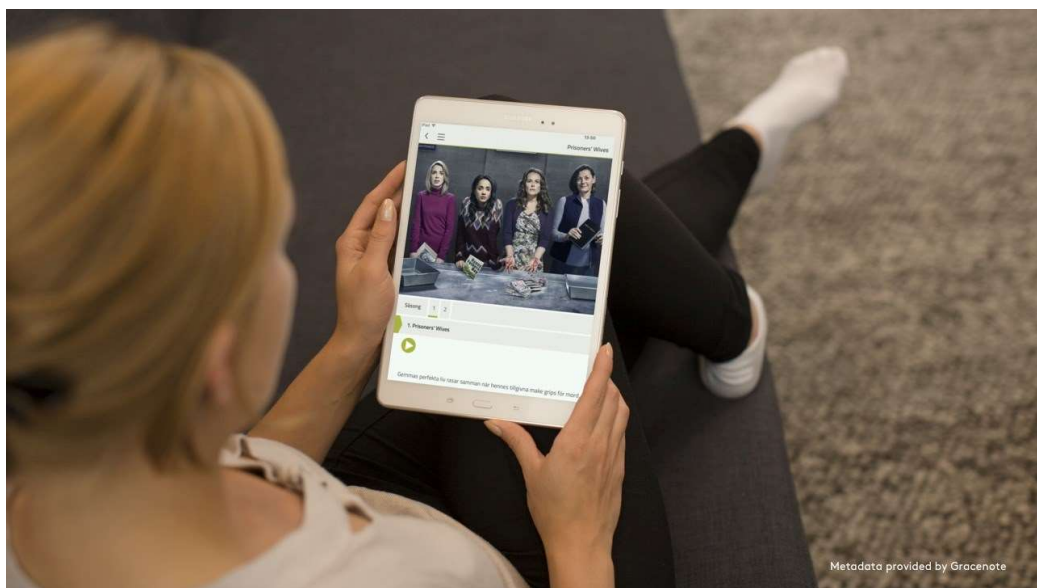


DIGITAL ADS IN AN OPERATOR'S TVE SERVICE



Revision B

Addendum Sweden: MMS Tracking



For the Broadcaster's need to, according to the contract, be able to capitalize on the stitched ads, a correct measurement to both MMS, with technical help from MMS Technology Partner, and the ad supplier that the Broadcaster uses for delivery of VAST to the Operator's DAI server is necessary.

For MMS tracking, measurement occurs during both content and ads on MMS-defined and required locations. This is facilitated through a client-side SDK or other methods as supplied by MMS and MMS Technology Partner.

While the ad server's measurements is based on industry standards (VAST and/or VMAP), MMS Technology Partner may require multiple well-defined arguments to be counted as valid. These are defined in the documentation provided by MMS Technology Partner¹.

The measurement of the linear channels and On Demand are largely similar, but there are a number of parameters that differ by nature between these two measurements, as detailed in the documentation.

IMPLEMENTATION GUIDE

Guide to implement MMS data collection is available at https://mms.se/wp-content/uploads/_dokument/Filspecar/online/MMS_Implementation_Scheme.pdf

MMS FILM CODE

MMS Film Code is a unique advertisement identifier used through the Swedish video advertising industry. It will be provided for each ad by Broadcaster in a custom VAST extension field (VAST 2, 3) or the Universal Ad ID field (VAST 4).

Example—

```
<VAST>
  <Ad>
    <InLine>
      <Creatives>
        <Creative>
          <UniversalAdId idRegistry="mms.se">[MMSFILMCODE]</UniversalAdId>
```

PERSISTENT ID

For Kantar Media to measure ad viewing on distributor platforms (Telia, Telenor, Tele2, etc.), a persistent identifier ("Persistent ID") must be available in the measurement data. This specification defines the requirements for enabling panel recognition in distributor environments.

A persistent, anonymous device identifier must be generated and maintained within the distributor's app environment. Acceptable identifier types include:

- Platform-provided IDs (IDFV on iOS, Android ID, etc.) - Preferred.
- First-party generated UUIDs stored in local storage

¹ For latest implementation documentation please advise your MMS contact.

Critical requirement: The Persistent ID must be **exactly identical** across all data touchpoints (ad requests, tracking pixels, ID-Ping). Any mismatch in hashing, salting, case, or formatting will result in failed panel matching.

Ad Measurement Requirements

The Persistent ID must be included in ad requests to the Media Company and must flow through to MMS Technology Partner's VAST tracking pixels.

ID-Ping Requirement

If the distributor is not using client-side tracking (Meaning sdk-implementation) (i.e., tracking requests are not fired from the end-user device), the distributor must implement a client-side ID-Ping to enable panel recognition.

Endpoint for ID-Ping tracking: provided by MMS Technology Partner including the parameters below. Exact parameter names are provided by MMS Technology Partner and below should serve as examples.

Parameters:

Parameter	Required	Description
vendor	Yes	Distributor identifier (e.g., "telia", "telenor")
fpid	Yes	Persistent ID (must exactly match ID used elsewhere)

When to send:

- App launch (required)
- Session start (optional)

Implementation requirements:

- Non-blocking (must not impact user experience)
- Silent failures (no error messages to users)
- No retries on failure
- 1-second maximum timeout

Privacy Design

The ID-Ping endpoint discards all incoming data immediately. Data is only captured by FocalMeter devices in panelist households who have explicitly agreed to participate. Non-panelist pings are never stored.

Content Measurement

Content measurement requirements (beyond ads) will be defined directly between the distributor and MMS Technology Partner based on the specific technical environment and data availability.

VALIDATION

For a Broadcaster to be able to claim and capitalize on the ad measurement, MMS should validate the Operator's reporting implementation. This should take place before going live with an application and usually occurs by sharing with MMS and MMS Technology Partner the beta versions of the app and the web clients one intends to go live with, and they can track the reporting by connecting this up to a proxy. One is then provided a validation protocol with the results whether or not one has been approved or given points to resolve before being able to go live.

Validation with MMS is done for major changes or at least four (4) times a year. Prior to validation, the Operator provides the Broadcaster and MMS beta versions of the apps so that validation can be done before they reach the end customers.