



IAB France responses to DG Comp's queries on FLEDGE

In September 2021, we shared with you a first memo offering an overview of how Privacy Sandbox's core privacy model and APIs (FLoC, FLEDGE, Measurement APIs) will benefit large actors such as Google over smaller players in the industry. In April 2022, we shared with you a second memo on the Topics proposal and its impact on the digital advertising industry.

Following our meeting of May 12, 2022, DG Competition sent IAB France / Alliance Digitale several questions related specifically to the FLEDGE API of the Privacy Sandbox and its impact on the digital advertising industry.

You will find below our answers.

1. An explanation of the extent to which Fledge changes the way auctions are run, including:

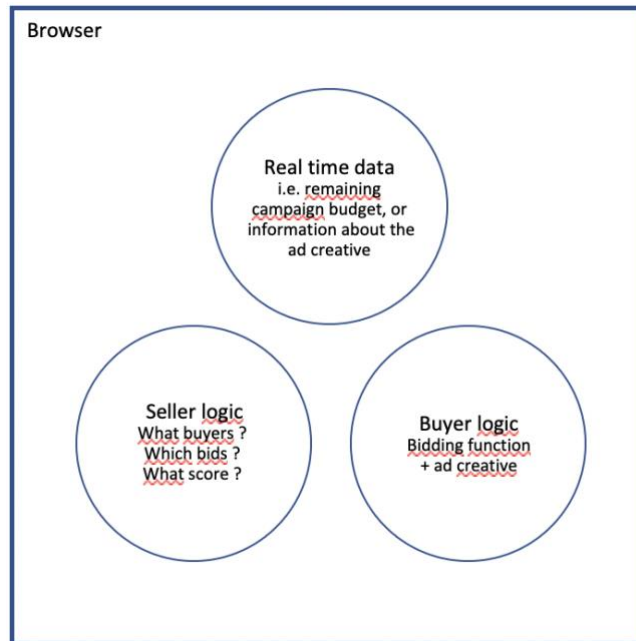
1.1. Which parts of the current auction process would be moved to the browser (or some 'trusted server'), and how this affects the current business models of market participants;

1.1.1. Which part of the current auction process would be moved to the browser with FLEDGE?

With FLEDGE, the browser will be responsible for (1) knowing which interest groups the user has joined, (2) for putting together and executing the data related to the on-device auction (bidding logic from the seller, from the buyer and from a third party trusted server) and (3) for rendering the winning ad that was previously downloaded in a fenced frame.

The step (2) relates to the auction.

The browser's role is to fetch information related to the auction from all parties (the seller, the buyer, and the trusted server) and execute the auction on-device.



Data related to the FLEDGE auction stored within the browser

Source: Alliance Digitale

In our position paper dated sept 2021, we raised the issue that FLEDGE would replace header bidding by a single auction, run by a single sell side partner chosen by publishers, which in most cases would be likely Google.

A new feature should now allow other SSPs to participate in so called “Component Auctions”, while the publisher’s main sell-side partner would make the final decision regarding the winning bidder in a “Top Level Auction”. As explained below, this two-tier auction process raises concerns as Google is likely to be chosen by publishers as their main sell-side partner.

As a reminder, in FLEDGE’s design, the FLEDGE winning bid value is also compared to a contextual bid value run server-side, with the following workflow:

1. SSPs run contextual auctions outside of FLEDGE
2. SSPs trigger auctions in FLEDGE, passing winning contextual bid through “sellerSignals”
3. That contextual bid value can be used to discard FLEDGE bids in “runAdAuction”
4. If there’s no FLEDGE winning bid, the SSP will de facto fall back on the contextual bid

1.1.2. How this affects the current business models of market participants

- 1.1.2.1. FLEDGE can only be used by first party data owners who also run the buying strategy

In our position paper dated sept 2021, we first mentioned that FLEDGE can only be used by first party data owners who also run the buying strategy. This is still true in the actual design.

When assigning a user into an interest group, first party data owners must also provide the ad's creative code as well as the bidding logic for evaluation that will be used later by the browser for on-device auctions. Unlike in today's world, where the data owner can delegate the buying strategy to a third party, the data owner must also run the buying strategy. This means the data owner must also be the buyer, or buyer's tech provider.

That makes the role of data provider much harder to sustain, since you can no longer simply focus on audience creation, but need also to operate the buying, which is a very different activity and as such requires those company to invest time, resources, and money to sustain their business compared to today. Data providers that do not also operate the buying strategy will not be able to leverage that proposal without a substantial evolution of their core business.

This will benefit large actors who are vertically integrated in the advertising supply chain. Google happens to already be both a data provider (they provide Google's first party audience as part of their DV360 offering) and a tech provider (they offer DV360 as a DSP to buyers). As such, unlike most existing data providers, Google is in no needs to change its business model to keep offering data provider services to buyers.

1.1.2.2. FLEDGE will make it harder for advertisers to test and switch its DSP partner, which will consolidate Google's DSP's dominant position

Today, advertiser's segments are managed by a third-party system (Data Management Platforms) and can be shared at any point with any DSP partner to run a campaign. With FLEDGE, the interest group will be created by and linked to a single tech partner.

It will be therefore impossible for the advertiser to switch that interest group to a different tech provider. To test with a different partner, the advertiser will thus need to create a new interest group from scratch as audiences will not be "portable" from one system to another.

As Google's DV360 is already in a dominant position on the DSP market and benefits from a first mover advantage, we fear FLEDGE should only consolidate its position.

1.1.2.3. FLEDGE will consolidate Google Ad Manager's dominant position as publisher's sell-side partner

As mentioned above (1.1.1), the FLEDGE auction should work in two tiers. Whereas publisher's main sell-side partner will run the "Top Level Auction" and choose the winning ad, other SSPs can participate in the "Component Auction".

This gives the main sell-side partner a privileged position: the main sell-side partner will be asked to score the ad from the winning component auction and will be told whom the partner is. The risk of unfair scoring should be limited though since the scoring code from the seller will be public "behind the decision logic url". However, component ads will have to pass through both the ad scoring of SSPs in the component auction and the ad scoring from the main sell-side partner as well, whereas it will only have to go through the main sell side partner's ad scoring in the top-level auction. The main sell side partner should therefore have more chance to select the winning ad in the end.

Given the largely dominant position of Google in the ad serving market (90% according to the CMA¹) and its first mover advantage, it appears most likely to us that publishers will end up choosing GAM as their main sell side partner.

Concerns were already raised in this regard, asking for all sellers to be treated on a level playing field in the component auctions while the top-level auction could be handled by an independent third party.² Yet Google Ads recently published an explanation of how Google Ad Manager (GAM) would integrate with FLEDGE with multiple sellers in the testing phase.³ That proposal only mentions GAM participating as main sell-side partner and doesn't provide guidance on whether GAM will support or not being run as a component auction itself. We raised the question explicitly,⁴ but we are still waiting for an answer.

FLEDGE will also create an entry barrier for independent ad tech companies that wish to partner with publishers. First and as explained above, Google is likely to be systematically chosen by publishers as their main sell-side partner. Second, the auction happens on-device, which means publishers will have to significantly reduce the number of sell-side partners to avoid the degradation of the user experience on their website. This means publishers will be limited to choosing a handful of sell-side partners, and among them necessarily Google.

Therefore, we fear FLEDGE will also consolidate Google's dominant position as publisher's sell-side partner.

1.2. The impact of changes to the auction process on Google's and third parties' ability to compete for the business of advertisers and/or publishers

1.2.1. To compete for the business of advertisers

- 1.2.1.1. See above (1.1.2.2): FLEDGE will make it harder for advertisers to test and switch its DSP partner, which will consolidate Google's dominant position on the buy-side

As explained above (1.1.2.2.), DSPs will endorse a new role i.e., creating and managing interest groups on behalf of the advertiser. These interest groups will not be portable. This means it will be harder for advertisers to test and switch for another DSP. With its large market share and first mover advantage, Google's dominant position on the buy-side will hereby be also consolidated.

¹ CMA, Online platforms and digital advertising market study, 5.227 (p.270), 1 July 2020, https://assets.publishing.service.gov.uk/media/5fa557668fa8f5788db46efc/Final_report_Digital_ALT_TEXT.pdf.

² Lukasz Wlodarczyk, *AdExchanger*, April 2022, <https://www.adexchanger.com/the-sell-sider/when-it-comes-to-header-bidding-will-google-play-fair-with-fledge/>

³ <https://github.com/google/ads-privacy/tree/master/proposals/fledge-multiple-seller-testing>.

⁴ <https://github.com/google/ads-privacy/issues/65>.

1.2.1.2. FLEDGE could create an entry barrier for DSPs as well

Without sending a response to the contextual bid request, DSPs cannot send any “Buyer Signal” in the FLEDGE auction. These signals might prove critical to base their bidding logic on. For example, it’s currently the only way to support bidding currencies other than USD.⁵ Participating in a contextual auction allows DSPs to pass their own custom signal, which will give an important advantage over DSP that do not.

This means DSPs would have to send a significant number of contextual bids to be able to provide their own buyer signal to be used at auction time and run at parity with other DSPs that will have access to such buyerSignal.

This would require substantial resources (processing power, servers, team) to bid on the largest user traffic possible to have an opportunity to participate in the FLEDGE auction. Smaller ad tech companies do not necessarily have those resources. To give an order of magnitude by illustrating with one of the major ad tech companies besides the GAFAM: Criteo has currently 45,000 servers in 7 data centers to handle its user traffic.

1.2.1.3. Digital advertising campaigns will be less relevant with FLEDGE, giving an advantage to walled gardens such as Google’s

Because of its complexity and the auction happening on-device, FLEDGE only offers marketers limited advertising abilities and performance reports compared to what Google’s walled garden advertising solutions will offer.

This relates to the general issue we raised in our position on Topics in April 2022: it seems that Google is building two worlds, one that will only offer very limited advertising abilities via the Privacy Sandbox, and another that will offer evermore targeting and measurement abilities using Google’s large set of first party data within its walled garden environment.

Until now, common audience types used by marketers on the web are:

- Audiences based on socio-demo and affinity criteria: e.g. “As a marketer, I want to reach people in age range 20-30 who like vegan food”
 - o An extension of this type of audience is “lookalike” audiences: “As a marketer, I want to reach people who are *similar* to my customers”. Similarity to the site customers is often achieved through machine learning technics, without explicitly referring to users’ characteristics.
- List of users from their CRM: e.g. “As a marketer, I want to reach lapsed buyers, i.e., customers who haven’t made a purchase for two months.”
- Audiences based on past interactions with the marketers’ site: e.g. “As a marketer, I want to reach people who put an item in a basket on my site but did no purchase.”

⁵ See this topic under discussion: <https://github.com/WICG/turtledove/issues/166>

FLEDGE only maps to the third use case, which is often called “Retargeting”, with the following limitations:

- Interest Groups have a 30-day lifetime, versus 13 months for third-party cookies on Chrome;
- FLEDGE does not allow to use data from several domains for further audience definition;
- FLEDGE includes a k-anonymity threshold for background updating of Interest Groups and rendered ads.

FLEDGE is overall a very complex system, and other key features for campaigns’ relevance might be impaired, such as:

- Ability to enforce ad display frequency capping and optimization (i.e., the ad is displayed at a certain pace to a user);
- Ability to enforce brand safety (i.e., the page the ad is displayed on is compliant with marketers’ requirements);
- Ability to enforce ad quality (i.e., the ad is compliant with the publishers’ requirements);
- Ability to update ads to provide for updates in product’s availability or price.

Part of the above-mentioned controls may have to be executed in-browser, through JavaScript-defined functions. As constraints are to be applied to the size of the JavaScript function, simplifications will have to be applied to the controls. It is likely that it will lead toward short "allow-lists", from which small advertisers (for Ad quality) or publishers (for Brand safety) will be excluded.

And the yet-to-be-defined target reporting proposals that will integrate with FLEDGE might impair:

- Ability to get billing and reporting data
- Ability to get legal reporting (e.g., [French digital advertising reporting law](#))
- Ability to perform campaign optimization
- Ability to perform campaign piloting (start, pause, stop a campaign) based on the campaign outcomes or budget spend
- Ability to perform monitoring and incident detection

Privacy Sandbox reporting data is planned to include reporting restrictions such as differential privacy or k-anonymity. Both will proportionally affect more small advertisers and publishers than large ones, leading to averaged values for bidding. For example:

- Bids are likely to be averaged on small publisher sites, e.g., losing the distinction between "high-quality content, manually curated small blog" and "link aggregator small blog". This will be less the case for "large" publishers for which reporting will be proportionally more accurate;
- In a similar manner, bids are likely to be averaged for small advertiser campaigns.

In-browser bidding functions, by their reduced complexity, will have the same discriminatory effect toward small actors.

1.2.2. To compete for the business of publishers

1.2.2.1. FLEDGE does not allow publisher alliances

In our position paper dated sept 2021, we mentioned FLEDGE would not allow publisher data alliances, while another proposal in the Privacy Sandbox (First Party Sets) aimed at allowing data sharing within a single corporate entity. After several critics from W3C (see below 1.2.2.1.2), Google mentioned in a recent meeting they are currently revisiting the proposal.⁶ However, no official announcement on this aspect have been released yet.

1.2.2.1.1. It is still true that Publisher data alliances will not be supported in FLEDGE

For long, Google has dominated the advertising industry as a publisher, with no threats from other publishers besides other GAFA. This domination was the result of a scaled first party data and inventory. However, in past few years, several publishers, in different markets, have worked together to create alliances, that will provide advertisers with scaled first party data and inventory, allowing them to finally provide a competitive offer to the likes of Facebook and Google. Such alliances include Skyline and Gravity in France, Ozone in UK, Wemass in Spain, Nonio in Portugal, etc.

Those alliances rely on publishers that form them to be able to share their first party data and activate it on each other's inventory. This ability is made possible thanks to third party cookies which allow them to build common audience on top of them. With FLEDGE, this is no longer possible as publishers cannot build common audience. Interest Groups are created based on interaction from a single website.

There were some attempts from the industry to suggest FLEDGE evolutions that would allow such alliances to continue to exist, but they were rejected right away by Google Chrome team, with limited justifications.⁷

If no publishers' alliances for first party data is supported, we will get back to a world where Google and Meta dominate without real competition from publishers that lack their scale and positioning on the market.

1.2.2.1.2. The First Party Sets proposal is currently revisited after having been the subject of several critics by W3C

The First Party Sets proposal has been the subject of multiple critics. The W3C TAG had declared in April 2021: "we consider the First Party Sets proposal harmful to the web in its current form".⁸ First Party Sets has now been rejected by one of W3C's working group in June 2022,⁹ and moved to another W3C group.¹⁰

⁶ IAB Europe Virtual Town Hall with Chrome and Google Ads on Privacy Sandbox Origin Trials, 26 July 2022, <https://iabeurope.eu/events/virtual-town-hall-with-chrome-and-android-on-privacy-sandbox/>.

⁷ <https://github.com/WICG/turtledove/issues/124>

⁸ https://github.com/w3ctag/design-reviews/blob/main/reviews/first_party_sets_feedback.md.

⁹ W3C Privacy Community Group, 2 June 2022, <https://lists.w3.org/Archives/Public/public-privacycg/2022Jun/0003.html>.

¹⁰ W3C Web Platform Incubator Community Group (WICG), <https://github.com/WICG/first-party-sets>.

First Party Sets allowed data to be transferred within a group of companies (ex: Disney or Nestle). The paradox between Chrome's refusal to allow data alliances between publishers on one side, and their First Party Sets proposal on the other side, underscored the core problem of the Privacy Sandbox, and more generally of other walled gardens recently. Google's vision of Privacy favors first party data over third-party data, whereas this distinction is nowhere to be seen in legal texts. In fact, the CMA has multiple times expressed its concerns that large actors would interpret user privacy in ways that would harm competition.

1.3. The nature and scale of the technical changes that Fledge requires companies to implement

FLEDGE would require companies to implement major technical changes.

With FLEDGE, data providers would need to switch their business model as they would have to run the buying strategy as well (see above 1.1.2.1).

DSPs would need to respond to all contextual bid requests to provide their own buyer signal to be used at auction time (see above 1.2.1.2.). To give an order of magnitude, Criteo has currently 45,000 servers in 7 data centers to handle its user traffic.

FLEDGE would require companies to invest in software engineering changes to integrate with FLEDGE and adapt to the new auction mechanism explained above, both for the first implementation of the proposal and the technical updates on the longer term.

Beyond technical changes, FLEDGE will require companies to develop an in-house expertise to be competitive, and educate their teams of software engineers internally about how the API works.

Even though it is difficult to give a precise evaluation of the cost it would engender for companies, Origin Trials already illustrate that those will be highly demanding in resources, time, and education (see below 3.1). A complete implementation of the Privacy Sandbox would probably require an order of magnitude more resources.

Many companies decided not to invest time and resources in testing Privacy Sandbox proposals in general, especially following the industry's experience with the sudden abortion of FLoC. FLEDGE is also particularly complex and demanding in time and resources.

2. Any uncertainties and unknowns around Fledge and the consequences of these uncertainties for the companies involved, including uncertainties around how FLEDGE itself will function, or around how it will interact with Google's other tools (e.g., GAM) or third-party auction tools (e.g., Prebid).

Overall, there are still major uncertainties and unknowns regarding FLEDGE.

First, several technical aspects of FLEDGE do not exist as of today:

- Fenced Frames are the technical medium used to render the winning ad offline in FLEDGE. It is still unclear how exactly those will work, and the design is still under discussion.¹¹
- The Trusted Server is meant to provide complementary real time information to the FLEDGE auction. It is unclear what its exact role will be. Chrome's explainer gives two examples: informing the buyer in real time of its remaining campaign budget and informing the seller in real time about the ad creative specifications.¹² It is also still unclear what actor will operate it and what governance or contractual model will be needed to ensure it stays a third party clear of conflicts of interests. Criteo engineers had made a clear proposal regarding the role of what such a trusted server could endorse in the past,¹³ yet the current design remains largely undefined.
- Google's decision process to include or not additional features remains unclear, e.g., a question on currency management in FLEDGE that has been running since April 2021.¹⁴

Second, Origin Trials will not enable industry stakeholders to draw meaningful conclusions on how FLEDGE will perform (see below 3.2. for more details). Both the timeline for the depreciation of third-party cookies and for the Origin Trials do not seem realistic in the light of what still needs to be accomplished to develop Privacy Sandbox proposals and test them, particularly with FLEDGE. The industry invested time and resources in testing FLoC, before it was suddenly replaced by the Topics proposal without any notification beforehand.

As a general consequence, companies doubt whether the FLEDGE proposal will ever come to light, the design might evolve substantially, even after third party cookies are deprecated. Therefore, many of our members decided not to participate in the origin trials, as they deem it is not worth the time and financial/human resources.

3. An explanation of the difficulties around FLEDGE's origin trials, including:

Google recently announced an extension for the OT,¹⁵ but we still lack a testing plan for the Privacy Sandbox:

- What's the KPIs that will be tested? These should cover the Google Commitments to the CMA;
- What will be the test strategy to assess these KPIs?;
- What will be the milestones related to this test strategy, including the dates of key technical elements availability?

¹¹ <https://github.com/WICG/turtledove/issues/312>.

¹² <https://github.com/WICG/turtledove/blob/main/FLEDGE.md>.

¹³ SPARROW, see <https://github.com/WICG/sparrow>.

¹⁴ <https://github.com/WICG/turtledove/issues/166>.

¹⁵ Anthony Chavez, Expanding testing for the Privacy Sandbox for the Web, 27 July 2022, <https://blog.google/products/chrome/update-testing-privacy-sandbox-web/>.

- 3.1. An explanation of the resources and costs required to participate in these trials (where possible, providing estimates of these costs and comparisons to those incurred in participating in FLoC's origin trials held before the proposal was scrapped)

Given the uncertainty and unknowns of the Origin Trial's Outcomes, only a few of our members have decided to invest in FLEDGE testing.

Company A and B dedicate each 4 engineers to Privacy Sandbox testing (FLEDGE included).

Criteo is participating to the Topics, FLEDGE, and Attribution Reporting Origin Trials, which is only part of the current Privacy Sandbox Origin Trials. The scope of this participation has been limited to being able to integrate with these APIs and collect data: collect topics from the Topics API, collect attribution reports from Attribution Reporting, do some simple bids in FLEDGE and collect data about Interest Groups.

These tests do not take into consideration bidding on Topics, using Attribution Reporting for a variety of reporting use cases, or using these APIs in conjunction for bid optimization. Also advertising functions such frequency capping, brand safety, or ad quality are still managed through third-party cookies.

To do so, a 10 people, 5 engineers among them, have been working full-time since early 2021. FLEDGE has been the biggest work of that team (see above 1.3 for more details regarding Criteo).

Google's plan to test FLEDGE, and other proposals remains unclear (see below 3.2).

Part of the investment may be for nothing. It feels like a "distraction tax" that Google is imposing to the rest of the industry.

- 3.2. The limits of FLEDGE's origin trials and resulting difficulties in establishing their effectiveness in replacing third party cookies (e.g., low level of data, use of third party cookies, etc.)

First, only beta of FLEDGE is being tested, key technical elements do not exist yet (see above 2.).

From a DSP perspective, the FLEDGE market and competition impact assessment on real data can be split in the following phases:

1. Technical integration
2. Data gathering and "offline analysis"
3. Market conditions simulation and "online" analysis

We're still in phase 1 with:

- Late publication of integration methods by Google Ads
- OT running still on Chrome beta users only. Note that the tests are supposed to run on 50% of Chrome Beta's traffic, and that our members do not even see such user traffic yet. Chrome Beta is a developer version of Chrome, which implies a heavy bias in its user traffic that is not representative of the standard version of Chrome

- No visibility on FLEDGE technical roadmap, e.g. release of critical features such as Fenced Frames, Trusted Server, [k-anonymity server](#), or FLEDGE technical limitations that will inevitably come with on-device processing
- No visibility on FLEDGE integration roadmap with other proposal such as Attribution Reporting
- Users are still targeted with 3d party cookies for other purposes. It is therefore impossible to compare CPMs with and without third party cookies while the latter still exist.

Phase 2 "offline analysis" is about studying the "quality" of FLEDGE audience.

FLEDGE is indeed about creating audiences linked to a past user browsing or purchasing experience. A typical FLEDGE use case is, for instance, "As a sport goods vendor, I want to show bike helmets ads to people who recently purchased a bike on my website", the audience being people who made a bike purchase on the vendor's site.

Once integrated with FLEDGE APIs, a DSP can start assessing what is the reach and quality of such audiences created through FLEDGE (e.g., how many of such users can I target through FLEDGE? For how long?). Note that Google has not proposed any testing protocol for phase 2.

Phase 2 requires:

- Phase 1 to be complete
- At least 3 months to gather relevant data, as FLEDGE needs one month before running at full capacity (Interest Group can have up to 30 days in duration)

Phase 3 "online analysis" should be about measuring FLEDGE impact on competition, publishers' revenues, and marketers' ability to run cost-effective campaigns, based on real user traffic. It requires collaboration across the industry, to recreate market conditions with DSP and SSP, and would be an order of magnitude more complex than phase 2. Google has not proposed any testing protocol around phase 3 either.

Criteo made a proposal on FLEDGE testing in January 2021, which did not receive any feedback.¹⁶ Criteo more recently re-opened the question,¹⁷ with no clear answer as of today.

Google Ads has not provided any indication of its test plan.

In November 2021, we asked Google representatives a question related to how FLEDGE would work with GAM,¹⁸ and sent 6 reminders before receiving an answer in April 2022 stating GAM's auction participation was still under discussion.

Privacy Sandbox Proposals all require an initialization phase before the tests can show the first results: FLEDGE's Interest Groups have a lifetime of 30 days, the Attribution Reporting API entails a reporting limitation to 30 days and Topics requires an initialization phase of at least 3 weeks. It further requires several months of data collection before being able to draw first conclusions (phase 2). The Origin Trial was only recently due to end at end of this August, which was even too short for phase 2.

¹⁶ <https://github.com/criteo/privacy/blob/main/TEETAR/README.md>.

¹⁷ <https://github.com/WICG/turtledove/issues/317>.

¹⁸ If GAM would return an auction response under comprehensible format (json) and wait for final auction decision from a third party (FLEDGE auction runner)? Like how header bidding works today).

4. Add. Consideration: FLEDGE relies on arbitrary privacy and other principles defined by Google

The Privacy Sandbox relies on the distinction between “first party” and “third party” as a base principle. Google has made clear numerous times that this principle is not to be discussed.

Yet the first “Development and Implementation Criteria” of Google Commitments to the CMA reads:

“Impact on privacy outcomes and compliance with data protection principles as set out in the Applicable Data Protection Legislation;”

Our understanding is that GDPR does not recognize “first party” vs “third party”, but instead has data processing principles such as:

- Lawfulness, fairness, and transparency
- Purpose limitation
- Data minimisation
- Accuracy
- Storage limitation
- Integrity and confidentiality (security)
- Accountability

Google has yet to demonstrate how their definition of privacy fits with this Development and Implementation Criteria.

FLEDGE includes a [specific additional principle](#):

“Microtargeting protection based on the browser ensuring that the same ad or ad component is being shown to at least some minimum number of people”

Which is enforced through k-anonymity requirements for displaying ads.

Through this definition, Google wants to prevent users from seeing ads that could be "too much targeted to them", even if that ad has been built in full compliance with every privacy principle. Under the "microtargeting protection", « small » advertisers may be unable to display ads using FLEDGE, as they would have too few potential customers for some of their ads.

While one can agree with the goal set by Google (e.g., to avoid "creepy ads") or not (e.g., it prevents the legitimate small advertiser use case), Google should not set itself the goal of "policing" the ads on the web, or the web itself for that matter.

Deciding what type of ads are "appropriate" or not in the context of the Privacy Sandbox goes beyond the scope of a user agent and intrudes on the relationship between users, advertisers, and publishers.