

VOZ DATA USE GUIDE

This document provides a guide to working with the VOZ Total TV database

What is VOZ?

Virtual Australia, or 'VOZ', is the foundation of Australia's 'Total TV' measurement currency. VOZ brings together broadcast viewing on TV sets and granular BVOD measurement of connected devices to provide truly national, de-duplicated, all-screen, cross-platform planning, trading and reporting for Australia's media industry.

What does the new era of VOZ data bring to network audience measurement?

The move from the existing TAM TV ratings service to the VOZ Total TV ratings service brings a number of firsts to the industry:

- All metropolitan and regional markets brought together into a single true national database view
 - Also now including the Rest of Australia coverage area
- Broadcast TV viewing and BVOD viewing together for all connected devices (TVs, Computers, Tablets, Phones)
 - Incorporating methodology for broadcast TV viewing deduplication at Connected TV sets
- A currency for BVOD viewing
 - Including co-viewing at Connected TV sets
- Development and implementation of a new measurement methodology
 - A migration from a broadcast TV only sample projected database to a complete fully granular broadcast TV and BVOD national Australia synthetic population
 - The granularity of the census measured BVOD viewing is retained
 - New longitudinal reach methodology (deduplicated across screens) for incremental audience estimates of viewing via BVOD only.
- When Watched (and What Watched) viewing available the next day

These unique benefits of VOZ need to be taken into account when making direct comparisons for broadcast TV results from TAM.

Datasets

The VOZ service delivers two datasets to the market:

1. **Respondent Level Data (RLD):** The viewing information to content by individual people for the specific times they were viewing, for both broadcast TV and BVOD across all screens. RLD is also referred to as Minute x Minute (MxM) or Elemental datasets in some industry tools and systems.
2. **Quarter Hour Files (QHF):** For broadcast TV only, the QHF are produced by processing the RLD into 15-minute audience estimates by channel for each trading demographic. The QHF dataset is the currency used for planning and trading of broadcast TV advertising spots.
 - VOZ quarter hour files for broadcast TV are delivered to the same frequency and in the same format as the current TAM service i.e:
 - Overnight and Consolidated-7 files
 - 2am to 2am
 - Metro and Regional Aggregate markets (incl. Tasmania) delivered daily
 - Regional WA delivered 4-weekly

Regional Sub Markets will be available 4-weekly.

TARPs are calculated against 1+TV homes universe estimates for each available demographic.

For further information on VOZ datasets refer to [Data Sets & Delivery Explained](#).

Viewing Aggregation Types

The OzTAM and Regional TAM TV ratings databases are produced on a 'What Watched' basis. This means viewing, whenever it takes place during the seven days following original broadcast (such as time-shifted a few days later), is attributed back to the matching broadcast content.

The VOZ Respondent Level Data, is produced on a 'When Watched' basis i.e. viewing is attributed to the time that the content was actually viewed, but importantly allows for both 'When Watched' and 'What Watched' reporting capabilities.

To understand the difference between 'What Watched' and 'When Watched', take the example of Program X which airs on Sundays at 20:30. A viewer watches this program on Tuesday, two days later at midday.

- In 'What Watched' data the playback viewing on the Tuesday would be attributed back to 20:30 on Sunday.
- In 'When Watched' data the viewing would be attributed to when it was viewed i.e. Tuesday at midday.

Data Delivery

The VOZ datasets are delivered each day at 11:30am as follows:

- Yesterday's viewing using the preliminary program (pre) log information (Day -1)
- The day before yesterday's viewing updated to reflect confirmed (post) program log information (Note: Saturday, Sunday, Monday data is delivered on Tuesdays) (Day -2)
- A third release, 'post revised', is delivered three days after the broadcast day to complete the remainder of Foxtel audience data from the Western Australia time zone (Day -3)

VOZ Consolidated 'What Watched' and 'When Watched' data is available at 11.30am each day:

- Overnight for the previous day
- Consolidated 7 for the corresponding research day, 8 days earlier
- Consolidated 28 for the corresponding research day, 29 days earlier

Markets

VOZ provides full national coverage which includes free-to-air and subscription television channels viewed in metropolitan and regional TV markets (including overlap areas) as well as 'Rest of Australia' aggregate market.

5 City Metro and individual metropolitan cities

- Sydney
- Melbourne
- Brisbane
- Adelaide
- Perth

Regional aggregate markets

- Queensland (QLD)
- Northern NSW (NNSW)
- Southern NSW (SNSW)
- Victoria (VIC)
- Tasmania (TAS)
- Regional WA (RegWA)
- Rest of Australia (RoA) - includes the combined 'solus' TV markets of Darwin, Remote Central + Mt Isa, Griffith, Mildura, Spencer Gulf (Port Pirie/Broken Hill) and Riverland/Mt Gambier. Due to sample size constraints, reporting is only available at the Rest of Australia aggregate level.

Markets can also be combined for analysis.

Spill Viewing and Overlap Markets

Spill viewing and overlap markets are two closely related but distinct concepts.

Unlike the distinct OzTAM and Regional TAM TV ratings service databases, which could only be analysed separately, VOZ now offers the opportunity to analyse metropolitan and regional markets together in a single, national Total TV database. This requires additional consideration on when to include or exclude spill viewing when analysing VOZ data.

Spill viewing

Spill viewing is a Free-to-Air broadcast TV-only concept that relates to viewing of broadcast channels transmitted from a market that is outside of the market being analysed. Note in the TAM broadcast TV ratings service, program audiences are always to local market broadcast TV channels, and therefore no spill viewing is included.

Overlap markets

Market areas are defined by the ACMA broadcast TV licence areas. Some of these licence areas overlap between metropolitan and regional markets, specifically:

- Sydney/Newcastle
- Melbourne/Gippsland
- Brisbane/Northern Rivers
- Brisbane/Maryborough

The viewing by people in these distinct overlap areas contributes to the market that the broadcast originates from as local market viewing. For example, people viewing broadcast TV channel Seven Sydney within the Sydney/Newcastle overlap area will have that viewing contribute to the Sydney Market as local market viewing. Conversely, people viewing broadcast TV channel Seven Sydney within the Sydney/Newcastle overlap area will have their viewing contribute to the NNSW Market as spill viewing.

The following examples provide guidance for analysing viewing within VOZ:

- The viewing to a broadcast that originates from Sydney by a viewer in the regional Wollongong market is spill viewing (noting that Sydney and Wollongong do not overlap meaning this is unambiguously spill viewing).
- In the case where markets do overlap, such as when there is viewing to a broadcast that originates from NNSW Northern Rivers market by a person in the Brisbane markets:
 - If that person is within Brisbane but not within the overlap area, then their viewing to the NNSW Northern Rivers market broadcast is spill viewing.
 - If that person in Brisbane is specifically within the Brisbane/Northern Rivers overlap area, then their viewing to the NNSW Northern Rivers market broadcast is:
 - Spill viewing if reporting the Brisbane market
 - Local market viewing if reporting the NNSW Aggregate market.

Importantly, the broadcast TV quarter hour files from the VOZ service excludes spill viewing.

Duplication

VOZ provides national, de-duplicated audience and reach & frequency estimates of all-screen broadcast TV and BVOD viewing.

There are three types of duplication addressed in VOZ methodology:

- **National view of market areas**

VOZ consolidates metropolitan and regional viewing into a national picture, accommodating viewing by people

within areas that overlap between the metropolitan and regional markets. The people in overlap areas can contribute to two markets. This is sometimes referred to as 'Spill' viewing.

- **Service measurement duplication**

VOZ deploys a model to remove the duplication of viewing that can arise from bringing together two measurement services to a TV set i.e. TAM (broadcast TV) and VPM (BVOD).

It is possible for current TAM measurement devices in TAM panel homes to pick-up up BVOD streaming viewing on connected TV sets that corresponds to broadcast TV references. The same BVOD viewing is also being measured in VPM.

VOZ introduces a modelled approach to identify and remove matched viewing sessions from broadcast TV estimates and preserve them in the BVOD measurement – creating a de-duplicated estimate for Total TV dayparts and program estimates.

- **Person level duplication**

VOZ supplies person-level exposure to broadcaster content (TV programs) and advertising across all screens (TV sets, computers, tablets and smartphones), allowing unique viewers to be counted. This means that people who have been exposed many times across multiple screens can be counted as just one viewer in VOZ Total TV reach measurement.

OzTAM is deploying Streaming TV Meter (STVM) technology into panel homes which will allow for the introduction of an enhanced technical solution to address service measurement duplication for future VOZ updates.

Co-viewing

Co-viewing activity to broadcaster content on TV sets is included in the VOZ database. There is however no linkage between the individuals doing the co-viewing, therefore it is not possible to create co-viewing demographics for analysis.

Co-viewing activity to broadcaster content via BVOD (live and on-demand) on connected TVs is also included in the VOZ database. Co-viewing is defined as up to three additional viewers watching BVOD on a connected TV (CTV) alongside the primary viewer. The co-viewing component of the BVOD viewing data cannot be analysed separately.

Trend Breaks

Key VOZ trend breaks and milestones include:

- **1st January 2023:** Viewing to Foxtel internet-delivered services (i.e. homes that receive Foxtel services only via the internet) is reported exclusively in BVOD results
- **30th July 2023:** Kayo Sports included in VOZ data
- **28th January 2024:** Enhanced co-viewing model for connected TV viewing

Saturday 28th December 2024 will be the last reporting day for TAM TV ratings data, with Sunday 29th December 2024 the first official trading currency day for VOZ data as currency.

Demographics

As part of the construction of VOZ, OzTAM's Video Player Measurement (VPM) census level data is enhanced via BVOD demographic modelling to deliver person-based measurement of viewing to live and video on-demand streaming broadcaster content.

The demographics available in VOZ largely reflect the demographics currently in the BVOD demographic model and will continue to evolve over time.

This means there is a reduction in the available demographics in VOZ compared to the TAM TV ratings. The core

demographics not included in VOZ include Total Households, age-groups 16-24, 18-29, 25-44, 30-49, all Grocery Buyer (GB) related demographics and all Occupational Group related demographics.

In summary, the available demographics in VOZ include the following age, gender and Grocery Shopper groups. The standard demographics shown in the table below are the building blocks to create any customised demographics.

	Children	People	Females	Males	Grocery Shoppers
00+					
00-17					
00-04					
05-12					
13-17					
00-39					
13+					
13-24					
13-39					
13-54					
16-39					
18+					
18-24					
18-39					
18-49					
18-54					
25+					
25-39					
25-54					
35-54*					
35-64*					
40+					
40-54					
55+					
55-64					
65+					
Plus Children*					

*From the research day of Sunday 27th October 2024 going forward, the demographic groups of People/Men/Women 35-54 and 35-64, as well as Grocery Shoppers plus Children, will be available to analyse and report on Total TV and BVOD, as well as broadcast TV. Prior to this date analysis for these demographics is only available for broadcast TV.

For the full list of VOZ demographics, refer to [Demographics Explained](#).

Universe Estimates

The Virtual Australia (VOZ) service Total TV universe estimates (UEs) provide the number of people in each market across Australia, categorised by age group and gender and include people in zero TV homes. These estimates are projected for the upcoming year using the trended official Australian Bureau of Statistics (ABS) estimates of the resident population. OzTAM and Regional TAM's large scale rolling Establishment Survey serves as a crucial source of additional population characteristics including details about people, their households, and relevant in-home technologies.

Universe Estimates are available [here](#).

People who live in homes without TV sets

The VOZ population reflects the total Australian population whether people live in homes with or without TV sets. This contrasts with the TAM service which is defined to report broadcast TV viewing by people in homes with at least one TV set.

This means the VOZ database includes viewing to BVOD content (both live and on-demand) by people across all homes including those people in homes without a TV set.

Guests

The VOZ database attributes viewing by guests measured in the TAM TV panel homes to distinct VOZ people. Guest status is therefore not available as an analysis characteristic.

Households

VOZ has initially been constructed to the population of individuals. The definition of a household in VOZ will be part of future VOZ development and is therefore not a current demographic for analysis. Please refer to [Demographics Explained](#) for further information.

Reach in VOZ

A different model for longitudinal reach

The VOZ and TAM TV ratings datasets are built using different methodologies with each dataset calculating R&F via different algorithms.

The TAM TV ratings service reach model was designed to address the challenge of sample changes over time. It uses an algorithm to adjust the weights used to project the sample to the population.

The VOZ service, built to have a synthetic population of approximately 27 million individuals, required the development of a new reach model with the calculation of reach across the synthetic individuals.

Within VOZ a sophisticated algorithm has been developed to deliver continuous synthetic individuals over time in such a way that compensates for the natural inflation in reach estimates that arises with this new synthetic population solution.

Differences in Reach results between VOZ and TAM will be observed over longer periods and for smaller demographics. OzTAM recommends campaign R&F analysis be constrained to a maximum of 12 weeks.

Total TV Reach is the distinct count of individuals who are reached via broadcast TV or BVOD. Of those individuals reached some were only reached via broadcast TV, some only by BVOD and some by both broadcast TV and BVOD.

For further information on the definition of reach, refer to [Total TV Reach Explained](#).