

*4th European Summit
on the Future Internet*

13-14 June - Aveiro, Portugal

PRIVACY ON THE TABLE

Luís Barroso, Portuguese Data Protection Commissioner



Hong Kong Will Decide My Fate, Edward Snowden Tells South ...

TIME - 2 hours ago

Photos of Edward Snowden, a contractor at the National Security Agency (NSA), and U.S. President Barack Obama are printed on the front ...

The Independen...

NSA whistleblower, Edward Snowden, confirms he will stay in Hong ...

The Independent - 2 hours ago

Edward Snowden vows not to 'hide from justice' amid new hacking ...

The Guardian - 1 hour ago



Bloomberg

CNN

YouTube

The Guardian

The Guardian

Vanity Fair

CBS News

[all 3434 news sources »](#)

Edward Snowden could remain in Hong Kong for years, legal ...

The Guardian - 7 hours ago

Edward Snowden could remain in Hong Kong for months or years if he chooses to fight any request for his return to the United States and if he ...



Edward Snowden: how the spy story of the age leaked out

The Guardian - 5 hours ago

Link to video: NSA whistleblower Edward Snowden: 'I don't want to live in a world with these sort of things'. As he pulled a small black ...



Edward Snowden and Washington's revolving-door culture

Aljazeera.com - 3 hours ago

In the wake of the Edward Snowden controversy, the National Security Agency whistleblower who revealed secret US government ...

Edward Snowden's girlfriend Lindsay ... the moment I feel alone

The Guardian - 7 hours ago

The girlfriend of Edward Snowden, the whistleblower who leaked classified documents about US surveillance operations, has ...

Edward Snowden: the man who is feared For Exposing The Federal ...

Forbes - 1 hour ago

Edward Snowden, the former CIA employee who blew the whistle on the gargantuan spying program, has curiously become an ...



Edward Snowden's explosive NSA leaks have US in damage control ...

The Guardian - 6 hours ago

Daniel Ellsberg called Snowden's leak the most important leak in American history Link to video: NSA whistleblower Edward Snowden: 'I don't ...

ars technica

Microsoft
Entirely new. Perfect for touch.



MAIN MENU

MY STORIES: 24

FORUMS

SUBSCRIBE

VIDEO

TECHNOLOGY LAB / INFORMATION TECHNOLOGY

What the NSA can do with "big data"

The NSA can't capture everything that crosses the Internet—but doesn't have to.

By Sean Gallagher - June 12 2012, 2:35pm HKT/GMT

The secret social graph

Ironically, about the same time these two companies were exposing the Internet companies such as Google and Yahoo were solving a data storage and analysis problem. In November of 2006, Google published a paper about a distributed database system capable of indexing the Web and supporting other applications. And the work at Yahoo to catch up with Google's GFS system, the basis of BigTable—resulted in the Hadoop.

BigTable and Hadoop, these two systems, are a way to handle huge amounts of data being captured by the Internet. But they used something critical to intelligence operations: compartmentalization. They didn't have security at all, for that matter. So in 2006, NSA set out to create a better version of Hadoop, called Accumulo—now an Apache Foundation project.

Accumulo is a "NoSQL" database, based on key-value pairs. It's a design similar to Google's BigTable or Amazon's DynamoDB, but Accumulo has special security features designed for the multiple levels of security access. The program is built on the open-source Hadoop platform and other Apache products.

One of those is called Column Visibility—a capability that allows individual items within a row of data to have different classifications. That allows users and applications with different levels of authorization to access data but see more or less information based on what each column's "visibility" is. Users with lower levels of clearance wouldn't be aware that the column of data they're prohibited from viewing existed.

Accumulo also can generate near real-time reports from specific patterns in data. So, for instance, the system could look for specific words or addressees in e-mail messages that come from a range of IP addresses; or, it could look for phone numbers that are two degrees of separation from a target's phone number. Then it can split those chosen e-mails or phone numbers into another database, where NSA workers could peruse it at their leisure.

In other words, Accumulo allows the NSA to do what Google does with your e-mails and Web searches—only with everything that flows across the Internet, or with every phone call you make.

It works because of a type of server process called "iterators." These pieces of code constantly process the information sent to them and send back reports on emerging patterns in the data. Querying a multi-petabyte database and waiting for a response would be deadly slow, especially because there is always new data being added. The iterators are like NSA's wireless data elves.

Accumulo is just one weapon in the NSA's arsenal. The aggregated data pumped out of Accumulo can be pulled into other tools for analysis, such as Palantir's analytic databases and its Graph application. Graph builds a visualization of the links between "entities" based on attributes and relationships and searches based on those relationships—conceptually similar to Facebook's Unicorn search and social graph, Google's Knowledge Graph, and Microsoft Research's Satori.

Palantir Labs - Graph



Privacy in the Internet

WHERE ARE WE?

Dez milhões de zombies distribuem spam e malware diariamente

2008-10-13 15:49:07

No segundo trimestre de 2008, três em cada quatro e-mails recebidos eram spam

Em média, mais de 10 milhões de computadores estavam infectados por bots e eram controlados remotamente por cibercriminosos (sistemas zombie) n

Changing Behaviours...

Privacidade em risco na Internet

ie ou com
ncontrar?
riqueza
fixo e
tem
v, a



Endereços, telefones e até horários de actividades estão na rede virtual; os dados podem ser aproveitados por criminosos

podem estar alimentando vá
nte, também favor



Perfis dos utilizadores foram invadidos

Facebook: 200 milhões de contas invadidas por «hackers»

2009/05/15 15:26 Redacção / LF

Hackers infiltram-se em rede social

Ataque de phishing atinge 200 milhões de utilizadores do Facebook

15.05.2009 - 11h24 Reuters



Início : Opini



Ameaça

Redes sociais são oportunidade para hackers

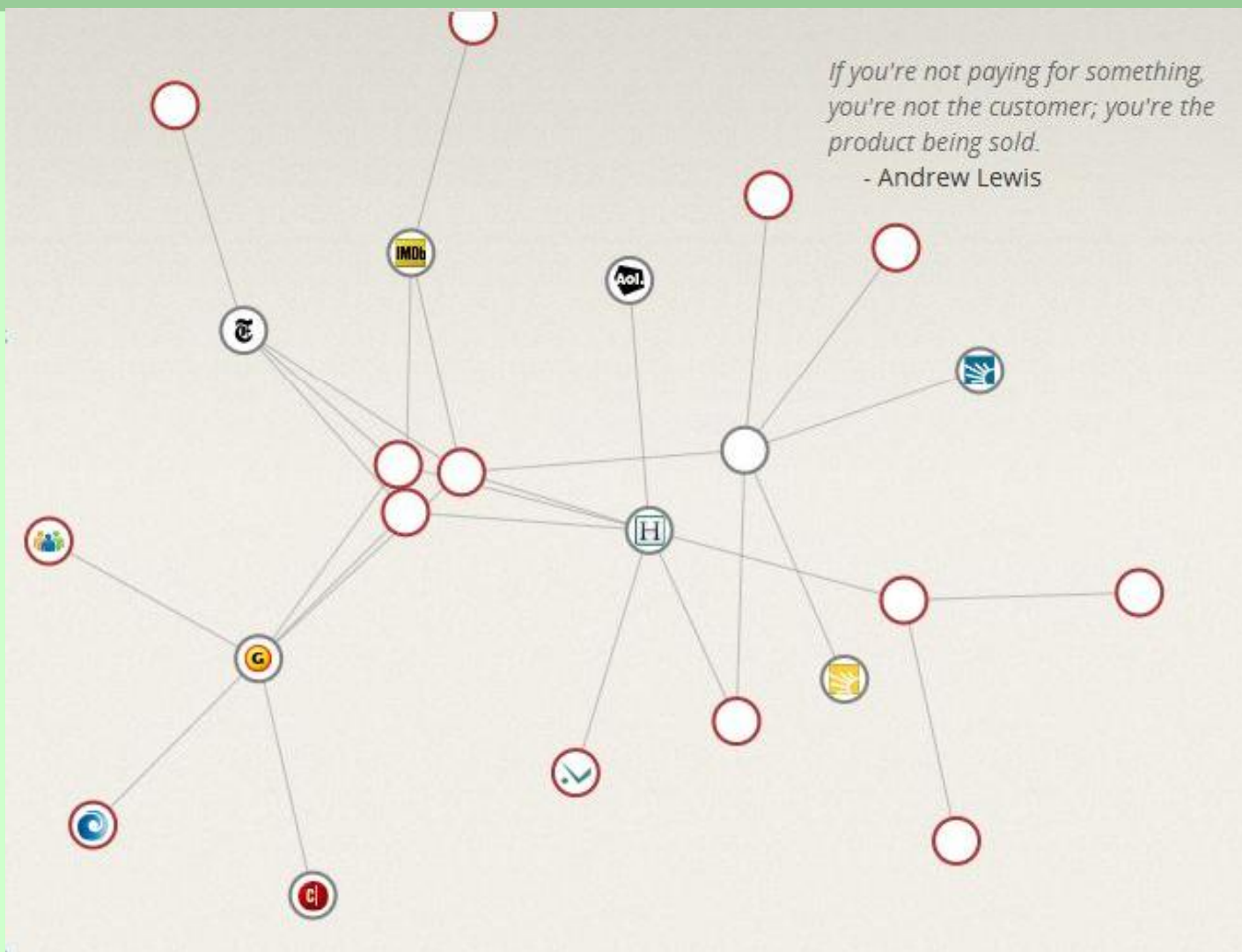
Várias redes sociais, como oMySpace ou Facebook, estão a ser alvo de vários ataques de hackers, que estão a aproveitar a crescente popularidade destes sites para levarem a cabo as suas acções menos bem intencionadas

Índia

Descoberta rede de tráfico de órgãos através de sites sociais

Foi descoberta na Índia uma rede de tráfico de órgãos humanos pela internet, alimentada por milhares de pessoas em páginas sociais como o Hi5, o Orkut e o Facebook, muito populares entre os indianos no país ou no estrangeiro

Web Tracking



The Present

➡ Directive 95/46/EC

Article 1

Object of the Directive

1. In accordance with this Directive, Member States shall protect the fundamental rights and freedoms of natural persons, and in particular their right to privacy with respect to the processing of personal data.
2. Member States shall neither restrict nor prohibit the free flow of personal data between Member States for reasons connected with the protection afforded under paragraph 1.

➡ Lei 67/98

Article 1

Object

This Act transposes into the internal legal system Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data.

➡ And more 26 national DP Laws...

Why a New Legal DP Framework?

Attitudes towards data protection

- Just over a quarter of social network users (**26%**) and even fewer online shoppers (**18%**) feel in **complete control** of their personal data.
- **74%** of Europeans see **disclosing personal information** as an increasing part of modern life.
- **43%** of Internet users say they have been asked for **more personal information than necessary**.
- Only **one-third** of Europeans are aware of the existence of **a national public authority** responsible for **data protection (33%)**.
- **90%** of Europeans want the **same** data protection rights across the EU.

Special Eurobarometer 359

Attitudes on Data Protection and Electronic Identity in the European Union, June 2011

“Data Protection in The Age of the Internet”

(...) the underlying principles of the current EU data protection legislation are still very much valid and have stood the test of time. However, it became equally clear that the EU needs a more comprehensive and more coherent approach in its policy for the fundamental right to personal data protection.

This reform will greatly simplify the regulatory environment and will substantially reduce the administrative burden. We need to drastically cut red tape, do away with all the notification obligations and requirements that are excessively bureaucratic, unnecessary and ineffective. Instead, we will focus on those requirements which really enhance legal certainty.

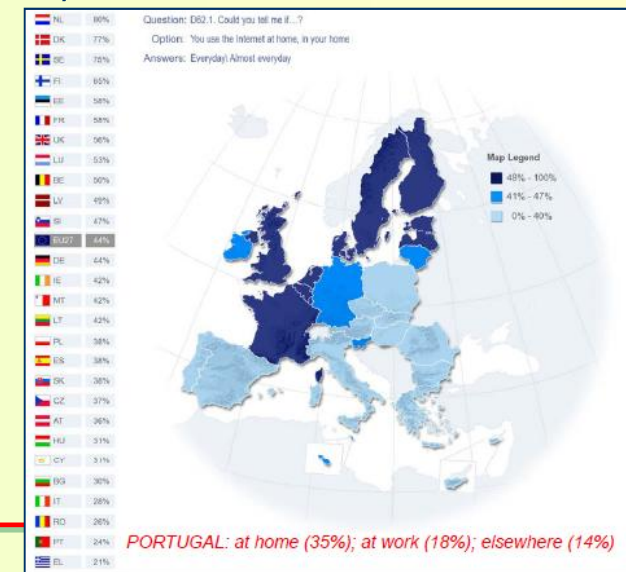
“Assuring data protection in the age of the internet”

Viviane Reding, Vice-President of the EC, EU Justice Commissioner

New European Legal Framework

The context

- ➡ Information considered as personal is, above all, financial information (75%), medical information (74%), and national identity numbers or cards and passports (73%).
- ➡ A majority of Europeans are concerned about the recording of their behaviour via payment cards (54% vs. 38%), mobile phones (49% vs. 43%) or mobile Internet (40% vs. 35%).
- ➡ Even though a majority of European Internet users feel responsible themselves for the safe handling of their personal data, almost all Europeans are in favour of equal protection rights across the EU (90%).



Some Figures

- Authorities and institutions – including the EC and the EP (55%) – are trusted more than commercial companies.
 - Less than one-third trust phone companies, mobile phone companies and Internet service providers (32%); and just over one-fifth trust Internet companies such as search engines, social networking sites and e-mail services (22%).
 - As regards the "right to be forgotten", a clear majority of Europeans (75 %) want to delete personal information on a website whenever they decide to do so.
 - Social networking and sharing sites users are more likely to disclose their name (79%), photo (51%) and nationality (47%). Online shoppers' actual online disclosure of personal information mainly involves their names (90%), home addresses (89%), and mobile numbers (46%).
-

Safety ⇔ Privacy ⇔ Trust

QB25. Different authorities (government departments, local authorities, agencies) and private companies collect and store personal information. To what extent do you trust the following institutions to protect your personal information?

		Shops and department stores			Phone companies, mobile phone companies and Internet Services Providers			Internet companies (Search Engines, Social Networking Sites, E-mail Services)		
		Total 'Trust'	Total 'Do not trust'	Don't know	Total 'Trust'	Total 'Do not trust'	Don't know	Total 'Trust'	Total 'Do not trust'	Don't know
	EU27	39%	57%	4%	32%	63%	5%	22%	62%	16%
	BE	51%	48%	1%	38%	60%	2%	23%	68%	9%
	BG	28%	64%	8%	35%	50%	15%	20%	45%	35%
	CZ	35%	63%	2%	37%	61%	2%	25%	63%	12%
	DK	47%	50%	3%	44%	54%	2%	32%	61%	7%
	DE	34%	64%	2%	20%	78%	2%	16%	74%	10%
	EE	57%	40%	3%	65%	31%	4%	32%	46%	22%
	IE	56%	39%	5%	41%	45%	14%	29%	45%	26%
	EL	23%	75%	2%	14%	85%	1%	14%	77%	9%
	ES	47%	50%	3%	27%	70%	3%	18%	62%	20%
	FR	35%	62%	3%	28%	67%	5%	16%	70%	14%
	IT	37%	59%	4%	30%	66%	4%	23%	64%	13%
	CY	43%	53%	4%	50%	44%	6%	12%	54%	34%
	LV	40%	56%	4%	48%	46%	6%	28%	53%	19%
	LT	46%	49%	5%	50%	45%	5%	28%	42%	30%
	LU	39%	57%	4%	49%	47%	4%	17%	68%	15%
	HU	36%	60%	4%	48%	48%	4%	24%	55%	21%
	MT	33%	55%	12%	52%	39%	9%	20%	49%	31%
	NL	33%	65%	2%	30%	68%	2%	20%	75%	5%
	AT	31%	66%	3%	33%	64%	3%	21%	67%	12%
	PL	36%	53%	11%	42%	47%	11%	25%	48%	27%
	PT	40%	51%	9%	32%	60%	8%	26%	57%	17%
	RO	28%	57%	15%	36%	47%	17%	22%	43%	35%
	SI	44%	55%	1%	39%	57%	4%	22%	64%	14%
	SK	41%	55%	4%	47%	50%	3%	32%	58%	10%
	FI	63%	36%	1%	55%	43%	2%	33%	54%	13%
	SE	41%	57%	2%	28%	70%	2%	26%	67%	7%
	UK	48%	47%	5%	43%	52%	5%	30%	54%	16%

To flourish, the digital economy needs trust. And trust is about the confidence consumers have when giving personal information online.

What are the challenges, then, that companies face under the current legal framework for data protection? What is hindering growth in the Digital Single Market? How can new European legislation overcome the current hurdles?

“Building trust in the Digital Single Market: Reforming the EU’s data protection rules”

Brussels, 28 November 2011

Viviane Reding

Vice-President of the European Commission, EU Justice Commissioner

Privacy in the Internet: Where are We?

***“The optimist proclaims that we
live in the best of all possible
worlds...
...the pessimist fears this is
true.”***

*James Branch Cabell, in The Silver Stallion
(1926)*

Charter of Fundamental Rights of the EU

Article 8 - Protection of personal data

- 1. Everyone has the right to the protection of personal data concerning him or her.*
 - 2. Such data must be processed fairly for specified purposes and on the basis of the consent of the person concerned or some other legitimate basis laid down by law. Everyone has the right of access to data which has been collected concerning him or her, and the right to have it rectified.*
 - 3. Compliance with these rules shall be subject to control by an independent authority.*
-

Convention (108)

for the protection of individuals with regard to automatic processing of personal data

Chapter I – General provisions

Article 1 – Object and purpose

The purpose of this convention is to secure in the territory of each Party for every individual, whatever his nationality or residence, respect for his rights and fundamental freedoms, and in particular his right to privacy, with regard to automatic processing of personal data relating to him (“data protection”).

Directive

Proposal for a
DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
on the protection of individuals with regard to the processing of personal data by
competent authorities for the purposes of prevention, investigation, detection or
prosecution of criminal offences or the execution of criminal penalties, and the free
movement of such data

Article 3 - Territorial scope

1. **This Regulation applies** to the processing of personal data in the context of the activities of an establishment of a controller or a processor in the Union.
 2. **This Regulation applies** to the processing of personal data of data subjects residing in the Union by a controller not established in the Union, where the processing activities are related to:
 - (a) the offering of goods or services to such data subjects in the Union; or
 - (b) the monitoring of their behaviour.
 3. **This Regulation applies** to the processing of personal data by a controller not established in the Union, but in a place where the national law of a Member State applies by virtue of public international law.
-

General Data Protection Regulation

Proposal for a Regulation of the European Parliament and of the Council on the protection of individuals with regard to the processing of personal data and on the free movement of such data

Article 1 - Subject matter and objectives

1. **This Regulation lays down** rules relating to the protection of individuals with regard to the processing of personal data and rules relating to the free movement of personal data.
 2. **This Regulation protects** the fundamental rights and freedoms of natural persons, and in particular their right to the protection of personal data.
 3. **The free movement of personal data** within the Union shall neither be restricted nor prohibited for reasons connected with the protection of individuals with regard to the processing of personal data.
-

General Data Protection Regulation

Article 2 - Material scope

1. **This Regulation applies** to the processing of personal data wholly or partly by automated means, and to the processing other than by automated means of personal data which form part of a filing system or are intended to form part of a filing system.
2. (...)

Article 3 - Territorial scope

1. **This Regulation applies** to the processing of personal data in the context of the activities of an establishment of a controller or a processor in the Union.
2. **This Regulation applies** to the processing of personal data of data subjects residing in the Union by a controller not established in the Union, where the processing activities are related to:
 - (a) the offering of goods or services to such data subjects in the Union; or
 - (b) the monitoring of their behaviour.
3. **This Regulation applies** to the processing of personal data by a controller not established in the Union, but in a place where the national law of a Member State applies by virtue of public international law.

Main Policy Objectives

- ➡ Modernise the EU legal system for the protection of personal data, in particular to meet the challenges resulting from globalisation and the use of new technologies;
 - ➡ Strengthen individuals' rights, and at the same time reduce administrative formalities to ensure a free flow of personal data within the EU and beyond;
 - ➡ Improve the clarity and coherence of the EU rules for personal data protection and achieve a consistent and effective implementation and application of the fundamental right to the protection of personal data in all areas of the Union's activities.
-

In a Technological Point of View...

➡ PbD (Privacy by Design)

- Good Practices: Office of the Privacy Commissioner of Canada
(http://www.priv.gc.ca/search-recherche/index_e.asp?rc=1&lg=eng&ss=privacy+by+design&cn-search-submit=Search)

➡ PIA (Privacy Impact Assessment)

- Good Practices: US Department of Homeland Security
(<http://www.dhs.gov/privacy-office-privacy-impact-assessments-pia>)
-

The core

- ➡ **A explicit consent is required for data processing**
 - ➡ **The “Right to be forgotten”**
 - ➡ **The right of data portability**
 - ➡ Notification of serious data breaches without undue delay
 - ➡ **A single set of rules on data protection for the entire EU**
 - ➡ **A “one stop shop” for companies**
 - ➡ **A “one stop shop” for citizens**
 - ➡ More responsibility and accountability for the controllers
 - ➡ No unnecessary administrative burdens
 - ➡ **EU rules will apply to companies not established in the EU, if...**
 - ➡ Reinforcement of the National DPA
-

What will the new DP framework mean to...

... the Citizen:

- **more control** over the personal data, make it easier to access, and improve the quality of information we get about what happens to our data once we decide to share it;
- Protection of his **personal information**, no matter where it is sent or stored (inside or outside the EU);
- **Confidence** in online services;
- **Trust** in new information and communication technologies.

... the Company:

- This **reinforced trust** will help businesses grow and allow them to serve consumers throughout Europe with adequate safeguards for personal data, and with lower costs.
- This will help **stimulate the internal market, boost growth, create jobs and foster innovation.**

4th European Summit on the Future Internet

13-14 June - Aveiro, Portugal



COMISSÃO NACIONAL
DE PROTECÇÃO DE DADOS

Pesquisar por palavra



Projecto DADUS

Formulários

Pedido Informações

Queixas/Reclamações

Rua de São Bento n.º 148-3º 1200-821 Lisboa - Tel: +351 213928400 - Fax: +351 213976832 - e-mail: geral@cnpd.pt

a CNPD
Direitos dos Cidadãos
Notificação/Formulários
Perguntas mais
Registo Público
Orientações da CNPD
Decisões
Relações Públicas
Relatórios
Atividade Internacional
Legislação
Jurisprudência
Ligações

Esclarecimento público sobre o envio de faturação à AT

Na sequência de várias queixas de cidadãos, a CNPD averiguou a situação do envio à AT, através da remessa pelos comerciantes do ficheiro SAF-T, de informação pessoal relativa aos consumos das pessoas. Na sua Deliberação n.º 485/2013, a CNPD entendeu que este procedimento não estava conforme a lei, tendo a AT já procedido à sua correção. Tendo em conta a importância da questão, a CNPD entendeu fazer um Esclarecimento público sobre a matéria (26.4.2013).

SIS II entra hoje em funcionamento

Começa hoje em funcionamento a segunda geração do Sistema de Informação de Schengen, com funcionalidades adicionais, tais como a utilização de dados biométricos e novos tipos de alertas. O SIS II permite a troca de informação entre as autoridades de controlo de fronteira, aduaneiras e policiais, sendo um dos maiores sistemas do mundo nesta área. Conheça os seus direitos. (9.4.2013)



PARA UMA
CIRCULAÇÃO LIVRE,
PARA UMA VIDA
EM SEGURANÇA



Intercâmbio de Informação Criminal

- A CNPD aprovou, na semana passada, a Deliberação n.º 71/2013, relativa ao funcionamento da Plataforma para o Intercâmbio de Informação Criminal (PIIC), prevista na Lei n.º 73/2009, de 12 de agosto. A PIIC irá permitir a partilha de informação entre cinco órgãos de polícia criminal, através de rede dedicada, para efeitos de prevenção e investigação criminal. O Ministério Público terá igualmente uma ligação à plataforma para acesso aos processos de que seja titular (22.1.2013).

Trabalho sobre informação de saúde galardoado

-O trabalho «Controlo de acesso à informação de saúde. Da legislação à prática: um caso de estudo do Break-The-Glass», da autoria de Pedro Ferreira Farinha Silva, obteve uma

E-mail : geral@cnpd.pt

Tel.: +351 213 928 400

Fax : +351 213 976 832

Web: <http://www.cnpd.pt>

Rua de São Bento, 148, 3º

1200-821 LISBOA

Luís Barroso

Data Protection Commissioner