ISBA Programmatic supply chain transparency study II summary:
Test of the Taskforce Financial Audit Toolkit

January 2023

pwc ISBA aop

Recap: 2020 ISBA/AOP/PwC programmatic study

https://www.isba.org.uk/system/files?file=media/documents/2020-12/executive-summary-programmatic-supply-chain-transparency-study.pdf

Two years ago the UK advertiser body (ISBA) and premium publisher body (AOP) tasked PwC with solving this key business challenge: "What do my programmatic supply chains really look like?"

Previous studies had examined only buy-side data, so this was true groundbreaking innovation: the **first time programmatic advertising supply chains were mapped end-to-end (all the way from advertiser to publisher) anywhere in the world.**

31m Matched impressions

50+ Companies involved

290 Unique supply chains matched

← 18 months study duration →

2.2bn Lines of data reviewed

267m Total impressions observed

Data sources spanned the industry: data was collected for Q1 2020 from 15 advertisers, eight agencies, five DSPs, six SSPs and 12 publishers, representing ~£0.1bn of annual UK programmatic spend.

The study uncovered industry-changing issues of global importance:
(i)   major challenges with data access and quality; and
(ii)   **15% of spend going into an unattributable 'unknown delta'.**

**Overall supply chain from the 2020 study**
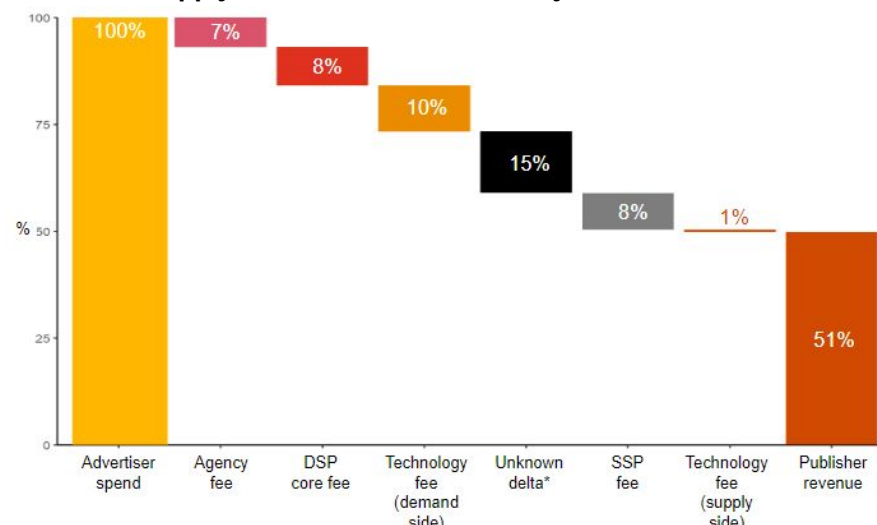
In response, a UK industry taskforce was convened, comprising ISBA, AOP, IAB and IPA, and individual members, with support from PwC. This Taskforce set out to resolve the data access and data quality issues, to be followed by exploration and reduction of the 15% unknown delta for the benefit of all the industry.

This new 2022 study was designed to test progress since 2020.
*(** Note: our 2022 study excludes agency fees, verification tools and ad serving; so to allow direct comparisons, our 2020 results must be restated as follows: unknown delta 15% restated to 17%; publisher net revenues 51% restated to 57%.)*

Restated 2020 overall supply chain
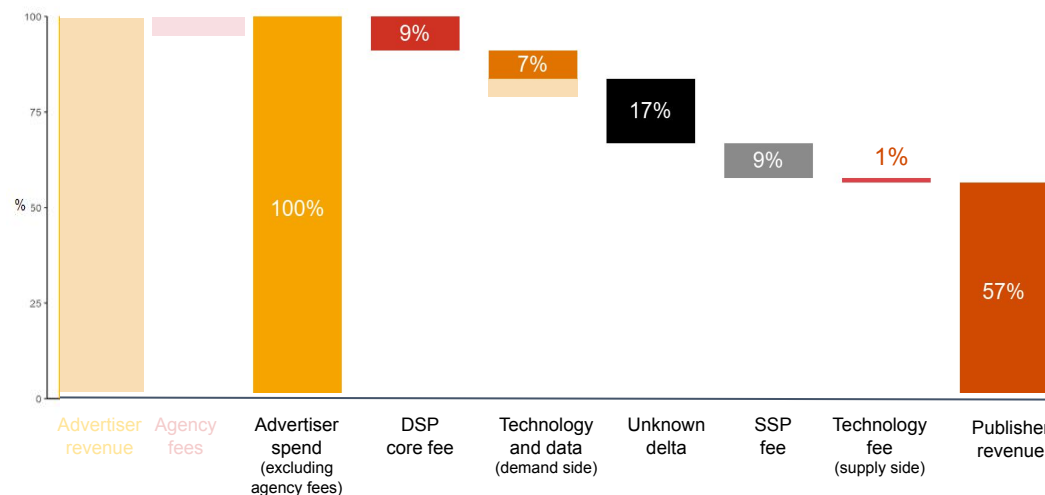
2022 study: objectives and participants

ISBA and its members were keen to understand whether programmatic supply chain transparency would be improved by the Taskforce outputs (the Toolkit) produced in response to the 2020 ISBA/AOP/PwC programmatic study.

This 2022 study set out to test the Toolkit (i.e. the Audit Permission Letter and Data Fields List) in five areas:

1. Does the Audit Permission Letter (APL) accelerate data access?
2. Does the Data Fields List (DFL) improve data quality?
3. Does improved data quality lead to improved impression match rates?
4. Is the unknown delta reduced?
5. Are there clear actionable next steps?

   (for individual participants, and the industry as a whole)

Our PwC team of data scientists, data engineers, and programmatic specialists collected data from 40+ study participants:

- 11 advertisers
- 7 agencies
- 6 DSPs and 6 SSPs
- 10 publishers

2022 study participants included:

Advertisers	Agencies	DSPs	SSPs	Publishers
Arla Foods	Havas Media Group	Adform	Ad Manager	Bauer Media
Channel 4	GroupM	Amobee	Index Exchange	Future
Deliveroo	MiQ	DV360	Magnite	Haymarket
Diageo	OMG	MediaMath	OpenX	Immediate
Dominos	IPA	The Trade Desk	PubMatic	Independent
PepsiCo		Xandr	Xandr	News UK
Sky		IAB	IAB	Ozone
Tesco				Rightmove
Vodafone				Telegraph
[+ 2 others]				The Guardian
ISBA				AOP

2022 study: highlights (with comparisons to 2020)

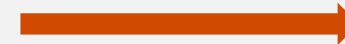|	2020 study	2022 study
Impressions analysed Total volume of impressions analysed during the study period: 1 September 2022 to 31 October 2022.	1.3bn →	1.3bn
Study duration Time duration to execute the study: onboard participants, access data, analyse, and report	18 months →	9 months
Matchable impressions Number of impressions served to study publishers via study tech vendors, available to analyse in both buy-side and sell-side data.	267m →	104m
Matched impressions Number of matchable impressions that were successfully matched from buy-side (DSP) data to sell-side (SSP) data.	31m →	61m
Match rate Proportion of matchable impressions that were successfully matchable from buy-side (DSP) data to sell-side (SSP) data.	12% →	58%
Unattributable spend / Unknown delta This represents discrepancies in the 'media cost' i.e. between amounts recorded as leaving the DSP and entering the SSP.	15% (17% restated) →	3%
Publisher revenue Proportion of advertiser spend that reaches publishers after applying the supply chain costs analysed in this study (including the unknown delta)	51% (57% restated) →	65%

2022 study: key findings

1. Does the Audit Permission Letter (APL) accelerate data access?

- The APL contributed to improved data access, which successfully **halved the study time to nine months** (vs 18 months first time).

- Where the APL was adopted and used as intended, it **operated effectively**. However, **APL adoption levels varied,** alternative bespoke solutions were often required.

- Although nine months is a **marked improvement on the 2020 study**, it is still short of the five months that we believe should be achievable.

2. Does the Data Fields List (DFL) improve data quality?

- The participants were able to provide log level data for each impression, a **significant improvement in data quality**.

- The **DFL proved to be a significant benefit** to the audit process, with adtech vendors on average sharing ~80% of the requested fields.

- **Some data quality limitations remain**: ~20% of fields were not shared, for either legal or technical reasons; and inconsistencies in data format (names, currency, device type, etc) and granularity continue to pose challenges in matching impressions end to end.

3. Does improved data quality lead to improved impression match rates?

	Matched impressions	Unmatched impressions
2022 study	58%	42%
2020 study	12%	88%
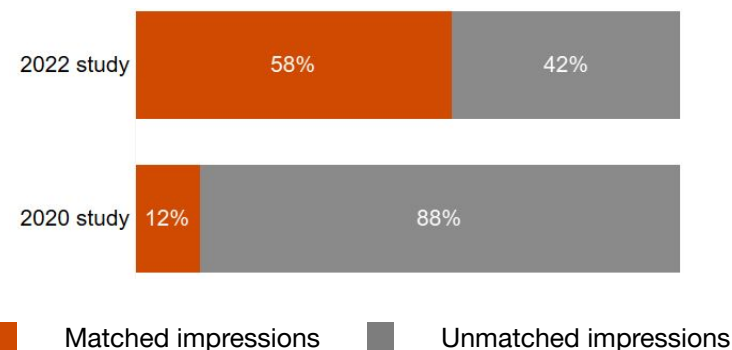
Of the 1.3 billion impressions analysed, 104 million "matchable" impressions were served via our study adtech vendors to our study publishers, of which 61 million (58%, i.e. the majority) were matched from buy-side to sell-side.

This nearly-fivefold increase on the 12% match rate in 2020 was due to:

- **Higher quality** log level data and **essential data fields,** which together enabled more deterministic impression matching from DSP data to SSP data

- **Private marketplace (PMP) deals**, which comprised approximately one-fifth of matchable impressions, had a match rate above 70%, in part due to Deal IDs facilitating impression matching from DSP to SSP.

4. Is the unknown delta reduced?

The higher data quality led to the unknown delta being reduced from 17% in 2020 (restated **) to 3% in this study (and <1% for private marketplaces).

2022 study: key recommendations

5) Are there clear actionable next steps? (for individual participants, and the industry as a whole)

Our key recommendations for next steps are:

❏ **Data access:** we believe the Taskforce should refine its Toolkit by updating the APL and DFL in response to this study, and then encourage leading adtech vendors to commit to the Toolkit's adoption and use

❏ **Data retention and data transfer:** we believe the Taskforce should seek to establish audit protocols for (a) temporary data retention, and (b) data transfer processes, including real-time checking during transfer periods

❏ **Auditors** should invest in their technical capabilities for ingesting log-level data, including all the main types of cloud storage buckets

❏ **Auditors** should work with advertisers and agencies to activate data retention only for supply chains with spend levels that warrant it

❏ **Advertisers, agencies, adtech vendors and publishers** should consider investing more in well-curated PMPs, given their higher impression match rates and publisher revenues (and, although outside this study, lower risks in fraud, viewability, brand safety and data leakage)

❏ **Advertisers and agencies** should agree separate DSP seats for each advertiser, to avoid the complexities of isolating data when multiple advertisers are combined within a single seat

❏ **Agencies** should appoint centralised, well-trained contact points for APL approvals and for extraction and reporting of buy-side log-level data

❏ **AdTech vendors** should continue to invest in their ability to filter, retain and share log-level data, covering all of the Taskforce DFL

❏ **Publishers and adtech vendors,** working with the IAB, should agree consistent taxonomies and naming conventions for ads.txt, and drive adoption and use of both ads.txt and sellers.json

❏ **Advertisers** should consider private supply chain audits chain every 1-3 years: proactive management can be a source of competitive advantage.

❏ **Publishers** should consider working with fewer SSPs, and consider private audits of them every 1-3 years

pwc.com