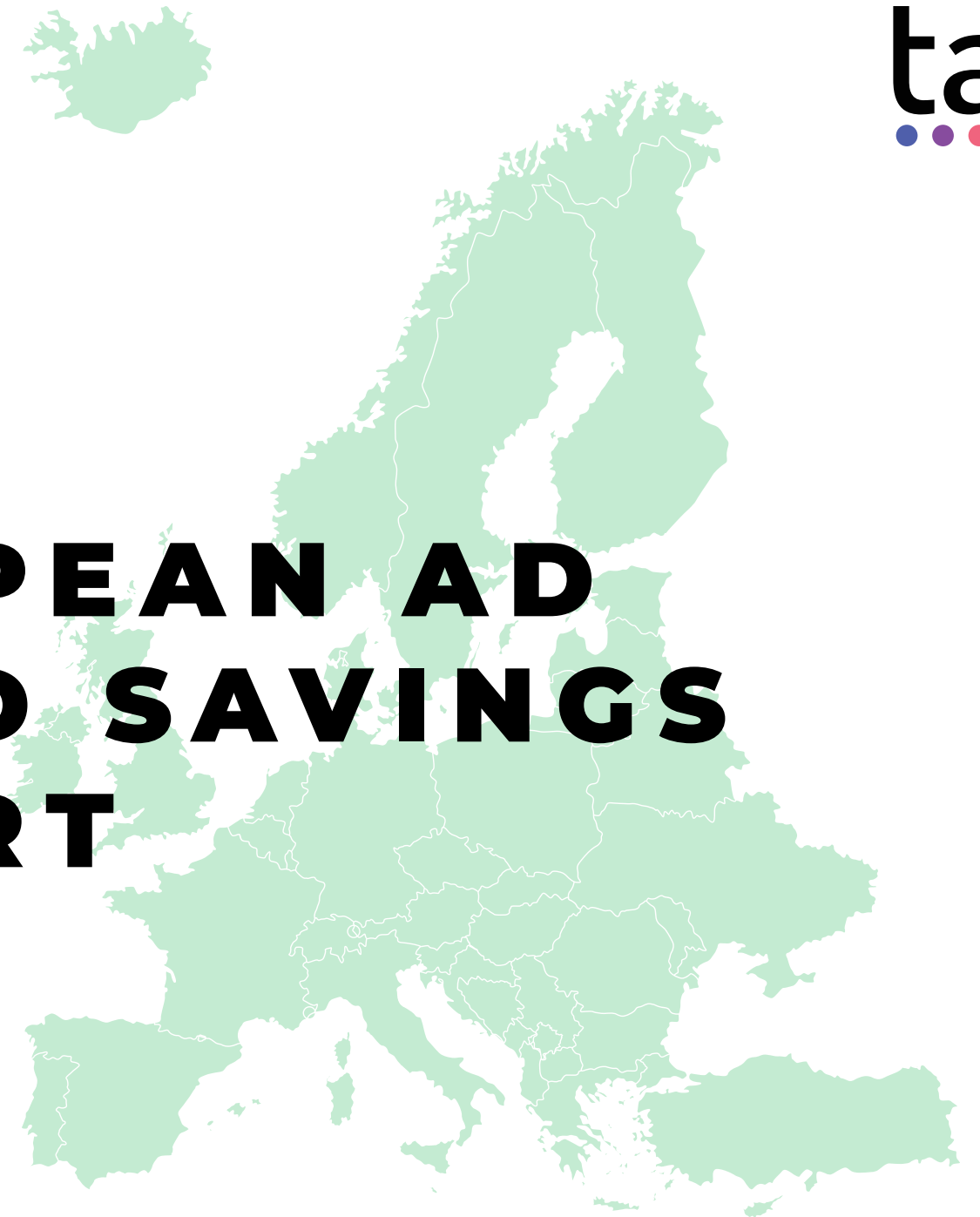




2025

EUROPEAN AD FRAUD SAVINGS REPORT



tag

EXECUTIVE SUMMARY

CROSS-INDUSTRY EUROPEAN ANTI-FRAUD STANDARDS SAVED ADVERTISERS €3.45 BILLION IN 2023

The 2025 European Ad Fraud Savings Report provides an objective analysis of the savings achieved from cross-industry collaboration to reduce ad fraud across the European digital advertising supply chain. The report determined that the advertising industry's anti-fraud efforts prevented **€3.45 billion** in potential Invalid Traffic (IVT) losses in 2023 — a **69% reduction** compared to the likely IVT losses without those standards and programs in place.

For historical context, ad fraud has been a persistent and intractable issue in digital advertising, with the 2018/2019 Bot Baseline study from the Association of National Advertisers (ANA) and White Ops projecting the cost of ad fraud to be €5.1 billion globally in 2019.

To turn the tide on ad fraud, leading organisations in the US, Europe, and other regions of the world have worked to reduce ad fraud by deploying a multi-pronged strategy over the last decade that includes:

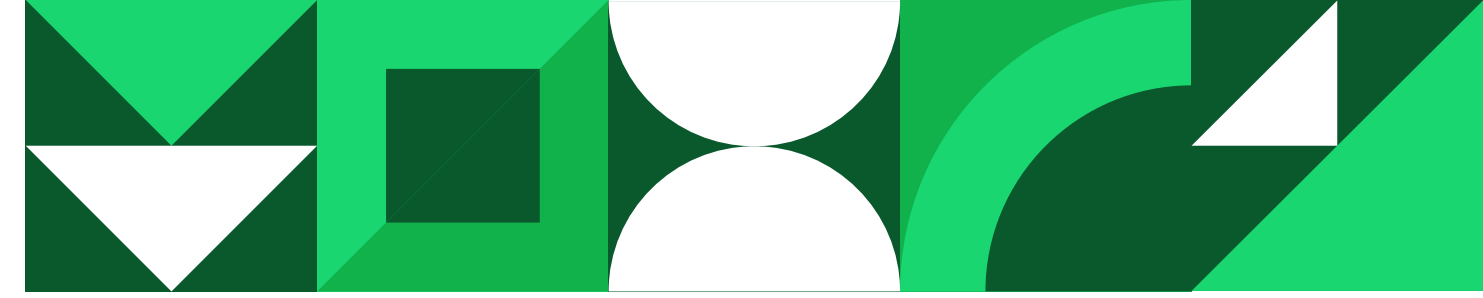
- The development and implementation of the “Invalid Traffic (IVT) Detection and Filtration Guidelines” by the Media Rating Council (MRC),¹
- The launch and expansion of TAG, a global standards and certification body that certifies companies which have adopted anti-fraud best practices; and
- The dissemination of innovative tools and standards such as Ads.txt and Sellers.json by the IAB Tech Lab, IAB Europe, and individual countries with IAB programs.

With support from hundreds of companies across the digital advertising supply chain who participated in committees and councils; organisations engaging in the standards programmes from the MRC, IAB Tech Lab, and TAG; and broad adoption of the TAG Certified Against Fraud Seal, multiple studies have shown that IVT rates have now been reduced to less than 1% worldwide in TAG Certified Channels (TCCs).²

Across Europe, there has been broad adoption of TAG's Certified Against Fraud standards, as well as country-specific programmes that incorporate anti-fraud elements into broader guidelines, such as the Digital Ad Trust Certification in France and BVDW's Digital Trust Initiative in Germany. While those country-specific initiatives have played an important role, TAG's fraud-specific and annually-updated worldwide program has proven its ability to quickly address new and emerging issues across the global supply chain.

Whilst significant progress has been made against fraud in Europe, no research to date has quantified the financial savings from the European ad industry's collaborative efforts to fight fraud. The primary objective of this study is to quantify those savings across video and display advertising channels in European markets. To do so, the analysis examined the fraud rate in channels with and without industry protections and compared the potential losses without standards against the actual losses in Protected Channels in 2023.

Using data from four MRC-accredited IVT vendors (DoubleVerify, Integral Ad Science, Moat by Oracle, and Picalate), the report estimated an IVT rate of **10.36%** in unfiltered video and display channels which lack anti-fraud protections. When applied to the total European



digital advertising market of **€48.3 billion** in 2023, the analysis determined that there would have been a loss of **€5 billion** if the industry had not adopted anti-fraud standards.

Instead, approximately 76% of the European ad spend in 2023 — or **€36.8 billion** — flowed through protected channels, such as social media platforms and open internet publishers that have received TAG Certification. Within these protected channels, IVT rates were significantly lower — **1%** on average — resulting in a much lower **€368** million in actual losses.

Yet gaps remain. Whilst three quarters of European ad spending flowed through protected channels, the remaining **24%** — or **€11.5 billion** — went through channels in which companies have not yet achieved TAG certification. Using the unfiltered IVT rate of 10.36%, those channels likely sustained IVT losses of **€1.19 billion**, or more than 10x the relative level of IVT losses as those in Protected Channels.

For European advertisers and their supply chain partners, that high cost of inaction is also an opportunity, as the adoption of TAG-level standards across these transactions would bring losses down to **€115 million**, unlocking an additional **€1.075** billion in annual savings.

¹ "Invalid Traffic Detection and Filtration Standards Addendum June 2020 – Update." MRC, 2019. <https://mediaratingcouncil.org/sites/default/files/Standards/IVT%20Addendum%20Update%20062520.pdf>

² A TAG Certified Channel is where the agency, buying platform, and selling platform involved in a transaction are all Certified Against Fraud.

SUMMARY OF KEY FINDINGS



EUROPEAN AD INDUSTRY WOULD HAVE LOST €5 BILLION TO IVT IN 2023 WITHOUT CURRENT ANTI-FRAUD STANDARDS AND PROGRAMMES

Without the ad industry anti-fraud programmes currently in place, the IVT rate for all display and video advertising in Europe would have been approximately 10.36% in 2023, translating to potential losses of approximately €5 billion, based on €48.3 billion in total ad spending in those channels and a blended IVT rate for unfiltered inventory from four MRC-accredited vendors.



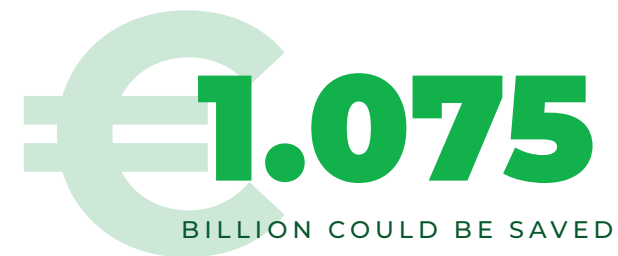
BROAD ADOPTION OF ANTI-FRAUD STANDARDS REDUCED IVT LOSSES BY 69% IN 2023

The European ad industry's broad implementation of anti-fraud standards significantly reduced IVT losses in 2023. As a result, the industry's losses due to IVT across all channels were 69% lower than potential unfiltered losses at just €1.558 billion.



**IN PROTECTED CHANNELS,
IVT LOSSES WERE HELD TO
JUST €368 MILLION — 1%
OF AD SPEND IN THOSE
CHANNELS**

For the 76% of European ad spending (€36.8 billion) that went through channels with TAG protections in 2023, the rate of IVT loss was held to just €368 million, a nominal 1% of the total ad spend through those channels.



**AN ADDITIONAL €1.075 BILLION
COULD BE SAVED THROUGH
ADOPTION OF ANTI-FRAUD
STANDARDS ACROSS 24% OF
UNPROTECTED AD SPEND**

European advertisers are still leaving money on the table, as 24% of Europe's ad spend — €11.5 billion — is still flowing through unfiltered channels. If companies in those channels adopted rigorous anti-fraud standards, European advertisers could save nearly €1.075 billion per year that is currently lost to IVT.

FRAUD SAVINGS RESEARCH



RESEARCH OBJECTIVE

After more than ten years of cross-industry collaboration to reduce fraud, [TAG Fraud Benchmark Reports](#) in the US, Europe, and Asia have documented the ad industry's success in maintaining low, predictable, and manageable IVT rates of under 1% in channels where multiple participants have adopted the industry's high anti-fraud standards.

This study set out to determine how much money was saved by European advertisers in 2023 due to the industry's adoption of those anti-fraud programmes and standards.



SUMMARY OF KEY TERMS

Fraud is a generic term, encompassing a range of nefarious activities. For the purposes of this report, the results focus on the broader metric of IVT, which the MRC defines as “traffic that does not meet certain ad serving quality or completeness criteria, or otherwise does not represent legitimate ad traffic that should be included in measurement counts.”

The MRC’s Invalid Traffic Detection and Filtration Standards Addendum separates IVT into two categories:

GENERAL INVALID TRAFFIC (GIVT):

Includes traffic identified through routine and list-based means of filtration — such as bots, spiders, other crawlers; non-browser user agent headers; and pre-fetch or browser pre-rendered traffic.

SOPHISTICATED INVALID TRAFFIC (SIVT):

Includes traffic identified through advanced analytics, multipoint corroboration, human intervention — such as hijacked devices, ad tags, or creatives; adware; malware; misappropriated content.



AD FRAUD EXPLAINER

Ad fraud is like paying for a billboard that’s hidden in a garage. You’re spending money to reach customers, but no real people see your ad. That’s what happens when your digital ads are shown to bots instead of humans or placed on fake websites and apps.

WHAT IS IVT (INVALID TRAFFIC)?

IVT means your ads are being seen or clicked on by something other than a real, interested person. That can include:

- Bots that mimic human behaviour or scrape sites for information
- Ads shown in background tabs or invisible frames
- Clicks from fake mobile apps
- Or even real people forced to click on ads in shady ways (like click farms)

You’re not getting value, but you’re likely still being charged.



In calculating IVT rates, the study combined both SIVT and GIVT in order to achieve a comprehensive result. The analysis also examines TAG Certified Channel transactions and Non-Certified Channels transactions, as defined below.

TAG CERTIFIED CHANNEL (TCC):

Transactions that flow through channels in which three or more entities involved in the transaction – such as the media agency, buy-side platform, sell-side platform, and/or publisher – have achieved the TAG Certified Against Fraud Seal.

NON-CERTIFIED CHANNELS (NCC):

Transactions that flow through channels in which at least one entity involved in the transaction may have achieved the TAG Certified Against Fraud Seal, but not enough entities for the channel to qualify as a TCC. For example, in a Non-Certified Channel, the media agency might have achieved the TAG Certified Against Fraud Seal, but other key entities - the buy-side platform, sell-side platform, and/or publisher - would not have achieved the certification.

SUMMARY OF METHODOLOGY

This study analysed the savings resulting from the digital advertising industry's implementation of anti-fraud programmes by determining the total amount that would have been lost to IVT in 2023 without those programmes in place, then subtracting the remaining amount of IVT-related spending lost that continues to exist.

The study focused on video and display advertising channels in Europe to allow direct comparison with the annual TAG European Fraud Benchmark Report, based on the high-quality revenue data publicly available in those channels.

The amount that would have been lost to fraud this year without standards in place was calculated by multiplying the current IVT rate for unfiltered (i.e. unprotected) inventory in Europe, based on 2023 and early 2024 industry estimates, against the total European display and video ad market.

The amount lost to IVT in Protected Channels was calculated by multiplying the weighted average of the IVT rate for video and display advertising in which at least one supply chain participant has adopted the TAG Certified Against Fraud standards (i.e. TCC and NCC inventory) against the video/display ad spending through those channels in 2023.

The amount lost to IVT in unprotected channels was calculated by multiplying a blended IVT rate for unfiltered inventory from four MRC-accredited vendors against the video/display ad spending through those channels in 2023.

By subtracting the total currently lost to IVT in both protected and unprotected channels from the total that would have been lost to IVT in 2023 without those protections, the study determined a valid estimate for the total fraud savings in Europe thanks to those programmes. Details of each element of that analysis follow.

This study used the following formula to determine the industry's fraud saving across video and display advertising in Europe for 2023:

**2023 EUROPEAN
DIGITAL AD FRAUD
SAVINGS**

=

**Amount that would have been lost
to IVT without anti-fraud standards**

-

Amount currently lost to IVT

HOW MUCH WOULD HAVE BEEN LOST TO FRAUD IF INDUSTRY ANTI-FRAUD PROGRAMMES DIDN'T EXIST?

To determine how much the digital advertising industry would have lost to video and display ad fraud in Europe in 2023 without current programmes, the study evaluated the amount of revenue that is lost to IVT in channels with little to no previous filtration. This measurement can be described as the “unoptimised” or “unfiltered” IVT rate.

It is a truism in research that where you measure matters. In this case, it is important to recognise that the methodology used to determine how much advertising spend would have been lost to fraud if industry anti-fraud programmes did not exist involved measuring IVT rates at several different points in the digital advertising supply chain.



AD FRAUD EXPLAINER

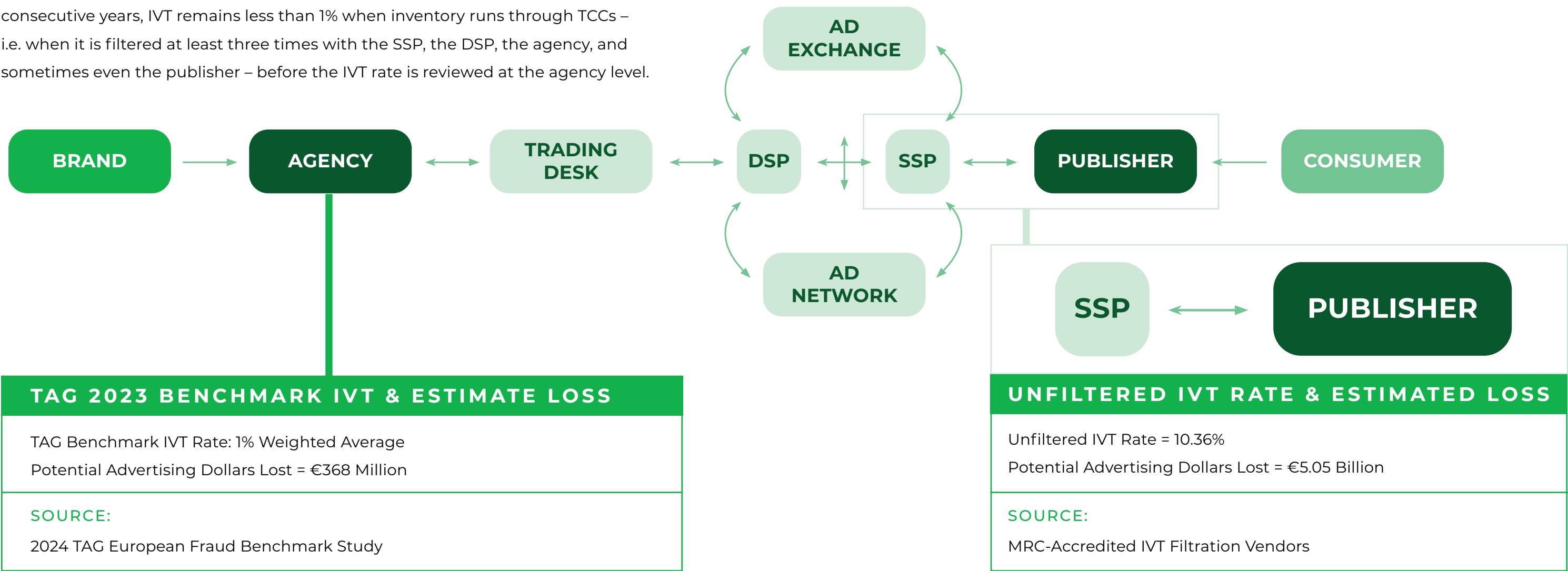
WHAT IS AD FRAUD?

Ad fraud is when bad actors intentionally create IVT to make money. They might:

- Create fake websites that attract bots, not people
- Use malware to load ads you never see
- Run fake videos to collect CPMs

PROGRAMMATIC ADVERTISING SUPPLY CHAIN

Since 2019, the annual TAG European Fraud Benchmark Report has focused on how low the industry can go with regard to IVT rates. Thanks to the support of advertising agency and MRC-accredited vendor partners, those studies confirmed that for six consecutive years, IVT remains less than 1% when inventory runs through TCCs – i.e. when it is filtered at least three times with the SSP, the DSP, the agency, and sometimes even the publisher – before the IVT rate is reviewed at the agency level.



Just as measuring IVT at the end of a transaction – at the agency level – yields the lowest IVT rate in the supply chain, it is logical to assume that higher rates of IVT are found if you measure farther downstream in the supply chain – towards publishers and SSPs – where fewer rounds of filtration have taken place. This was affirmed in the data regarding unfiltered IVT rates collected from the MRC-accredited vendors participating in this research.

To determine the unfiltered IVT rate, the study analysed data from four MRC-accredited IVT filtration vendors, including DoubleVerify, Integral Ad Science, Oracle Data Cloud's Moat⁵, and Pixalate from 2023 and 2024. Whilst all four vendors are accredited by the MRC, each has nuanced detection capabilities, and combining data from multiple vendors ensures greater accuracy.

The blended average unfiltered IVT rate from all four vendors was approximately 10.36% across display and video campaigns in Europe in 2023/2024. Without industry standards and protections currently implemented across the supply chain, this 10.36% IVT rate would likely be the norm, if not higher.

To determine the total value of digital video and display advertising spending in Europe in 2023, the study used data from the IAB Europe 2023 AdEx Benchmark Study⁶. According to that report, display ad revenue reached €26.6 billion, and digital video revenue added €21.8 billion, for a combined total of €48.3 billion.

By applying the unfiltered IVT rate of 10.36% to the total €48.3 billion in display and video revenue, the study estimates that €5 billion would have been lost to IVT in a scenario without industry standards.

⁵ At the time of this collection, the data from Oracle Data Cloud's Moat was valid as the MRC accredited data supplied was prior to Moat's announcement of discontinuation.

⁶ IAB Europe's AdEx Benchmark 2023 Study, slide 31 https://iab europe.eu/wp-content/uploads/IAB-Europe_AdEx-Benchmark-2023-Report.pdf

AD FRAUD EXPLAINER

WHY IT MATTERS TO YOU

- You're spending your budget on impressions or clicks that don't matter or deliver value.
- Your performance data becomes misleading or inflated.
- You may optimise based on bad signals, hurting ROI.

Even premium ad platforms can have fraud slipping through, so relying only on flashy reports can be risky.



HOW MUCH AD SPEND WAS LOST TO IVT IN 2023 IN CHANNELS ADOPTING ANTI-FRAUD STANDARDS?

To determine the estimated amount of digital video and display advertising spending lost to IVT in channels that have adopted rigorous industry standards, the study began with spending totals from the IAB Europe AdEx Benchmark 2023 Study and used sources of advertising investments to calculate a minimum estimate of advertising revenue flowing through at least one TAG-certified company.⁷

According to Statista and IAB Europe's AdEx Benchmark 2023 Study, social media platforms received €23.3 billion in advertising spending in 2023.⁸ That accounts for over 48% of the €48.3 billion Display and Video market cited in IAB Europe's AdEx Benchmark 2023 Study or roughly €23.2 billion. If social media accounts for 48% of total spending, then open internet publishers account for the other 52% of the €48.3 billion, or roughly €25.1 billion.

Calculating open internet TAG Certified Against Fraud coverage starts with Google's Ad Manager, given the extraordinary reach of the ad server giant. In a survey of European publishers by ExchangeWire research, 54% of publishers indicated they are using Google's Ad Manager, which extrapolates to roughly €13.6 billion of Europe's total open internet ad spend.

Given Google's longtime adoption of the TAG Certified Against Fraud standards, all of the inventory flowing through Google Ad Manager - i.e. €13.6 billion of ad spend - would be protected by TAG standards (as either TCC or NCC inventory). Since nearly all of the major social media platforms are also TAG certified, the €23.2 billion flowing through those platforms is also protected by TAG standard, for a total of €36.8 billion flowing through TCCs and NCCs.

The €36.8 billion in protected inventory accounts for 76% of the €48.3 billion total in IAB Europe's AdEx Benchmark 2023 Study and is likely a conservative estimate, as many agency holding companies and other major players like Amazon Advertising are also TAG Certified Against Fraud. However, some important large agency

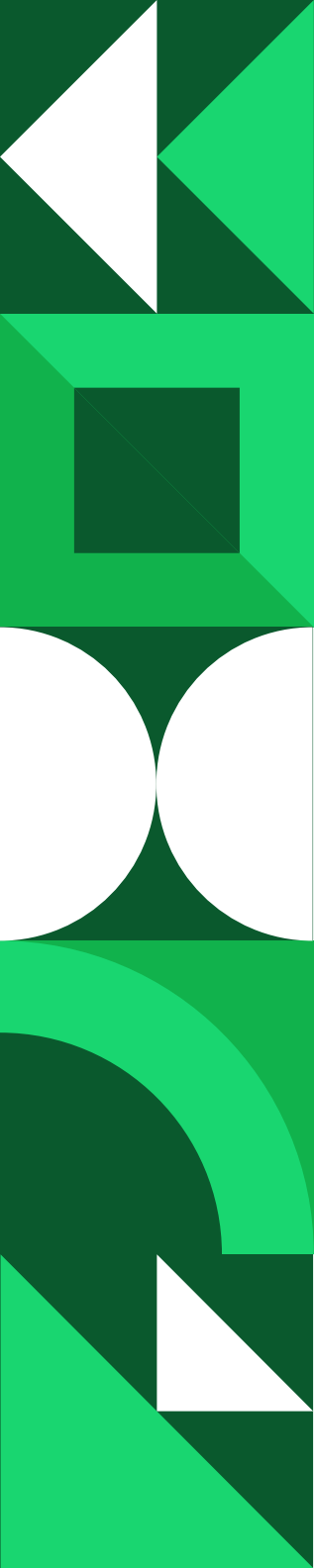
holding companies and DSPs do not have TAG certification covering their European operations, so the estimate is likely both accurate and conservative.

To determine the actual amount lost to IVT when companies bought through TCCs and NCCs in 2023, this study used the European weighted average IVT rate found across both TCCs and NCCs. According to the TAG 2023 European Fraud Benchmark Report, the weighted average of IVT found across both TCCs and NCCs was 1%. Inventory flowing through TCCs and NCCs is referenced as "protected" in this report, given the low rate of IVT in those channels.

Given that €36.8 billion in ad revenue flowed through protected channels in 2023, the study projects that roughly €368 million was lost to IVT through the 76% of total ad spending that took place through protected channels (TCCs and NCCs) in 2023. With another 24% of ad spend (€11.5 billion) flowing through unprotected channels, an additional €1.19 billion was lost to IVT through those unprotected channels.

⁷ Both the 2023 IAB Europe AdEx Benchmark Annual Report

⁸ Social media advertising spending in Europe in 2022 and 2023 <https://www.statista.com/statistics/899269/ad-spend-social-vs-other-display/>



HOW MUCH DID DIGITAL ADVERTISERS REDUCE FRAUD LOSSES IN 2023 DUE TO INDUSTRY PROGRAMS?

Using the same 2023 IAB Europe AdEx Benchmark Report findings of €26.6 billion display revenue and €21.8 billion digital video revenue in 2023, the combined amount of money likely lost to IVT with no industry action would have been more than €5 billion of the €48.3 billion in total revenue.

By comparison, only €368M of the €36.8 billion in European display and video ad revenue that flowed through TCCs and NCCs in 2023 is estimated to have been lost to IVT, whilst an additional €1.19 billion was lost to IVT of the €11.5 billion that flowed through unprotected channels. The total losses to IVT through both protected and unprotected channels in Europe were €1.558 billion in 2023.

	Estimated IVT losses with no anti-fraud standards	Estimated IVT losses in protected channels	Estimated IVT losses in unprotected channels	Estimated IVT losses in both protected & unprotected channels
Total Video & Display Spending	€48.3 Billion*	€36.8 Billion (76% of Total)**	€11.5 Billion (24% of Total)	€48.3 Billion
IVT Rate	10.36%***	1%****	10.36%	n/a
Total IVT Loss	€5.05 Billion	€368 Million	€1.19 Billion	€1.558 Billion
Current Savings from Adoption of TAG Standards				€3.447 Billion
Additional Savings from 100% Industry Adoption of TAG Standards	€1.075 Billion*****			

* Combined 2023 display and video revenue from 2023 IAB Europe AdEx Benchmark report

** Estimated based on 2023 IAB Europe AdEx Benchmark report, ExchangeWire research, and methodology described herein.

*** Unfiltered European and global IVT rates from four MRC-accredited vendors across a minimum of three quarters of display and video in 2023 and 2024.

**** Weighted average of IVT from TCCs and NCCs in TAG 2024 European Fraud Benchmark Report.

***** Estimated amount saved if 100% of the supply chain was protected by TAG standards.

In summary, through the rigorous anti-fraud standards adopted by the ad industry, European advertisers are saved approximately **€3.447 billion** from IVT in 2023, a reduction of 69% from the losses they otherwise would have suffered had no protections been in place.

If 24% of remaining spending on unprotected inventory had those same high anti-fraud standards applied to it, advertisers could save an additional €1.075 billion in losses they currently suffer.



**WHERE DO WE GO
FROM HERE?**



The 2025 European Fraud Savings Report shows that Europe has made tremendous strides in reducing losses due to IVT, thanks to the broad adoption of rigorous global anti-fraud standards that reduce IVT rates to less than 1% across protected channels. Despite that progress, there is significant work that remains to be done, as 24% of European ad spending remains unprotected, costing advertisers more than a billion Euros in preventable losses each year.

To address this gap, the report highlights the importance of driving broader European adoption of TAG's global anti-fraud certification to ensure that all companies across the worldwide supply chain are maintaining the same rigorous standards. Whilst localised European programmes are beneficial in their country of origin to strengthen broader supply chain standards, none of these certifications focus solely on ad fraud prevention, and companies should supplement any engagement in those programmes with TAG's global anti-fraud certification.



AD FRAUD EXPLAINER

WHAT CAN YOU DO?

IVT means your ads are being seen or clicked on by something other than a real, interested person. That can include:

- Use trusted measurement vendors that are MRC-accredited and audited for fraud protection.
- Make sure they use post-bid filtering (removes invalid traffic after the ad runs so you don't pay for it).
- Ask for transparency—where your ads ran, who saw them, and how fraud is handled.
- Don't just look at CPMs or click-through rates, look at real outcomes. Bots can't buy your product.
- Buy through partners with rigorous protections, like TAG Certified Channels.

We also know that other technical tools exist and still need further industry adoption. The IAB Tech Lab's Supply Chain Object (2019) and Ads.cert (2022) technical protocols, for example, are two standards-based solutions that could significantly contribute to ad fraud mitigation through security and transparency but lack scaled adoption from supply chain intermediaries. By understanding and enforcing these additional standards, agencies and brands can bolster the existing industry anti-fraud framework through required disclosures of adoption, further instilling even more trust that their ad spend reaches their intended audience through certified channels.

Finally, **the total European savings of €3,447,000,000** is no small feat and deserves commendation, but the industry must not let down its guard. The criminals who profit from ad fraud are constantly updating and adapting their attacks to exploit the cracks in industry adoption of anti-fraud standard. The digital advertising industry must be equally vigilant in monitoring for new fraud tactics through collaborative forums like the TAG Threat Exchange, whilst encouraging continued adoption of tough global anti-fraud standards.

9 Supply Chain Object (released 2019): This standard provides end-to-end transparency by clearly identifying all intermediaries involved in delivering an ad impression. Mapping out the entire supply chain from the advertiser to the publisher allows for better visibility into the ad delivery process. This transparency ensures that only authorized parties are part of the supply chain, reducing the risk of ad fraud, such as domain spoofing, where fraudulent actors misrepresent themselves as legitimate websites to siphon ad spending.

10 Ads.cert 2.0 (released 2022): This standard adds a layer of cryptographic security to digital ad transactions. By authenticating the identities of supply chain participants through cryptographic signatures, ads.cert ensures that only verified players are involved in ad transactions. This prevents malicious actors from inserting fraudulent impressions, clicks, or ad units into the supply chain. Ads.cert's authentication mechanism mitigates the risk of impression laundering, where fraudulent inventory is disguised as premium inventory.

APPENDIX A

SUMMARY: MRC ON PRE-BID IVT REQUIREMENTS FROM APRIL 11, 2025

The Media Rating Council (MRC) released an updated statement that provided further guidance in how vendors manage invalid traffic (IVT). The MRC clarified that:

- Post-bid IVT detection is required for MRC-accredited vendors. This means any invalid traffic should be identified and removed after the ad is served—but before billing.
- Pre-bid IVT filtering is optional and not a substitute for post-bid filtering. It can help reduce fraud upfront but shouldn't be relied on alone.
- Pre-bid filtering alone has risks, such as tipping off fraudsters to detection tactics.
- All MRC-accredited vendors go through rigorous audits, and they are required to be transparent about how they detect IVT.
- The MRC emphasized the need for more education and transparency in the industry to prevent confusion and maintain trust in measurement.

The bottom line: Don't assume all fraud is caught before the ad is served in prevention—robust post-bid filtering is essential to protect spend and ensure accurate reporting.

For further guidance regarding MRC Prebid and Postbid in detail, see the MRC statement from April 11, 2025:

<https://mediaratingcouncil.org/sites/default/files/News/MRC%20Statement%20on%20pre%20bid%20IVT%20requirements%20and%20processes.pdf>

ACKNOWLEDGEMENTS

PRINCIPAL INVESTIGATOR, AUTHOR, AND ADVISOR TO TEAM TAG:

Scott Cunningham, Cunningham.Tech Consulting

Cunningham is a longtime partner and collaborator to the ANA, 4A's, and IAB trade associations and members, as well as a Founder and continued supporter of the IAB Tech Lab.

MRC ACCREDITED MEASUREMENT PARTNERS:





tagtoday.net