## Media-Timed Events Task Force Progress in 2018

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### Original Goals

- Survey existing methods for media-timed events
  - DASH
  - HbbTV
  - W3C
    - TTML/WebVTT
    - Datacue
  - Emerging
    - MPEG work item on web track
    - DASH-IF work on Eventing API ("DAInty")
- Survey guidelines for rendering of timed metadata
  - Is "Time marches on" good enough?

# Impetus: In-band/Out-of-band events — DASH approach

- DASH events are timed actions that are meant to take place in conjunction with media playout
- DASH events may be conveyed via
  - 1. The MPD (Media Presentation Description) Document
    - The EventStream fragment
  - 2. The 'emsg' box in the ISO BMFF media track
    - In-band event
- Neither mechanism is well-suited for HTML5
  - MPD eventing requires the application (HTML/JS) to execute the events as per media playback time
    - Application may not have time-accurate insight into media playback status
  - emsg eventing support is non-existent in current browsers
    - Even if browsers propagated emsg data into JS, the event handler in the application can become a bottleneck

#### Status

- Current group recommendations can be found at https://w3c.github.io/me-media-timed-events/
- Have made one solid recommendation to WICG
  - Regarding DataCue and 'emsg' events (ISO BMFF)
    - <a href="https://discourse.wicg.io/t/media-timed-events-api-for-mpeg-dash-mpd-and-emsg-events/3096">https://discourse.wicg.io/t/media-timed-events-api-for-mpeg-dash-mpd-and-emsg-events/3096</a>
  - Allows for a type of metadata cue ("datacue") for typed data
- Open issues
  - How to handle metadata-only tracks or the planned MPEG web track
  - New API surface for timed events
    - e.g. ongoing work in DASH-IF

## Ways Forward

- Publish existing document as IG note?
- Continue TF to begin collaboration with WICG?