

Annual Report





Contents

1.	Contents 2
2.	How SafeLine works 2
3.	Procedure for Report processing
4.	Notes on the procedure for Report
	processing
5.	2011-18 trends 5
6.	2018 statistics 10
7.	Terminology 10
8.	Country of origin 12
9.	Endnotes on the Processing of reports 13
10.	Co-operation with <u>INHOPE</u> 14
11.	Greek Safer Internet Center
12.	Working with the Police, the Law and the
	industry 16
13.	Frequently asked questions 17
14.	Digital world 18
15.	Fighting CSAM 19
16.	Notice & Takedown19
17.	Useful information 20

What SafeLine does?

SafeLine's aim is to reduce the amount of illegal material on the Internet, focusing on child abuse-material, and in general to help protect minors while they are online. Specifically, SafeLine assists

- eliminate audiovisual material that portrays ill-treatment of minors,
- safeguard children's right to safe online surfing &
- reduce racist, xenophobic, violent and other illegal content.

How SafeLine works?

- 1. SafeLine receives anonymous reports from the public, about content suspected to be illegal.
- 2. For each report, SafeLine follows its approved <u>Processing Procedure</u>.
- 3. SafeLine helped introduce <u>Notice & Takedown</u> procedures in Greece.
- 4. SafeLine participates in the global network of hotlines, <u>INHOPE</u>, were it exchanges best practices and receives training.
- 5. SafeLine cooperates with the e-Crime & Digital Forensics units of the <u>Hellenic Police</u> on various other matters.
- 6. SafeLine is one of the three pillars of the Greek Safer Internet Centre.

More information

This Annual Report can only cover the most important issues, in brief. Please visit <u>www.SafeLine.gr/en</u>, for additional information.

Procedure for Report processing



When SafeLine receives a report it tries to **locate** the content. If the content can't be located, the report is **rejected**.

If the content is located, SafeLine determines **type** of the content & the hosting **country** and updates the **statistical** counters.

If the content is **CSAM**, the URL is uploaded to INHOPE's ICCAM database, through which Interpol and other hotlines are notified.

If SafeLine thinks that the content may be **illegal**, it considers following **Notice** & **Takedown** procedures.

If the content is hosted in **Greece**, the report is forwarded to the **Hellenic Police**.

If, and when, feasible, **feedback** is forwarded to the **report originator**.



Notes on the procedure for Report processing

Why the reported content may not be located?

Because, between reporting and processing, the content is often withdrawn, by the content owner / provider / authorities / etc. In such a case, the report cannot be processed.

What is the type of the content?

SafeLine categorizes the reports in a number of ways, including the content type: Child pornography, Racism & xenophobia, Terrorism, Drugs, ..., Other content / Not illegal, Queries & Outside Hotline responsibility.

What is the hosting country and why do we need to know it?

Responsibility for the content is assumed by the authorities of the country physically hosting the content. The report must be forwarded to them.

What are the statistical counters?

SafeLine & INHOPE publish statistics every year. The counters count content types & location, action taken, etc. for the reported period. Statistics are useful because if you can't measure it, you can't improve it.

CSAM:

Although legislation uses the term child pornography, a more appropriate one is Child Sexual Abuse Material (CSAM). The problem with the term pornography is that it may give the impression that the sexual acts had the consent of the children.

INHOPE database, ICCAM:

<u>INHOPE</u> maintains a database (ICCAM) with unique CSAM URLs: "ICCAM provides vital intelligence to law enforcement, including INTERPOL, in identifying previously unseen CSAM and supports the process of victim identification". This speeds up action to save the children involved.

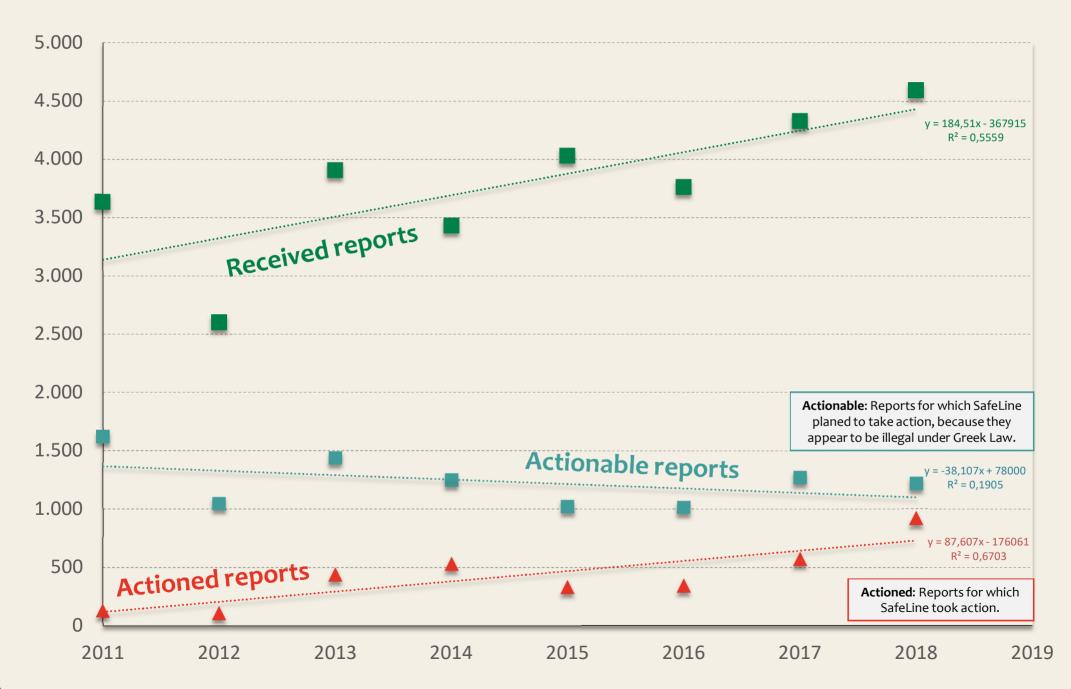
Doesn't SafeLine, or the reporter of the content, know if the content is illegal?

What is illegal is determined by the Law. The Law is interpreted by the Courts of Justice, or other appointed authorities. If SafeLine suspects that the content may be illegal it forwards the report to the authorities.

Notice & Takedown: Please see p. 19.



2011-18 trends

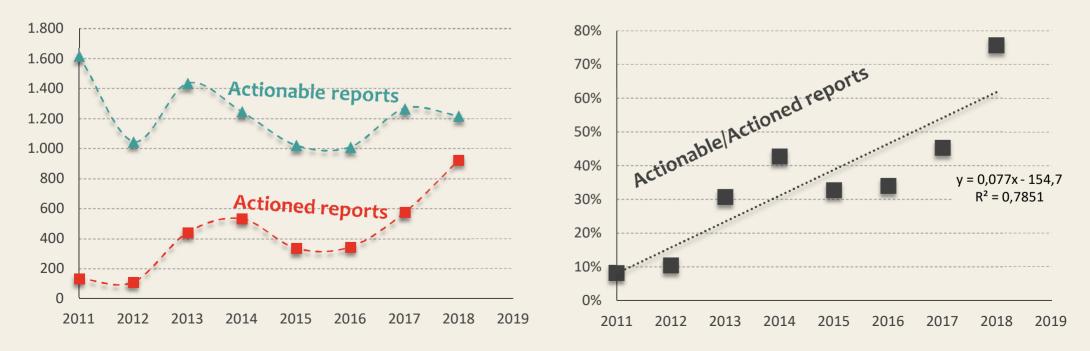




2011-18 trends, of Actioned & Actionable reports

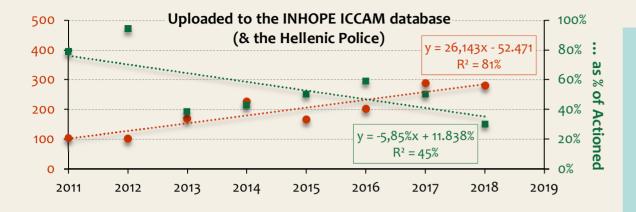
Over the period 2011-18:

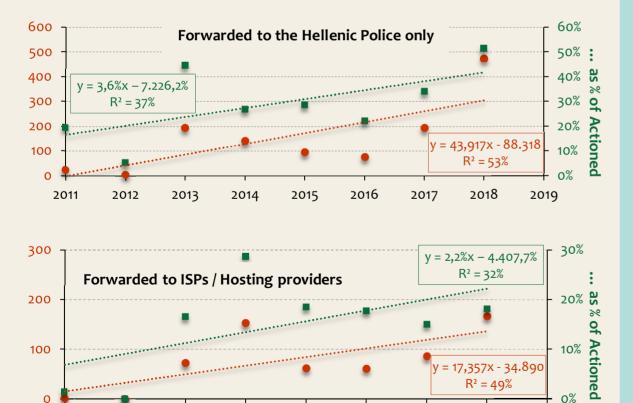
- The total number of reports **received** by SafeLine has been **increasing**, on average, by 185 per year, but the forecast value of this rate is average, as R²=56%. See <u>NOTE A</u>, in p. 13, for an explanation of R².
- The number of reports **actioned** by SafeLine has been **increasing**, on average, by 88 per year. The forecast value of this rate is good, as R²=67%, but as the **actioned** reports are drawn from the **actionable** ones, further increase of the **actioned** reports will rely on the number of **actionable** reports in 2019.
- Over the last 8 years, the ratio of **actioned/actionable** reports has been increasing at a reliable (R²=79%) trend of +7,7%/year, to reach 76% in 2018. This ratio cannot, obviously, keep increasing, so the trendline is expected to flatten over the next 2-3 years.
- The number of reports characterized by SafeLine as **actionable**, has been **decreasing** by **38** per year, on average. The forecast value of this rate is low, as R²=19%. It is expected that this trend will switch to increasing, following the rising trend of **actioned** reports.





2011-18 trends, of forwarded reports





2015

2016

2018

2017

2019

Reports **Uploaded to the INHOPE ICCAM database (& the Hellenic Police)** have increased, in absolute numbers, since 2011, while in relative terms (as a % of actioned reports) they gave way to the other two categories below. In fact, we have:

- +26 reports per year, on average and expected to keep increasing at about this rate for the next few years.
- -5,8% points per year, on average, which were shared by reports forwarded to the Hellenic Police only (+3,6% per year) and reports forwarded to ISPs / Hosting providers (the remaining +2,2% per year).

Reports Forwarded to the Hellenic Police only have increased, since 2011, both in absolute terms, and in relative terms as a % of actioned reports:

- +44 reports per year, on average and expected to keep increasing at an indeterminate rate (as R² is not strong).
- +3,6 points per year, on average and expected to keep increasing at an indeterminate rate (as R² is not strong).

Reports **Forwarded to ISPs** / **Hosting providers** have increased, since 2011, both in absolute terms, and in relative terms as a % of actioned reports:

- +17 reports per year, on average and expected to keep increasing at an indeterminate rate (as R² is not strong).
- +2,2 points per year, on average and expected to keep increasing at an indeterminate rate (as R² is not strong).

2011

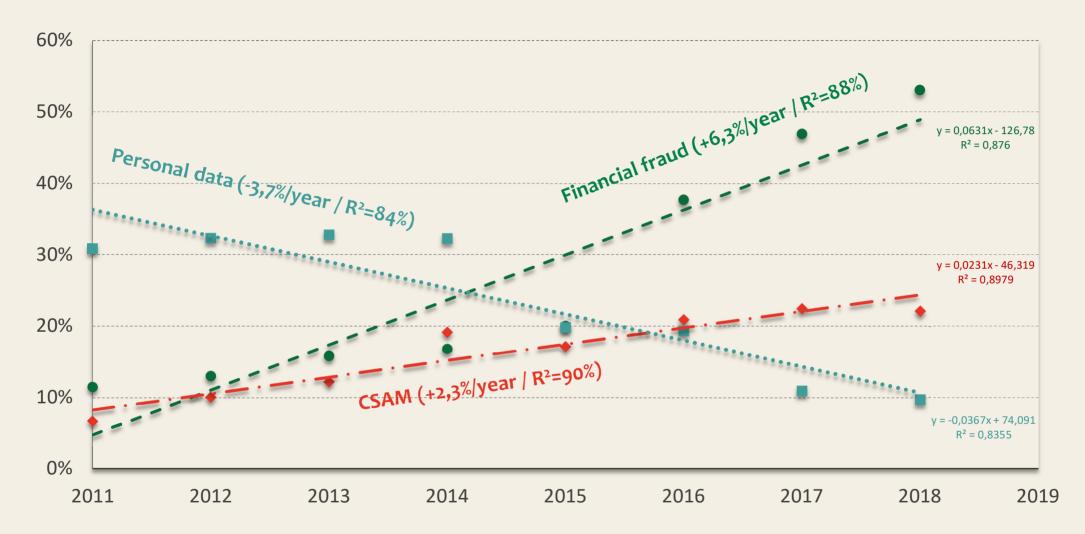
2012

2013

2014



2011-18 trends, of Actionable reports

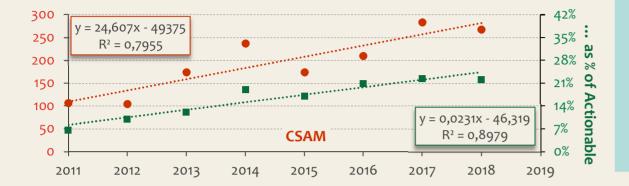


Over the period 2011-18 the following **reliable trends** were observed:

- Personal data violation, as a % of actionable reports, decreased at an average annual rate of 3,7% per year.
- Online financial fraud, as a % of actionable reports, increased at an average annual rate of 6,3% per year.
- CSAM (Child Sexual-Abuse Material), as a % of actionable reports, increased at an average annual rate of 2,3% per year.

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2011-18 trends, of Actionable reports



CSAM reports have increased, since 2011, both in absolute numbers, and in relative terms as a % of actionable reports:

- +25 reports per year, on average.
- +2,3% points per year, on average.

It is expected that **CSAM** reports will keep **increasing** over the next few years:

- +20 / year, from 269 in 2018, and
- +2% points / year, from 22% in 2018.

Financial online fraud reports have increased, since 2011, both in absolute numbers, and in relative terms as a % of actionable reports:

- +71 reports per year, on average.
- +6,3% points per year, on average.

It is expected that **Financial online fraud** reports will keep **increasing** over the next few years, at a rate of:

- +70 / year, from 646 in 2018, and
- +6% points / year, from 53% in 2018.

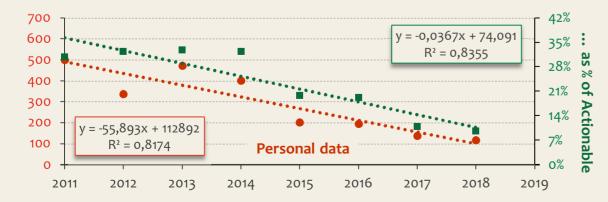
Personal data violation reports have decreased, since 2011, both in absolute numbers, and in relative terms as a % of actionable reports:

- -56 reports per year, on average.
- -3,7% points per year, on average.

It is expected that **CSAM** reports will keep decreasing over the next few years, at a rate of:

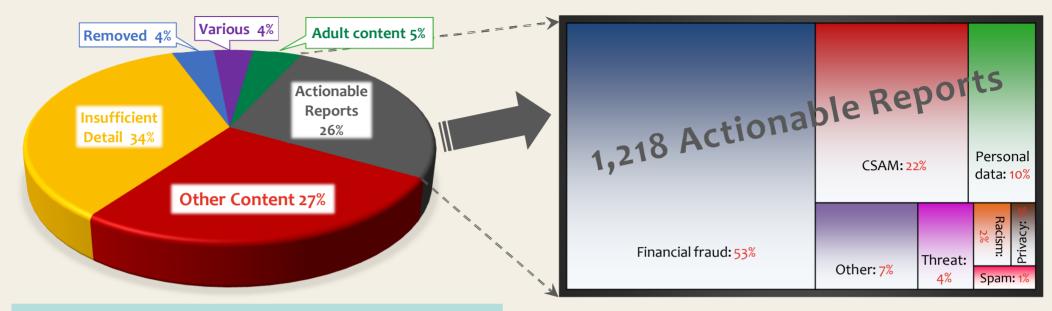
- ~20 / year, from 269 in 2018, and
- +2% points / year, from 22% in 2018.







4,591 reports received in 2018



Terminology:

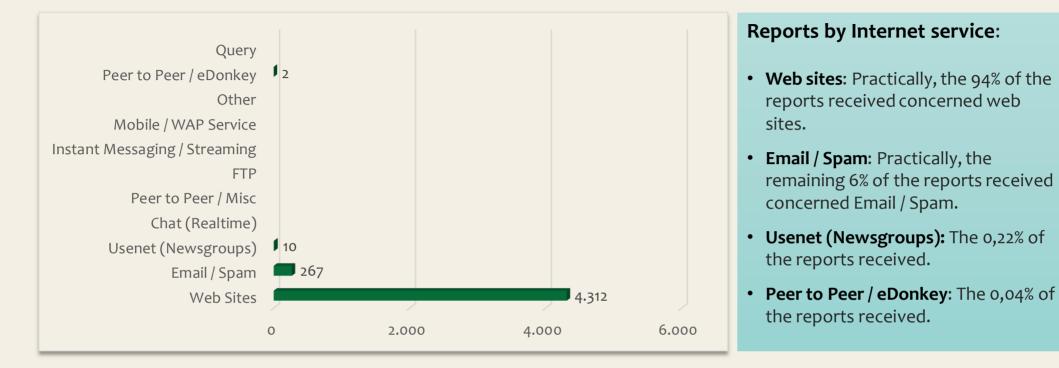
- Actionable: Reports for which SafeLine planed to take action, because they appear to be illegal under Greek Law.
- Adult Content: Adult Pornography, or Extreme Adult Content
- **Insufficient detail**: Report with insufficient data, to allow processing.
- **Other Content:** Content outside SafeLine's responsibility.
- **Removed**: Reports about content which was subsequently withdrawn.
- Various: Cyberbullying, Queries, Not illegal, or Not accessible.

Notes:

- CSAM: Child Sexual Abuse Material. Same as in 2017.
- **Financial fraud**: Online financial fraud. Up from 47%.
- **Other**: Other smaller categories of actionable reports (Copyright breach, Defamation, Other child-related content, Terrorism, Drugs, Promotion of suicide & Sexual harassment). Up from 6%.
- **Personal data**: Personal data violation. Down from 11%.
- **Privacy**: Communications privacy breach. Down from 3%.
- Racism: Down from 3%.
- **Spam**: Spam-phising. Down from 2%.
- Threat: Down from 7%.



4,591 reports received in 2018

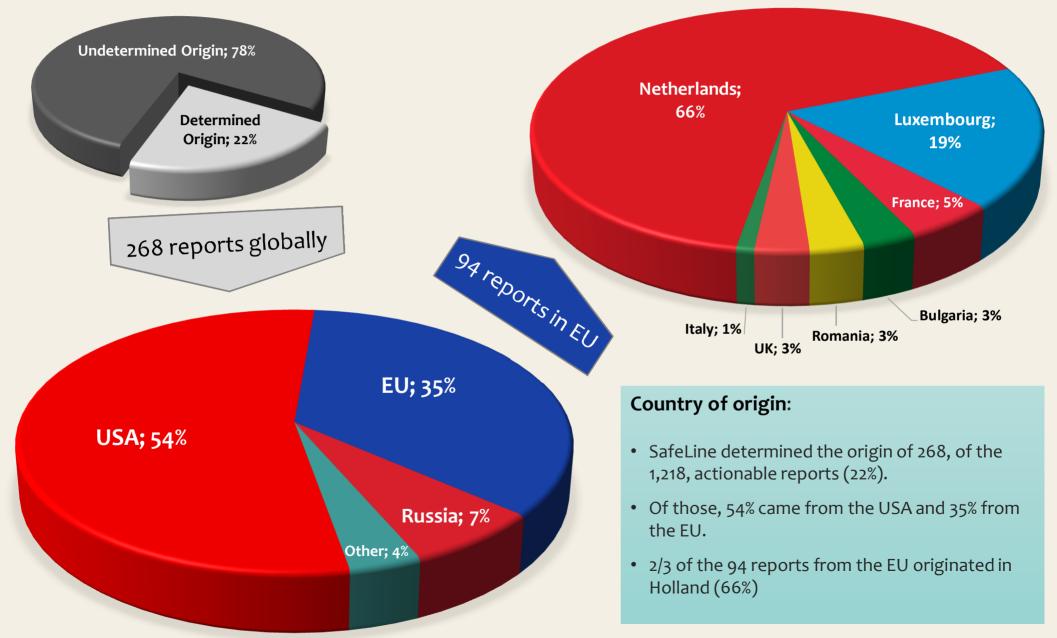


923 reports actioned in 2018

				Reports destined for other INHOPE hotlines, INTERPOL & INHOPE are
	Number of reports	Number of		forwarded via the
	forwarded to the	reports		INHOPE ICCAM database.
	INHOPE ICCAM	forwarded to		
Number of reports forwarded to the	database and the	ISPs/hosting		
Hellenic Police only: 52%	Hellenic Police: 30%	providers: 18%		

Country of origin, of the 1,218 actionable reports

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Endnotes on the Processing of reports

There is no automatic system, yet, which can identify with confidence, illegal & harmful content on the Internet. The only alternative then is the **report** from the human user of the Internet who comes across such content accidentally. And even then, only a trained expert can judge what is potentially illegal and report the matter to the authorities.

The effort then to make Internet safer, starts from the user **report** and his/her willingness to share responsibility for the well-being of this unique medium.

A hotline is an entity which offers to the public, a method to anonymously report Internet material, that they think is illegal. SafeLine is the Greek hotline.

To process the received **reports**, SafeLine follows the <u>Procedure for</u> <u>Report processing</u>. The procedure has been approved by INHOPE.

SafeLine has been audited by <u>INHOPE</u>, regarding compliance with standards and procedures, as set out in the INHOPE Quality Assurance programme.



NOTE A:

When we observe time-series, like in the diagrams in the next pages, where we plot, say, number of reports received per year, we can attempt to add a trendline (dotted lines), of an appropriate shape. The most common shape is a straight line. Each shape has a different fit and the quality of fit is measured by R².

A trend line of a chosen shape, here straight line, is the line that better fits the given data.

The value of a linear trend line also gives us the average rate of change, say +185/year for reports received. This rate of change is an undeniable fact, whatever the value of R², and describes what has happened over the observed period (here, 2011-18).

If R² is good (say, >70%), we can use the trendline to forecast the next 2-3 years. The closer R² is to 100%, the more reliable the forecast.

NOTE B:

A note of caution is necessary, when we discuss statistical trends, as a common reflex is to try and draw dangerous conclusions. For example, in p. Z, we examine the rising number of CSAM reports received per year, by SafeLine. This fact, does in no way imply that CSAM material is on the rise. What we have observed is that CSAM reports are on the rise, but we do not know the reasons, until we conduct a separate study.

A very challenging, and most likely unsolvable problem, is the separation of the *cause factor* from the *observation factor*. For example, an increase in the number of CSAM reports/year may be due to an increase in CSAM content, or an increase in SafeLine visibility, or an increase of public awareness, or an increase in the use of Internet, etc., or on a combination of the above and other factors.

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Co-operation with INHOPE

SafeLine believes that current generations are fortunate enough to have Internet, as it greatly enhances human rights, democracy, commerce, culture & innovation and it does so outside the control of any single authority. It is then in the interests of its members, the ordinary Internet users, to help combat Internet's dark side.

At the same time, Internet as a global medium, can only be protected by global efforts. It is with the above in mind that SafeLine became a full member of INHOPE.

INHOPE membership

- INHOPE was launched in 1999. Its membership currently stands at 46 hotlines.
- **SafeLine** is a full member since 2005.
- INHOPE **Mission**: "... to support and enhance the work of member hotlines to strengthen the International efforts to combat child sexual abuse using a multi stakeholder approach".
- INHOPE **Objectives**:
 - 1. Establish policies and best practice standards for hotlines.
 - 2. Encourage exchange of expertise among members.
 - 3. Ensure rapid & effective response to illegal content reports around the world by developing consistent, effective and secure mechanisms.
 - 4. Expand the network of INHOPE Hotlines around the world by ... providing consultation and training to meet best practice standards.
 - 5. Promote a better understanding of the work of hotlines to policymakers at an international level ... with the aim of achieving better co-operation.
 - 6. Raise awareness of INHOPE and member hotlines with key stakeholders as well as with the general public.
- INHOPE Values:
 - 1. Freedom of the Internet
 - 2. A commitment to the positive uses of the Internet
 - 3. A shared responsibility for the protection of young people by government, educators, parents and the Internet industry.

Greek Safer Internet Center

The Greek Safer Internet Center comprises three activities:

- 1. SaferInternet4Kids
- 2. Help-line
- 3. SafeLine

SaferInternet4Kids:

SaferInternet4Kids.gr

This is an awareness raising portal for

- parents,
- educators,
- adolescents & children,

with suitable multimedia content, as well as daily interventions through its Facebook & Twitter accounts.

Helpline:

It offers support in cases of harmful content & conduct, such as excessive internet use, bullying or exposure to inappropriate online content (available at +30 210 600 7686).

SafeLine:

SafeLine, and the hotline network in general, help remove many of the threats of the online world. This activity reduces the chances that a minor will be threatened, when surfing.

A risk-based approach to Internet safety

In the current context, risk is proportional to

- 1. the chances that a threat will develop to hurt an Internet user &
- 2. the expected consequences of this development.

SafeLine aims at reducing the amount of illegal, and mainly, child abuse material on the Internet. Hence, this activity reduces the <u>chances</u> that a minor will be threatened, when surfing.

Risk is also reduced by attacking the <u>consequences</u>. So, it is imperative that minors are better prepared to face threats. The *SaferInternet4Kids*, aims at raising awareness, among Internet users, about the safe use of the Internet.

The above two activities (*SafeLine & awareness building*) reduce risk proactively, i.e. they try to lower the risks of tomorrow's harmful events.

The *Help-line* aims at reducing the consequences reactively, in that it tries to reduce the consequences of yesterday's harmful events.

It is well known that, although we aim at eliminating online threats, Internet will be a place with risks. The mission of the *Greek Safer Internet Center* is to lower these risks to acceptable levels.



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Working with stakeholders

... the Police

As mentioned under "Procedure for Report processing", if SafeLine thinks that the content may be illegal and if the content is hosted in Greece, then the Report is forwarded to the Hellenic Police, and in particular to its Cyber Crime Division. Although the cooperation between SafeLine and the Police dates back to 2004, the Cyber Crime Division, in its current form, is based on a 2014 decree and operates out of Athens, with a sub-division operating out of Thessaloniki.



... the Industry

SafeLine cooperates with the Internet industry, like Facebook, Instagram, YouTube, Twitter, Google & others, as well as with the Greek ISPs.

One dimension of this cooperation concerns the "<u>Notice &</u> <u>Takedown</u>" process (see p. 19), while other areas of cooperation include participation in common meetings and activities.



... the Law

Hellenic penal laws apply to all acts committed in Greece, even by foreigners. The Code also applies to any act described as a felony or misdemeanor, committed abroad by a Greek national, if this act is punishable according to the laws of the country where it was committed.

For crimes committed on the Internet, the place where the crime took place is either the place where the webpage can be read, or where it is hosted.





Frequently (and infrequently) Asked Questions

- 1. What kind of Internet content is considered illegal? Every country defines what is illegal in her own way. Usually, what is illegal offline, is illegal online. In general, all countries outlaw, CSAM and racism or xenophobia.
- 2. What kind of Internet content is considered harmful? It is any material, otherwise non-illegal, which is subject to distribution restrictions (adults only, for example).
- **3.** What type of Internet content should I report to SafeLine? You should report webpages with content you believe is illegal. For harmful content use filters, appropriate browser/ISP/router-setting, and/or parental control tools.
- **4. Can I report illegal content anonymously?** Of course! When you visit the "Make a Report" page, in the "Personal Information" box, *anonymous* is the default value.
- 5. Why is content I reported still online? If reported content is still online it may be that what you reported is not illegal in the hosting country, or it may be because an international cooperation of the police is necessary, which might lead to delays in some cases.
- 6. Are there any risks to children & young people when playing online games? Gaming sites can be fantastic fun for young people. However as with any online technology, there are risks:
 - a. Addiction: Gamers may become so involved that they lose touch with the offline world and stay late at night playing, neglecting also their obligations.
 - b. Abuse: Some young people can become abusive to other gamers, in their effort to progress with the game.
 - c. Risky behavior: Some young people may fall victim to adults who are prepared to ask them for sexual favours in exchange of information and knowledge useful to progress with the game.
- 7. What is phishing? It is the attempt to obtain sensitive information (passwords, etc.) by disguising as a trustworthy entity (for example your Bank).
- 8. For more FAQs, visit:
 - a. http://www.SafeLine.gr/en/information/qs, or
 - b. <u>http://inhope.org/gns/who-we-are/faqs.aspx</u>

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Digital world

- 1. Digitized information: Information (video, picture, music, text, etc.), that can be processed, stored & transmitted, by computers.
- 2. Digital technologies: Technologies processing digitized information.
- **3. Cybercrime**: It is any combination of the following (definition adopted by the EU):
 - 1. Traditional forms of crime like fraud or forgery, committed over electronic information networks & systems;
 - 2. Publication of illegal content over electronic media (e.g., CSAM, or incitement to racial hatred);
 - 3. Crimes unique to electronic networks, e.g., attacks against information systems, denial of service and hacking.
- **4. Digital transformation**: The transformation through which businesses and the society, in general, have to go through in order to fully exploit *digital technologies*. To the extend that society transfers more and more of its operations from physical to digital, to that extend, and perhaps faster, we should supplement physical with digital (or *IT*) *safety* & *security*, to protect people & property against *cybercrime*.
- **5. IT Safety & Security**: Both refer to the condition of being protected from *cybercrime*. *Safety* refers to the control of the risks through safety measures, awareness & preparation. *Security* refers to solid measures taken to protect from *cybercrime*, like antivirus, firewall, etc.
- 6. Hash value: It is a digital word (say, 20 characters), easily produced from a digital file (any size), in such a way that even if one bit of the file changes, hash also changes in many places. So, a *hash value* is like the fingerprint of the file. The probability that two different files have the same *hash* is negligible. The INHOPE network, once it categorizes suspected imagery as CSAM, it uses its *hash value* for further processing. This is necessary to satisfy the law and minimize the risk of accidental spill of CSAM.
- 7. Digital signature: If the hash value, of a file, is encrypted by the file *sender* and attached to the file, this may serve as the *digital signature* of the file *sender*: A hacker can change the file, but not its (encrypted) hash value, so any attack will be detected by the owners of the encryption password.
- 8. Blockchain: It is a digital record duplicated thousands of times across a network of computers, in such a way that all the copies of the digital record are regularly updated, say every ten minutes. As there is no single central location, where the *blockchain* is hosted, it cannot be successfully hacked. *Blockchain* is updated by adding new blocks. Each new block contains an encrypted hash of the previous block, a timestamp and the new content. Private *blockchains* have been proposed for business use. Digital currencies use public *blockchains*.



Fighting CSAM

Child Sexual Abuse Material (CSAM) is the most horrific of the illegal content, hotlines come across on the Internet. Frequently, CSAM is being referred to, as *child pornography*; nevertheless, the term *pornography* may give the impression of consent of the actors, which cannot be the case for underage individuals. CSAM is then used as the most accurate term, which reinforces that behind images of child pornography there is sexual abuse of real children.

Once CSAM is detected, and to minimize re-victimization, it is extremely important that this content is *taken down* immediately. Even more important is the assessment, by Law Enforcement, that the specific CSAM depicts past acts, known to the authorities and not ongoing abuse of children. If the latter is the case, then Police has to move in urgently to free the abused victims.

Hence, especially for CSAM, speed is of the essence.

To assist Police, CSA imagery found by the hotline network is stored in a specific **INHOPE database**, called **ICCAM**, which allows the identification of new imagery, flagging out the duplicates.

The procedure used to remove **CSAM** from the Internet is called **Notice & Takedown** and is described below.

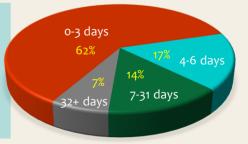
Notice & Takedown

- 1. Notice & Action procedures are those followed by the Internet Intermediaries for the purpose of combating illegal content upon receipt of notification.
- 2. Takedown is the most common outcome of *Notice* & *Action*. Other possibilities are: Blocking, voluntary takedown, proactive & preventive measures and action against repeated infringements.
- 3. SafeLine notifies the Internet Intermediaries for content on their servers, suspected to be illegal.
- 4. SafeLine cooperates closely with many Internet Intermediaries: Facebook, Instagram, YouTube, Twitter & others.
- 5. On notification, by SafeLine, the Internet Intermediaries normally takedown the reported content.
- 6. A measure of the effectiveness of the Notice & Takedown procedure is the time it takes to remove the "notified" piece. See pie: → → →

Internet Intermediaries:

- Internet service providers,
- Search engines
- Social media platforms &
- others.

They are companies that facilitate the use of the Internet.



INHOPE Global Statistics 2017 Removal time for CSAM



To report illegal material:

www.safeline.gr/en/report Mail at report@safeline.gr

For more information:

Mail at contact@safeline.gr

To complain about the Hotline:

Mail at complaints@safeline.gr

Find safe<mark>lyne</mark>on :					
	www.safeline.gr				
f	Facebook				
E	Twitter				

Developed by Dr. Nikos P. Frydas, FORTH

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