "China Takes Measures To Counter Google Earth's Leakage of Secrets About Its Terrain," 29 May 2008
[10] *IT Security* article "Blurred Out: 51 Things You Aren't Allowed to See on Google Maps," 15 July 2008

removed. He also said that foreign companies and individuals engaged in publishing online maps will be stopped.[11]

A Google Earth ban in Sudan is reportedly due to U.S. export restrictions and economic-sanctions regulations.[12] Knowledge of the restrictions spread after Google Earth added a data layer on the humanitarian crisis in the Darfur region.

Developing a Similar Product

Several countries have opted to create their own version of Google Earth. Digital Thailand, first announced early in 2006,[13] was developed using NASA's Whirlwind engine. In may 2008, the Indian Space Research Organization (ISRO) announced plans to provide imagery of earth in a variety of spectral bands and a resolution better than one meter in its own mapping service beginning late in 2008.[14] "Our images will be on our website six months from now," ISRO Chairman G Madhavan Nair told reporters. Pointing out that certain locations with high security risks were prohibited by law from being imaged, he added, "We are figuring that out. The remaining places, of course, would be on the net."

Also in May 2008, the state-run news agency reported that China, too, is developing its own version of Google Earth.[15] The article mentions three possible names" China Earth, Google China, or Image China and states that it will make its debut in 2009.

Other countries have embraced the Google technology. A Chinese article[16] noted that "… the major powers … all possess better satellite reconnaissance capabilities and [therefore] have no need for Google Earth's services. However, to countries that do not have any reconnaissance satellites, Google Earth has provided them with a new channel for securing intelligence information, which enables them to more easily find out about certain aspects of large military facilities of other countries, such as their airports and seaports."

Taking Evasive Measures

In an article that appeared in a Chinese military journal[17] in September 2006, Qi Mingming wrote that Google "has broken the monopoly position of traditional line-drawn maps and ushered in a new era of electronic maps [but] has also brought a certain amount of hidden security-related dangers that pose threats to every country and region. In the present era of information sharing on the Internet, when protection by corresponding laws and regulations is lacking, stifling Google Earth is obviously not only out of keeping with the times but is also unnecessary and

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[11] China Daily article "Crackdown on illegal mapping websites," 27 March 2008
[12] Softpedia article "Google Earth Banned In Sudan- By the US Authorities," 23 April 2007
[13] *Bangkok Post* article "SATELLITE MAPS: Thai rival for Google Earth," 02 January 2006
[14] *EARSC* article "Isro Aims To Rival Google Earth," 23 May 2008
[15] *Zhongguo Tongxun She* article "China Takes Measures To Counter Google Earth's Leakage of Secrets About Its Terrain," 29 May 2008
[16] Article by Yuan Lin, "Google Earth; Is Traveling Around the World Online Leading to a Divulging of Secrets?" September 2006
[17] PRC Military Magazine Article Discusses 'Google Earth' Risks, Countermeasures, September 2006

baseless. On the other hand, we can adopt various methods and measures and do all we can to get around the problems brought about by Google Earth and minimize the impact it has on national security." The author stresses the importance of anti-reconnaissance against satellites, properly camouflaging and protecting important secret facilities, and understanding a satellite's shooting intervals, which could be used for conducting major military activities. Furthermore, since international stipulations or conventions that would restrict the posting of satellite images on the Internet were not in place previously, a vision of development and foresight is essential among the international community to avoid being caught unprepared in other situations similar to those caused by Google Earth.

India's army announced that it had taken evasive measures[18] against the "intrusive photographs of strategic installations" but would not elaborate on how it had been accomplished. Norway was developing ways of hiding defense installations from satellites and pending the implementation of these technologies it stated it would find other ways such as concealing buildings underground and in mountain installations.[19]

OSC Resources

The OSC Map Services Center (MSC) is staffed by Geographers who are experts in foreign mapping, geographic information, and geospatial technologies. Analytical products, training and a host of related geographic services are available to those on the front lines of intelligence. Call (STU-III) 703-742-8642 for assistance or visit the Map Services Center's online map repository (located on OSIS – account required).

The Geography Community at OSC.gov contains analyses, reports, hosted content, foreign articles, and industry news of interest to geographers, users of geospatial tools, and regional analysts. The OSC GeoNews is a regular email update highlighting content at the Geography Community. MSC also maintains a Geospatial Intelligence blog on OSC.gov that covers geospatial trends and technology news.

Related Resources

Nations React To Innovative Online Mapping Applications (481 KB)

08/16/2006 07:28 *FEA20060810026184 OSC in English 10 Aug 06*

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[18] Hong Kong AFP, 03 Apr 06
[19] *Aftenposten* article ""Seeking To Hide Norwegian Installations," 06 Apr 06