

Global Surveillance: The Evidence for Echelon

Duncan Campbell

This presentation sets out the historical, factual and evidential basis for our knowledge and understanding of highly classified matters concerning the mass global interception and processing of civil and commercial telecommunications. Such understanding is important in underpinning discussion of the political and technical interventions that can secure personal and commercial communications and provide data security in the 21st century.

Since 1996, there has been increasing global interest in and awareness of the extent of the automated surveillance of global telecommunications systems, primarily but not exclusively by the signals intelligence (sigint) agencies of the United States and its English-speaking allies. Although many thousands of codenames are in use, the technically-informed public now commonly know this system as “Echelon”.

Recent information suggests that the original Echelon system came into existence about 1971, and that within the signals intelligence agencies it was (and remains) the commercial communications satellite (COMSAT) collection sub-system of the global communications surveillance system. The existence of the Echelon network was first publicised in the late 1980s, when it underwent an unprecedented enlargement, including the development of southern hemisphere interception sites. Development has continued on an ever-increasing basis since 1990.

This presentation reports and attempts to and assimilate the best available evidence for the interception and processing capabilities of such systems, together with their implications for personal and commercial privacy and security. It also reviews the legal authority controlling such activities, and such privacy procedures as have been disclosed. A key contemporary issue is whether the technological processes now associated with automated communications intelligence effectively nullify privacy protection safeguards, such as are set out in statutes such as the US Foreign Intelligence Surveillance Act (FISA).

It is a matter of record that the signals intelligence agencies have struggled for more than 50 years to prevent access to or the general use of effective cryptographic methods by private citizens or by organisations not generally under their control. They now recognise this as a losing battle, and are in the process of redirecting their efforts. A review of clandestine interception methods may provide pointers to new systems to be deployed in future.

Reaction to the STOA “Interception Capabilities 2000” report : May – June 1999

“This is by far the most authoritative document ever prepared on just what snooping is being done into your and my telecommunications”. Sunday Programme, Channel 9 TV, Australia : 23 May 1999

“The report is undoubtedly the most comprehensive look at Echelon to date because of its attention to detail — [and] the NSA’s use of technology” Wired, 10 May 1999.

“Son investigation est tout à fait explosive; elle rappelle, détails à l’appui, que l’appareil de renseignement américain, et son appendice britannique, espionne et traque les communications internationales depuis le début du siècle”. Le Point, 21 May 1999

“Eine Vorstellung wie aus der Phantasie eines Paranoikers: Ob wir über Handy oder Festnetz telefonieren, E-Mail schreiben, Dateien übers Internet verschicken - kein Wort sei sicher vor dem Zugriff internationaler Geheimdienste, die systematisch und in großem Maßstab nahezu alle Wege, auch den zivilen elektronischen Datenverkehr, belauschen und für ihre Zwecke auswerten”. Der Spiegel, 21 May 1999.

“This extremely thorough document took a bit of the gloss of omniscience off of Echelon, but confirmed that it’s an extremely powerful network, and one that in some ways is untouched by human hands.” About.com, 3 June 1999.

“I believe that it’s time that there is some congressional scrutiny of the Echelon project ... Echelon has raised some questions about fundamental policy and constitutional rights.” US Congressman and former CIA General Counsel Bob Barr, (quoted in Wired, 10 May 1999)

The STOA report on Comint - Interception Capabilities 2000 (IC-2000) - is currently available from :

http://www.gn.apc.org/duncan/stoa_cover.htm

The European Parliament site is :

<http://www.europarl.eu.int>

The exact URL will be advised, when available.

There are mirrors at :

UK http://www.cyber-rights.org/interception/stoa/stoa_cover.htm

UK http://www.iptrreports.mcmail.com/stoa_cover.htm

Netherlands <http://www.nrc.nl/W2/Lab/Echelon/interccapabilities2000vp.htm> (modified)

Germany <http://www.spiegel.de/statichtml/stoa/index.htm>

Germany http://www.ez-info.com/c3/stoa_cover.htm

Australia http://www.c2o.org/mirrors/duncan/stoa_cover.htm

USA <http://anon.efga.org:8080/OtherSites/Interception>

USA http://www.Genocide2600.com/~tattooman/cryptography/nsa/ic2000/stoa_cover.htm

USA <http://members.atlantisnetwork.com/qubit/ic200.htm> (jazzed up, not recommended)

The zipped file can be obtained from <http://jya.com/ic2000.zip> and also from <http://www.gn.apc.org/duncan/ic2000.zip>

You can ask for a printed copy from the Scientific and Technological Options Assessment (STOA) Panel office at the European Parliament, Luxembourg. Fax number: 352-4300-22418

Or write to either :

European Parliament
Directorate B / STOA
SCH 4/81
L-2929 Luxembourg
Tel: +32 2 284 43748
Fax: +32 2 284 49059

European Parliament
Directorate B / STOA
EAS 12
Rue Belliard 97-113
B-1047 Bruxelles
Tel +352 4300 22511

The **previous STOA report** in this series also covers ECHELON. It can be obtained from STOA (as above) or can be read on-line at: <http://www.heise.de/tp/deutsch/special/info/6280/anchor1.html>

Special electronic spying page on Yahoo: <http://headlines.yahoo.com/FC/World/ECHELON/>

Another, short list of links is at <http://antimedia.net/echelon>

Coverage by Country

UNITED STATES

Christian Science Monitor , 6 September 1999 What's a little spying between friends?
<http://www.nandotimes.com/technology/story/body/0,1634,89923-142316-981920-0,00.html>

ABC News Online, 16 July 1999 Big ears and big secrets
http://www.abcnews.go.com/sections/world/DailyNews/Echelon_990709.html

(and - **ABC News Online, 123 July 1999** Big brother is listening
http://www.abcnews.go.com/sections/world/DailyNews/spyII_990727.html)

Time Magazine (digital), 24 June 1999 The government is reading your e-mail
<http://cgi.pathfinder.com/time/digital/daily/0%2C2822%2C27293%2C00.html>

Wired News, 3 June 1999 Germany endorses strong crypto
<http://www.wired.com/news/news/politics/story/20023.html>

About.com, 1 June 1999
<http://civilliberty.about.com/library/weekly/aa060199.htm> Spying on the spies

New York Times, 18 May 1999 US Uses Key Escrow To Steal Secrets
http://www.nytimes.com/techweb/TW_Report_U_S_Uses_Key_Escrow_To_Steal_Secrets.html

Techweb, 18 May 1999 US Uses Key Escrow To Steal Secrets
<http://www.techweb.com/wire/story/TWB19990518S0004>

Wired News, 10 May 1999
http://www.wired.com/news/print_version/politics/story/19602.html?wnpg=all

Slashdot, 9 May 1999

<http://slashdot.org>

Salt Lake Tribune; 8 May 1999 : Echelon Eavesdrops Around the World Without Warrant or Court Order

No URL available

ABC News Online, 7 June 1999 Spies like us

<http://www.abcnews.go.com/sections/tech/NextFiles/nextfiles990607.html>

CANADA

C-news, 18 June 1999 Spy network eavesdropping on Canadians, says former spy

<http://www.canoe.ca/NationalTicker/CANOE-wire.Spy-Network.html>

Ottawa Citizen : 20 May 1999 Canada a key snooper in huge spy / report says alliance is able to intercept nearly any message

<http://www.ottawacitizen.com/national/990522/2630510.html>

Hamilton Spectator, 9 June 1999

TBA

Vancouver Sun, 24 May 1999

<http://jya.com/cse-snoop.htm>

The World Today, CKNW Radio : forthcoming, by Susan Kleiderman

GERMANY

Bavarian Radio, 5 June 1999

<http://www.bayern3.de/netradio/sendung/themen/990605/>

Die Welt, 25 May 1999 USA und EU im Cyber-Clinch, Bruck M. Kimmerle

No URL

Der Spiegel, 20 May 1999

<http://www.spiegel.de/netzwelt/politik/0,1518,23279,00.html>

c't (computer magazine), 11 May 1999 "Neues EU-Arbeitspapier zu Echelon"

URL not known

Focus Magazine : To be published 28 May 1999, by Jochen Wegner.

Telepolis : 10 May 1999 : Abhören im Jahr 2000

<http://www.heise.de/tp/deutsch/inhalt/te/2833/1.html>

JAPAN

Times of Japan : 26 May 1999

<http://www.japantimes.co.jp/features/cyberia/1999/cyberia990526.html>

UNITED KINGDOM

New Scientist, 10 May 1999

<http://www.newscientist.com/ns/19990515/newsstory4.html>

The Register, 19 May 1999

<http://www.theregister.co.uk/990519-000018.html>

IT Week : 17 May 1999 Spies target corporate data

IRELAND

Irish Times, 27 May 1999 Technology a threat to right of privacy

<http://www.ireland.com/newspaper/finance/1999/0604/tech4.htm>

AUSTRALIA

Channel 9 Sunday Programme, 23 May 1999 :

http://sunday.ninemsn.com.au/sun_feature2.asp?id=821

Melbourne Age, 23 May 1999

<http://www.theage.com.au/daily/990523/news/news3.html>

Channel 9 Sunday Programme, 23 May 1999:

http://sunday.ninemsn.com.au/sun_cover2.asp?id=818

NEW ZEALAND

New Zealand Herald, 24 May 1999

<http://www.nzherald.co.nz/nzherald99/story.cfm?theStoryID=7474>

AUSTRIA

DER STANDARD, 26 May 1999 Cyberkrieg um Kosovo

<http://derstandard.at/arc/19990526/94.htm>

ORT online

Reference to be supplied

FRANCE

Le Point, 21 May 1999 : by Jean Guisnel, not on web.

ITALY

Il Mondo : forthcoming, by Claudio Gatti

Corriere : forthcoming, by Claudio Gatti

DENMARK

Børsens Nyhedsmagasin (Business News) : forthcoming, by Kim Schaumann

Danish Radio : “U-land” : youth lifestyle, forthcoming

Danish Radio : 28 May 1999 : “Harddisken” (IT, culture weekly)

<http://www.dr.dk/harddisk/ugenshd.htm> and

<http://www.dr.dk/harddisk/realaudi/921duncan.ram>

Danish Radio : 28 May 1999 : “Mandat” (democracy in Denmark)
<http://www.dr.dk/p1/mandat/Inds599.htm> (‘hør udsendelsen her’)

NORWAY

Internett Kanal 1, by Eirik Rossen

SWEDEN

Datateknik, 10 June 1999 USAs industrispionage ställs mot väggen (U.S. industrial espionage Is confronted)

<http://www.datateknik.se/arkiv/99-10/3.html>

<http://jya.com/echelon-se2.htm> (English translation)

Swedish Broadcasting Corporation, 25 May 1999. by Frederik Laurin

SWEDEN / NORWAY / DENMARK

Internet World, May 1999 : by Michel Bajuk