

# How do Spams Escape the Law?

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**Abstract.** Spams tend to promote a certain range of products and services without taking into account the language or the geographical position. The constant increase of spams, very broadly broadcast, does not any more allow considering these phenomena as negligible quantity, and leads us to wonder on the specificities of functioning of this technology which escapes the law.

Spams, extolling the merits of some types of products or services, encumber mailboxes. In light of the existing laws in France and the European directives in place, spam is illegal. However, illegality does not prevent their issuers from pursuing their activities. The development of this advertising medium is mainly due to the expertise and the professionalism of spammers who, in order to reach a maximum public, use sophisticated techniques allowing to enrich their address books, on the one hand, and regularly create new forms of spams to bypass the filters anti-spam and optimize as a result the rate of delivery of their messages, on the other hand.

**Keywords:** Spam, Advertising, Law, Business.

## 1. Introduction

Advertisers use several media-leaflets, the direct mail advertising, the posting on signs, the TV screens placed on the places of sale and the internet. Advertising on the internet, in comparison with other techniques, has the following characteristic: high effectiveness with lower costs while answering perfectly to the various objectives of the advertising executive. Advertising on the internet constitutes a privileged means which allows the promotion of services or products offered by the advertiser. According to TNS Medium Intelligence, a firm specialized in new advertising technologies, the advertising on internet records a strong progress since several years. In 2008, the market of this sector represents 3.7 billion euros against only 1.6 billion euros in 2006 and 1.1 billion euros in 2005. However, this tool of advertising has not always evolved in the right way (*i.e* advertising flags, sponsored links) and many people have quickly learned how use excessively these means, and as a result, they gave birth to the "Spam".

The movement of spams is in progress; spam became a true plague of internet and electronic mail. According to a report published by *Commtouch Software* (Rudiger, 2006), a world leader of the solutions anti-spam, the rate of spams reached 96% of the total e-mail traffic in 2007, against only 62% in 2006.

In order to reach a maximum public, the spammer needs to enrich his address book. For that, he uses various techniques, such as sophisticated software which run the web pages, the forums, the chats... He can also buy lists of e-mails or pirates the waiters of accommodation's mails.

The constant increase of spams, very broadly broadcast, does not any more allow considering these phenomena as negligible quantity, and leads us to wonder on two questions. Firstly, what are the specificities of functioning of this technology which allows having such development? And, secondly, what about the French legislation on spam ? The research articles that have addressed this subject are very recent (Bohme and Holz, 2006; Frieder and Zitterain, 2007; Bouraoui, 2007 and 2009; Hanke and Hauser, 2008; Nelson, Price and Rountree, 2009). However, these authors were interested in a particular subject of spams, namely the stock spams, and have studied their impact on financial markets activity. Their results show that stock spams affect very significantly the characteristics of the financial securities, which demonstrates the

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effectiveness of this technique like an advertising tool. Therefore, understanding the mechanism of this technique and its development over time are interesting topics.

This paper answers to the following issue. In what consists the activity of advertisers who practise the spam to broadcast their ads, and how explain the development of this advertising support facing the ban of French law for this activity and anti-spam filters? To do this, the suite of this paper has the following structure: the next section defines spam while coming back on the origin of this word. The third section presents spam in point of view the law. Section 4 focuses on the activity of spammers. The various forms of spam created by the advertisers will be developed in the fifth section. Finally, section 6 concludes the article.

## 2. Definition and Origin of the Word “Spam”

Spam, the English word of computer jargon, called also spamming, junk mail or UBE (Unsolicited Bulk E-mails) is used to designate unsolicited electronic mails, sent in bulk and having an advertising or commercial character. “Spam” comes from a very popular sketch in the Anglo-Saxon world accomplished in 1970 by troops of English comic actors, called *Monthly Python*. During this sketch, the word spam (contraction of “spiced ham”, English mark of ham) was constantly repeated in order to encourage the viewers to become consumers. Because of the repetition that turns to the absurd, and at the same time in remembers of the mark of the product that suffered a little, that these messages ended up to be baptized thus.

The birth of the spam goes back to 1978 (Templeton, 2000) when Gray Thuerk, marketing manager of *Digital Equipment Corporation* (a U.S computer company) had the idea to retrieve the addresses of 600 users Arapnet (name of the Internet at that time, dedicated to some American universities and military bases) in order to send them the same message. He is regarded as the founding father of the spam. At that time, the spam was not yet of actuality. In 1994, we noted the first commercial massive sending of spams when two American lawyers, Laurence Canter and Martha Siegel, sent thousands of e-mails to the immigrants seeking to have the work permit or Green Card in the United States. This operation aims to promote the juridical services of their office, which offers to these addressees a participation in the drawing of green cards after payment of fees. A few weeks later, and following the enormous benefit that they have collected after this advertising campaign, they have transmitted their knowledge to the future spammers by publishing a book entitled “How to make a fortune on the information superhighway”. Since 1997, the spam has been considered as a true problem, and the Real time Black List (RBL) or blacklist appeared in the same year.

According to the American journal *New Yorker* (August, 2007), more than 100 billions of spams are sent every day in the world. This number represents 90 % of traffic e-mail (Hsu, 2007). In 2004, this rate was only 70 % against 5 % in 2001. This increase is largely explained by the low cost associated to the sending in bulk of unsolicited messages: Judge, Alperovitch and Yang (2005) state that the sending of a spam costs approximately 2800 times less expensive than the sending of a regular mail (see table 1). They also show that people who send mails, called direct mailer, need an answer rate of about 2 % so that the advertising campaign, object of mails, bring them a benefits. In contrast, for the spammers, an answer rate, ridiculously low, of about 0,001% is enough to make for them gather colossal benefits.

Table 1: Cost of different methods of advertising

	Total cost	Number of recipients	Cost per recipient
Mail	\$9.70	7.000	\$1.39
Telemarketing	\$160	240	\$0.66
Personalized booklets	\$7.50	100.000	\$0.075
General booklets	\$30.00	442.000	\$0.067
Fax	\$30	600	\$0.05
Ads Online	\$35	1.000	\$0.035
<i>Spam</i>	\$250	500.000	\$0.0005

Source : Judge, Alperovitch et Yang (2005)

### 3. Spams and the French Law

Some countries try to regulate spam through legislation (Moustakas, Ranganathan and Duquenoy, 2005; Park, Kim and Kang, 2005). Juridically, a spam can be defined as a message which was sent without respecting the rules of law relating to the consent of the recipient. Moustakas, Ranganathan and Duquenoy (2005) provide a comparison between the anti-spam legislation of the European Union, Australia, Canada, USA, Japan and New Zealand. They find that Canada has the highest number of directives to fight spam. To spammer, collecting e-mail addresses is required. However, the e-mail is a personal and nominative data. So, its collection should be regulated. For that, the law created in 1978 the first independent administrative authority of France charged to look after the personal data and privacy, namely the National Commission of Computer science and Freedom. This organization imposes that the personal data are collected for specified, explicit and legitimate purposes, and are not processed in an incompatible way with these finalities.

In 2002, France adopted a specific directive on spams and the sending of unsolicited e-mails by enacting a new article L34-5 of the Code of posts and Electronic Communications which is based on the European Directive of July 12, 2002, and which prohibits «...direct marketing through an automated call, fax or e-mail using any form whatsoever the coordinates of an individual who has not expressed his prior consent to accept direct prospecting by this means». This prohibition was, in the spirit of the law, supposed to protect only the private individuals and does not refer to the companies. For that, the French law set up two basic rules concerning the sending of prospecting e-mails. The first one is the *opt-in*, for the individuals, which allows the sending of prospecting e-mails if the addressee agreed to accept it and if the broadcasting organism shows clearly its identity. The second one which is the *opt-out* is adapted to the professionals and consists in the fact that the recipient must have the possibility to stop, in a simple way and without cost, the sending of e-mails. In other words, for the personal e-mail addresses (*opt-in*), the authorization of the recipient is required before sending him an advertising e-mail. Whereas for the professionals addresses e-mails (*opt-out*), this authorization is not required if the advertisement is related to the profession of the recipient, but this last has the right, if he wishes, to unsubscribe in order to stop receiving messages. The non respect of these rules involves an infraction and leads the spammer to pay a ticket of 750 euros per spam.

These measurements taken by the French legislation protect principally the addressee of the electronic message, who is able to make a complaint for illegal use of his personal data. However, the prejudice of the provider of messaging is very difficult to make recognize because it is not born from a particular message but from their accumulation. To fight against the plague of spams, these providers develop technical solutions which are generally expensive. Here, the law plays a crucial role because even if it does not protect in a direct way the technical providers, the latter will be automatically saved if the spam measurements are effective and, consequently, stop the movement of spams.

### 4. The Activity of Spammers

Spammers use specific programs to generate and transmit billions of e-mails which are sent every day. That requires a considerable investment in time and money. The spammer's activity is summarized in three stages:

#### 4.1. Collecting E-mail Addresses

To create and enrich their address books, spammers use several techniques:

- They buy e-mail lists from the providers of e-mail addresses: the latter resell whole or part of their lists of subscribers to a third, who resells them to another, etc. Finally, the addresses are diffused in several copies on the net. This operation can be made in legality.
- They use specialized software which runs web pages, forums, blogs and chat sites. They search especially the fields '@' and 'mailto' in the visited pages.
- They can steal or pirate databases in order to obtain the identities of individuals.

## 4.2. Checking E-mail Addresses

After collecting e-mail addresses, the spammer checks whether each e-mail is still consulted by its user or not. Valid addresses are more victims of spamming than others; they receive a lot of undesirable e-mails. To know whether an e-mail address is valid or not, the spammer uses the following methods:

- The response to a spam validates easily the address of the internaut; this is the simplest method for the spammer.
- A message with a random text, designed to avoid the filters anti-spam, is sent to the mailing list. The log server, a program which allows to identify the internaut and to draw the history of his actions, is analysed to detect valid and obsolete addresses, and database is consequently modified.
- The spammer sends a message which contains, for example, a link towards a picture located on a specific server. Once the message is read, the picture is automatically opened and the server records the address as active.

## 4.3. Sending Spams

Once the database created, the e-mail addresses checked and selected, the spammer sends in bulk the advertising messages. Obviously, the success of this technique as a method of advertising depends largely on the form of spam. Nowadays, the spammers are developing various methods to mask similarity between messages and to escape anti-spam filters.

## 5. Conclusion

Spams constitute an opportunity for advertisers to reach a maximum target in a very short time and with very low cost. Traditionally, they cover various areas such as meeting websites, medical products, financial loans. Appeared in various forms, spams avail each time a new look to escape the progress of mail filters. Sometimes having the form of textual messages, picture, PDF, Excel, MP3 and recently with the form of spams video of high quality, spammers employs all stratagems to diffuse their advertising messages. To fight against this plague, spams are illegal in France. The purpose of the law is to reconcile between the prospecting and the respect of the consumers, on the one hand, and to define a border between sending e-mails of prospecting and sending spams, on the other hand.

In spite of the legal texts which prohibit the spamming, this, unfortunately, did not prevent the transmitters of spam from continuing their activities and so, inventing new forms of spam to circumvent anti-spam software.

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