

TECH POLICY NOTES

MARCH 2001

The "Echelon" Debate

"Echelon" is the name given to an alleged global eavesdropping network maintained by the U.S. and three 'Anglo-Saxon' allies. One ally, New Zealand, publicly admits that it is a "member of a long-standing collaborative international partnership for the exchange of foreign intelligence and the sharing of communications security technology." with the U.S. and two other nations. The European Parliament has taken up Echelon as a cause celebre. While the Europeans worry about "Echelon's" intrusions, the U.S. worries about declining capabilities at the National Security Agency, which is responsible for intercepting foreign communications. The most important questions, however, have to do with transatlantic and European cooperation.

Put simply, a system designed to collect against telephones doesn't work very well against the Internet. The U.S. built its signals intelligence network to collect microwave communications and radio signals. The system was effective against Soviet telecommunications in the 1980s, but today's phone system is much harder to collect against. The most important change is the spread of fiber-optic telecommunications. Fiber optics carry the bulk of traffic and use pulses of light to transmit data. Satellites and ground stations cannot collect against these networks. Direct physical access to the fiber is required to collect data. Doing this covertly and frequently is much harder to do than is flying a satellite overhead or setting up a ground station hundreds of miles away in another country. The European Parliament Working Document on "Echelon" recognizes that "illegal interception" of fiber optic communications is "highly unlikely."

Other improvements also hurt collection. Cellular telephones have a short range, quickly hand off messages to fiber networks and are not used for large data transfers (like blueprints) that would be useful for economic espionage. The spread of unbreakable encryption also hurts, but encryption has had less effect than the switch to fiber optics in degrading collection capabilities because so few people bother to use it. The result is that fewer signals are collected and fewer of the collected signals can be read.

Knowing that Echelon-style systems are increasingly ineffective against modern communications does not assuage European concerns. The European Parliament's draft report has as its main point that the U.S.'s European partners must ensure that any intelligence operations are consistent with European law. This is aimed at the U.K. European law says that "intelligence operations" are legal (national security actions are outside of EU jurisdiction) but that economic espionage is not, and at one point, the Europeans thought of asking the U.S. (and U.K.) for a pledge that their spying was appropriate and took commercial law and privacy into account.

Privacy is a hot topic in Europe, where the German parliament just cancelled the national census for being too intrusive into people's private lives. European law makes privacy a Human Right. A system of the kind "Echelon" is reported to be (a 'vacuum cleaner' that sweeps in electromagnetic signals, sorts them with computers, and then discards all but those few messages that deal with topics of interest), runs contrary to European privacy rules, where collecting data on citizens is not allowed without their consent.

Privacy concerns do not often figure in espionage, where the intent is to acquire information illicitly and covertly, but the "Echelon" debate is shaped by an embarrassing lack of covertness. Large, mysterious antennae farms are hard to hide and easily trigger suspicion when their Cold-War justification no longer exists. NSA is also paying, to a degree, for the high profile it took during the encryption debate.

New Zealand assures its citizens that the cooperative signals intelligence arrangement is not used to spy on them. U.S. law prohibits NSA from spying on Americans, and the Agency is scrupulous in adhering to the law. The U.S. and its partners, of course, would not be the only countries to eavesdrop on telecommunications - many governments have and use this capability against their own citizens and some use it against their neighbours as well. In a fiber-optic world, the

advantage goes to countries crossed by international fiber-optic channels, not the countries with large satellites and ground stations.

Europeans worry that "Echelon' provides commercial advantage to the U.S. and its partners. Former CIA Director Jim Woolsey pointed out that the U.S. was unlikely to steal European technology as it isn't worth stealing. Moreover, the U.S. ranks its intelligence targets in order to allocate scarce collection resources, and U.S. priorities place commercial matters a distant third to military and national security concerns. Foreign efforts to win large contracts with bribery reportedly attract U.S. attention, and U.S. complaints about bribery could lend credence to fears of economic espionage. Other nations may also find it difficult to believe that the U.S. does not engage in behaviors of which they themselves have been accused. The American Civil Liberties Union, no friend of NSA, notes in its "Echelon Watch" that "France's SGDN (Secretariat General de la Defense Nationale) conducts surveillance not only for the French government, but also passes pertinent information along to French private companies."

A few former U.S. officials believe that foreign intelligence services may be stirring the pot by leaking "Echelon" stories. The tactic was used in the 1980s for protests over U.S. deployment of tactical nuclear missiles to Europe. If successful, a covert "anti-Echelon" campaign would damage U.S. collection capabilities at relatively little cost.

The "Echelon" debate is less about economic espionage and more about diverging views between the U.S. and Europe. The U.S. is preoccupied with terrorism, proliferation, drugs and military capabilities of potential opponents, and the Europeans with privacy, commerce and forging a common identity. The official U.S. response has been to lay low in the hopes that "Echelon" will go away. Europe's concern comes at a time when the U.S. may be reconsidering its passion for large, expensive, and potentially outmoded collection technologies, but the "Echelon" debate presages further tension. A united Europe - a single European state, may acquire its own military and intelligence forces, and the Europeans are already grappling with how to construct this and how it will fit with NATO. The most important question in Echelon is not to the U.S. but to Britain from its European partners and they are asking the UK how and if it can balance transatlantic commitments with an emerging European security identity.