Seller Defined Audiences
Implementation Guide

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Please email support@iabtechlab.com with feedback or questions

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About IAB Tech Lab

The IAB Technology Laboratory is a nonprofit research and development consortium charged with producing and helping companies implement global industry technical standards and solutions. The goal of the Tech Lab is to reduce friction associated with the digital advertising and marketing supply chain while contributing to the safe growth of an industry.

The IAB Tech Lab spearheads the development of technical standards, creates and maintains a code library to assist in rapid, cost-effective implementation of IAB standards, and establishes a test platform for companies to evaluate the compatibility of their technology solutions with IAB standards, which for 18 years have been the foundation for interoperability and profitable growth in the digital advertising supply chain. Further details about the IAB Technology Lab can be found at https://iabtechlab.com.

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Background

**Seller Defined Audiences** (SDA) is an addressability specification incubated within Project Rearc, released in February 2022. This specification allows publishers, exchanges, and DSPs to scale first-party data responsibly and reliably without data leakage. It was the first in a portfolio approach of specifications to facilitate audience targeting without third-party cookies.

While Project Rearc focuses on specifications that preserve addressability with the deprecation (or limitation) of third-party cookies and mobile identifiers, ecosystem participants are interested in testing this type of approach now without having to re-architect other aspects of the supply chain, such as frequency capping, measurement, and attribution.

This implementation guide will provide multiple options for the implementer. One approach envisions Seller Definite Audience segments only, where the seller provides an audience classification and where frequency capping, measurement, and attribution are not fully detailed. This implementation guide does not seek to solve for the full life cycle of targeted advertising use cases but presents a way for a piece of the puzzle, in this case, targeting, to occur.

Another approach focuses on minimizing unauthorized use of publisher data (the risk of publisher 1st-party data getting associated with identifiers and usable on other properties without the publisher’s permission) while still leveraging cookie-based identifiers for frequency capping, measurement, and attribution.

OpenRTB provides ways to pass both contextual categorizations and audience data. Though these look similar and may be related, they serve different functions. This document focuses on communicating information about audiences. For more information about how to communicate contextual information, please see the following objects in the OpenRTB 2.x specification: Site, App, Publisher, Content, Video, and Producer.

Getting Started

As an audience owner, your goal is to use what you know about your users to drive better monetization while protecting your user’s privacy. The following are best practices for audience owners for the generation and sharing of audiences.

Audience owners (publishers or otherwise)

- Identify and create valuable audiences
  - There are multiple ways to understand an audience; one common method is to infer audience membership based on what content users have visited or opened
(for example, if a user keeps visiting content on soccer, they are probably a soccer fan, even when they are later visiting non-soccer content). Other examples of audiences can be information users give when they sign up for or interact with a website or app, like the presence of a pet, their job function, or hobbies. It’s worth noting that building such an audience does not depend on a user login.

- Ensure that the audiences you create are true to the intent of what a reasonable advertiser would want to buy. Audiences that are well-labeled and meet advertiser expectations are more likely to be bought in the future.

- Aggregate those audiences into segments.
  - It is recommended those audiences are labeled using IAB Tech Lab’s Audience Taxonomy 1.1
  - If IAB Tech Lab Audience Taxonomy is not used, it is still required to label which taxonomy is being used to describe the audience, and there must be a row for that audience in the taxonomy listed, so that the demand partners have the capability to read and translate those taxonomical IDs. This process must be completed between the audience owner and demand partner prior to any campaign leveraging vendor specific taxonomies going live.
  - Should audience owners choose to use a vendor-specific taxonomy, it is recommended they are declared in the segtax extension for interoperability with the demand and supply partners following the OpenRTB specification.
  - Use of IAB Tech Lab’s Data Transparency Standard can be used to declare relevant metadata about the composition of the audience.

- It is strongly recommended that audience owners complete the Data Transparency Compliance Program

Publishers/Sales Houses

- Make your audience segments available to an exchange partner.
  - If you are using header bidding with prebid.js use the first-party data mechanism in prebid to make the data available to bidder adaptors.

Exchanges

- Ensure you’re aware of first party segment data being passed to you and pass it along to DSPs

DSPs (or other buying platforms)

- Implement support for buyers to target seller-defined audience signals provided in the bid request (see examples below)
- When consuming Seller Defined Audience signals, buyers should minimize their dependencies on fields that contain data that may be used to identify a device or individual.
To minimize risk of linkage between user or device identifying signals and audience segments, publishers and supply sources may choose to omit potential user or device-identifying attributes common in the bid stream today. Buyers should ensure that there aren’t obstacles to this such as only having exchanges send “matched” traffic, or internal implementation details at the DSP level that might cause a no-bid.

Getting Started

**Publisher**
- Ensure 1st data is collected and sent to Exchanges or DSP partners
- Send which taxonomy is being used to label the audience

**SSP**
- Consume and aggregate audiences across publishers.
  - Note: even if the audiences from each publisher have the same name, their composition is likely to be different

**DSP**
- Turn off common targeting like 'matched audience', IP address, and/or Device ID
- Ignore unintended ids that accidentally get sent in the bidstream

High-level Implementation Options for SDA

The existing SDA spec mentions that platforms should refrain from sending both user or device identifying information and SDA in the same bid request, to avoid unauthorized connections between user identifiers and audience definitions. However, the SDA spec doesn’t provide guidance about how to do so. Here, we outline two approaches that could be taken.

Environments without Cross-Site/App Identifiers

The planned deprecation of cookies in Chrome will mean that environments without cross-site/app identifiers will be the only inventory available in the long term, so understanding this version of the Seller Defined Audience solution is strongly recommended. Seller Defined Audiences are a great tool to test within already 3rd party cookieless environments like Safari and Firefox. In these environments, there is no or minimal “opportunity cost” of removing traditional identifiers like 3p cookies from the bid request since it is nonexistent or limited anyway. While publishers may have instances where some attributes are sent to buyers, Exchanges may need to further ensure that no potential device or user-identifiable attributes are shared or should obfuscate/truncate such attributes when the exchange includes seller-defined audiences in the request.

In that context, SDA signals can be sent to DSPs which minimizes the risk of unauthorized use following the rest of the SDA spec. Bid request originators should work with their partners to activate demand against those signals.

Specific best practices if using this approach include:
Exchanges

- Optionally aggregate SDA data into deal IDs for direct activation with your buyers
- Assure all publisher data being transmitted to demand partners associates only attributes deemed appropriate and necessary for the transaction. Give publishers visibility into, and control over potential demand partners that will receive access to their data
- Work with buying partners to implement alternative solutions for use cases that depend on identifiers such as frequency capping and attribution

DSPs (or other buying platforms)

- Build alternative solutions for other needs like frequency capping (such as capping on session level identifiers) and attribution
- If user level signals are inadvertently sent in the bid request, DSPs should not associate user or device identifiers to SDA signals for use outside of the context of the bid request in which the information was sent

Sample bid request showing how to use Seller Defined Audiences in Cookieless environments:

```
|...                |
| "device": {      |
|   "ip": "192.0.2.XXX" |
| },               |
| "user": {        |
|   "dota": [     |
|       "name": "publisher.com", |
|       "ext": {   |
|         "segex": "3" |
|     },           |
|     "segment": [ |
|       "id": "200" |
|     ],           |
|       "id": "514" |
|...               |
```

For Cookie-Enabled Environments

Prior to the planned deprecation of cookies, the availability of fields such as user or device identifiers often have a significant impact on whether bidders consider a given bid request a valid opportunity and respond with any bids. These fields enable customary DSP targeting, frequency capping, detection of invalid traffic and attribution to function and are thus important.
For requests where a user ID is available, exchanges could consider focusing on obfuscating the audience association rather than the user ID.

The most straightforward way to accomplish this, and the one in fact employed already for this and other similar use cases, is through the use of PMPs. Publishers or trusted exchanges can pre-package combinations of SDA segments that meet a particular buyer’s interest and other forms of seller’s targeting and transmit that in the form of a deal id, omitting the SDA fields themselves from the bid request. Thus, the buyer can purchase on the SDA data, but no supply chain partners would have access to understand the segment definition and associate it with user IDs.

Best practices for cookie-enabled environments:

**Exchanges**

- Support allowing the publisher to create deals based on those SDA signals and/or to package deals at an exchange level on these signals, but **do not** pass the SDA signals themselves in the outbound request
- Create a single deal for whichever seller-defined audience or combination of audiences meets the specific buyer’s use case
  - Use distinct deal ID for each buyer/campaign
  - Such deals should not be uploaded/utilized in publicly accessible UIs that some DSPs use to allow buyers to browse available deals
  - Avoid naming the deal using a description of the audience
  - Deal ID strings themselves should have no innate or evident meaning and should not expose the underlying audience information. For example, a deal ID string like “SomePub-BrandName-AudienceName” would make it obvious what audience the deal represents, creating an increased risk of misuse by other parties who can observe the bid request. On the other hand, a deal ID string like “4a916bc1” does not innately convey anything, keeping the meaning of the deal limited to just the seller and the buyer
- The SSP or Pub should provide a deal id string to the DSP without identifiable SDA fields in the bid request
- Sellers may consider contractual mechanisms to ensure buyers and/or their DSPs are not able to create audience segment based on user id associated with the SDA or deal id (as applicable)
- Fields that might identify a device, a browser or a user can still be sent, subject to applicable privacy regulations, user privacy and publisher controls

**DSPs**

- So long as DSPs support deal ID based targeting, there is no additional implementation effort required for DSPs.
Sample bid request showing how to use Seller Defined Audiences in Cookied environments:

```
...  
"user": {  
  "id": 123456  
  "eids": [  
    {  
      "source": "techcompany1"  
      "uid": "987654"  
      "data": {  
        "name": "publisher.com",  
        "ext": {  
          "segment": "y"  
        }  
    }  
  ]  
  "segment": [  
    { "id": "208" }  
    { "id": "516" }...

```

Conclusion

A [study released by RTB House](https://www.rtbhouse.com) in August 2023 found that 75% of Seller Defined Audience signals failed to meet the specification, most commonly by failing to include which taxonomy the audience was referring to in the bid request. Easily solvable implementation mistakes can have an outsized negative impact on adoption. This guide hopes to help parties avoid those common errors by showing two ways to implement Seller Defined Audiences.

There is not now, nor will there ever be a single silver bullet to replace third party cookies and mobile ad identifiers (MAIDs). The Seller Defined Audiences specification is one in a suite of Addressability technologies aimed at solving some of the pressing issues facing Programmatic Supply Chain participants, all of whom are encouraged to start testing as soon as possible.

Please reach out to [support@iabtechlab.com](mailto:support@iabtechlab.com) with any questions or feedback.