

SECURITY, OPENNESS & PRIVACY (SOP)

**BALANCING CYBERSECURITY, OPENNESS AND PRIVACY
THROUGH THE MULTI-STAKEHOLDER PARTNERSHIP
FRAMEWORK**

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ACKNOWLEDGEMENT

- **Eben Moglen: Why Freedom of Thought Requires Free Media and Why Free Media Require Free Technology;** Published on May 19, 2012 by [republica2010](#) via <https://www.youtube.com/watch?v=sKOk4Y4inVY>
- **Eben Moglen: Why Political Liberty Depends on Software Freedom More Than Ever;** A speech given by [Eben Moglen](#) at the 2011 [FOSDEM](#) conference in Brussels on Feb 5, 2011
- **Eben Moglen: Innovation under Austerity;** A speech given by a speech given by [Eben Moglen](#) at the 2012 [Freedom to Connect](#) conference in Washington DC on May 22, 2012; <http://freedom-to-connect.net/agenda-2/>
- **Omer Tene Big Data for All: Privacy and User Control in the Age of Analytics;** The Center for Internet and Society at Stanford Law School Date Published: 20th September 2012; <http://cyberlaw.stanford.edu/blog/2012/09/big-data-all-privacy-and-user-control-age-analytics>
- **Malte Spitz: German Politician and Data Activist;** TED Talk; <http://www.ted.com/speakers/browse> and <http://www.zeit.de/digital/datenschutz/2011-03/data-protection-malte-spitz>



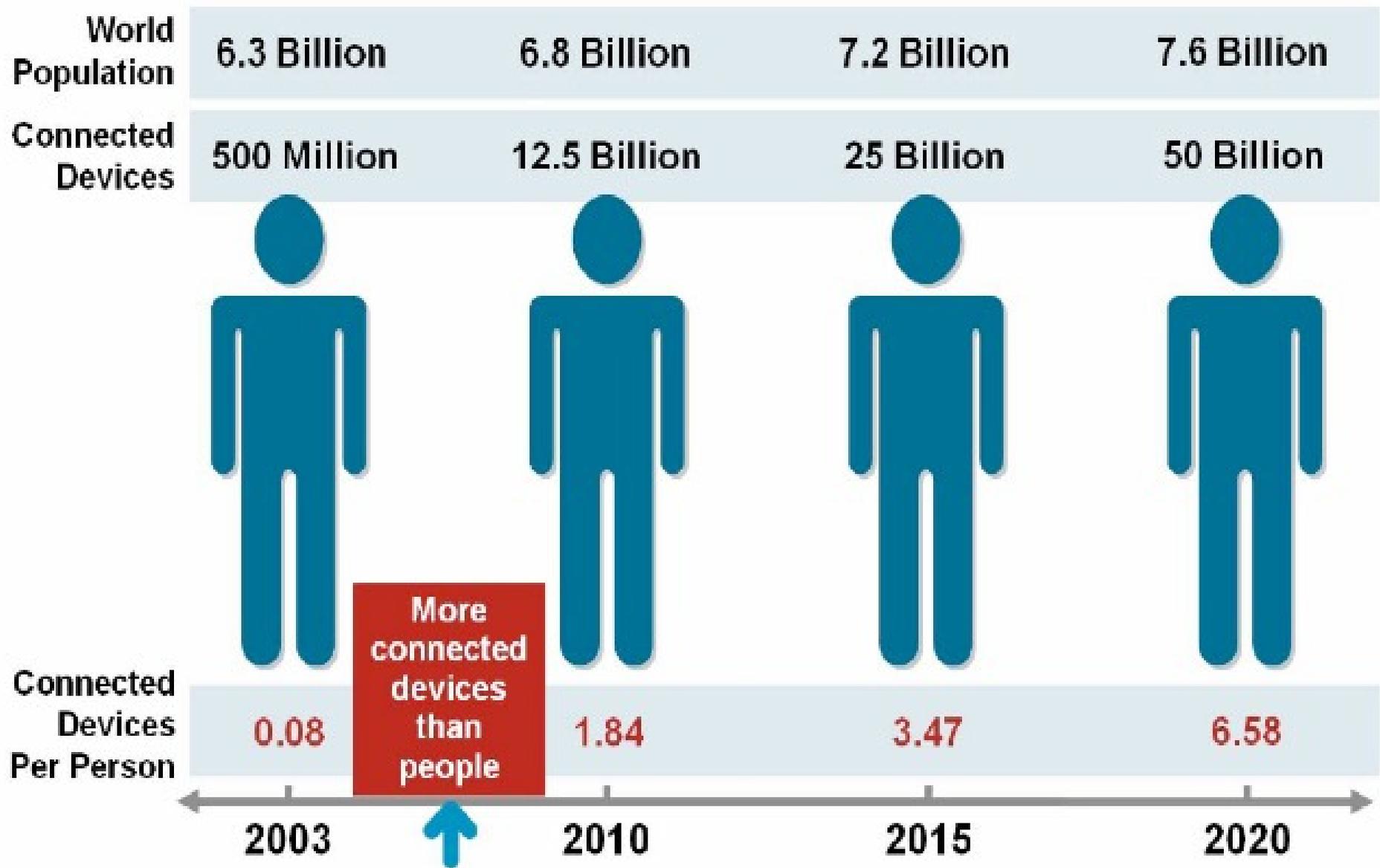
"...the network is the computer."

John Burdette Gage

**WE ONLY SEE THE THINGS ON
THE SURFACE.**

29 October 1969: ARPANET 15,671 days ago
06 August 1991: www @ CERN 7,720 days old

MORE DEVICES CONNECTED THAN HUMAN BEINGS EXIST



Source: Cisco IBSG, April 2011

THE NEXT 7,500 DAYS?

• "All these computers, all these handhelds, all these cell phones, all these laptops, all these servers — what we're getting out of all these connections is we're getting one machine.... **We're constructing a single, global machine.**"

(Kevin Kelly)

"...now — building a single nervous system that will embrace every human mind... Two generations from now, **a network that connects every human mind, thoughts, plans, dreams and action will flow as nervous impulses in the network,** we are now designing its foundation..."

(Eben Moaglen)

CONTEXT FOR WHAT IS AT STAKE

- **The Almighty gave us the freedom of thought and the freedom to choose – right/ wrong**
- **Modern (from 15th Century) freedom of thought is based on access to printed material rooted in **the right to read and the right to publish****
 - **Central to struggle for freedom of thought**
- **The right to read in private and right to think, speak & act on basis of free and uncensored will**
- **Books became subversive commerce, freedom of reading was the avenue to freedom of thinking**
- **Unorthodox thinking and revolutionary acting**

FEAR

- The reality which we are struggling to cope with is that current conditions in the country foster fears of insecurity



- By acknowledging the prevailing fear of insecurity, is **not to suggest that we succumb to its debilitating effects**, but to enliven the search for viable alternatives

(LKK Are)

SECURITY NEEDS

- **Preservation of the country from all threats to its survival**
 - Peace and prosperity
- **Defence of sovereignty and territorial integrity**
 - Protection of inhabitants -- citizens and non-citizens
 - Protection of national values
 - National wealth
 - Maintenance of peace and order

www.theodora.com/maps

(LKK Are)

THREAT ENVIRONMENT

- **No matter how good a security system is, there will always be threats**
 - Petty and violent crimes
 - Community clashes
 - Episodic violence
 - **Uncertainty creates a volatile environment which turns vulnerabilities, normally under control, into disasters**
 - Domestic and global factors influence the threat environment
- **Security is dynamic**
- **The situation defines who or what is to be regarded as a threat**

WHAT IS AT STAKE

- **We are the last generation of human brains formed without the net**
- **In two generations early life will be formed with direct connection to the net, each of us effectively a neuron**
- **Fate of freedom of thought will depend on the neural anatomy of the network**
 - **It is this generation that will decide how the network is organised**
- **What we put in place now will have consequences**



WAKE UP TO THE REALITY

- We grew up to be consumers of media
 - now media consume us....
- The things we read watch us read them
- The things we listen to, listen to us, listen to them
- We are tracked, monitored predicted by the media we use
- The process of building the network institutionalises information flow
- Facebook is now man in the middle, share all with our friends and "SUPER friend" == the one who can pay him, make or help them...



PRETTY GOOD PRIVACY (PGP) ENCRYPTION

- **Philip Zimmerman, PGP Government should not read everything**
 - Prosecuted for sharing encryption – military secrets



- **PGP concepts are the basis of digital commerce estimated to reach \$963.0 billion worldwide by 2013** <http://www.internetretailer.com/2011/01/04/global-e-commerce-sales-head-1-trillion-mark>
- **24% likely to be from M-Commerce**
- **Should we care about anonymity?**
 - Network now assumes we can be tracked everywhere
 - Determines if we can have anonymous reading
 - Apple has a walled garden (**jail**) called iTunes

SHOULD WE CARE ABOUT ANONYMITY?

- France's former president proposed laws that jail repeat visitors to extremist web sites:
 - **Criminalisation of reading**
 - **Criminalisation of research**
- Sarkozy lost election - idea lives on
- USA terrorism prosecution routinely present Google search logs as proof of conspiratorial behaviour:
 - The act of seeking knowledge is used as proof of conspiracy activities, **effectively criminalising thinking, reading and research....**
- This is happening in so called free societies -- we have forgotten the power of the unchecked state and power cliques



Sarkozy: Jail those who browse terror websites

– **By Raphael Satter, Associated Press – Thu, Mar 22, 2012**

<http://news.yahoo.com/sarkozy-jail-those-browse-terror-websites-182328946.html>

WE PUT OUR DREAMS IN THE SEARCH BOX AND THEY OWN IT

- The primary purpose of 21st century commerce is to predict how we can be made to buy
 - The primary thing they want us to buy is debt
 - We are going into debt buying all we did not know we needed because they own the search box and we put our dreams in it
- Thus they know what we:
 - want, hope, like, wish we knew about
 - we put in the search box – they own the search box



Every time you make a link you are teaching the machine, every time you make a link about someone else you are teaching the machine about someone else ■14

EASE OF SURVEILLANCE



- **The end of forgetting**
 - **Nothing ever goes away
nothing is ever forgotten**
- **What is not understood will be understood tomorrow**
 - **Todays encrypted messages will be broken tomorrow**
- **We will need to totally rebuild all our security protocols all the time forever because no encrypted packet will ever be lost**
- **Something can be linked to something else thus security officials will always be able to link data together**
 - **Todays unconnected dots can be connected tomorrow**

EASE OF SURVEILLANCE

- **Over the course of six months**
 - **Tracked his geographical location and what he was doing with his phone more than 35,000 times**
- **"Seen individually, the pieces of data are mostly inconsequential and harmless. But taken together, they provide what investigators call a profile – - a clear picture of a person's habits and preferences, and indeed, of his or her life."**
- **"Betrayed by Our Own Data" (Die Zeit)**
<http://www.zeit.de/digital/datenschutz/2011-03/data-protection-malte-spitz>
- **A Nigeria Mobile phone provider process over 300 million pieces of data DAILY**



**Malte Spitz:
German
Politician and
Data Activist**
He asked his
cell phone
carrier what
it knew
about him

- **Mapped what he found out.**

MALTE SPITZ

Six (6) months cell phone activity

35,000 TRACKED

CELL PHONE

RECORDS

"Betrayed by Our Own Data," Die Zeit

BI ON A DATA WAREHOUSE

- The threat of data coming out of Facebook – where does it go?
 - Real threat is that of code going into Facebook
- Enterprise computing is the addition of the layer of analytics/ Business Intelligence (BI) that sits on top of the database
 - BI answers to questions you did not know you had
- Real threat is the BI layer on top of Facebook data warehouse
 - Contains the behaviours and thinking of almost 1 billion people
 - your service agreement says they can run any software they want to improve the customer experience



• BI code on top is where every Intelligence service in the world wants to go

INTELLIGENCE/ SECURITY SERVICE

- **Intelligence is a peoples business/ classes of people:**
 - **agents, sources, adversaries “influenceables” i.e. people you can pressure who are related to adversaries e.g. wives, husbands, daughters, parents, children....**
- **Recruit from these classes of people:**
 - **Don’t know their names but you know what they are like...**
 - **Don’t know who they are but you know social characteristic of those you want**
- **Insert the appropriate code in the BI layer and Facebook can filter out those by behaviour and social circle who could be agents, sources adversaries and “influenceables” to get at the adversaries**
 - **– show you by their social circles –**
- **Like buttons get recorded and you either liked or did nothing either way that’s data teaching the machine**

ROBOTS

- **Mobile robot (phone) we all carry around**
 - **Knows where we are all the time**
 - **We hope is not listening to us and reporting to HQ**
 - **It runs software we cannot read, see, study or modify**
- **Apps know your heart rate and micro-changes in a persons face/ voice changes -- like a lie detector**

The
inside of
you
head

becomes
the
outside
of your
face

inside of
your
smart
phone

then
becomes
the
inside of
network

becomes
a file at
Headqua
rters

CONTROL OF THE INTERNET

- Human beings require space to think, read reflect and become unorthodox
 - This is being taken away – **the structure and control of the Internet is critical**
- Freedom of thought is at risk, possibly forever
- Agnostic Networks/ Internet:
 - We must control the politics, policies, hardware, software and so on in the network **else the network will control us**
 - Network must accommodate the users at the edge not needs of master servers in centre
 - Mesh networks with many small servers
- Else our children may not know what freedom means
 - **It may cost us and require sacrifices to impose ethics on the technology**

CONTROL OF HUMANKIND

- **We are the last generation capable of knowing what the fundamental issues and changes are, because we have lived on both sides**
 - **Hats are not allowed in Hong Kong airport because it interferes with the facial recognition systems**
- **What will our children say, if they find out that we gave away their freedoms for convenience, because:**
 - **We loved the tablets and Facebook**
 - **We could not find better ways to communicate**
 - **We did not care about the future of freedom of thought**
 - **We thought it was someone else's problem**
 - **We did not think there was any future**
 - **We did not really care about freedom of thought**

OUR DREAM

- All the future Einstein's in the streets (almajaris) will be able to learn:
 - All the Fela's will learn music
 - All the research physicians will be able to study
- Humanity will be connected
 - All brains will be allowed to learn
 - **No brain will be crushed for thinking wrong**
- The Nightmare:
 - Or we give it way in exchange for idle talking to our friends or for speedier in search engines
- **History has shown that security tools improve society, when opened to innovation – cell phone, encryption and the Internet**

*The Formative
Years of
Gbenga Sesan:
Nigerian ICT
Legend*



FGC, Idoani, received two sets of computers and Gbenga Sesan, who was in his third year, was too excited to try his hands on the devices. "Sorry, you can't understand how to use them because **they not for people like you**", a teacher rebuked him.

<http://ictworks.us5.list-manage2.com/track/click?u=780df2f2887c650714e068c0d&id=9b770764a8&e=ff1ea94a32>

Sep 21, 2012 04:00 am, Guest Writer

ACTUALISING OUR DREAM

- **We need to build the network but build it to foster innovation and privacy**
- **Software is what the 21st century is made of**
 - **What steel was to the 20th century**
 - **It is the crucial building block, the component out of which everything else is made, including freedom, tyranny, business as usual and spying on everybody**
- **Technology, that we can, if we chose, read, think about, can add to, can participate in without being monitored/ surveilled/ reported in on:**
 - **Software we can truly access**
 - **Hardware that we “OWN” in the real sense**
 - **Agnostic bandwidth**
- **Demand that technology organisations adhere to citizen friendly codes of ethics**
- **Else capitalism will move to curtail freedoms in pursuit of profits and politician in pursuit of power**

CONCLUSION

- **We can enhance our Security by empowering people with capacities and “agnostic” tools to be creative -- PGP**
- **Openness is about giving people a choice about what they decide to share**
- **Privacy: The electromagnetic spectrum belongs to us, the people, and government holds it in trust**
 - **Censorship by opening our data packets infringes on all our rights to privacy**
- **We can chose to be the generation, that completes the work of building Freedom of thought, else we will be the generation that gave it all away**
 - **We can slip into an effective inquisition using technology**

We must not fail



Thank you, for your attention
Merci, de votre attention

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