

Global Call Threat Report

Insights into today's worldwide spam problem

Q1 2023



Index

I Section One

Phone spam is a global problem

Introduction and methodology	2
Key findings	3
United States	5
Canada	7
United Kingdom	9
Spain	11
France	13
Germany	15
Spam and fraud rates by region	17
The solution	20

Index

I Section Two

The state of spam calls by country
(Countries are hyperlinked)

Americas		Europe	
Argentina	22	Austria	40
Brazil	23	Belgium	41
Canada	24	Czech Republic	42
Chile	25	Denmark	43
Mexico	26	Finland	44
Puerto Rico	27	France	45
United States	28	Germany	46
		Greece	47
Asia/Pacific		Hungary	48
Australia	29	Ireland	49
Hong Kong	30	Italy	50
India	31	Netherlands	41
Indonesia	32	Norway	52
Israel	33	Poland	53
Malaysia	34	Portugal	54
New Zealand	35	Slovakia	55
Philippines	36	Spain	56
Singapore	37	Sweden	57
Thailand	38	Switzerland	58
Turkey	39	United Kingdom	59

Section One

Phone spam is a global problem

Phone spam is a worldwide problem

Introduction

In the first quarter of 2023, Hiya observed 6.7 billion spam calls worldwide. That's more than 73.6 million calls every day. In fact, Hiya's data shows that 1 out of every 4 calls from non-contacts in the United States is a spam (unwanted) call, and in some European countries more than 40% of calls received from non-contacts are spam. And that's not the worst of it. Chile tops the Americas with a 54.9% spam rate, and in the Asia-Pacific region Indonesia leads the world with a 55.6% spam rate.

This report not only compares spam and fraud call rates and volumes in various countries throughout the world, but also reveals the most common scams in select countries. These scams go beyond wasting people's time. Billions of dollars are lost each year to phone scams and victims rarely recover their money. Fraudsters target vulnerable populations like the elderly and immigrants, threatening them with arrest or duping them into providing bank account information that can be used to drain their life savings in seconds.

That's the bad news. But the good news is that there are solutions to the phone spam problem. See the [end of this report](#) to learn how Hiya is using the latest technology to combat spam.

Methodology

The data in this report is based on a representative sample of calls observed during Q1 of 2023 on the Hiya Voice Security Network, which includes Samsung Smart Call enabled devices and the Hiya mobile app.

Spam is defined as unwanted calls, and includes both fraud calls and nuisance calls. The spam flag rate in this report represents calls that Hiya has identified and flagged as either fraud or nuisance. Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

KEY FINDINGS

Overall spam rates remain steady, but several countries experience a higher percentage of unwanted calls

This is Hiya’s second edition of the Global Call Threat Report, following the release of the [Q4 2022 report](#) earlier this year, which allows for comparisons.

Although overall spam volumes were down in Q1 2023 compared to Q4 2022, it’s not unusual for overall call and spam volumes to subside in Q1 compared to the busy holiday season and end-of-year push commonly experienced in Q4.

While total volumes dropped, spam rates remained about the same when looking at the 38 countries measured in this report. The quarter-over-quarter spam rate average increased very slightly from 24.8% in Q4 to 24.9% in Q1. Several individual countries did, however, experience a significant increase in the percentage of calls that were identified as spam. In Europe, 14 out of the 20 countries tracked in this report had a higher percentage of unwanted calls, and in the Asia-Pacific region 9 out of 11 countries saw an increase in the percentage of spam calls.

In Q1, after a gradual buildup at the beginning of the year, spam volumes reached a fairly steady pace of around 500 million spam calls per week.

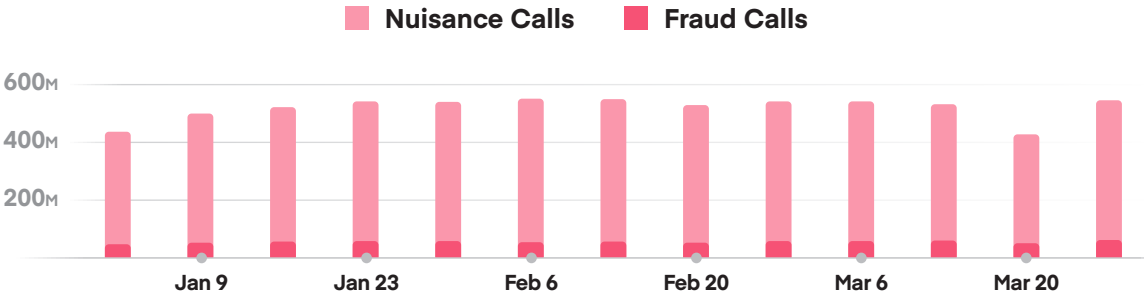
6.7B(Billion)

Global spam calls flagged in Q1 2023

550M(Million)

Spam call volumes in Q1 peaked during the week of Feb. 6, 2023

Hiya’s Incoming Unwanted Call Volume



Spam call volumes have hovered around 500 million calls each week during the first quarter of 2023.



Phone spam knows no boundaries

No country is immune from phone spam. Several scam campaigns span multiple countries — such as cryptocurrency, tech support and Amazon scams — while others are uniquely targeted to residents of a specific country.



1 out of every 4 calls is unwanted

In the US, one out of every four calls from a non-contact was flagged as spam. Top phone scams reported this quarter included fraudulent calls about Medicare, insurance, and mortgage products.



Higher percentage of fraud calls

Canadians get half the spam calls that Americans do, but they experience a higher percentage of fraud calls — 6.3% compared to the US's .73%. Top scams in Canada include air duct cleaning, cryptocurrency trading, and immigration scams.



Highest fraud call rate in Europe

In the UK, 30% of calls from non-contacts are spam. Of those spam calls, 13% – nearly half – are fraud calls. That's the highest proportion of fraud in Europe. Common scams relate to cryptocurrency trading and sales of fraudulent mobile phone devices and contracts.



Highest spam rates in Europe

In Spain, 46.3% of the calls received from non-contacts are spam, and France is not far behind at 43.2% – the highest rates of unwanted calls in Europe. What's more, Spain has the third-highest rate of fraud calls of any European country.



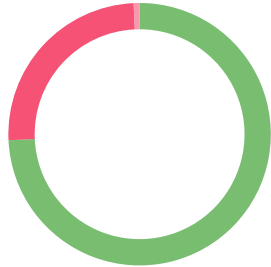
Germans experience average spam

Germany is in the middle of the pack of European countries, with a spam rate of 21% from non-contact calls. That's down slightly from the previous quarter. Popular scams in Germany include sweepstakes and tech support scams.

United States

POPULATION
324 million

REGULATOR
FCC 



25.73%
Spam flag rate

-26%
Spam flag rate Q1 2023 vs. Q4 2022

25%
Nuisance calls

0.73%
Fraud calls

74.27%
Wanted calls

14.5 Calls/Month
Average spam calls per person

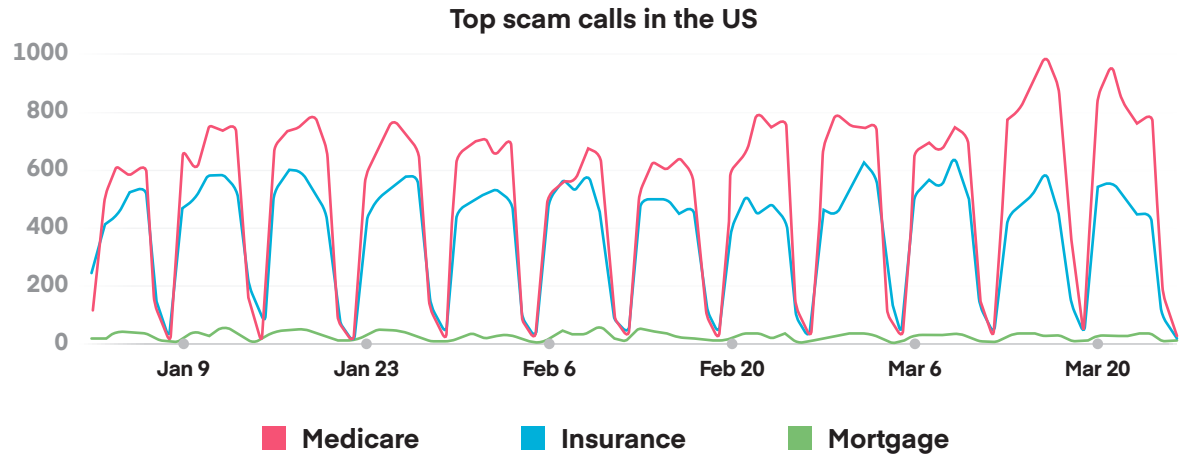
Q1 brings a new mix of scam calls to the US

In the first quarter of 2023, the spam flag rate dipped from 34.9% to 25.7% compared to last quarter, and fraud calls fell from .9% to .7%.

Q1 also saw a different mix of spam calls. Spam campaigns that were popular in 2022, such as Amazon and credit cards, didn't top the list in Q1 2023. And the [auto warranty scam](#), which had been the most popular scam for years, took a steep dive in the middle of 2022 after the FCC shut down a major player initiating the calls. In Q1 2023 the top scams related to Medicare, insurance, and mortgage products.

Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

United States



- ⚠️ **Medicare** – Medicare scams began to climb in late 2022 during Medicare’s open enrollment period and that momentum continued into 2023. Medicare scams were the #1 most reported type of phone scam in Q1 of 2023. Scammers will often try to obtain a person’s Medicare number in order to falsely bill the government for medical services.
- ⚠️ **Insurance** – Insurance scams have been around for years, and were the second most reported phone scam in Q1 2023. These scams — which can span auto, home, medical, and life insurance — typically involve bad actors posing as insurance representatives to sell fake insurance policies, request payment for services, or simply to steal personal information.
- ⚠️ **Mortgage** – Mortgage scams were the third most reported scam in Q1. Some Hiya users have reported these calls as suspected fraud, while others simply report them as spam: telemarketing calls that may or may not be from legitimate mortgage companies.

United Kingdom

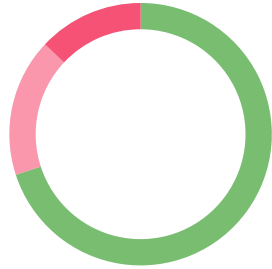
POPULATION

65 million

REGULATOR

Ofcom >

ICO >



30%
Spam flag rate

+7%
Spam flag rate Q1 2023 vs. Q4 2022

17%
Nuisance calls

13%
Fraud calls

70%
Wanted calls

4.5 Calls/Month
Average spam calls per person

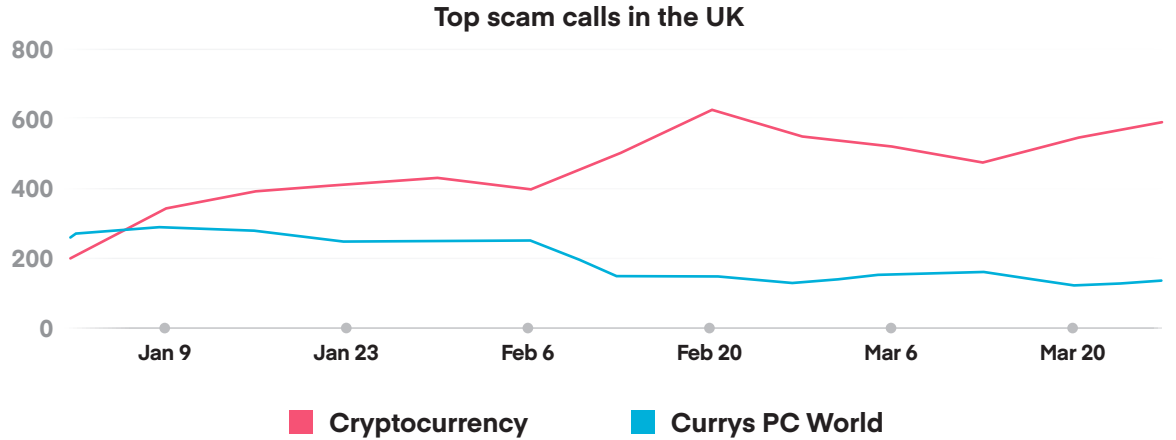
UK has highest fraud call rate in Europe

Just under a third of incoming calls from non-contacts in the UK are unwanted calls. But unlike other countries where most of the unwanted calls are simply nuisance calls, in the UK nearly half of those unwanted calls are actually fraud. For the second quarter in a row, the UK's fraud rate stood at 13%, which is the [highest fraud rate in Europe](#).

What has changed is the type of fraud calls received. The most popular scams last quarter impersonated representatives from Amazon, banks, Her Majesty's Revenue and Customs, and VISA, but in Q1 the top scams had to do with cryptocurrency trading and mobile phone offers from Currys PC World and Carphone Warehouse.

Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

United Kingdom



- ⚠ Cryptocurrency trading** – The most-reported scam in the UK in Q1 related to cryptocurrency trading. Hiya received up to 600 reports per week in Q1 from users who have been called by cryptocurrency traders. Cryptocurrency scams are a worldwide problem and each year Brits lose millions of pounds from these scams.
- ⚠ Currys PC World / Carphone Warehouse** – The second most reported scam in the UK in Q1 had to do with sales of mobile phones and mobile phone contracts, supposedly from technology-retailer Currys PC World and Carphone Warehouse (which was purchased by Currys).

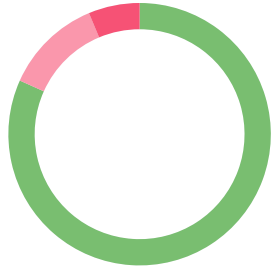
Canada

POPULATION

36 million

REGULATOR

CRTC 



18.3%
Spam flag rate

-12%
Spam flag rate Q1 2023 vs. Q4 2022

12%
Nuisance calls

6.3%
Fraud calls

81.7%
Wanted calls

3 Calls/Month
Average spam calls per person

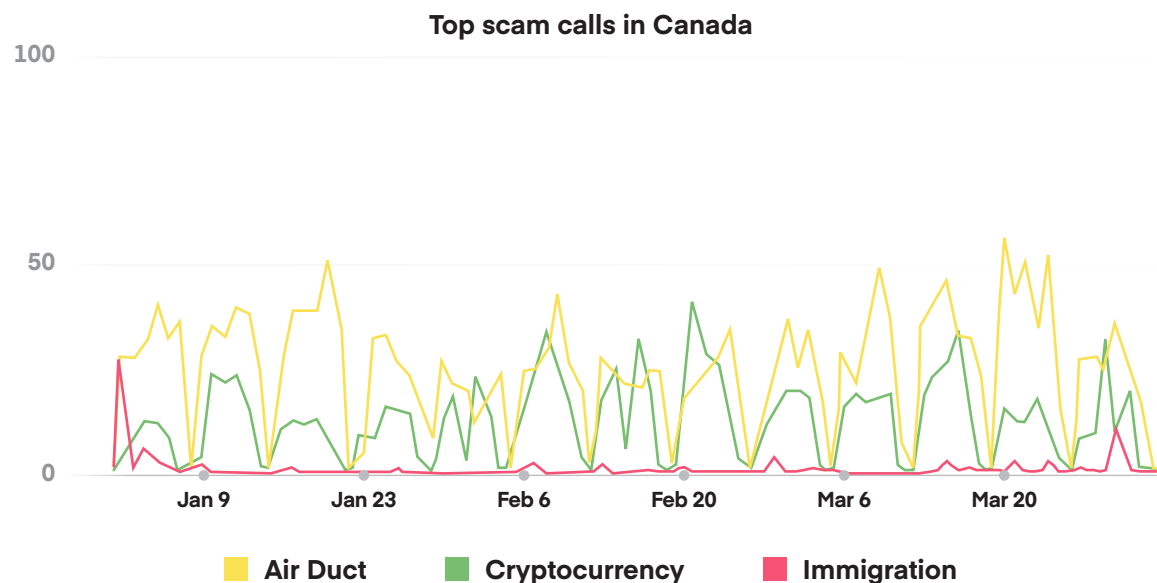
In Canada, spam calls are down overall but fraud calls increased

In Canada, the overall spam rate dropped slightly, from 20.9% in Q4 2022 to 18.3% in Q1 2023, but the percentage of fraud calls actually ticked up. In Q1, 6.3% of unwanted calls were fraud calls, compared to 5.9% in Q4.

Like the rest of the world, Canadians get calls about crypto trading, but there are also scams that are pervasive in Canada but not in other countries, such as air duct cleaning scams.

Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Canada



- ⚠ Air duct cleaning** – In the first quarter of 2023, air duct cleaning scams were the #1 type of phone scam reported to Hiya by users in Canada. These scams are nothing new. For years Canadians have endured calls from scammers offering low rates on air duct cleaning services that are either of substandard quality or that, after arrival, add on services that significantly jack up the initial price quoted.
- ⚠ Cryptocurrency** – Cryptocurrency scams are among the top scams reported in several of the countries that Hiya monitors. According to the Canadian Anti-Fraud Centre, investment scams stole more than \$115 million from Canadians last year, and many of those involved cryptocurrency trading.
- ⚠ Immigration** – There are a variety of scams in Canada that target immigrants, knowing that they may be less familiar with the way the government works in Canada. A common scam involves the caller [impersonating a government official](#) claiming to be from the Canada Border Services Agency or some other governmental agency. There are also scams that target specific ethnic groups, such as [Chinese-language scams](#): robocalls directed at Canadians who speak Chinese.

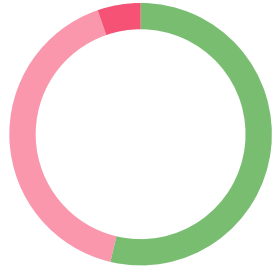
Spain

POPULATION

46 million

REGULATOR

CNMC 



46.3%
Spam flag rate

+5%
Spam flag rate Q1 2023 vs. Q4 2022

41%
Nuisance calls

5.3%
Fraud calls

53.7%
Wanted calls

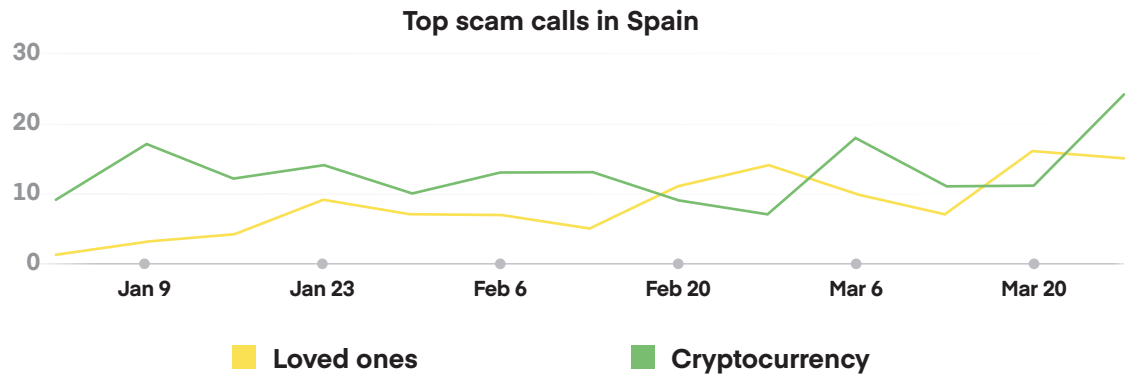
12 Calls/Month
Average spam calls per person

Spain has the highest spam rate in Europe

In Spain, nearly half the calls received from non-contacts are spam calls, and the problem is getting worse. Spain's spam rate grew from 43.9% in Q4 to 46.3% in Q1. That's the **highest spam rate in Europe**. Spain also has the second highest **fraud rate in Europe**: 4.9%. It's the worst of both worlds.

Spaniards continue to get unwanted telemarketing calls from **utility providers**, just as they did last quarter, but now other topics are gaining steam, including calls where scammers pose as loved ones in an effort to steal money.

Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.



- ⚠️ **Loved ones** – Trending up in Q1 in Spain are “loved ones scams.” These seem to be similar to the [grandparent scam](#) seen in Canada and the US where the scammer pretends to be a grandchild in need of help — often requesting an urgent money transfer. In Spain, Hiya users report scammers posing as sons calling their mothers asking for immediate financial help.
- ⚠️ **Cryptocurrency** – Spain is not alone in being bombarded with cryptocurrency scams. In Q1, these scams were prevalent in Canada, the UK, and the US. Cryptocurrency trading is hot right now and scammers take advantage of people’s desire to make a quick, easy profit.

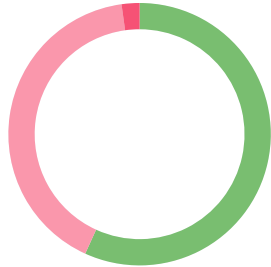
France

POPULATION

67 million

REGULATOR

ARCEP 



43.2%
Spam flag rate

0%
Spam flag rate Q1 2023 vs. Q4 2022

41%
Nuisance calls

2.2%
Fraud calls

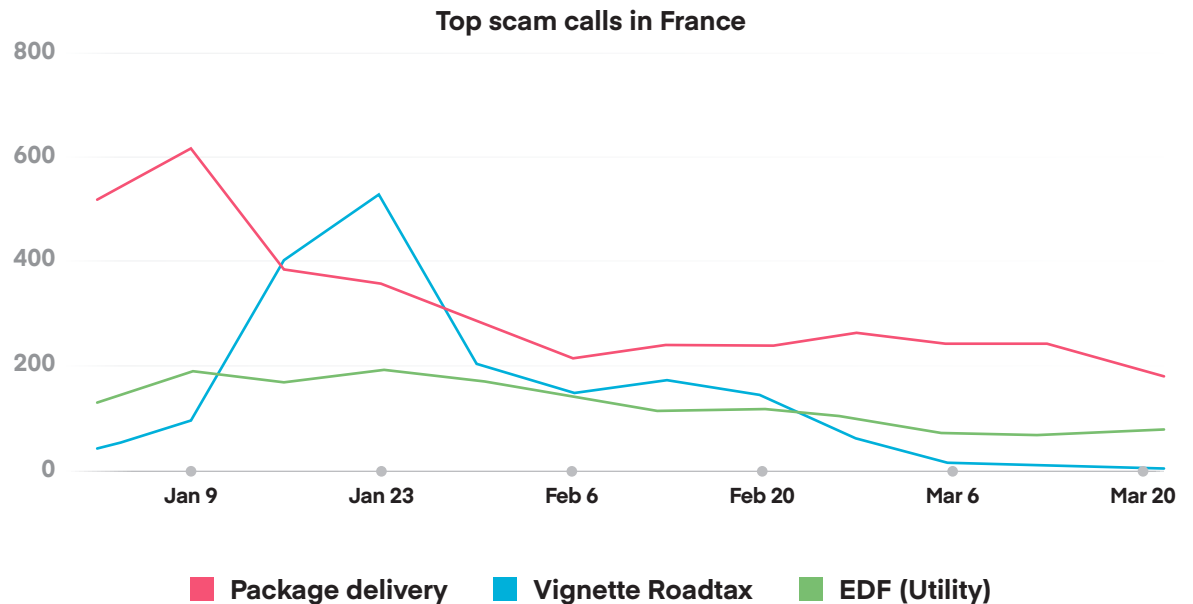
56.8%
Wanted calls

9.5 Calls/Month
Average spam calls per person

France has second-highest spam rate in Europe, but less fraud

In Europe, Spain may have the highest spam rate (46.3%), but France is close second at 43.2%. One consolation is that the rate of fraud calls in France is comparatively low, with just 2.2% of all calls being fraud. Compare that with a 5.3% fraud rate in Spain and 13% fraud rate in the UK.

Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.



- ⚠ Package Delivery** – With this scam, fraudsters call or send an SMS message saying that a package is awaiting delivery and the recipient needs to pay the delivery fee. Hiya users have reported fraudsters posing as DHL, Amazon, and even the local post office.
- ⚠ Vignette Roadtax** – This scam relates to an emissions sticker (vignette) required in certain cities in France. These Crit’Air stickers are color coded indicating the emissions a vehicle produces. The scam involves a message telling recipients that they need to buy a Crit’Air sticker for their vehicle and provides a link to a fraudulent web address to pay the fee.
- ⚠ EDF** – The EDF Group is the world’s biggest electricity generator, serving both businesses and homes. Hiya users in France are reporting calls from supposed EDF representatives asking for personal information, including bank details.

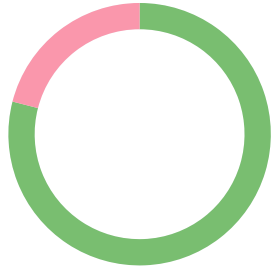
Germany

POPULATION

82 million

REGULATOR

BNetzA 
(Bundesnetzagentur)



21%
Spam flag rate

-1%
Spam flag rate Q1 2023 vs. Q4 2022


21%
Nuisance calls


79%
Wanted calls

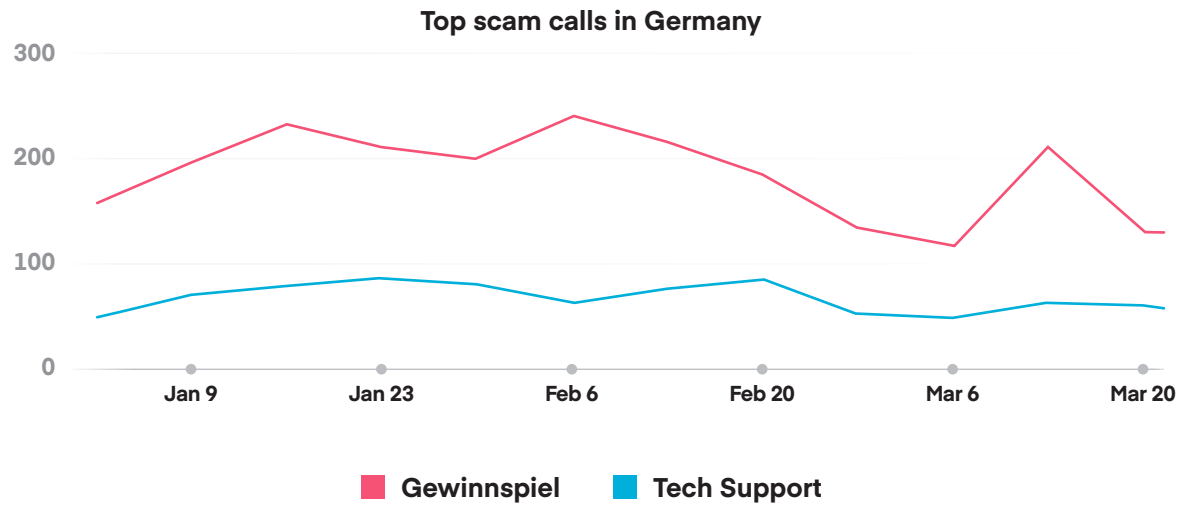
2 Calls/Month
Average spam calls
per person

Germany experiences average spam

Of the 20 countries tracked in Europe, Germany is #9 for its spam rate, slightly higher than the average with spam making up 21% of non-contact calls. The most-reported scams in Germany this quarter were sweepstakes and tech support scams.

*Hiya uses a single 'spam' warning for both nuisance and fraud calls.

Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

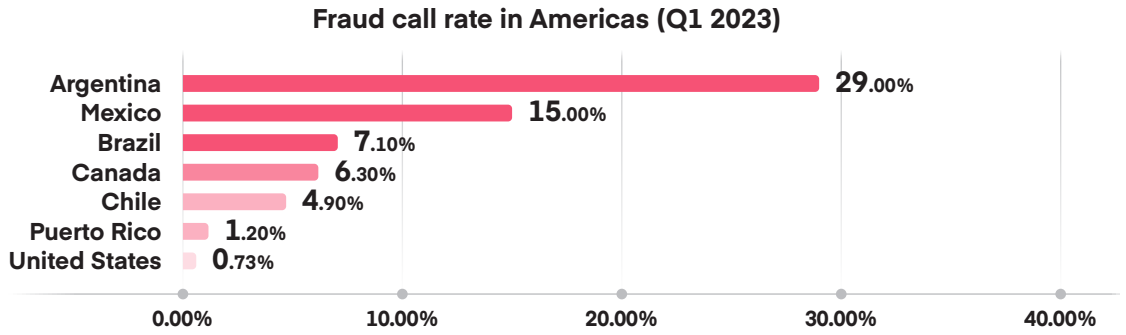
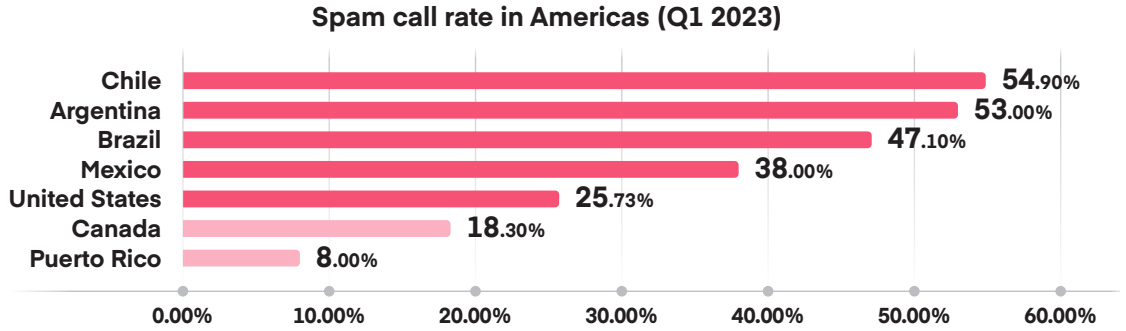


- ⚠️ **Gewinnspiel** – The most reported scam in Germany in Q1 was the sweepstakes scam (called “gewinnspiel” in German). Germany’s Federal Criminal Police Office has warned that call centers in Turkey are calling Germans to inform them they have won a large prize in cash or merchandise. The only catch: the recipient must first pay taxes or fees in order to claim the prize.
- ⚠️ **Tech Support** – Tech support scams are popular in many countries, including Germany. Commonly the caller will say there is a virus or other problem with the recipient’s computer and tech support can solve the problem — after a fee is paid.

SPAM AND FRAUD RATES BY REGION

Americas

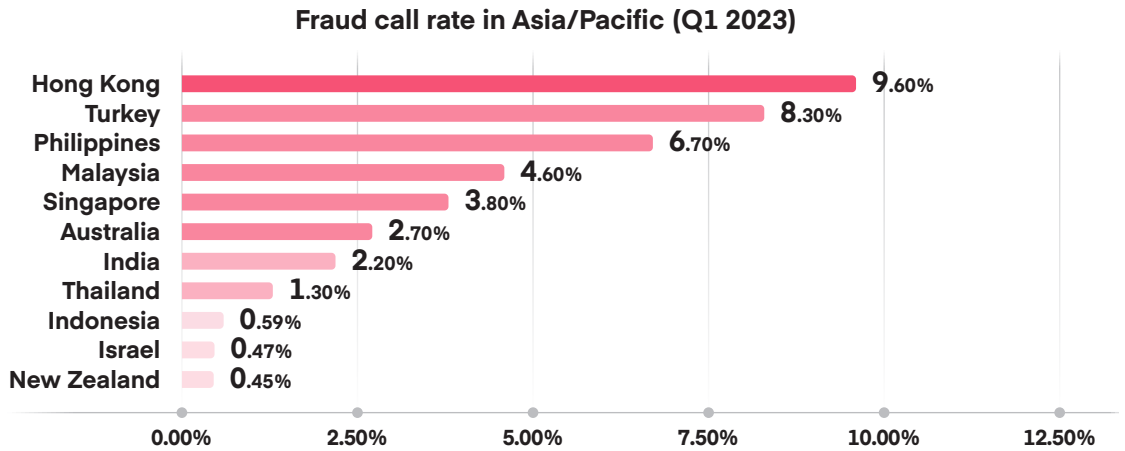
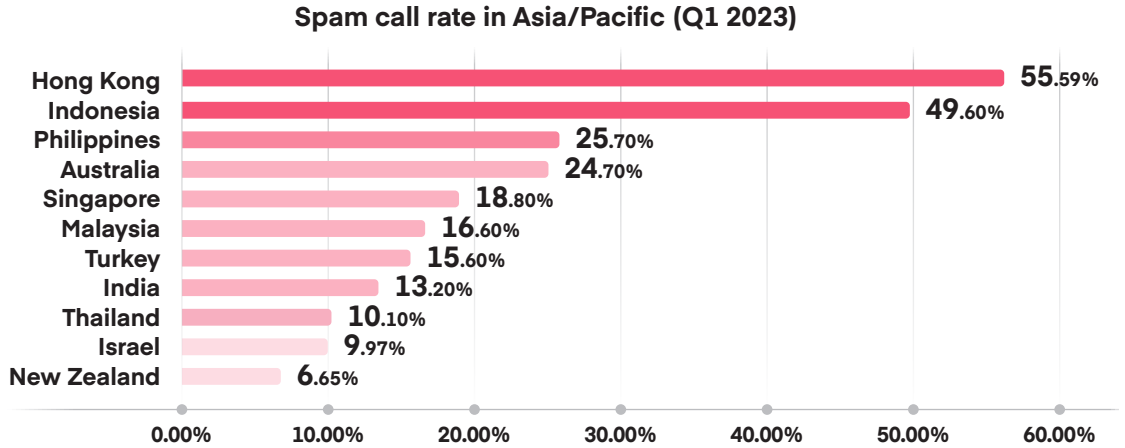
Argentina sees sky-high rates of both spam and fraud.



SPAM AND FRAUD RATES BY REGION

Asia/Pacific

Indonesia tops the world with a 55.59% spam rate.

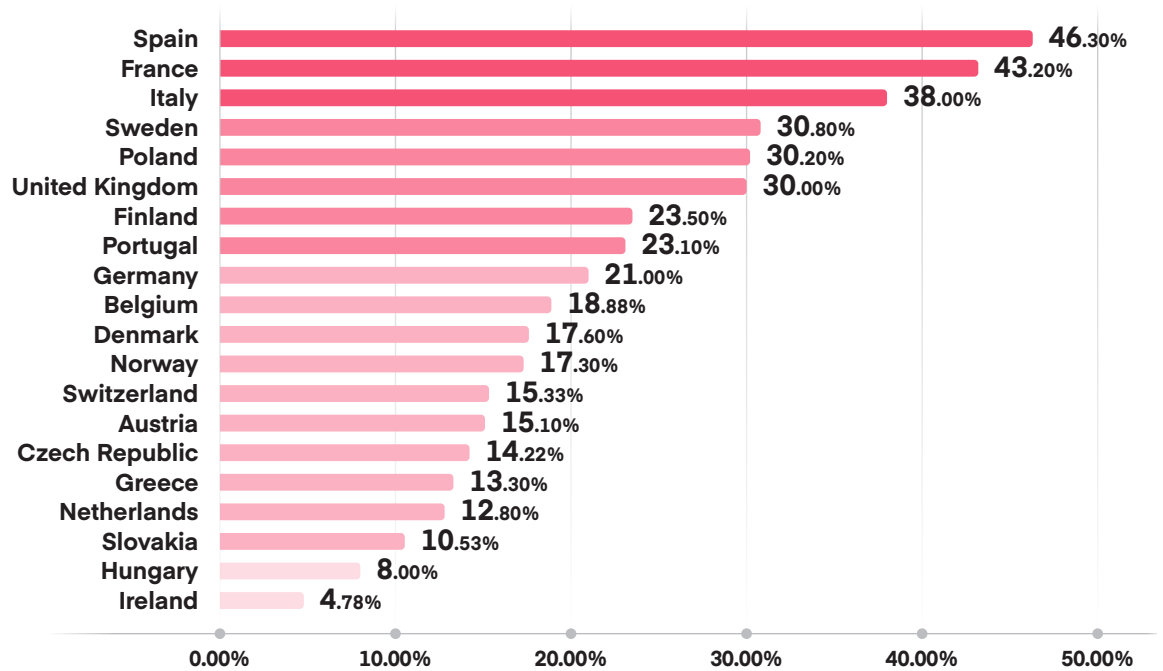


SPAM AND FRAUD RATES BY REGION

Europe

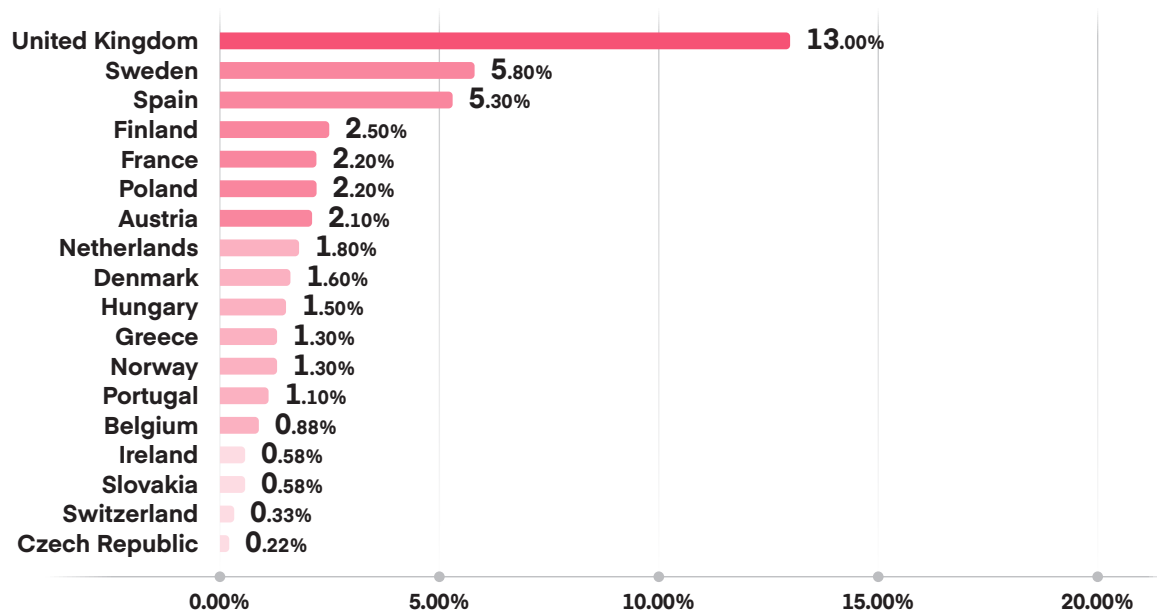
Spain and France lead Europe with highest spam rates while the UK is experiencing more fraud than any other European country.

Spam call rate in Europe (Q1 2023)



Fraud call rate in Europe (Q1 2023)

*Hiya uses a single 'spam' warning for both nuisance and fraud calls in Germany and Italy



SOLUTION

How carriers can fight back against spam

[Hiya Protect](#) is a complete call protection solution that enables mobile carriers to protect their subscribers by blocking and labeling spam calls, and helping them identify wanted calls. It is used by carriers, OEMs, and network providers who are looking to create a differentiated voice offering and increase customer satisfaction.

Hiya Protect is powered by the industry's largest and most comprehensive real-time data set, with call event data from more than 250 million users across 60+ countries. The only solution with Adaptive AI, Hiya Protect allows service providers to proactively identify threats in real time and continually adapt to the latest spam tactics.

Within the past year, Hiya Protect has added two new layers of protection, which are exclusive to Hiya. [Personal Call Filtering](#) is the industry's first-ever personalized call protection. It uses an individual's call history to understand which calls are likely to be spam, so carriers can be more aggressive against spam and fraud without stopping wanted calls. [Enterprise Caller Scoring](#) stops number rotation — the practice of switching phone numbers to avoid spam detection — from being effective on mobile networks. It assesses incoming calls based on the calling enterprise's history across all the numbers they own.

Section Two

Spam calls by country

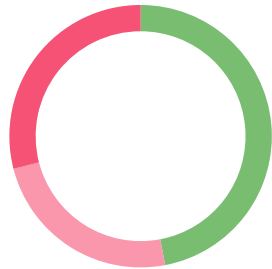
AMERICAS

Argentina

PERIOD

Q1

Jan 2023 - Mar 2023



53%
Spam flag rate

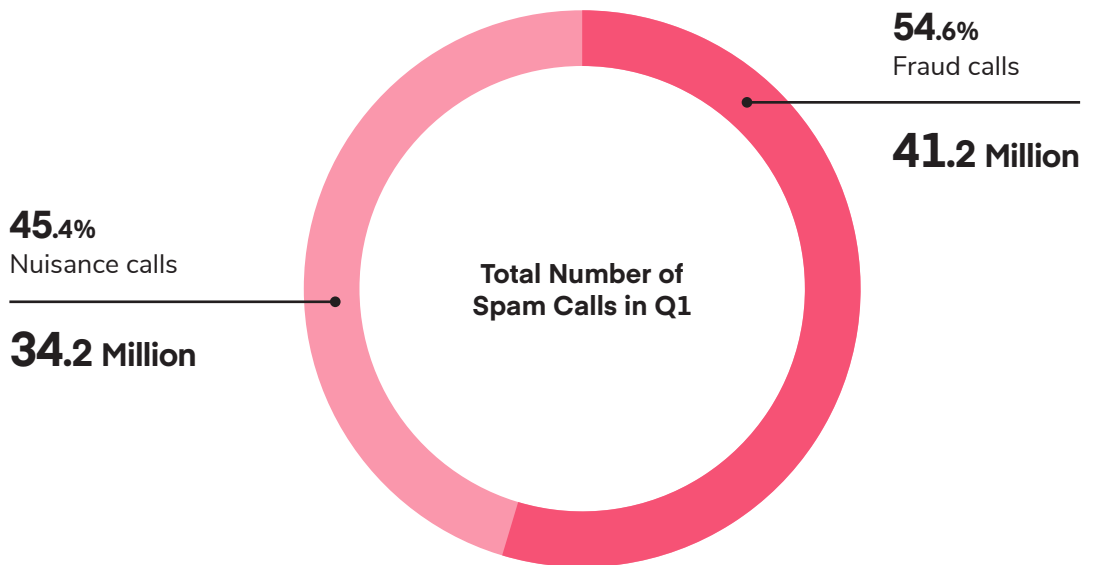
24%
Nuisance calls

29%
Fraud calls

47%
Wanted calls

7.5 Calls/Month
Average spam calls per person

55% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Argentina

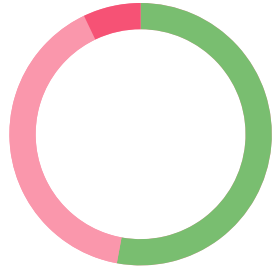
AMERICAS

Brazil

PERIOD

Q1

Jan 2023 - Mar 2023



47.1%
Spam flag rate

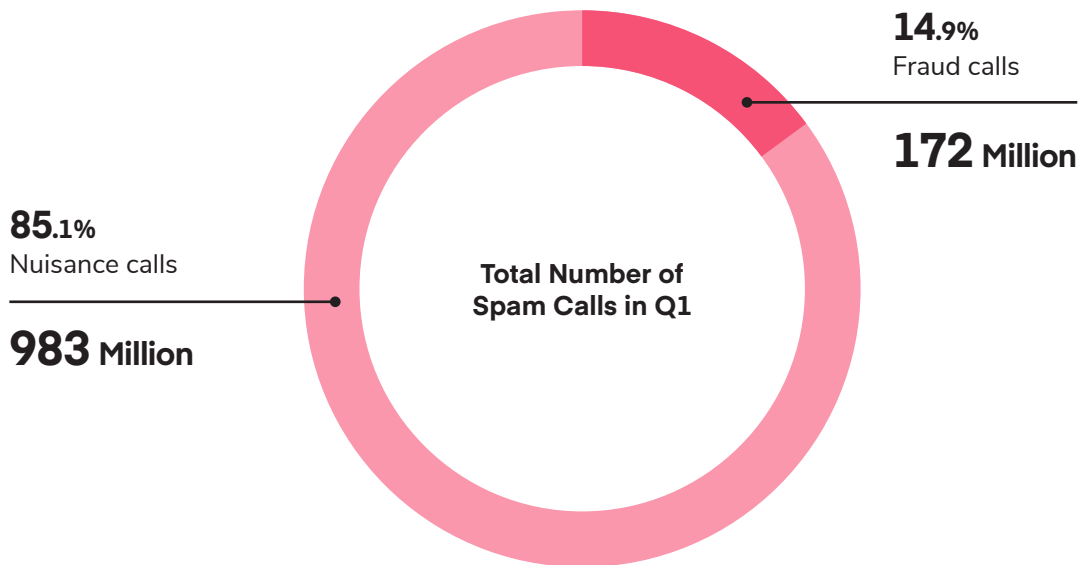
40%
Nuisance calls

7.1%
Fraud calls

52.9%
Wanted calls

26 Calls/Month
Average spam calls per person

15% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Brazil

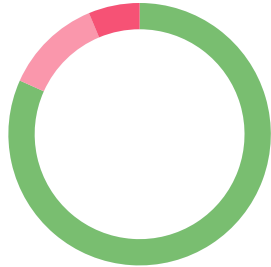
AMERICAS

Canada

PERIOD

Q1

Jan 2023 - Mar 2023



18.3%
Spam flag rate

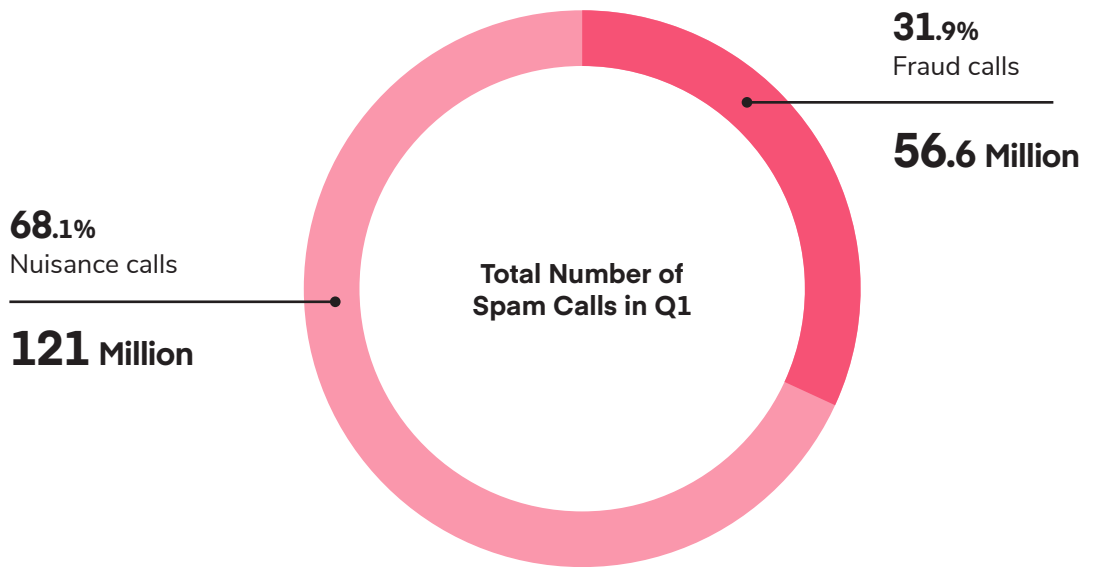
12%
Nuisance calls

6.3%
Fraud calls

81.7%
Wanted calls

3 Calls/Month
Average spam calls per person

32% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Canada

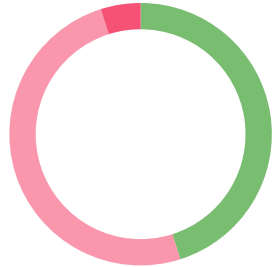
AMERICAS

Chile

PERIOD

Q1

Jan 2023 - Mar 2023



54.9%
Spam flag rate

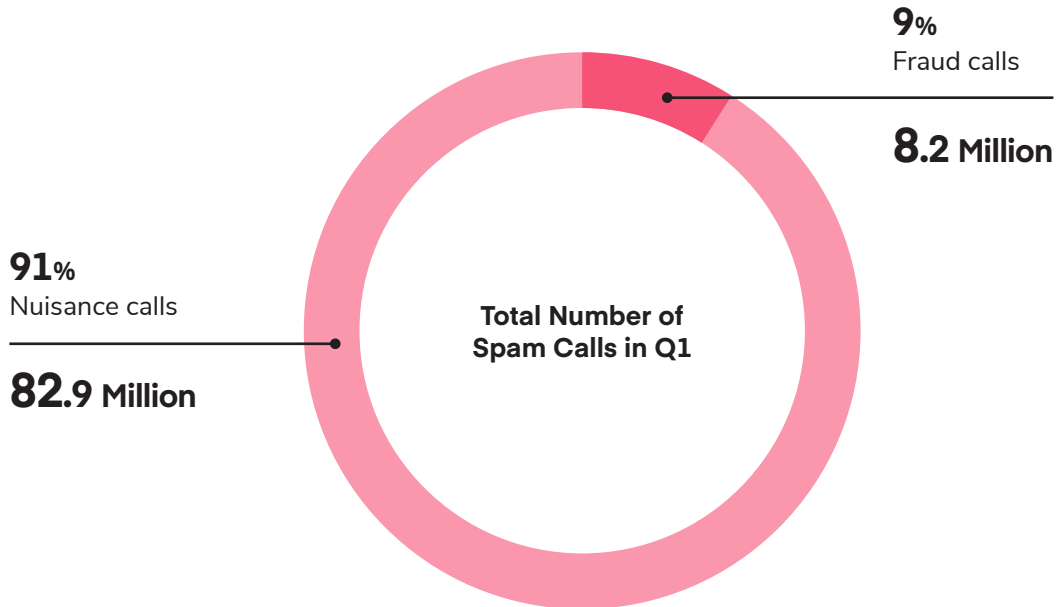
50%
Nuisance calls

4.9%
Fraud calls

45.1%
Wanted calls

18 Calls/Month
Average spam calls per person

9% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Chile

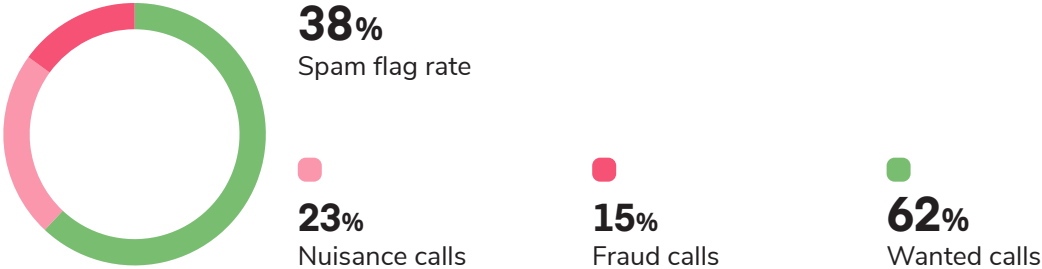
AMERICAS

Mexico

PERIOD

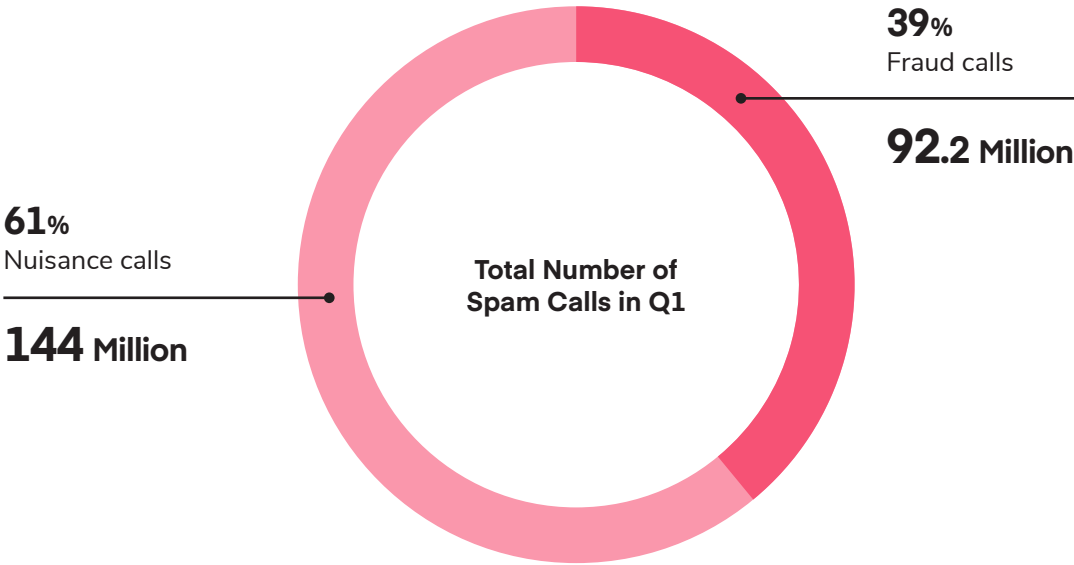
Q1

Jan 2023 - Mar 2023



16 Calls/Month
Average spam calls per person

39% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Mexico

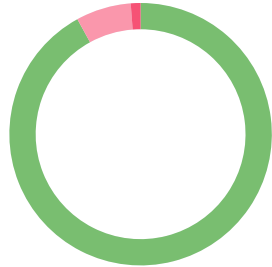
AMERICAS

Puerto Rico

PERIOD

Q1

Jan 2023 - Mar 2023



8%
Spam flag rate

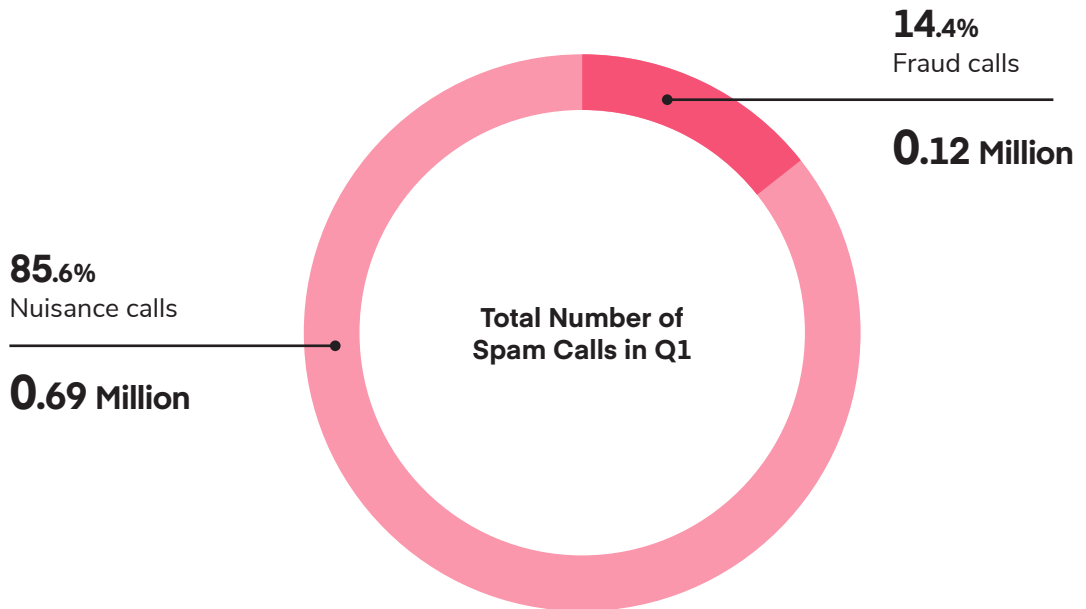
6.8%
Nuisance calls

1.2%
Fraud calls

92%
Wanted calls

9 Calls/Month
Average spam calls per person

14% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Puerto Rico

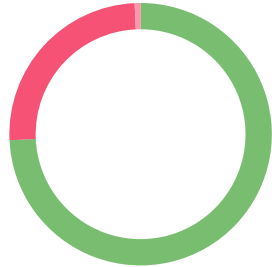
AMERICAS

United States

PERIOD

Q1

Jan 2023 - Mar 2023



25.73%
Spam flag rate

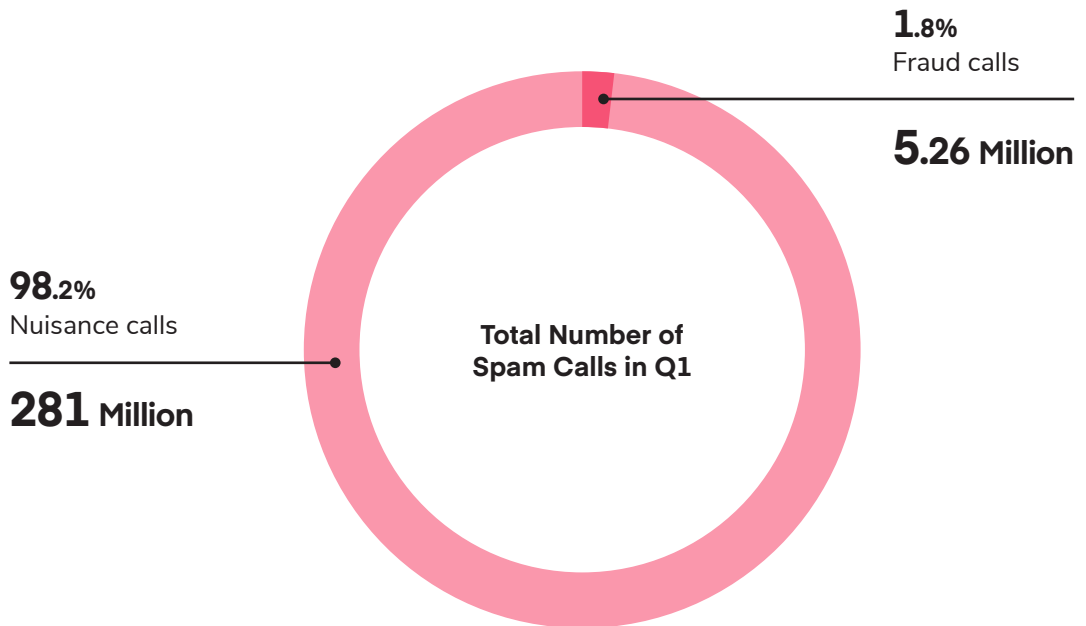
25%
Nuisance calls

0.73%
Fraud calls

74.27%
Wanted calls

14.5 Calls/Month
Average spam calls per person

2% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in United States

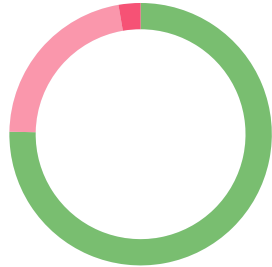
ASIA/PACIFIC

Australia

PERIOD

Q1

Jan 2023 - Mar 2023



24.7%
Spam flag rate

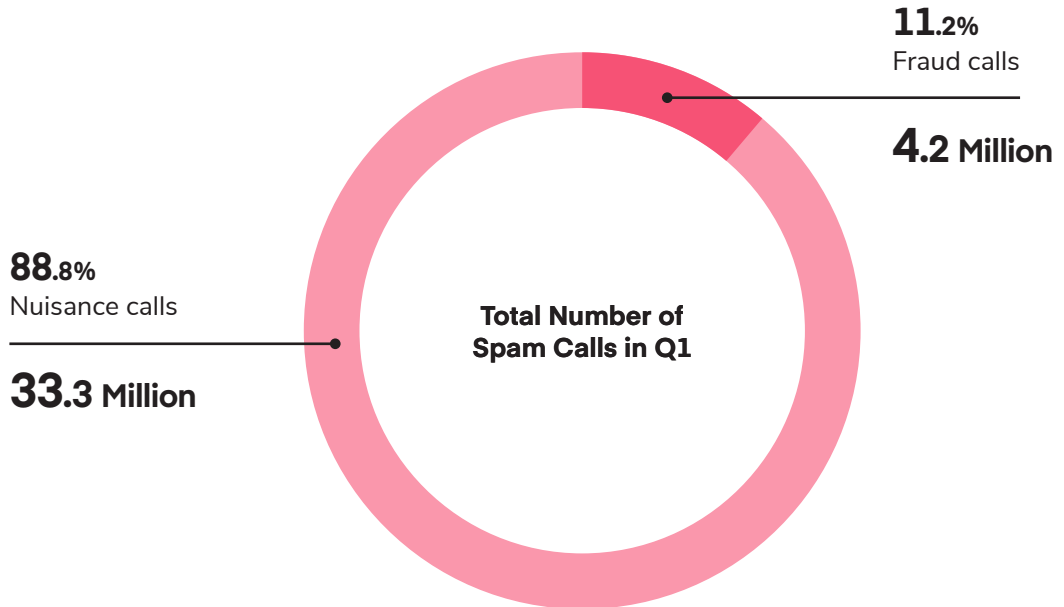
22%
Nuisance calls

2.7%
Fraud calls

75.3%
Wanted calls

5 Calls/Month
Average spam calls per person

11% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Australia

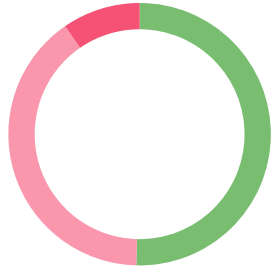
ASIA/PACIFIC

Hong Kong

PERIOD

Q1

Jan 2023 - Mar 2023



49.6%
Spam flag rate

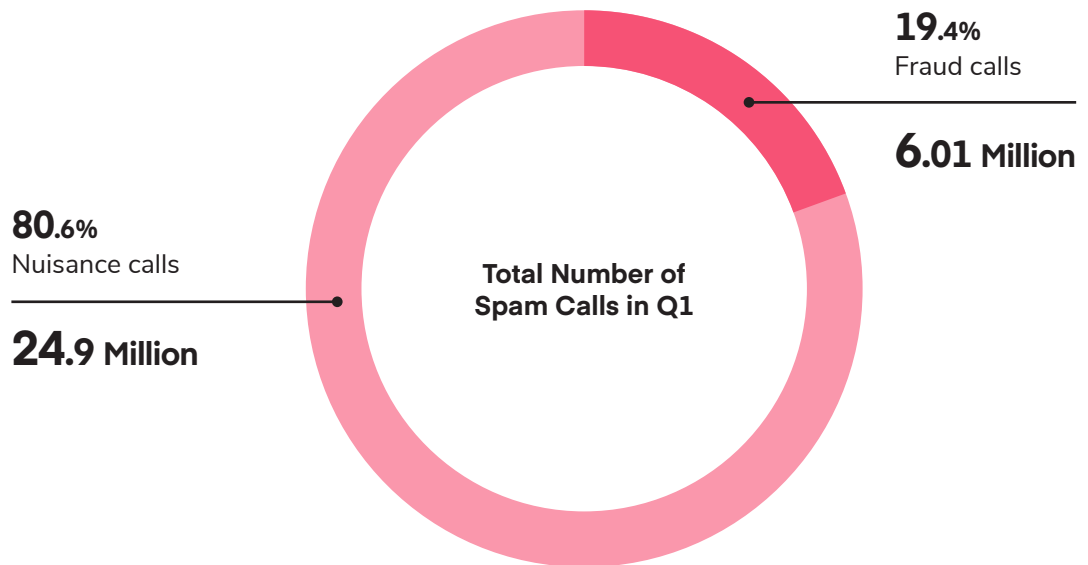
40%
Nuisance calls

9.6%
Fraud calls

50.4%
Wanted calls

17.4 Calls/Month
Average spam calls per person

20% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Hong Kong

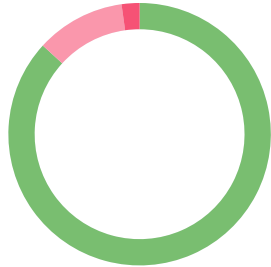
ASIA/PACIFIC

India

PERIOD

Q1

Jan 2023 - Mar 2023



13.2%
Spam flag rate

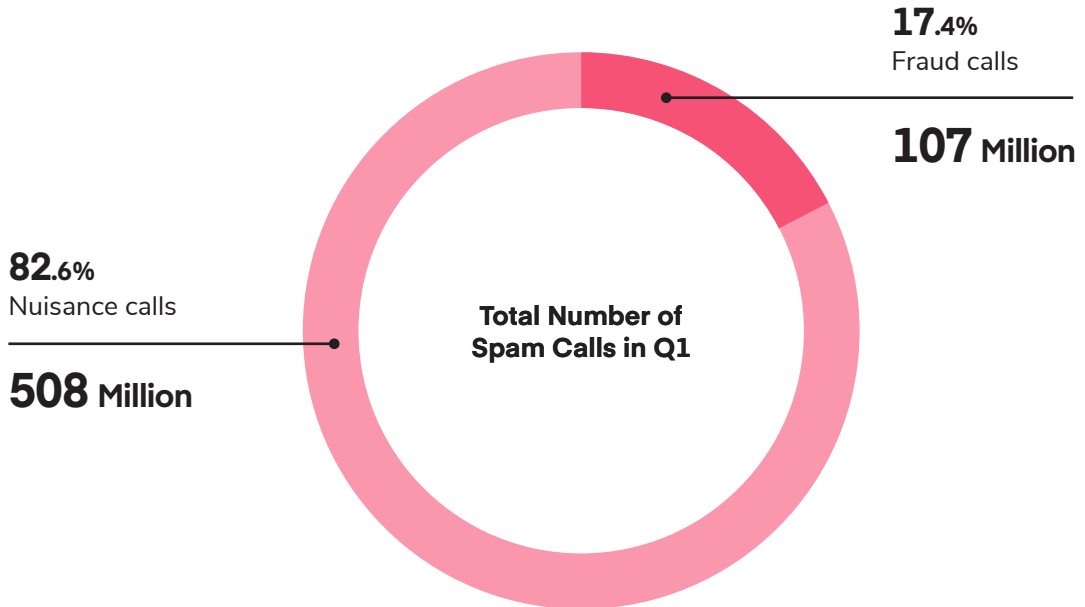
11%
Nuisance calls

2.2%
Fraud calls

86.8%
Wanted calls

8 Calls/Month
Average spam calls per person

17% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in India

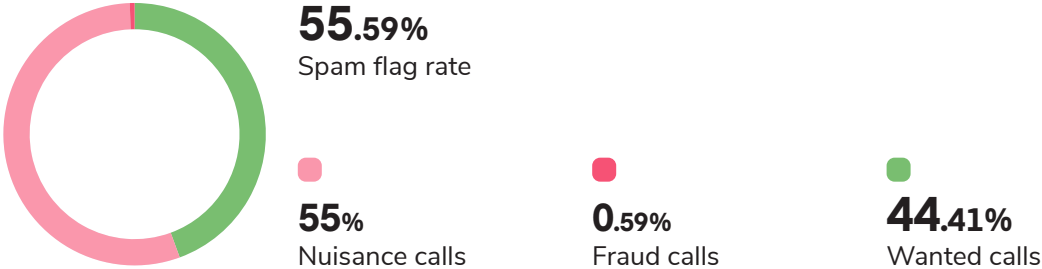
ASIA/PACIFIC

Indonesia

PERIOD

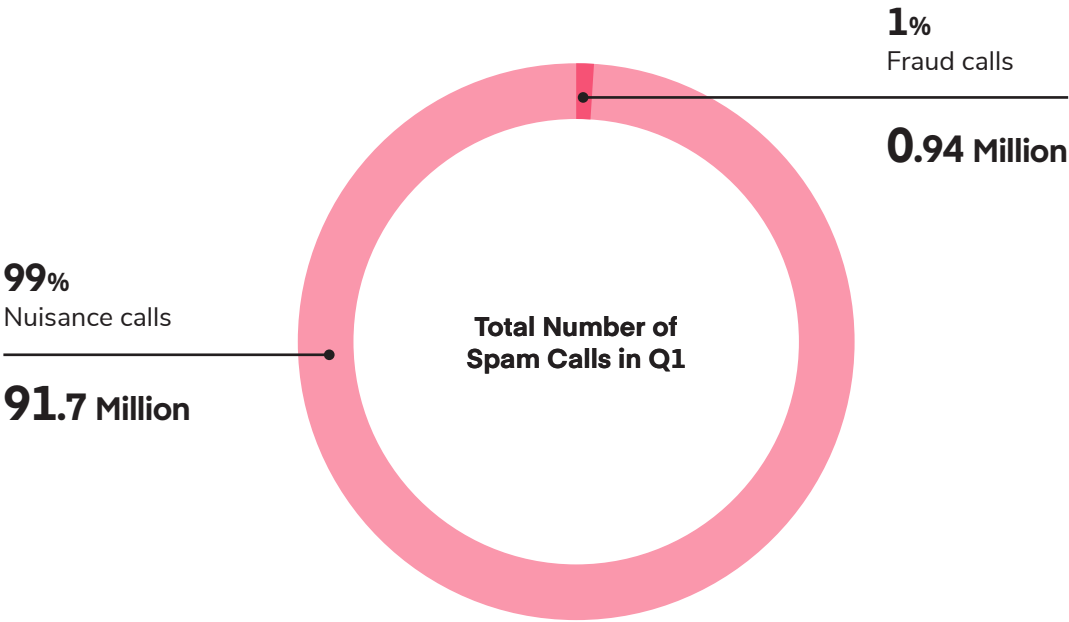
Q1

Jan 2023 - Mar 2023



10 Calls/Month
Average spam calls per person

1% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Indonesia

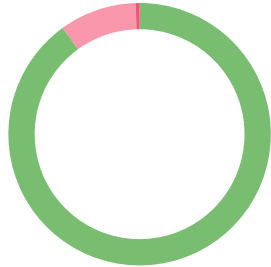
ASIA/PACIFIC

Israel

PERIOD

Q1

Jan 2023 - Mar 2023



9.97%
Spam flag rate

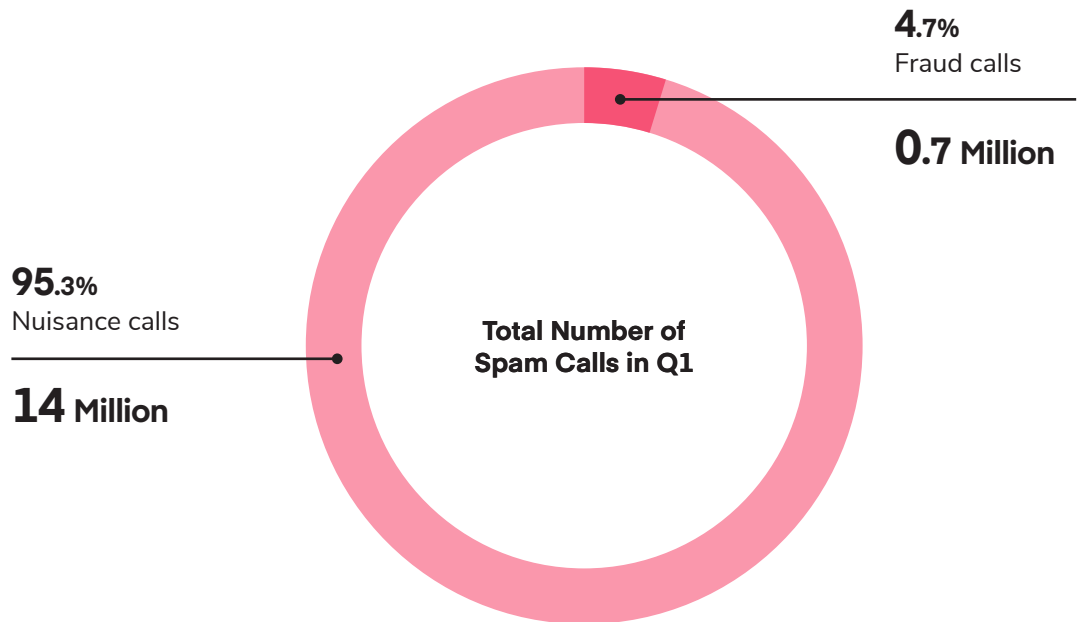
9.5%
Nuisance calls

0.47%
Fraud calls

90.03%
Wanted calls

4 Calls/Month
Average spam calls per person

5% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Israel

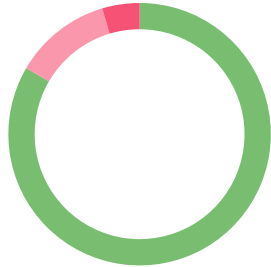
ASIA/PACIFIC

Malaysia

PERIOD

Q1

Jan 2023 - Mar 2023



16.6%
Spam flag rate

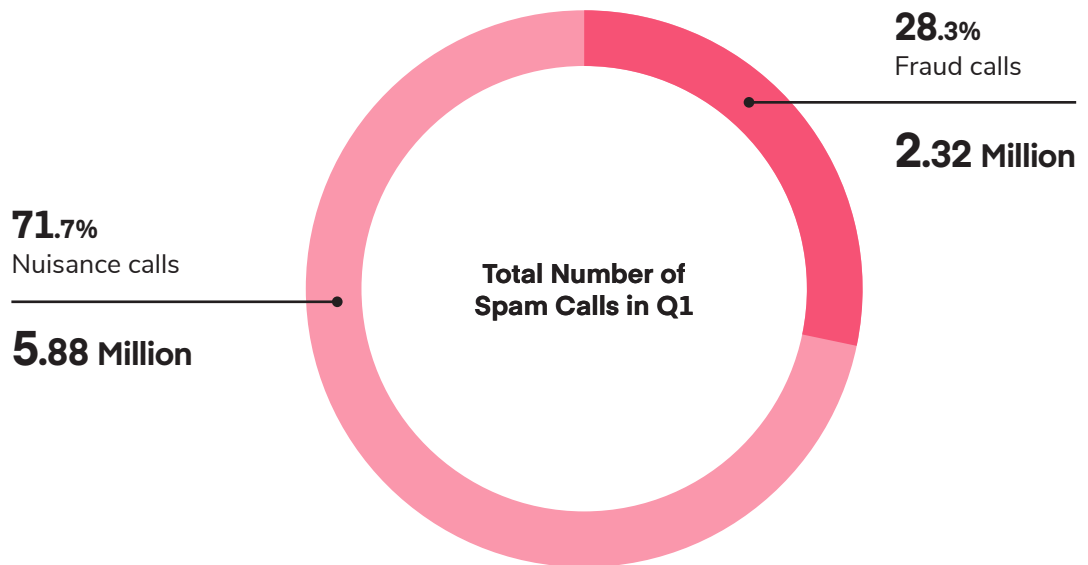
12%
Nuisance calls

4.6%
Fraud calls

83.4%
Wanted calls

3 Calls/Month
Average spam calls per person

28% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Malaysia

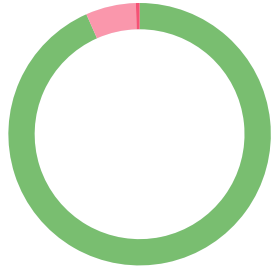
ASIA/PACIFIC

New Zealand

PERIOD

Q1

Jan 2023 - Mar 2023



6.65%
Spam flag rate

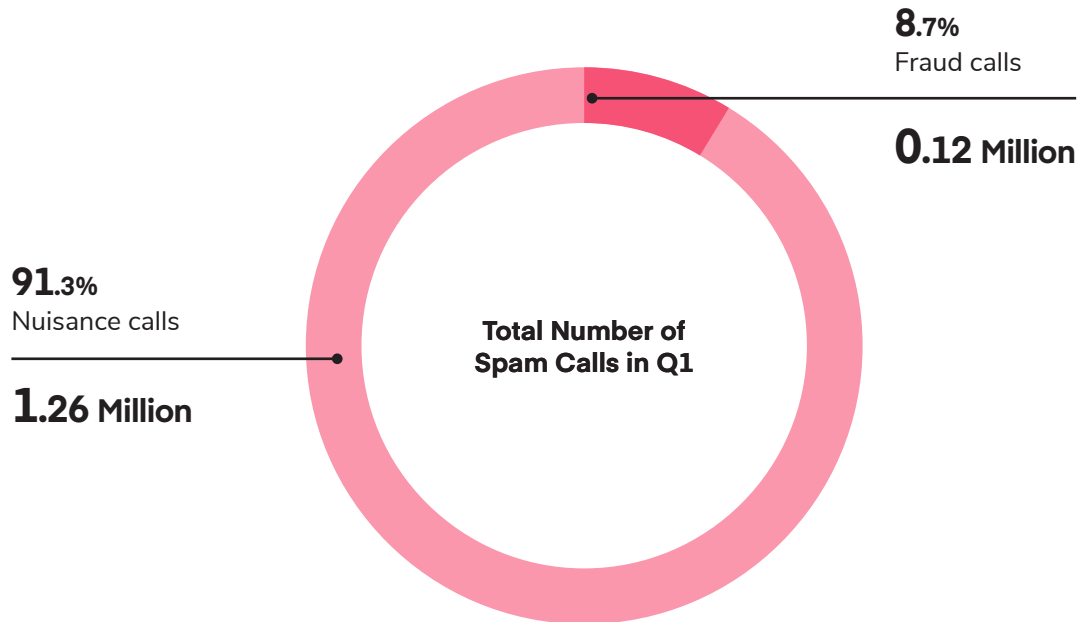
6.2%
Nuisance calls

0.45%
Fraud calls

93.35%
Wanted calls

1 Calls/Month
Average spam calls per person

9% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in New Zealand

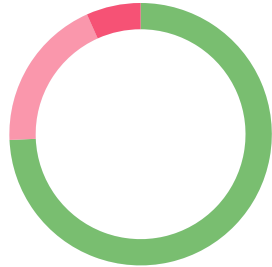
ASIA/PACIFIC

Philippines

PERIOD

Q1

Jan 2023 - Mar 2023



25.7%
Spam flag rate

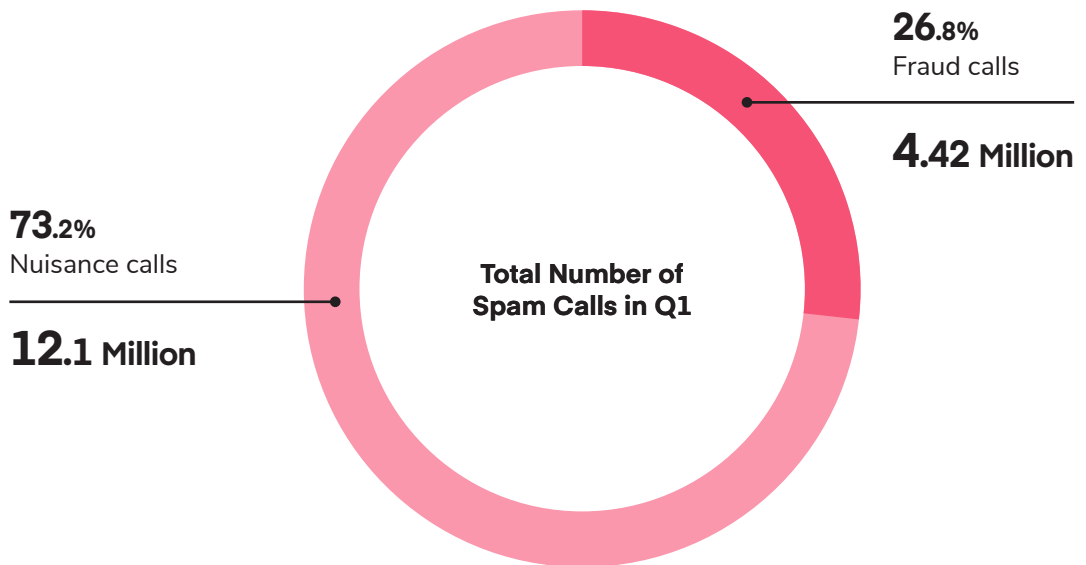
19%
Nuisance calls

6.7%
Fraud calls

74.3%
Wanted calls

4 Calls/Month
Average spam calls per person

27% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Philippines

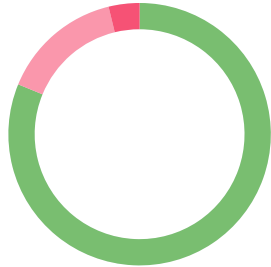
ASIA/PACIFIC

Singapore

PERIOD

Q1

Jan 2023 - Mar 2023



18.8%
Spam flag rate

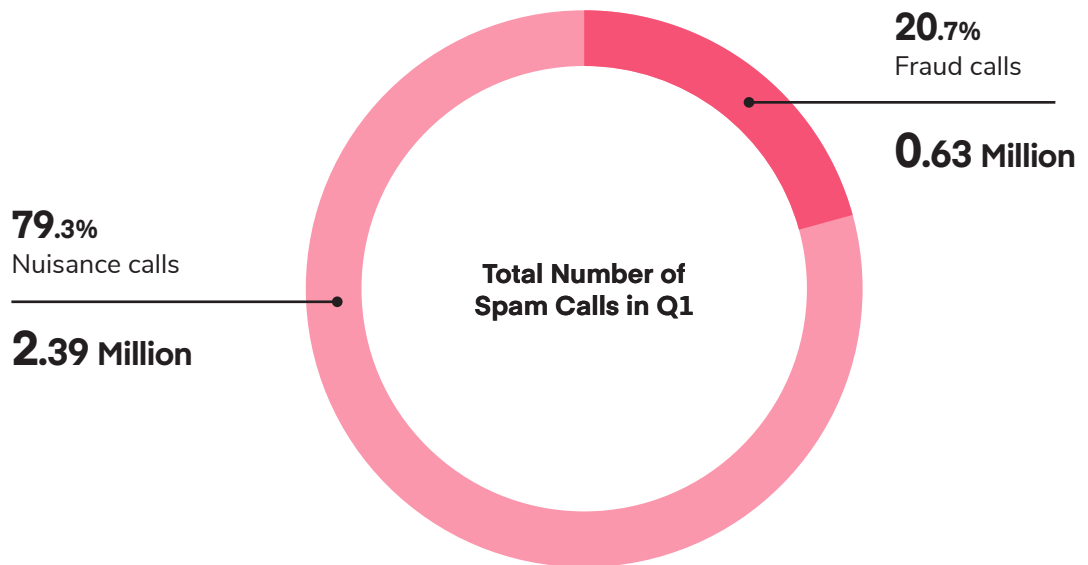
15%
Nuisance calls

3.8%
Fraud calls

81.2%
Wanted calls

2 Calls/Month
Average spam calls per person

21% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Singapore

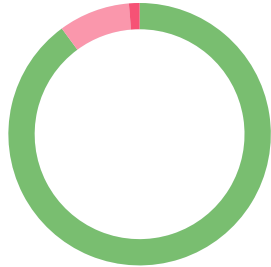
ASIA/PACIFIC

Thailand

PERIOD

Q1

Jan 2023 - Mar 2023



10.1%
Spam flag rate

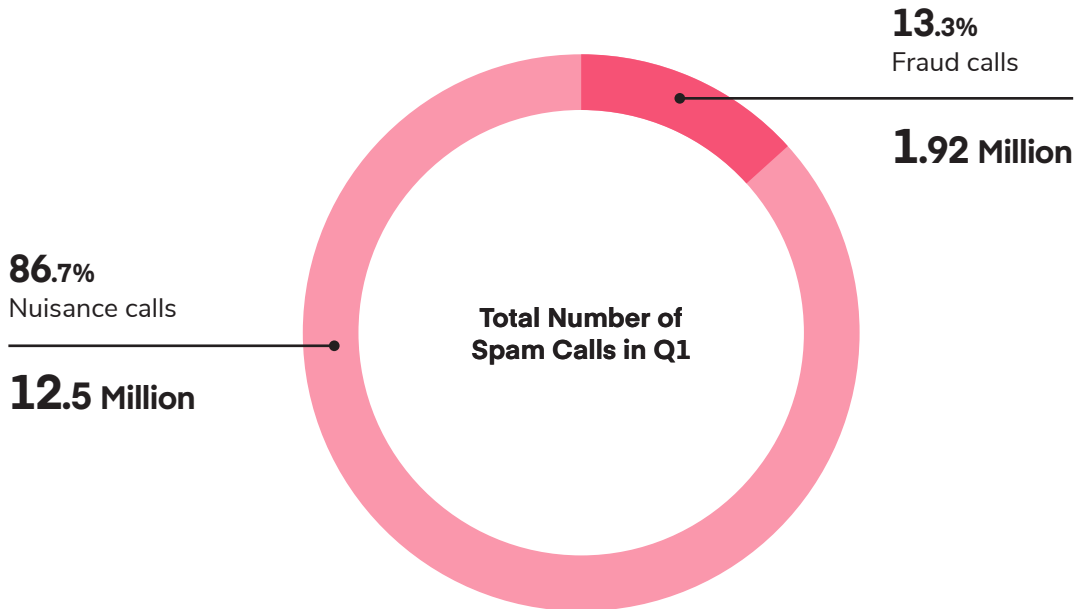
8.8%
Nuisance calls

1.3%
Fraud calls

89.9%
Wanted calls

2.5 Calls/Month
Average spam calls per person

13% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Thailand

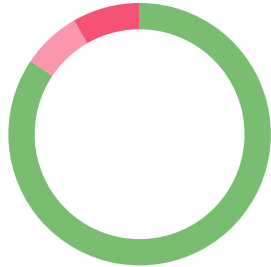
ASIA/PACIFIC

Turkey

PERIOD

Q1

Jan 2023 - Mar 2023



15.6%
Spam flag rate

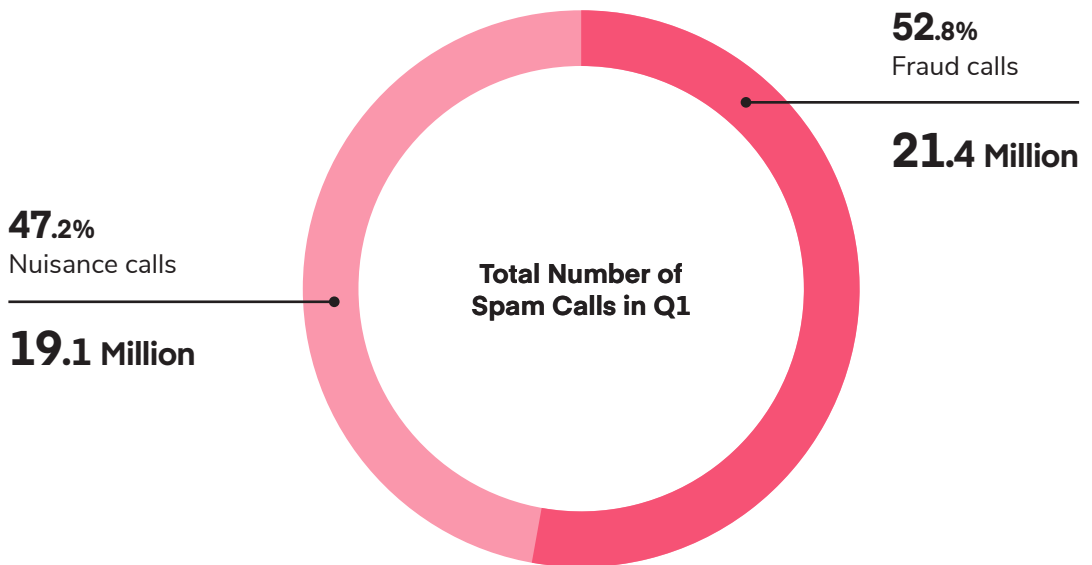
7.3%
Nuisance calls

8.3%
Fraud calls

84.4%
Wanted calls

4 Calls/Month
Average spam calls per person

53% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Turkey

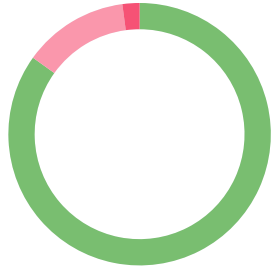
EUROPE

Austria

PERIOD

Q1

Jan 2023 - Mar 2023



15.1%
Spam flag rate

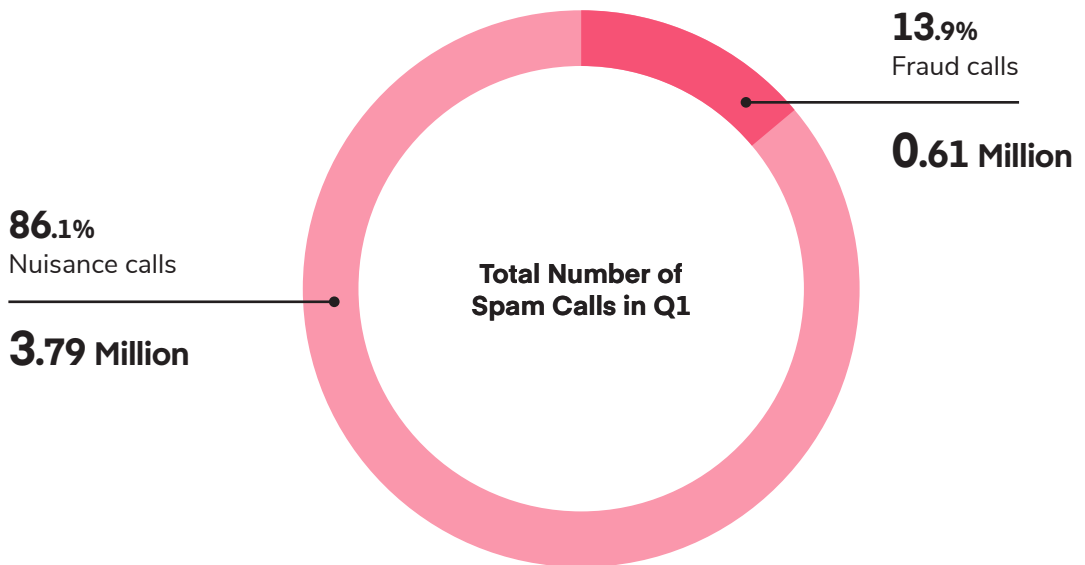
13%
Nuisance calls

2.1%
Fraud calls

84.9%
Wanted calls

2 Calls/Month
Average spam calls per person

14% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Austria

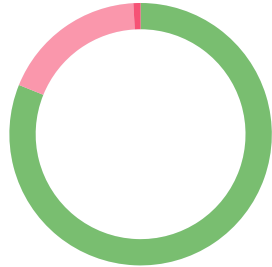
EUROPE

Belgium

PERIOD

Q1

Jan 2023 - Mar 2023



18.88%
Spam flag rate

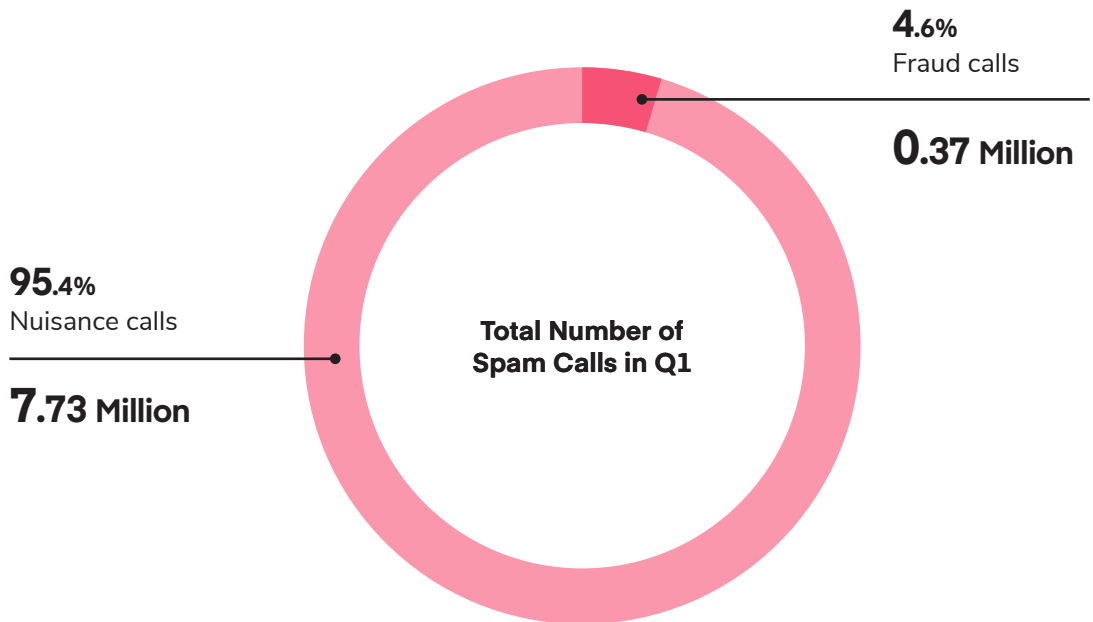
18%
Nuisance calls

0.88%
Fraud calls

81.12%
Wanted calls

2.5 Calls/Month
Average spam calls per person

5% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Belgium

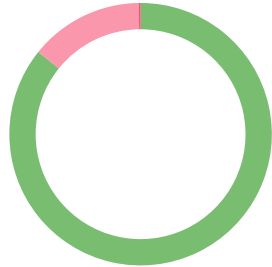
EUROPE

Czech Republic

PERIOD

Q1

Jan 2023 - Mar 2023



14.22%
Spam flag rate

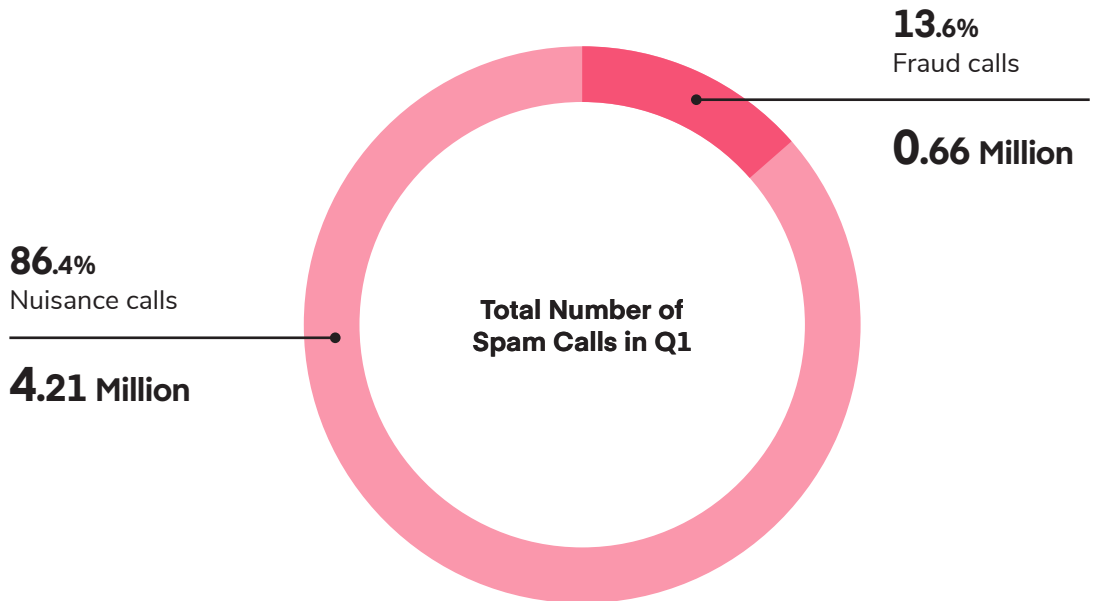
14%
Nuisance calls

0.22%
Fraud calls

85.78%
Wanted calls

2.5 Calls/Month
Average spam calls per person

14% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Czech Republic

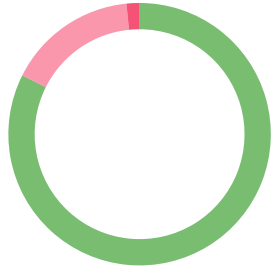
EUROPE

Denmark

PERIOD

Q1

Jan 2023 - Mar 2023



17.6%
Spam flag rate

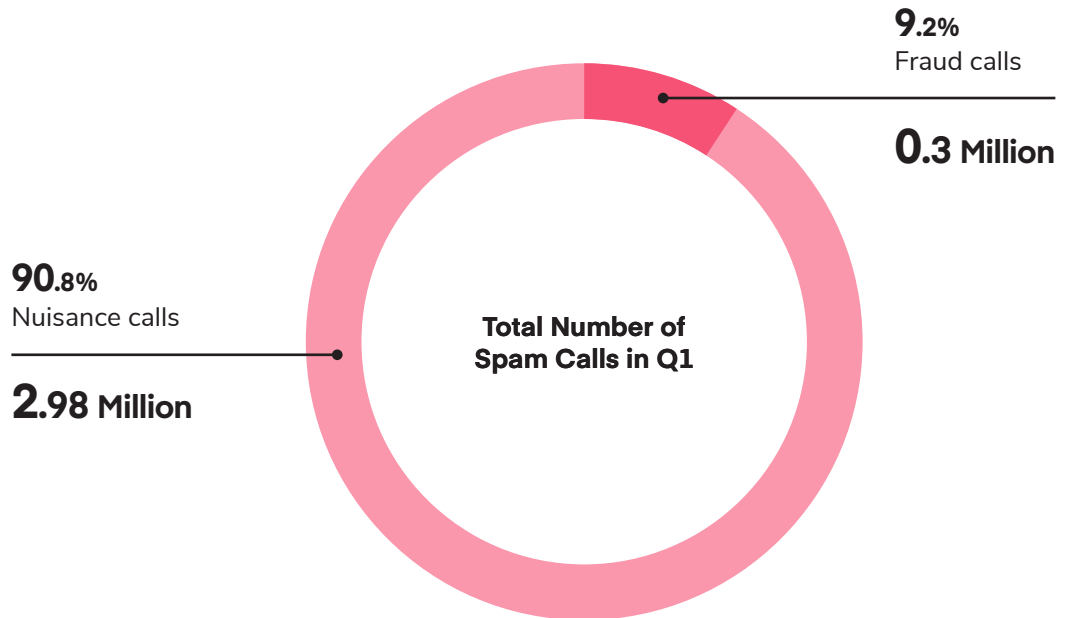
16%
Nuisance calls

1.6%
Fraud calls

82.4%
Wanted calls

2.5 Calls/Month
Average spam calls per person

9% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Denmark

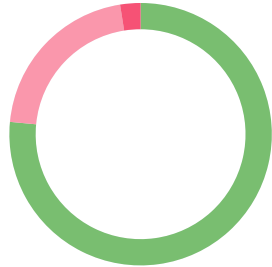
EUROPE

Finland

PERIOD

Q1

Jan 2023 - Mar 2023



23.5%
Spam flag rate

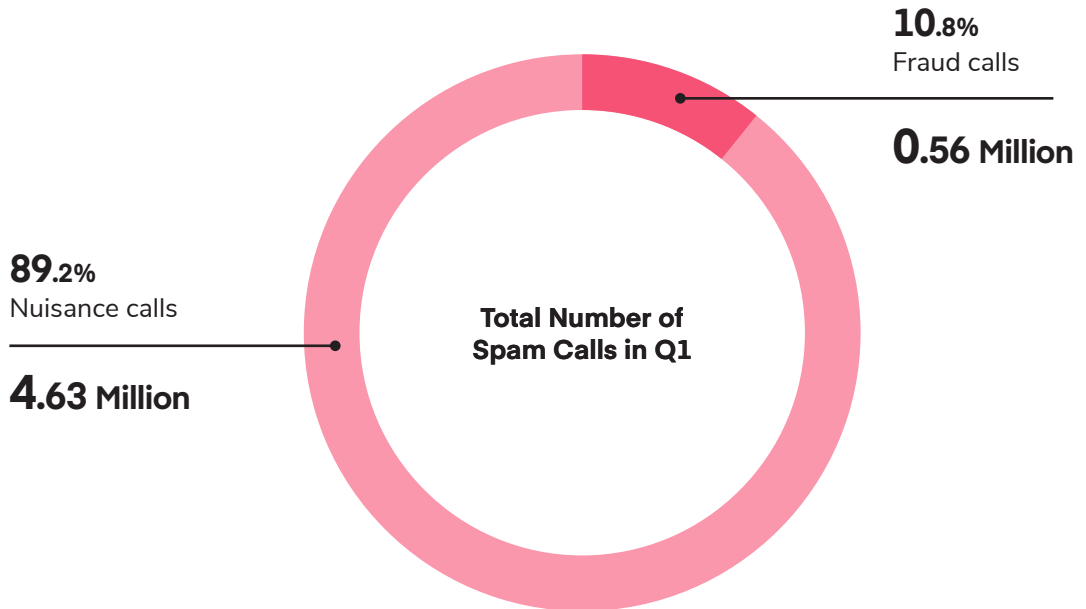
21%
Nuisance calls

2.5%
Fraud calls

76.5%
Wanted calls

3.5 Calls/Month
Average spam calls per person

11% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Finland

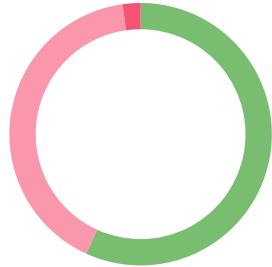
EUROPE

France

PERIOD

Q1

Jan 2023 - Mar 2023



43.2%
Spam flag rate

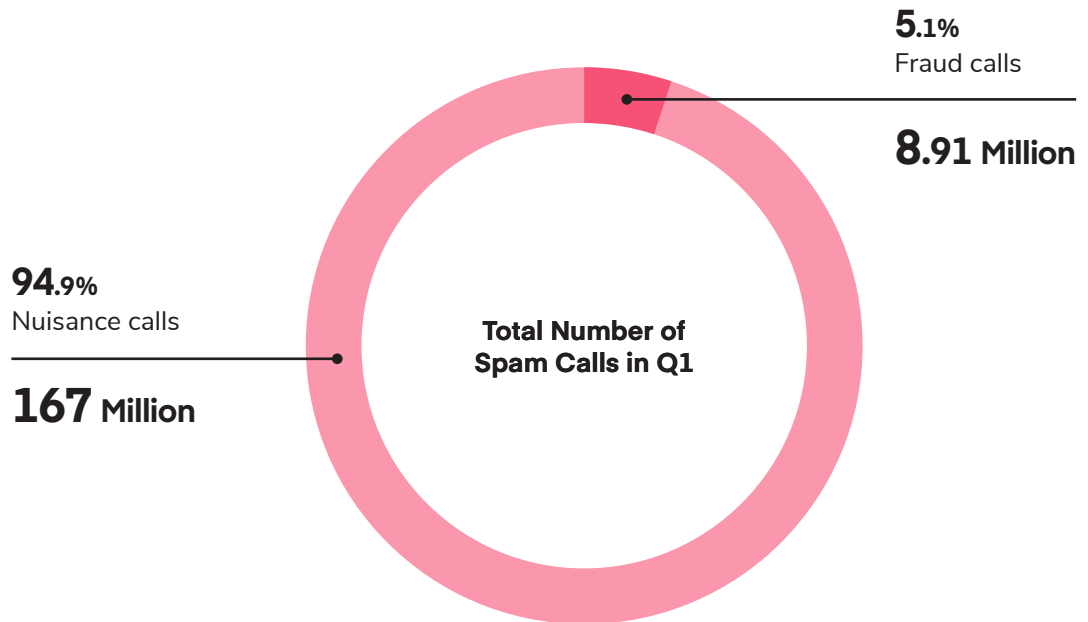
41%
Nuisance calls

2.2%
Fraud calls

56.8%
Wanted calls

9.5 Calls/Month
Average spam calls
per person

5% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in France

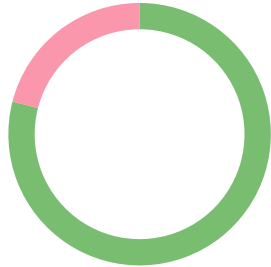
EUROPE

Germany

PERIOD

Q1

Jan 2023 - Mar 2023



21%
Spam flag rate

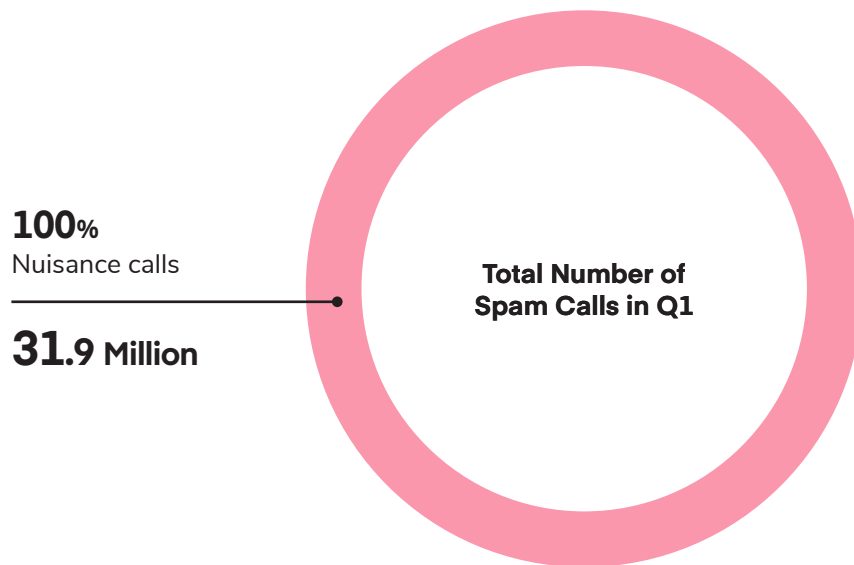
21%
Nuisance calls

79%
Wanted calls

2 Calls/Month
Average spam calls
per person

All unwanted calls flagged as spam

Hiya uses a single 'spam' warning for both nuisance and fraud calls.



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source:
Samsung Smart Call users
in Germany

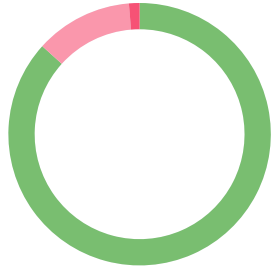
EUROPE

Greece

PERIOD

Q1

Jan 2023 - Mar 2023



13.3%
Spam flag rate

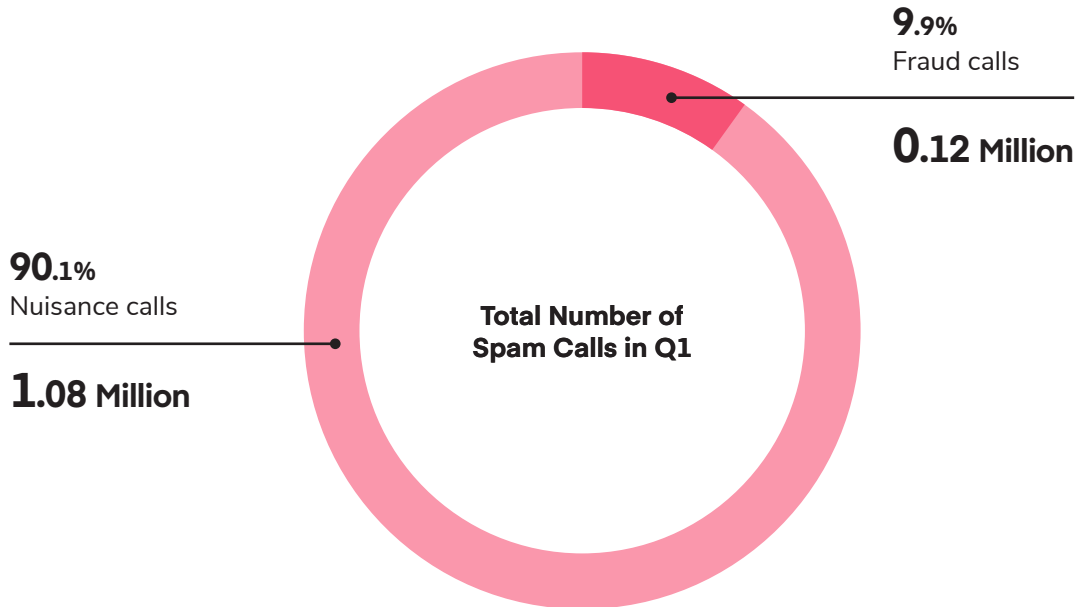
12%
Nuisance calls

1.3%
Fraud calls

86.7%
Wanted calls

3.5 Calls/Month
Average spam calls per person

10% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Greece

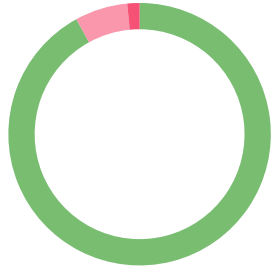
EUROPE

Hungary

PERIOD

Q1

Jan 2023 - Mar 2023



8%
Spam flag rate

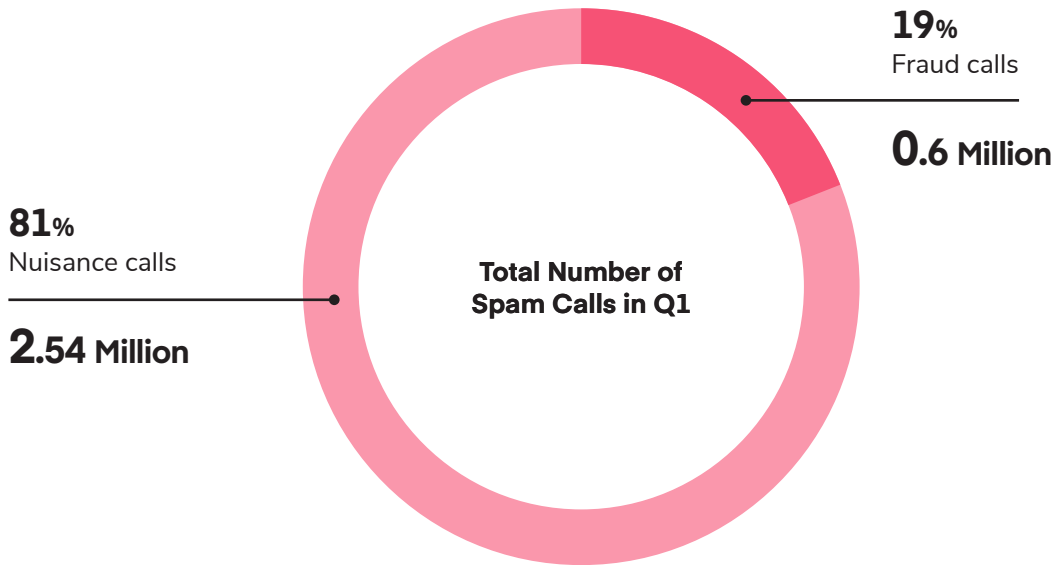
6.5%
Nuisance calls

1.5%
Fraud calls

92%
Wanted calls

1 Calls/Month
Average spam calls per person

19% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Hungary

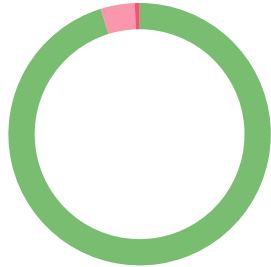
EUROPE

Ireland

PERIOD

Q1

Jan 2023 - Mar 2023



4.78%
Spam flag rate

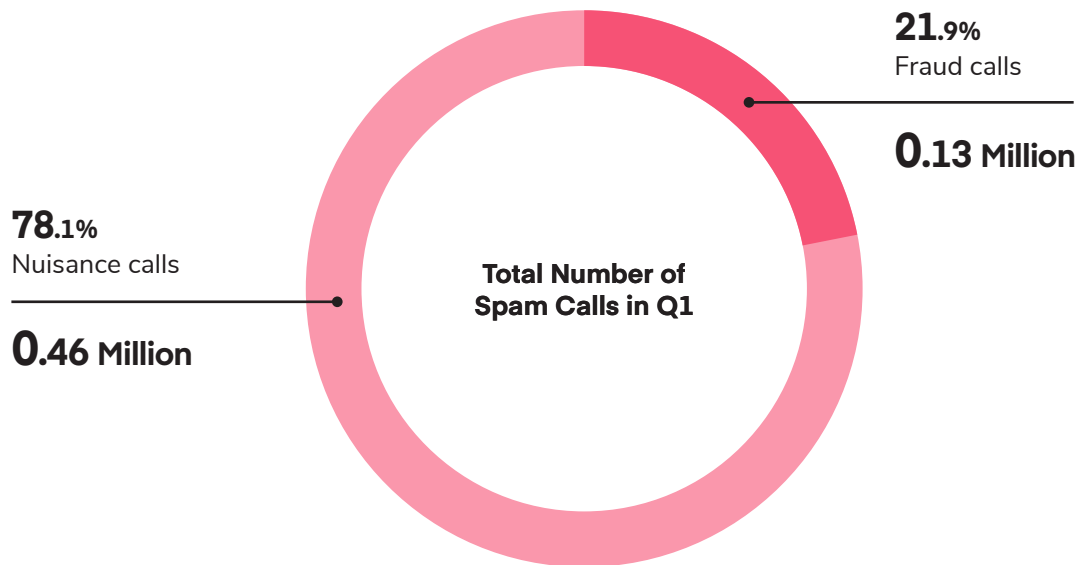
4.2%
Nuisance calls

0.58%
Fraud calls

95.22%
Wanted calls

0.5 Calls/Month
Average spam calls per person

22% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Ireland

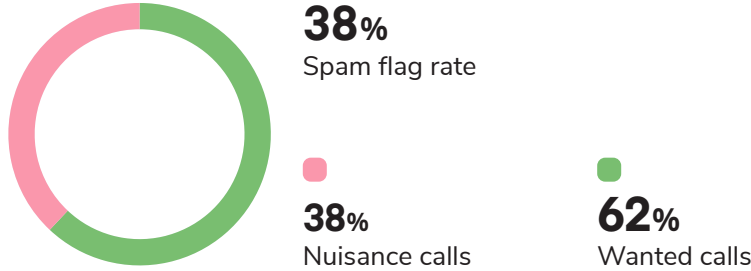
EUROPE

Italy

PERIOD

Q1

Jan 2023 - Mar 2023

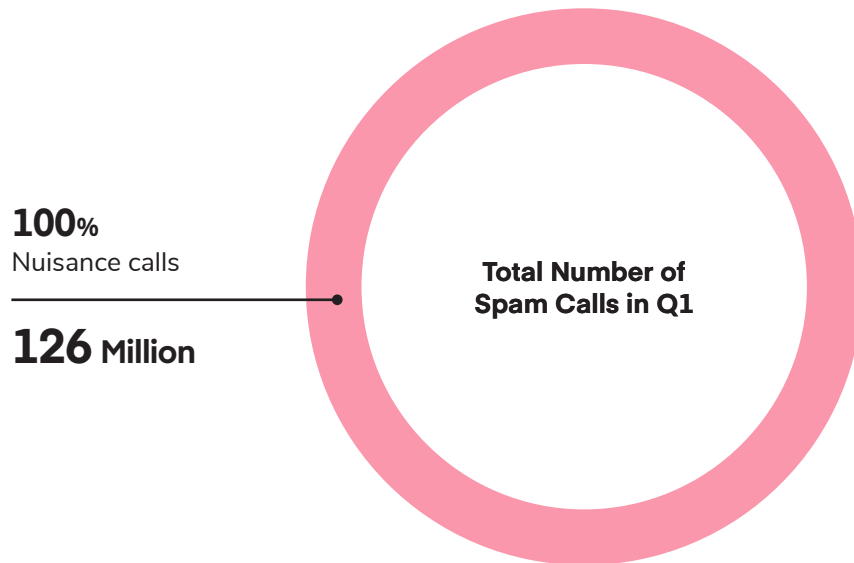


10 Calls/Month

Average spam calls per person

All unwanted calls flagged as spam

Hiya uses a single 'spam' warning for both nuisance and fraud calls.



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Italy

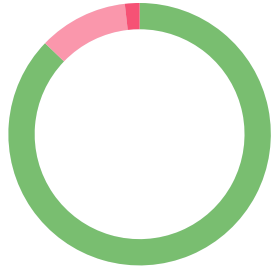
EUROPE

Netherlands

PERIOD

Q1

Jan 2023 - Mar 2023



12.8%
Spam flag rate

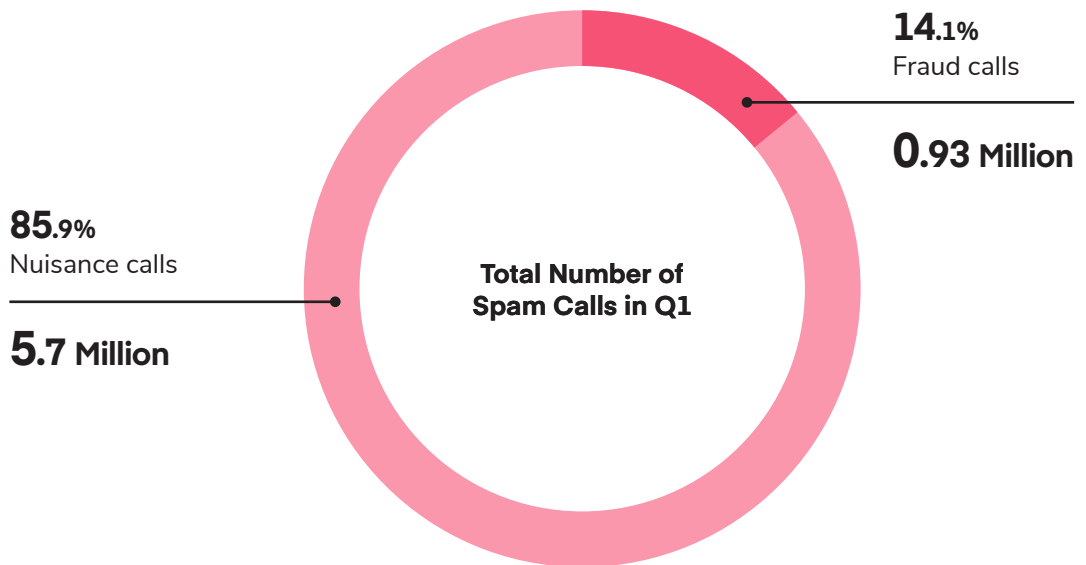
11%
Nuisance calls

1.8%
Fraud calls

87.2%
Wanted calls

1.5 Calls/Month
Average spam calls per person

14% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Netherlands

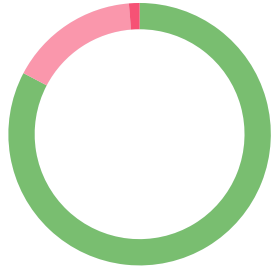
EUROPE

Norway

PERIOD

Q1

Jan 2023 - Mar 2023



17.3%
Spam flag rate

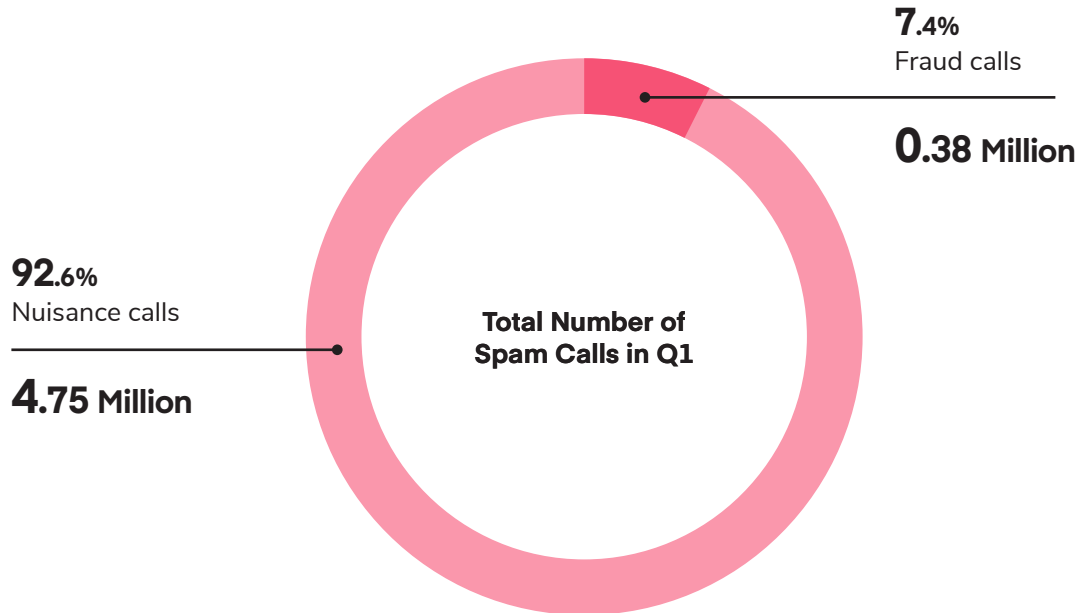
16%
Nuisance calls

1.3%
Fraud calls

82.7%
Wanted calls

3 Calls/Month
Average spam calls per person

7% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Norway

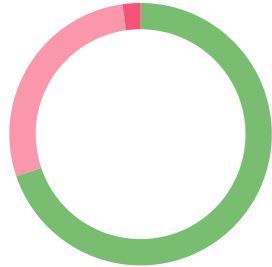
EUROPE

Poland

PERIOD

Q1

Jan 2023 - Mar 2023



30.2%
Spam flag rate

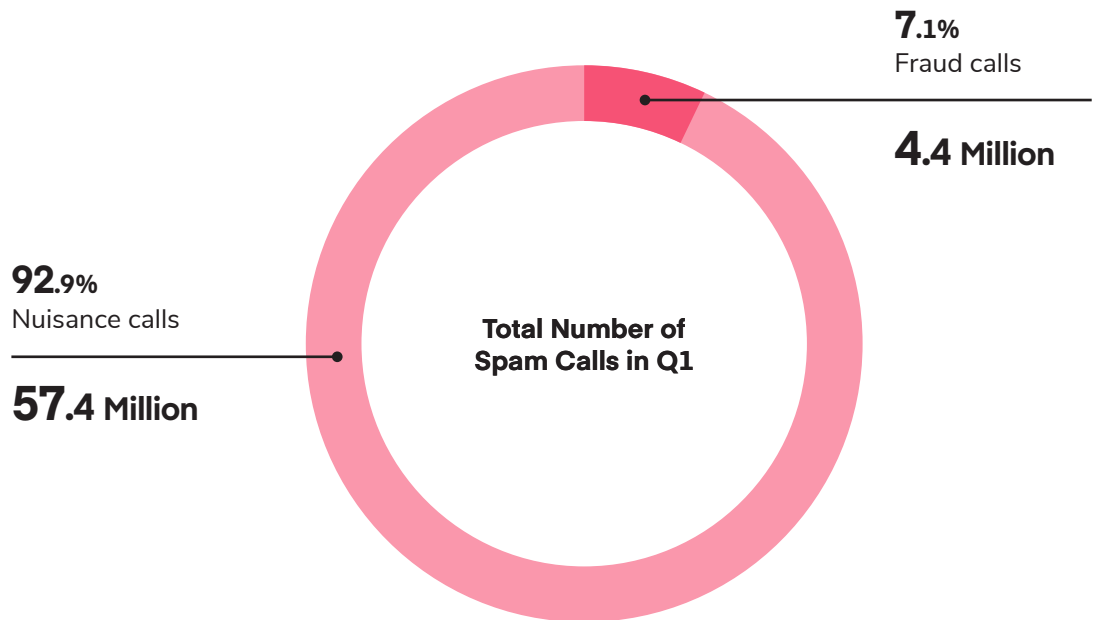
28%
Nuisance calls

2.2%
Fraud calls

69.8%
Wanted calls

6.5 Calls/Month
Average spam calls per person

7% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source:
Samsung Smart Call users in Poland

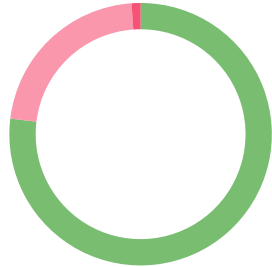
EUROPE

Portugal

PERIOD

Q1

Jan 2023 - Mar 2023



23.1%
Spam flag rate

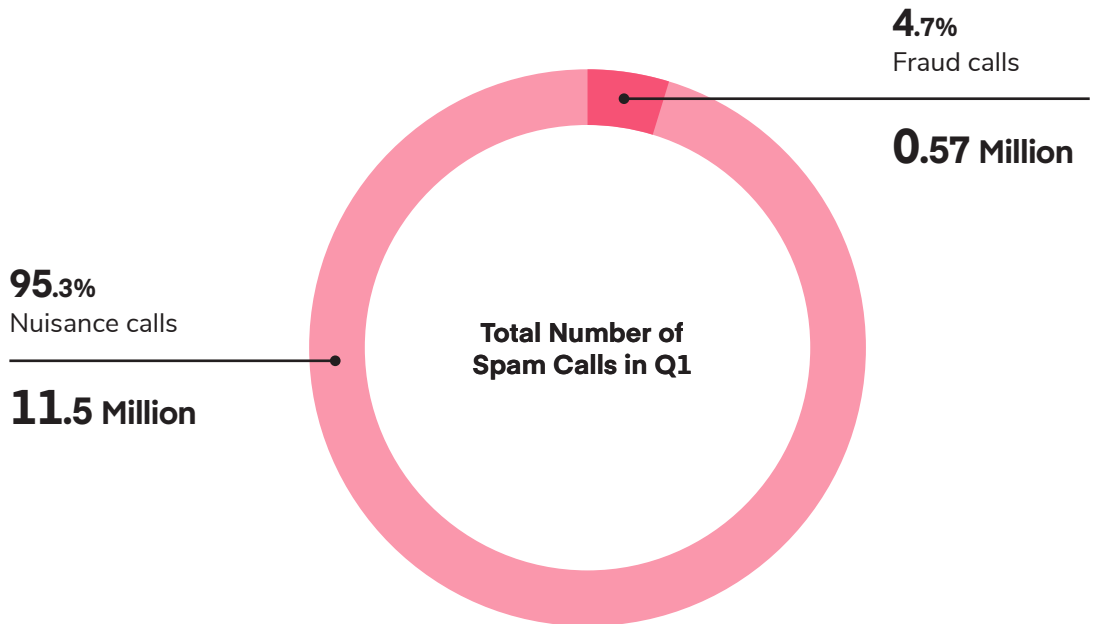
22%
Nuisance calls

1.1%
Fraud calls

76.9%
Wanted calls

4.5 Calls/Month
Average spam calls per person

5% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Portugal

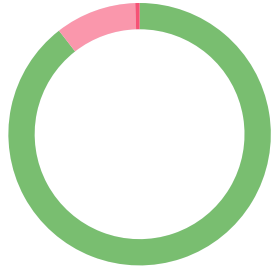
EUROPE

Slovakia

PERIOD

Q1

Jan 2023 - Mar 2023



10.53%
Spam flag rate

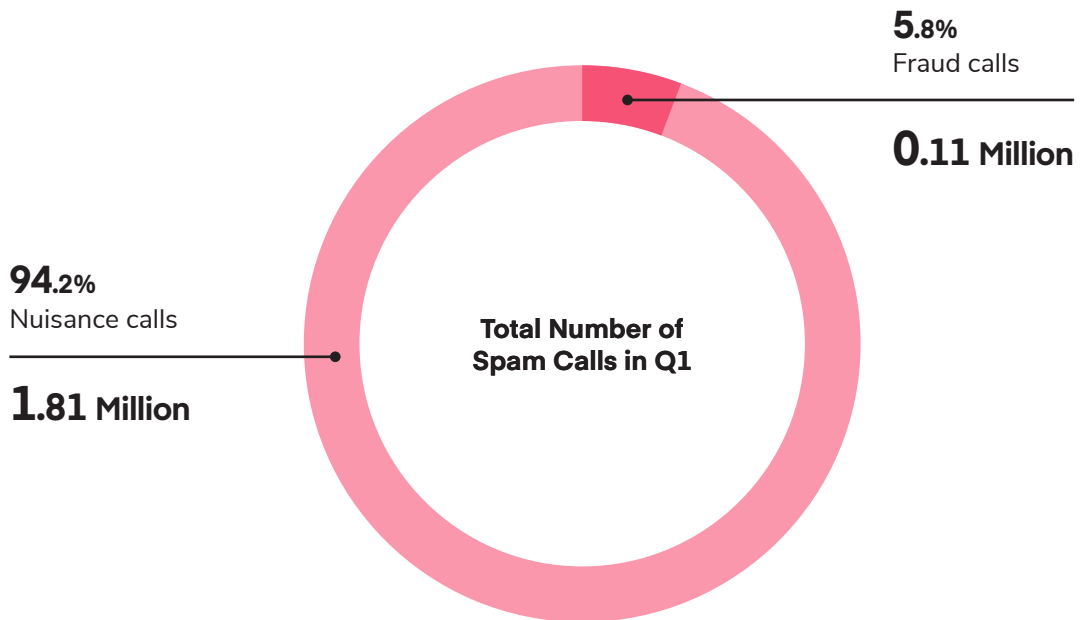
10%
Nuisance calls

0.53%
Fraud calls

89.47%
Wanted calls

2 Calls/Month
Average spam calls per person

6% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Slovakia

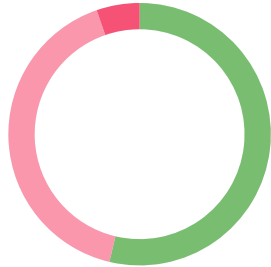
EUROPE

Spain

PERIOD

Q1

Jan 2023 - Mar 2023



46.3%
Spam flag rate

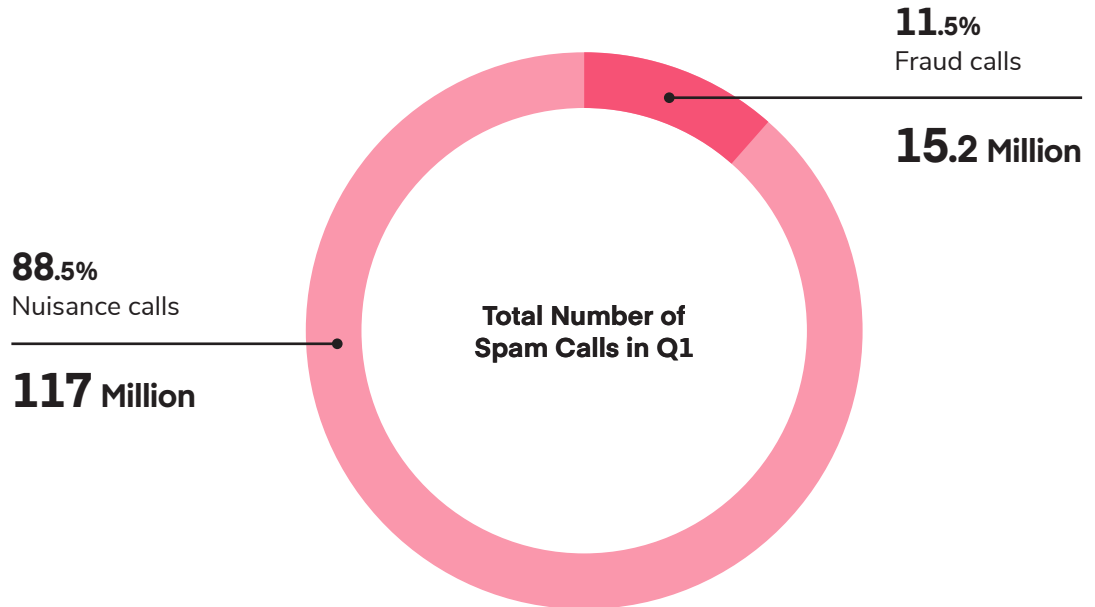
41%
Nuisance calls

5.3%
Fraud calls

53.7%
Wanted calls

12 Calls/Month
Average spam calls per person

21% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Spain

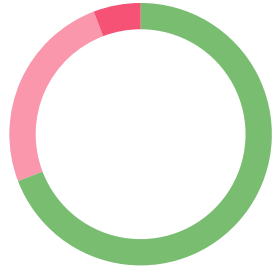
EUROPE

Sweden

PERIOD

Q1

Jan 2023 - Mar 2023



30.8%
Spam flag rate

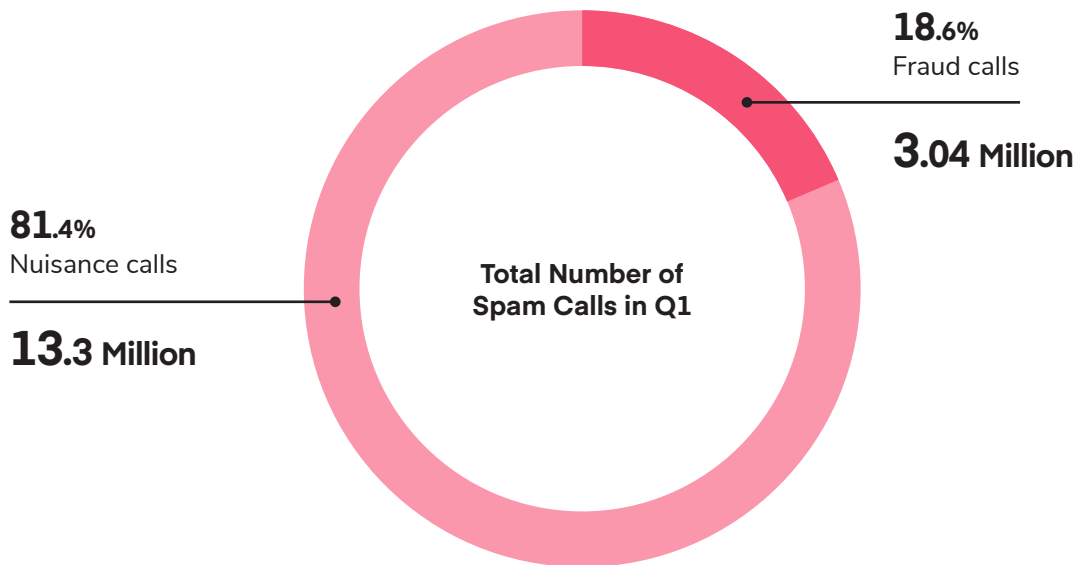
25%
Nuisance calls

5.8%
Fraud calls

69.2%
Wanted calls

5.5 Calls/Month
Average spam calls per person

19% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Sweden

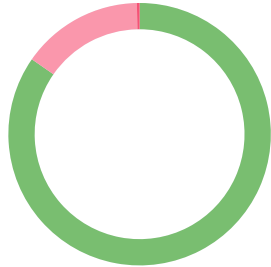
EUROPE

Switzerland

PERIOD

Q1

Jan 2023 - Mar 2023



15.33%
Spam flag rate

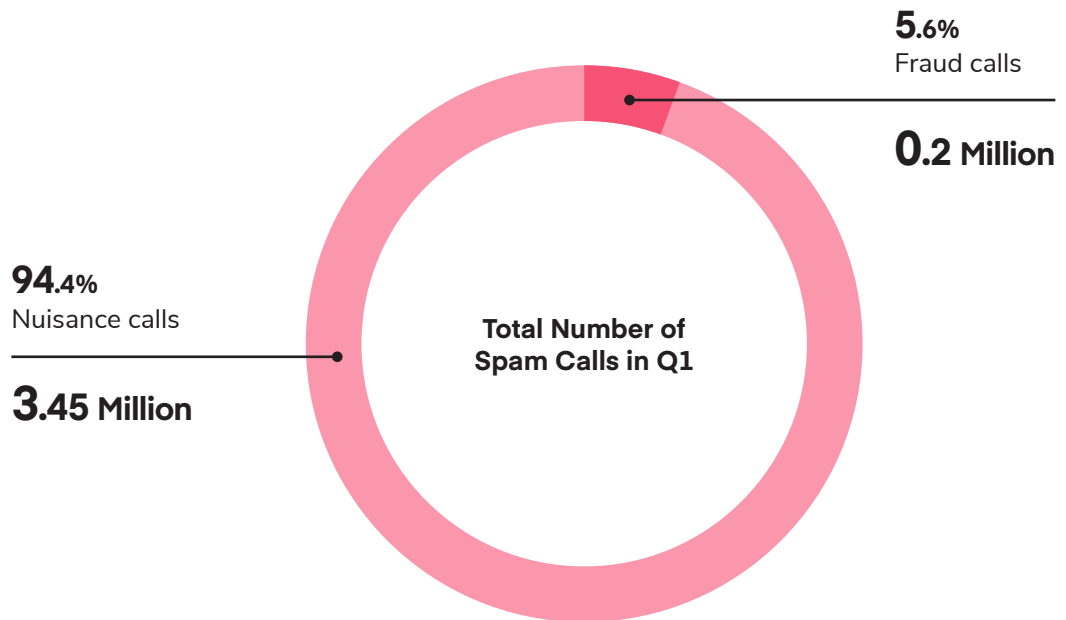
15%
Nuisance calls

0.33%
Fraud calls

84.67%
Wanted calls

2 Calls/Month
Average spam calls per person

6% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in Switzerland

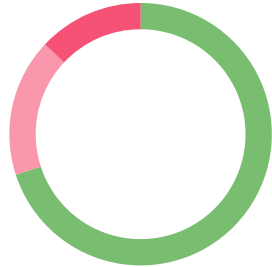
EUROPE

United Kingdom

PERIOD

Q1

Jan 2023 - Mar 2023



30%
Spam flag rate

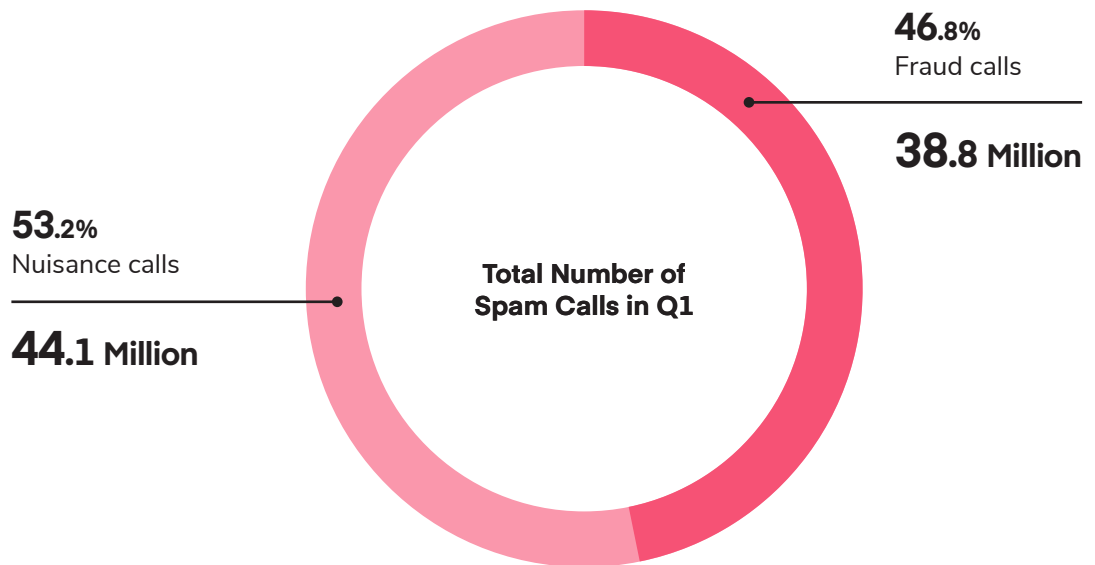
17%
Nuisance calls

13%
Fraud calls

70%
Wanted calls

4.5 Calls/Month
Average spam calls per person

47% of all spam calls in Q1 were labeled as fraud



Spam ratios represent the number of unwanted calls from "non-contacts," which are calls placed from numbers that are not in an individual's local address book.

Source: Samsung Smart Call users in United Kingdom



ABOUT HIYA

Hiya is trusted by global businesses, carriers and consumers to provide secure, engaging connections and stop unwanted calls. Built on the world's leading Voice Security Platform, Hiya connects businesses with their customers, helps carriers secure their networks, and protects people from spam and fraud calls.

Hiya's leading SaaS applications, [Hiya Connect](#) and [Hiya Protect](#), improve the voice experience with trust, identity and intelligence. Powering call protection and identity services for AT&T, EE, Samsung, Ericsson and more, Hiya Protect outsmarts sophisticated scammers with machine-trained trust models and makes voice more intelligent via real-time, global analytics. With a reach of hundreds of millions of users worldwide, Hiya Connect enables enterprises to deliver an unsurpassed, differentiated customer experience through secure and branded calls, and optimizes business results with call performance intelligence.