

How the US crafted secret mass-surveillance laws for foreign Cloud data, without any legal rights or redress

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Cloud *computing* **parallel processing power as commodity**



Consumer: Facebook, Skype, Microsoft, Google

Business : Microsoft Azure/Office365, Google Apps, Amazon

“Warrantless Wiretapping” 2001-7

- 2003: AT&T San Francisco switching centre
 - Internet backbone split to DPI and forwarded to NSA
- 2005 New York Times broke story
 - media self-censored story until after 2004 election
 - several whistleblowers NSA, FBI, and AT&T
 - tried official channels and then media – ignored, prosecuted
 - Traffic-analysis of call patterns and transaction data
- 2007: “legalized” by Protect America Act
 - retroactive immunity for telcos
 - new paradigm: “collect everything, minimize later”
 - no more particular warrants
 - FISC approves “procedures”

What is “*foreign intelligence information*” ?

- (1) information that relates to, and if concerning a United States person is necessary to, the ability of the United States to protect against -
 - (A) actual or potential attack or other grave hostile acts of a foreign power or an agent of a foreign power;
 - (B) sabotage, international terrorism, or the international proliferation of weapons of mass destruction by a foreign power or an agent of a foreign power; or
 - (C) clandestine intelligence activities by an intelligence service or network of a foreign power or by an agent of a foreign power; **or**
- (2) **information with respect to a foreign power or foreign territory that relates to**, and if concerning a United States person is necessary to -
 - (A) the national defense or the security of the United States; or
 - (B) **the conduct of the foreign affairs of the United States.**

information with respect to a foreign-based political organization or foreign territory that relates to the conduct of the foreign affairs of the United States.

2008 FISA Amendment Act §1881a (Sec.702)

- ♦ *foreign intelligence information*
- ♦ *intentionally* targets only non-US persons outside US
- ♦ authorization for 1 year
- ♦ “minimize” access on US persons after collection
- ♦ provide all facilities/information to accomplish in **secret**
- ♦ contempt of FISC for non-compliance
- ♦ providers have complete immunity from civil lawsuits
- ♦ **“in a manner consistent with the 4th Amendment”**

FISAAA 2008 combined 3 elements for 1st time

- 1) §1881a only targets non-US persons located outside US
- 2) “remote computing services” (defined ECPA 1986)
 - *provision to the public of computer storage or processing services by means of an electronic communications system (today = **Cloud**)*
 - Nobody noticed **addition of RCS!**
- 3) not criminality, not “national security”
 - **purely political surveillance**
 - ordinary lawful democratic activities

→ designed for **mass-surveillance** of any Cloud data **relating to US foreign policy**

 - **“double-discrimination” by US nationality**
 - completely unlawful under ECHR



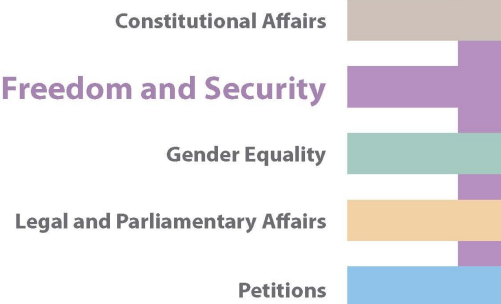


DIRECTORATE-GENERAL FOR INTERNAL POLICIES

POLICY DEPARTMENT
CITIZENS' RIGHTS AND CONSTITUTIONAL AFFAIRS **C**



Fighting cyber crime and
protecting privacy in the
cloud



STUDY

EN

2012

SLATE 8th Jan: Ryan Gallagher

**U.S. Spy Law Authorizes Mass
Surveillance of European Citizens:
Report**

1500 Tweets in a week

**Most apparently from Europe,
without comment, but general
reaction of “WTF? How can this be
allowed ?”**

**US blog reaction MUCH less, but
typically**

“who's going to stop us?”

NEW post-Snowden
research briefing

**European Parliament
September 2013**

Main programmes revealed by Snowden

- PRISM (FISA 702)
- “Upstream” (EO12333)
 - fibre-optic cables, public and private telco/ISP networks
 - Internet exchanges
- Xkeyscore - “exploitation system/analytic framework”
 - indexes/searches “3 day rolling buffer” of “full take” data stored at 150 global sites on 700 database servers.
- BULLRUN - “aggressive multi-pronged effort to break into widely used encryption technologies”
- MUSCULAR – NSA intercepting to Google/Yahoo fibre
 - flows between datacentres not encrypted (or defeated)
 - **Microsoft** admits to European Parliament no encryption “server-to-server”

Procedures used by NSA to target non-US persons [\(Guardian 20.6.13\)](#)^h

- Confirms there are zero substantive privacy protections for non-US persons
- solely concerned with establishing “foreignness” of target
- no restriction on full breadth of “foreign intelligence information”

Cloudwash

US law offers good protection to its citizens
as good or better as foreign law for foreigners

▶ ▶ ▶ don't worry about the US Cloud

FALLACY: FISAAA offers zero protection to foreigners' data
in US Clouds

And these materials don't mention FISAAA at all...

- “Five Myths...” (US mission to EU)
 - Hogan Lovells report (for “media and political purposes”)
 - Linklaters
 - **Peter Hustinx (April 2010)**
 - “streamlining the use of BCRs”
 - ENISA - “procure secure”
 - WTO (Kogan)
 - RAND Europe
 - QMUL Cloud Project* (sponsored by Microsoft)
- *one paper has one footnote

(some) Privacy regulators acquiesce to “don't worry be happy about the Cloud”?

- ~ 150 Opinions on EU Data Commissioners since 9/11
 - PATRIOT mentioned in one footnote in 2001
 - Absent: FISA, PAA, FAA , “foreign intelligence”
 - 24.11.11 **Anne Cavoukian** – Ontario Privacy Commissioner
 - **“Privacy in the Clouds –Yes, You Can Have Both” (?!!)**
 - **“Don't waste your time** by focusing on the Patriot Act, there are several U.S. investigatory powers that rival the Act and grant similar authority”
 - no mention of FISA in an OPC materials until May 2013
 - no analysis of discrimination by nationality/implications under Canadian Charter
 - Regulators conceive their job as enabling and obfuscating mass-surveillance (especially by the state)

US political and media debate entirely focussed on rights of Americans

- PRISM not controversial in Congress
 - Controversy about s.215 of PATRIOT and domestic + international “metadata”
- non-Americans rights non-existent, unmentioned
- ex-NSA Dir. Hayden
 - *“4th Amendment is not an international Treaty”*
 - *“home field advantage”* data transiting/stored US
- But until 2012 US State Department extolling protections of 4th at international conferences !!
 - 4th situation did not crystallise until 2012

Questions about outsourced e-services

RISK ≠ UNCERTAINTY

- Is metadata covered as “Enterprise customer data”?
 - How long is data retained, where are flows exposed?
- How do we trust (proprietary implementations) of encryption after BULLRUN/MUSCULAR ?
 - If data wasn't encrypted between datacentres, what does that imply about good faith and prudence of vendors?
 - Encryption is futile to protect webmail & hosted services against NSA if provider subject to US jurisdiction
- What are vendor assurances by worth given secrecy provisions in FISA/PATRIOT orders ?
- **What about the students ?**

Reduce risks & uncertainties, don't entrench them