



Data Transparency Standard

Independent Validation

March 31, 2024



Pandora, a subsidiary of [SiriusXM](#), is the largest ad-supported audio entertainment streaming service in the U.S. Pandora provides consumers a uniquely-personalized music and podcast listening experience with its proprietary [Music Genome Project](#)® and Podcast Genome Project® technology. Pandora is also the leading digital audio advertising platform in the U.S. Through its own Pandora service, its AdsWizz platform, and third-party services, such as SoundCloud, Pandora connects brands to the largest ad-supported streaming audio marketplace in the country. Pandora is available through its mobile app, on the web at www.pandora.com, and integrations with more than 2,000 connected products.

Pandora Music

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IAB Tech Lab

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Compliance Key:

Supported: Meets guideline control, no action required
 Not Supported: Does not meet guideline control, must be addressed before certification is issued
 Not Applicable: This criteria is not applicable or not in scope

| I. Data Transparency Dissonance Control Objectives | | | |
|--|-----------------------------|---|------------|
| Test No. | Control Area | Tests | Compliance |
| Section: Data Summary | | | |
| | Segment Testing | Select random segments to test compliance to the Data Transparency Compliance Guide. | Supported |
| 1 | Provider Name | Data provider organization is incorporated / functioning in market as a data seller, and has the right to use the name / trademark | Supported |
| 2 | Provider Domain | Data provider can prove ownership of the domain (DNS, or other forms of verification) | Supported |
| 3 | Provider Contact Info | Email address provided is a real / functioning email | Supported |
| 4 | Provider's Audience Name | Cross-check content in following fields: A. Segmentation Criteria B. Standardized Audience ID C. ID Type D. Audience Precision Level E. Geography | Supported |
| 5 | Provider's Audience ID | Provider can source an internally maintained taxonomy that accurately captures "Audience Name" and Audience ID" field pairing. | Supported |
| 6 | Standardized Audience ID(s) | Ensure legitimate entry from IAB Audience Taxonomy 1.1 | Supported |
| 7 | Segmentation Criteria | Check that the criteria described addresses business rules for ID inclusion and is not overly reliant on peripheral segment description. This description should address: A. Data provenance, B. frequency at which attribute needs to be observed to be associated with ID, C. and how long ago the attribute was observed. If business rules for inclusion are proprietary / algorithmically driven, describe algorithm behavior as it relates to the above items. | Supported |
| 7 | Segmentation Criteria | Cross-check content in following fields: A. Audience Refresh Cadence B. Source Look Back window C. Data Sources | Supported |
| 8 | Audience Precision Level | Cross-check content in following fields: A. Segmentation Criteria B. Standard Segment name C. Segment name D. ID Type | Supported |

| I. Data Transparency Dissonance Control Objectives | | | |
|---|---|---|-------------------|
| Test No. | Control Area | Tests | Compliance |
| 9 | Audience Scope | Verify the Audience Scope represent the information presented in the Field selection(s). | Supported |
| 10 | Originating Domain | Verify the Originating Domain represent the information presented in the Field selection(s). | Supported |
| 11 | Audience Size | The count is disclosed (Figure is variable depending on seasonality, activation platform match rates, and other factors) | Supported |
| 12 | ID Type(s) | Cross-check content in following fields: A. Data Sources B. Segmentation Criteria | Supported |
| 13 | Geography Standard country list is used. | Cross-check content to the Segmentation Criteria | Supported |
| 14 | Privacy Compliance Mechanisms Used | Verify the Privacy Compliance Mechanisms used are disclosed. Check the mechanisms site for approved listing (TCF, DAA, EDAA, etc.) and/or review registration documentation or agreements with relevant privacy organizations. | Supported |
| 15 | Privacy Policy | Link is functional and leads to indicated privacy content | Supported |
| 16 | IAB Tech Lab Compliant | | Supported |
| | | | |
| Section: Audience Details | | | |
| 17 | Data Source(s) | Cross-check content in following fields: A. ID Type B. Segmentation Criteria If "Offline Survey", "Public Record", or "Offline Transaction" is stated, the "Onboarder Details" section must be completed and properly formatted. | Supported |
| 18 | Data Inclusion Methodology | Cross-check content in the Segmentation Criteria Selection of "Modeling": Requires selection of "Yes" within "Audience Expansion" field. Ensure that "Audience Expansion" is completed and accurately formatted. | Supported |
| 19 | Audience Expansion | Cross-check content in following fields: A. Data Inclusion Methodology B. Segmentation Criteria Selection of "Modeling": Requires selection of "Yes" within "Audience Expansion" field. | Supported |
| 20 | Cross-device Expansion | Cross-check content in Segmentation Criteria | Not Applicable |

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|---|--------------------------|---|-------------------|
| Test No. | Control Area | Tests | Compliance |
| 21 | Audience Refresh Cadence | Cross-check against content in following fields: A. Segmentation Criteria B. Data Sources - if any "Offline" source is selected, "Continuous" or "Daily" are not acceptable options Selection of Offline Sources: Requires completion of "Onboarder Details" section | Supported |
| 22 | Source Look Back Window | Cross-check against content in following fields: A. Segmentation Criteria B. Audience Refresh Cadence | Supported |
| Section: Onboarder Details | | | |
| 23 | Input ID/Match Key | Review the input ID/Match Key used by the Onboarder for matching. | Supported |
| 24 | Audience Expansion | Confirm "look-a-like" modeling was used to include similar ID's before the data was matched to a digital identifier. (Y/N/NA) | Supported |
| 25 | Cross Device Expansion | Confirm the audience was expanded to include affiliated devices and ID's before the data was matched to the digital identifier. (Y/N/NA) | Not Applicable |
| 26 | Audience Precision Level | Confirm the precision level of the data before it was matched to a digital identifier (Individual, Household, Geography, NA) | Supported |

| II. People and Process Control Objectives | | | |
|--|---|---|-------------------|
| Test No. | Control Area | Tests | Compliance |
| Section: General | | | |
| 27 | General - Documentation/Data Process | Examine documentation to support the online and offline data partner's acquisition, data transfer and quality control processes. | Supported |
| | | Walk through workflow of data logging process. | Supported |
| | | Review system control documentation within the data loading process to prevent loss or corruption of data. | Supported |
| | | Review data aggregation job process. | Supported |
| | | Review controls and test documentation to ensure successful and complete collection and aggregation of log file data. | Supported |
| 28 | General - Organization | <p>Organization Structure and Personnel Functions:</p> <p>Org Chart of team directly involved in collecting, analyzing, onboarding, or otherwise preparing the data for sale to buyers.</p> <p>Job descriptions of product, engineering, and business development stakeholders within org chart.</p> <p>Process by which relevant stakeholders interact to collect and process data.</p> <p>Process by which relevant stakeholders interact to populate the IAB Tech Lab data transparency standard,</p> <p>and description of responsible, accountable, consulted, informed parties (RACI) for each segment field.</p> | Supported |
| Section: Data Summary | | | |
| 29 | Provider Contact Info | Confirm the email address is of the Provider. | Supported |
| 30 | Audience Precision Level | <p>Provide documentation re how identity is resolved: via in house tech, via a partner, or some combination of both in house and partner.</p> <p>If in house: methodology description (DOM) - documentation to be provided outlining systems for data flow, and for resolving identity.</p> <p>If via partner: provide a description of partner, SOW with partner, examples of log files / data ingestion points.</p> <p>If both in-house + provider: see requirements above for both.</p> | Supported |
| 31 | ID Type(s) | Confirm on segment files that unique ID types are represented. | Supported |
| 32 | Geography Standard Country list is used. | Provide documentation for the process used to assign geographic attribute to the ID level record. | Supported |

| II. People and Process Control Objectives | | | |
|---|--|--|----------------|
| Test No. | Control Area | Tests | Compliance |
| Section: Audience Details | | | |
| 33 | Data Inclusion Methodology | Review the identification and disclosure of Data Inclusion Methodologies. | Supported |
| | | If “Modeled” is selected - documentation shall be provided for model input, output, and scores associated with behavior. | Supported |
| 34 | Audience Expansion Selection of “Modeling”: Requires selection of “Yes” within “Audience Expansion” field. Onboarder Details: Audience Expansion | Provide documentation of seed ID footprint with suitable number of attributes to enable modeling / scoring, which outlines the types of attributes being used as an input into the model. | Supported |
| 35 | | Provide Output file documentation to ensure that resulting ID count is larger than ID count input file (see Input ID / Match Key log file). | Supported |
| 36 | | Provide documentation of match report / data portrait analysis (ie, demographic profile). | Supported |
| 37 | Cross Device Expansion Onboarder Details: Cross Device Expansion | Provide documentation of consumer (device) footprint with suitable number of attributes to enable modeling and scoring that are tied to the same Input ID. | Not Applicable |
| 38 | | Provide Output file documentation to ensure that resulting ID count is larger than ID count input file (see Input ID / Match Key log file). | Not Applicable |
| 39 | Audience Refresh Cadence | Review the audience refresh cadence. | Supported |
| | | Syndication record documentation / analysis – evaluation of the delta between syndication records to ensure that IDs were added or removed from segment, and that syndication occurred within the declared cadence. Documentation needs to demonstrate: A. 3-5 syndication attempts (if continuous selected, multiple examples of intra-day refresh need to be provided) over the course of at least a year, B. and all syndication records need to be maintained for evaluation a minimum of one month | Supported |
| 40 | Source Lookback Window | Documentation of: Source event record associated with IDs to ensure date stamp matches segment's declared refresh cadence. | Supported |
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| II. People and Process Control Objectives | | | |
|--|--------------------------|--|-------------------|
| Test No. | Control Area | Tests | Compliance |
| Section: Onboarder Details | | | |
| 41 | Input ID/Match Key | Provide processing logs and match reports, ensure that inputs and outputs match. | Supported |
| 42 | Audience Precision Level | Show existing in-house database records that contain data on the same match key for indicated level of audience granularity. | Supported |

| III. Technology Control Objectives | | | |
|------------------------------------|--|---|----------------|
| Test No. | Control Area | Tests | Compliance |
| Section: General | | | |
| 43 | General | <p>Review architecture of the Data Solution Provider.</p> <p>Review the flow of data through the system: input, processing, at rest, output (in transit).</p> <p>Review log file and data retention protocols.</p> <p>Review system controls within the data loading process to prevent loss or corruption of data.</p> <p>Review data table structure.</p> <p>Analyze controls and tests in place to ensure successful and complete collection and aggregation of log file data.</p> | Supported |
| Section: Audience Details | | | |
| 44 | Audience Scope | Trace back the sources used for identifying the audience scope (logs, data tables, etc.). Identify and review the associated technology (code and controls) over generation of the Audience Scope contexts. | Supported |
| 45 | Originating Domain | Trace back the sources used for identifying the originating domain(s) (logs, data tables, etc.). Identify and review the associated technology (code and controls) over associating segments with originating domains. | Supported |
| 46 | Privacy Compliance Mechanisms Used | Review tools and controls used for ensuring privacy compliance, including disclosure tools (such as in-creative icons), consent determination, and other privacy requirements as applicable. | Supported |
| 47 | <p>Audience Expansion</p> <p>Onboarder Details: Audience Expansion</p> <p>Selection of "Modeling": Requires selection of "Yes" within "Audience Expansion" field</p> | Analyze modeling code / script / routine that is used to process input, create, and validate model, and select look-a-like data. | Supported |
| 48 | <p>Audience Expansion</p> <p>Onboarder Details: Audience Expansion</p> <p>Selection of "Modeling": Requires selection of "Yes" within "Audience Expansion" field</p> | Analyze Internal environment where script is run (cloud service / grid system) | Supported |
| 49 | <p>Cross Device Expansion</p> <p>Onboarder Details: Cross Device Expansion</p> | If in-house match table is used to expand segment the GitHub / product specs for match table are provided; methodology associated with ID resolution is described and documented, | Not Applicable |

| III. Technology Control Objectives | | | |
|------------------------------------|--------------|---|------------|
| Test No. | Control Area | Tests | Compliance |
| | | <p>provide the modeling code / script / routine that is used to associate information over time.</p> <p>If match table used to expand segment is provided by 3rd party, provide MSA associated with business partner that does analysis.</p> <p>Provide process documentation of API calls to outside cross-device expansion partner (which would contain log files, reporting and billing information)</p> | |