Web and TV Interest Group Intro

Co-chairs: Yosuke Funahashi - W3C
                     Giuseppe Pascale - Opera Software
                     Mark Vickers – Comcast

Team Contact: Kazuyuki Ashimura – W3C
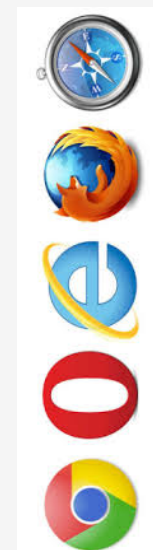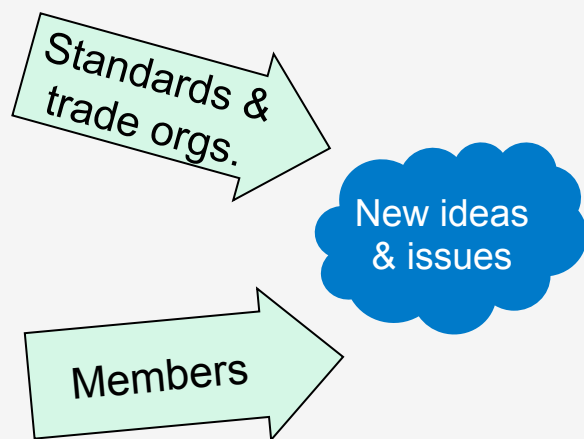
Web & TV IG: Charter

- Scope
  - "**Web-based media distribution** which is currently done by media services over a variety of distribution channels (IP, satellite and terrestrial broadcasting, cable, telecomm, etc.) to a variety of devices (TV-sets, phones, tablets, PCs, game machines, etc.)."
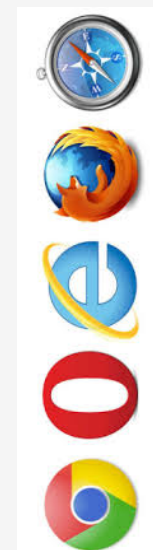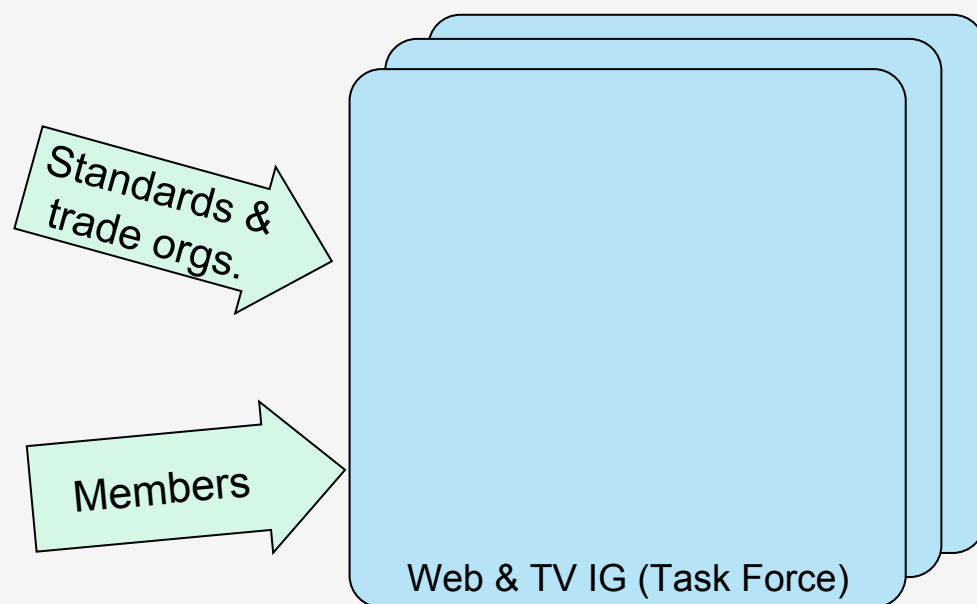
- Tasks
  - "Identification of **requirements** for tighter support of media-centric applications on the Web Platform
  - Identification of **gaps** in the Web Platform that do not allow the identified requirements to be met
  - **Review of deliverables** under development by other W3C groups that are relevant to the IG scope and report bugs as appropriate
  - **Liaison with other organizations** in the media industry to promote adherence to W3C standards within global media specifications."

http://www.w3.org/2012/11/webTVIGcharter.html

Web & TV IG: Work Flow

Standards & trade orgs.

New ideas & issues

Members

Web & TV IG: Work Flow

Standards & trade orgs.

Members

Web & TV IG (Task Force)

Web & TV IG: Work Flow

Standards & trade orgs.

Members

Use cases

Requirements

Gap analysis

Web & TV IG (Task Force)

Web & TV IG: Work Flow

Standards & trade orgs.

Members

Use cases

Requirements

Specs

Gap analysis

Web & TV IG (Task Force)

Web & TV IG: Work Flow

Standards & trade orgs.

Members

Use cases

Requirements

Specs

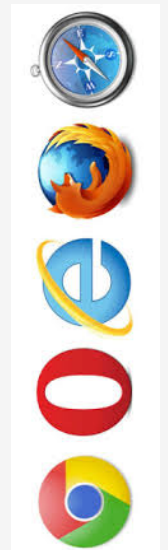Gap analysis

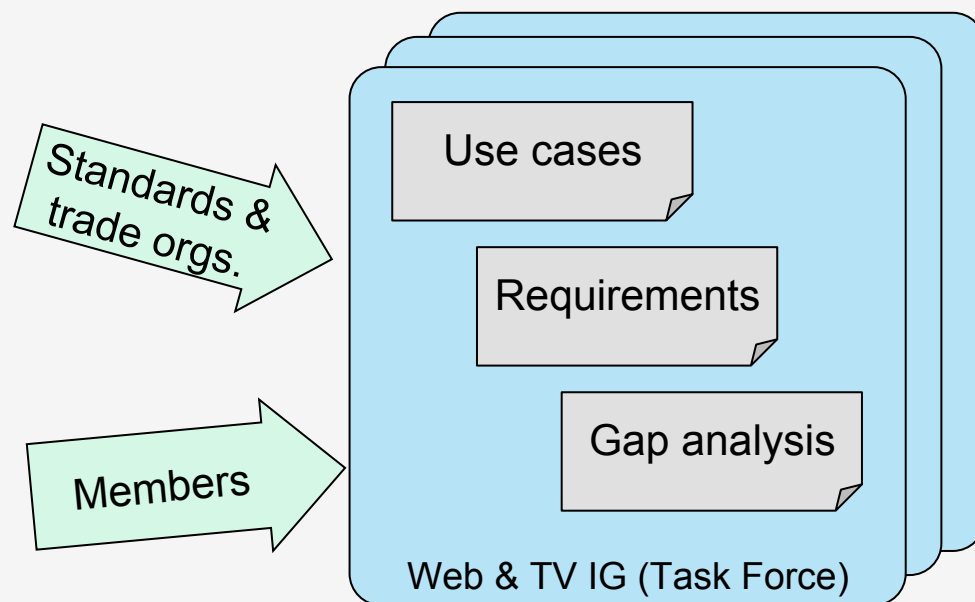Web & TV IG (Task Force)
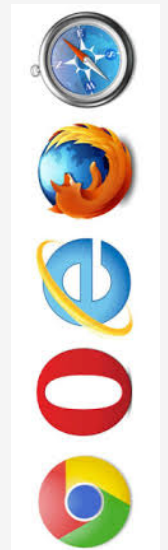
Bug reports

current spec

WG

Web & TV IG: Work Flow

Web & TV IG: Work Flow

Web & TV IG: Task Forces
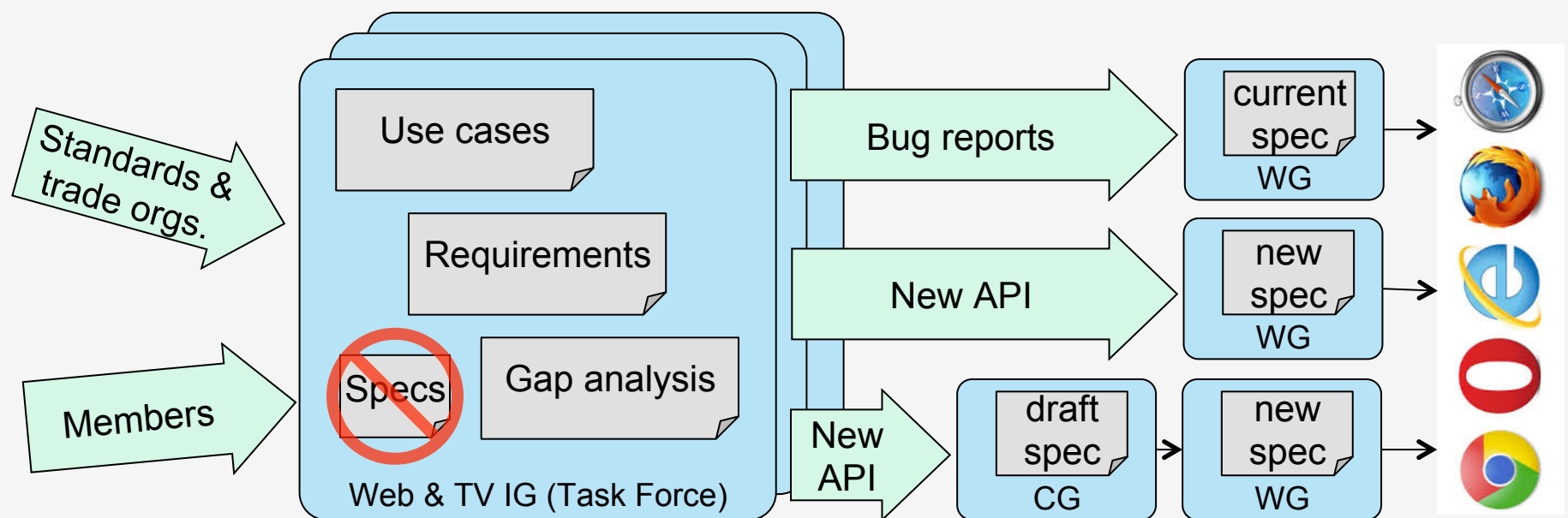
- Closed
  - Media Pipeline TF
  - Home Network TF
  - Testing TF
  - Timed Text TF
  - Media APIs TF

- On hold
  - Web Media Profile TF

- Active
  - Glass to Glass Internet Ecosystem (GGIE) TF

- New proposal
  - Cloud Browser APIs TF

http://www.w3.org/2011/webtv/wiki/Main_Page#Task_Forces
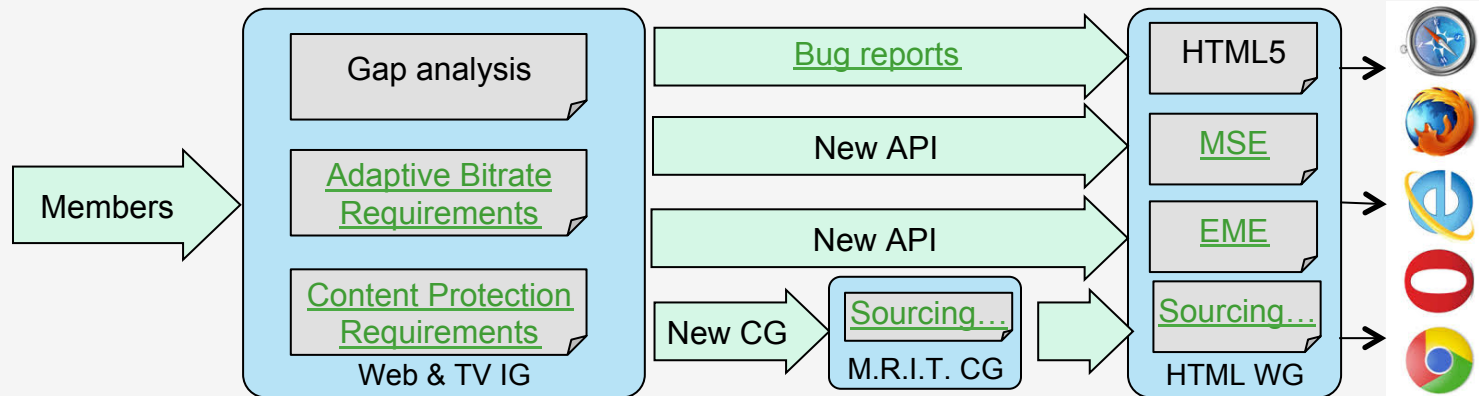
Web & TV IG: Task Forces

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- New proposal
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Cloud Browser TF Proposal today

http://www.w3.org/2011/webtv/wiki/Main_Page#Task_Forces

Media Pipeline TF (closed)

- Goal: Improve HTML5 media pipeline to support media services
- Outcome:
  - IG Bug reports addressed. HTML5 is a W3C Recommendation, wide browser support
  - MSE (Media Source Extensions): Candidate Recommendation, wide browser support
  - EME (Encrypted Media Extensions): Working Draft, wide browser support
  - IG members form new CG: Media Resource In-band Tracks CG
    - *Sourcing In-band Media Resource Tracks from Media Containers into HTML* referenced by HTML5 & MSE

Media Pipeline TF (closed)
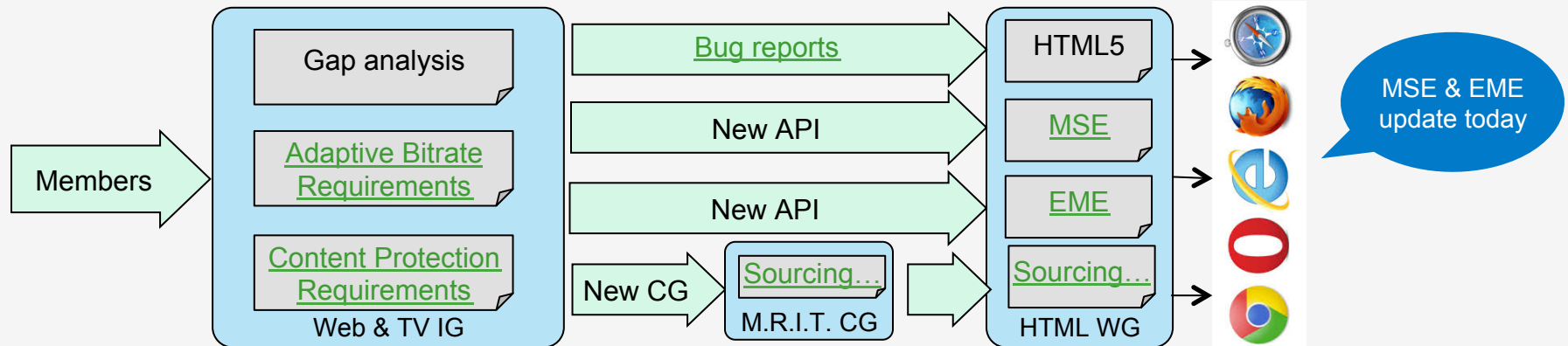
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Web Media Profile (on hold)

Members → Web Media Profile ← New CG?

Media Standards organizations

Web & TV IG
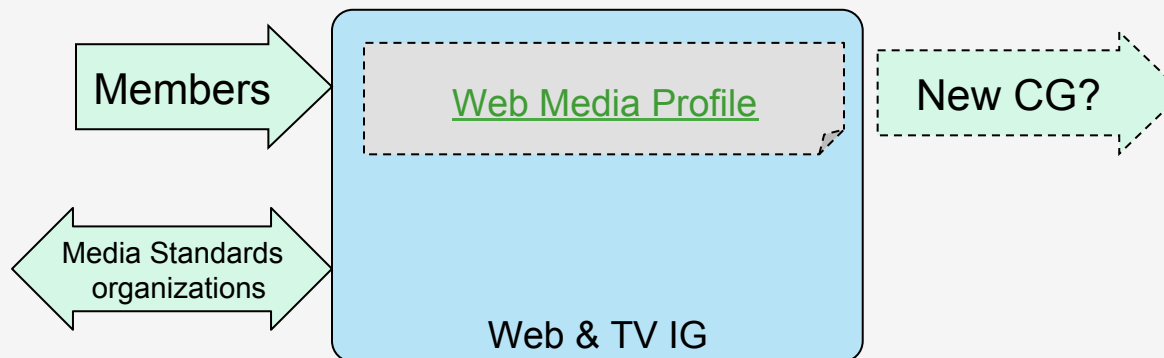
- Goal: Create profile of HTML5 specs to support media applications
- Outcome & status:
  - Draft Web Media Profile
  - Put on hold because at the time (2011):
    a. HTML5 and related specs changing too rapidly
    b. Media standards organizations interested in HTML5 not public
  - Now HTML5 foundation is stable & media standards groups are more open
    - Is it time to restart the Web Media Profile?

Home Network TF (closed)
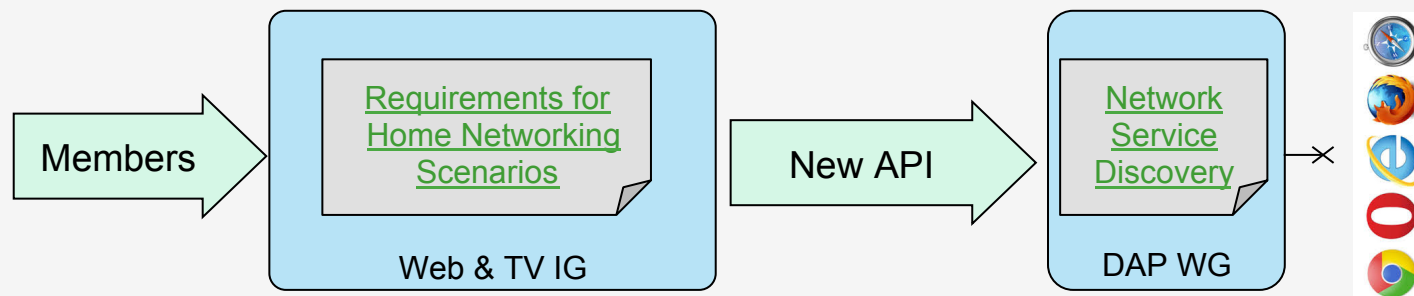
- Goal: Enable discovery & control of devices & services on the LAN
- Outcome:
  - Use cases and requirements for potential specifications
  - Network Service Discovery API (Working Draft)
  - Security/privacy concerns raised by Privacy IG (PING), some
  - Status: No browser implementations

Testing TF (closed)
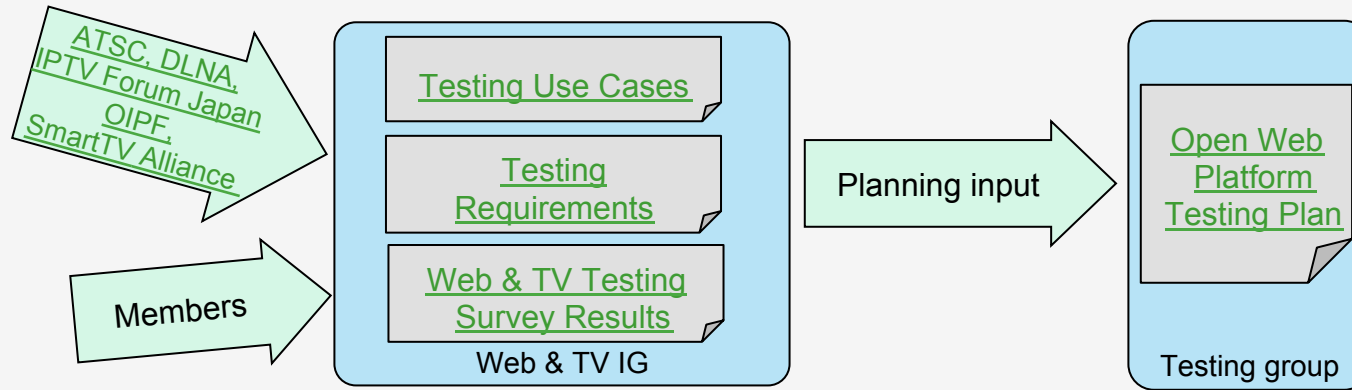
ATSC, DLNA, IPTV Forum Japan, OIPF, SmartTV Alliance → [Testing Use Cases, Testing Requirements, Web & TV Testing Survey Results] Web & TV IG

Members →

Planning input → Open Web Platform Testing Plan — Testing group

- Goal: Improve HTML5 platform test coverage.
- Outcome:
  - 10 external organizations surveyed, 5 returned survey
  - Use cases & requirements completed
  - Reports delivered to Testing group

Testing TF (closed)
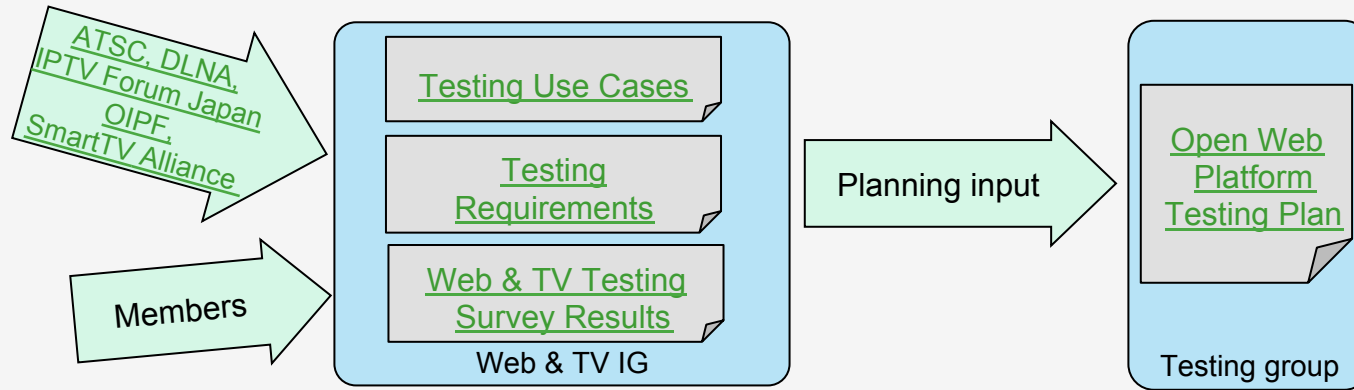
ATSC, DLNA, IPTV Forum Japan OIPF, SmartTV Alliance

Testing Use Cases

Testing Requirements

Web & TV Testing Survey Results

Web & TV IG

Members

Planning input

Open Web Platform Testing Plan

Testing group

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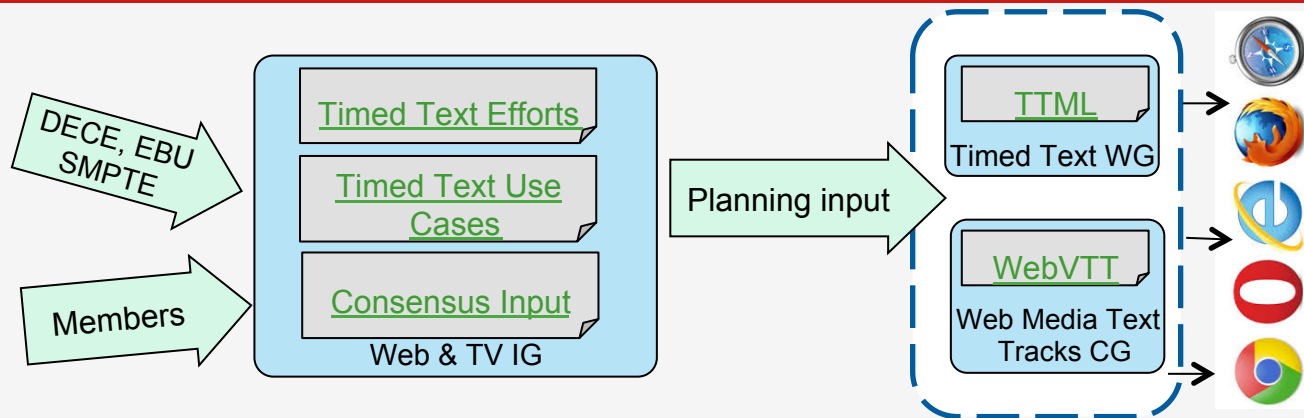 - Use cases & requirements completed
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Web platform test runner for TV today

Timed Text TF (closed)

- **Goal:** Facilitate use and interoperability of TTML and WebVTT
- **Outcome & status:**
  - Document scope and variations of TTML and WebVTT
  - Gather Web-based timed text use cases from the TV and Media industry & IG members
  - Delivered IG Consensus Input to Timed Text WG charter
  - New charter for TT WG (a) included both TTML and WebVTT (b) added a deliverable to create a mapping doc between TTML and WebVTT
    - *Mapping Between TTML and WebVTT* Editor's Draft
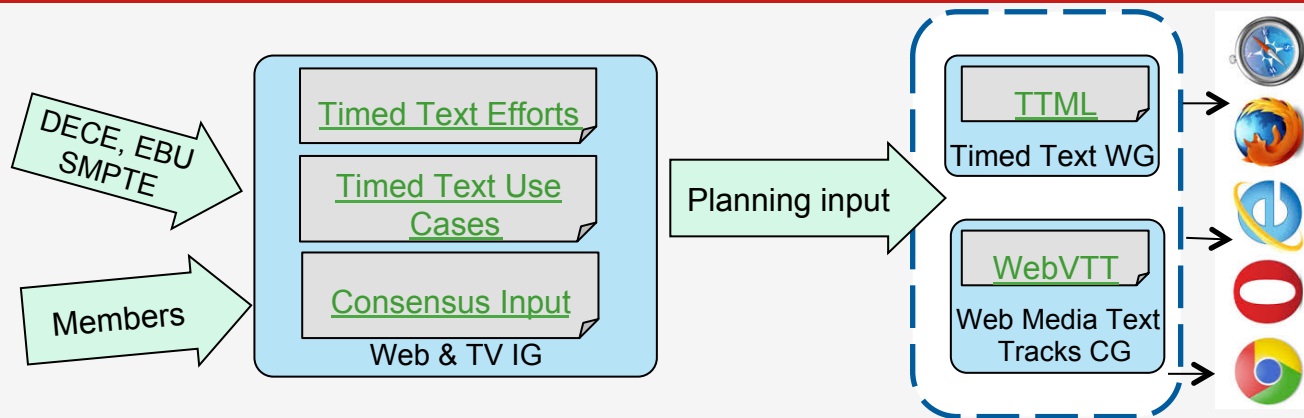
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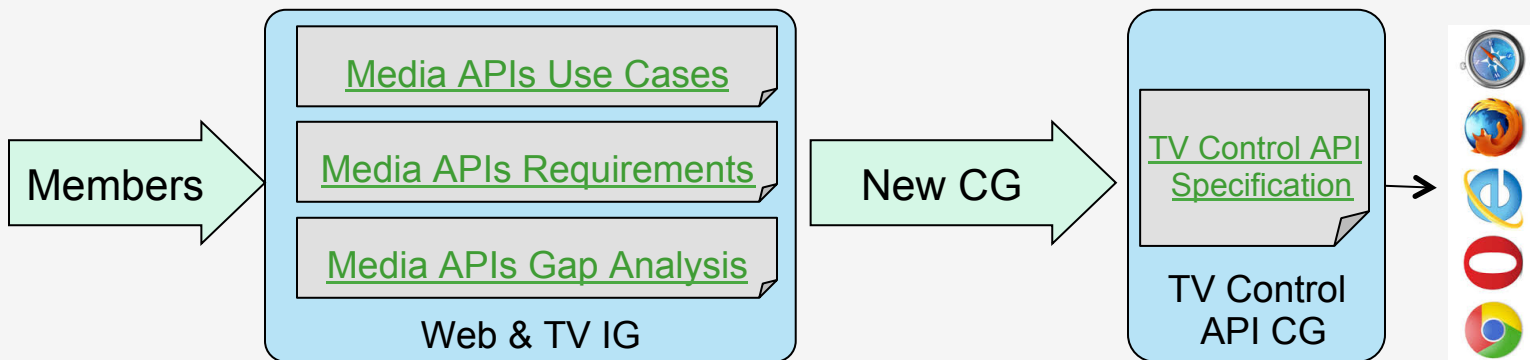   - *Mapping Between TTML and WebVTT* Editor's Draft

Media APIs TF (closed)

Members → [Media APIs Use Cases / Media APIs Requirements / Media APIs Gap Analysis — Web & TV IG] → New CG → [TV Control API Specification — TV Control API CG] →

TV Control API CG update today

- Goal: Identify requirements for:
  - Recording and downloading media
  - Discovery and control of device capabilities (e.g. tuner control)
  - Exposing TV metadata to web applications
  - Mapping between Media Element API and in-band metadata
  - Synchronization of broadcast content and web applications up to frame accurate

- Outcome & status:
  - Started TV Control API CG, which produced *TV Control API Specification*

Media APIs TF (closed)

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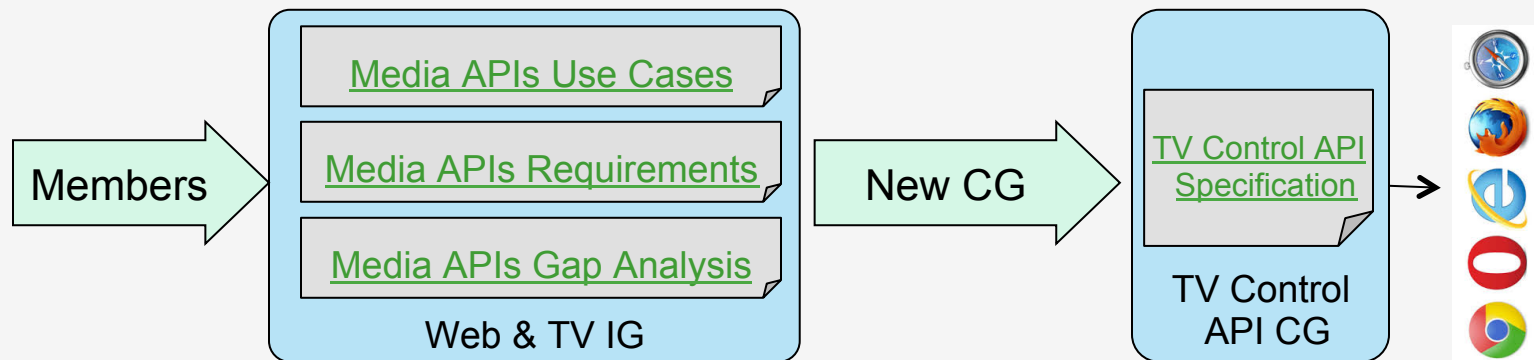
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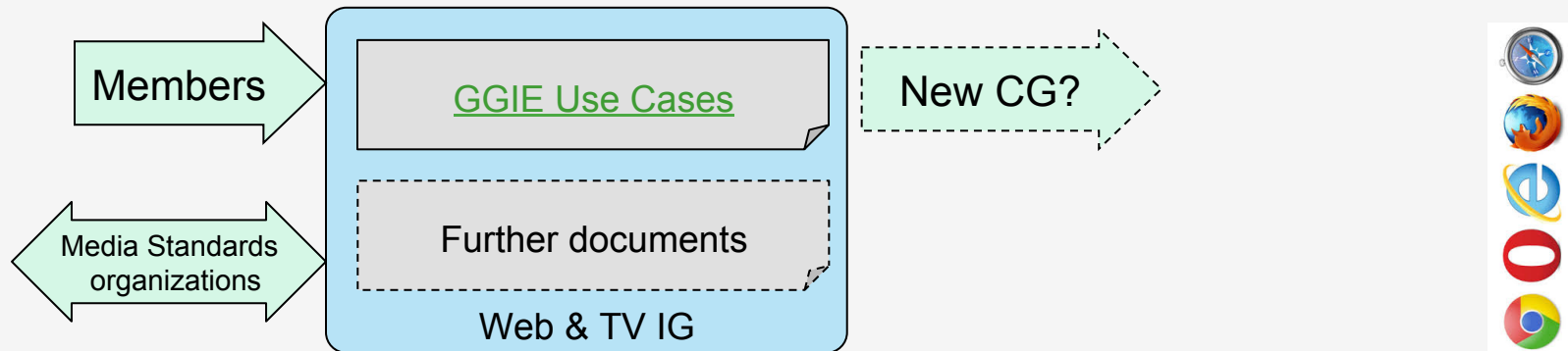 - Started TV Control API CG, which produced *TV Control API Specification*

Glass to Glass Internet Ecosystem (GGIE) (active)

- **Goal:** Help standards organizations identify technical standards needs around:
  - media capture (professional cameras, smartphones)
  - media editing systems
  - media storage
  - media packaging
  - media providers (streaming media websites, cable, IPTV & satellite systems)
  - media clients (general-purpose browsers, televisions, tablets, phones)
- **Outcome & status:**
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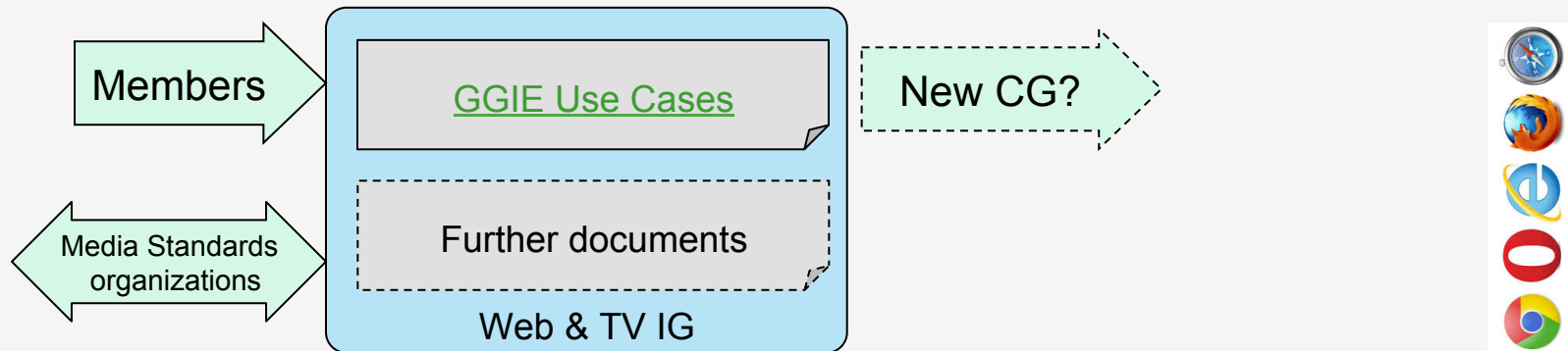
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Related CG updates

- [Multi Device Timing CG](#)
- [Media Resource In-band Tracks CG](#)
- [Second Screen Presentation CG](#)

Related CG updates

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Multi Device Timing CG update today

Second Screen Presentation update today

Web & TV IG: State of HTML5 in Media Specs & Tech

Worldwide TV Standards support HTML5 (or plan to):	Hardware support HTML5 (or plan to)::
• ATSC 3.0 • DLNA VidiPath • HbbTV 2.0 • MSIP Smart TV 2.0 (Korea) • IPTV Forum Japan Hybridcast • …	• AMD • ARM • Broadcom • Intel • Marvell • Mstar • NXP • Sigma • ST • …
TV Platforms support HTML5 (or plan to):	Content protection support EME (or plan to)::
• Android TV • Firefox OS • Opera TV • Tizen • WebOS • …	• Adobe Access • Alticast XCAS • Apple Fairplay • ARRIS SecureMedia • Cisco VideoGuard • Google Widevine • Intel HDCP • Microsoft PlayReady • NAGRA Anycast • Verimatrix VCAS

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Web platform in worldwide TV specifications update today

Web & TV IG: What remains to be done?

- Make list today & review at end of day
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