MediaTimedEvents

in Hybridcast

W3C TPAC2019

Media & Entertainment Interest Group

NHK (Japan Broadcasting Corp.)

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New APIs for Hybridcast-Connect

1. MediaAvailabilityAPI

Check availability of Terrestrial/Satellite tuner on a TV set

2. ChannelsInfoAPI

Get list of channel information and tuning parameters
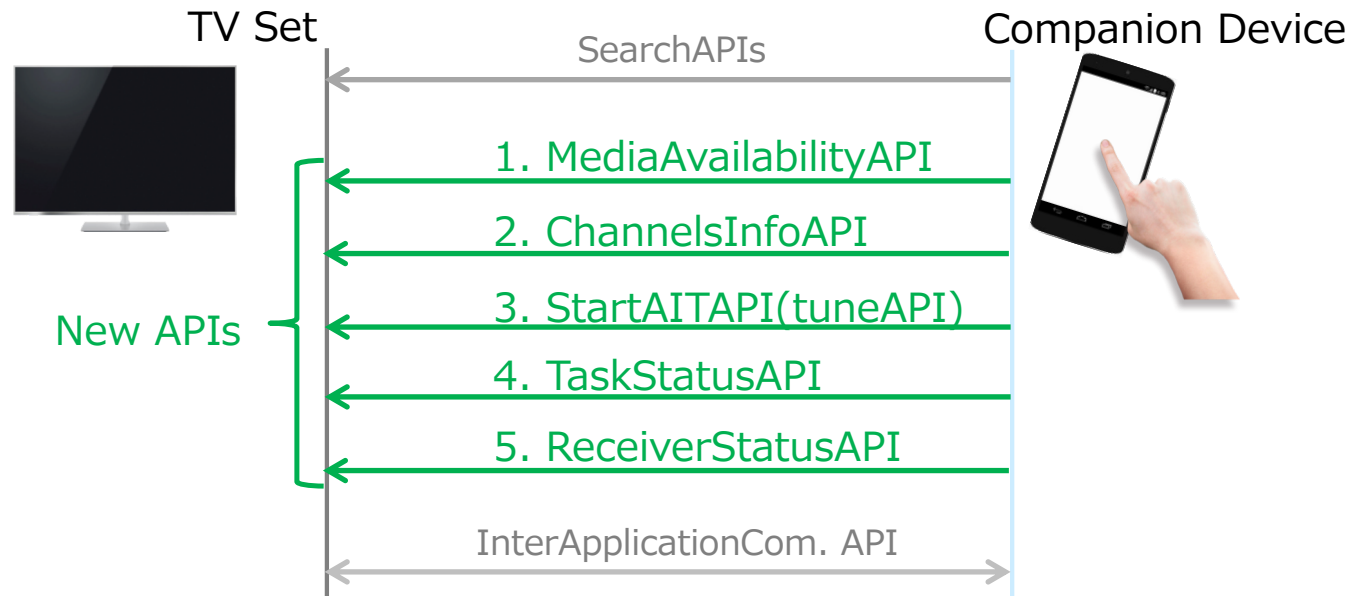
3. StartAITAPI(tuneAPI)

Changes channel of a TV set and launches Hybridcast app(HTML) on the TV set

4. TaskStatusAPI

Get status of startAITAPI request

5. ReceiverStatusAPI

Get status of HTML5 browser, the number of communicating apps on companion devices, and current channel

TV Set   SearchAPIs   Companion Device

1. MediaAvailabilityAPI

2. ChannelsInfoAPI

New APIs   3. StartAITAPI(tuneAPI)

4. TaskStatusAPI

5. ReceiverStatusAPI

InterApplicationCom. API

Service Patterns with Hybridcast Connect

Broadcasters in Japan need trigger message to switch to broadcasting

- Pattern1: mobile app to broadcasting on TV
- Pattern2: another app in TV to broadcasting

Pattern1

Select Video in mobile app
(channel "C" and AIT URL)

Broadcasting

Ch.C

Tune to the expected channel
and lauch application specified in AIT
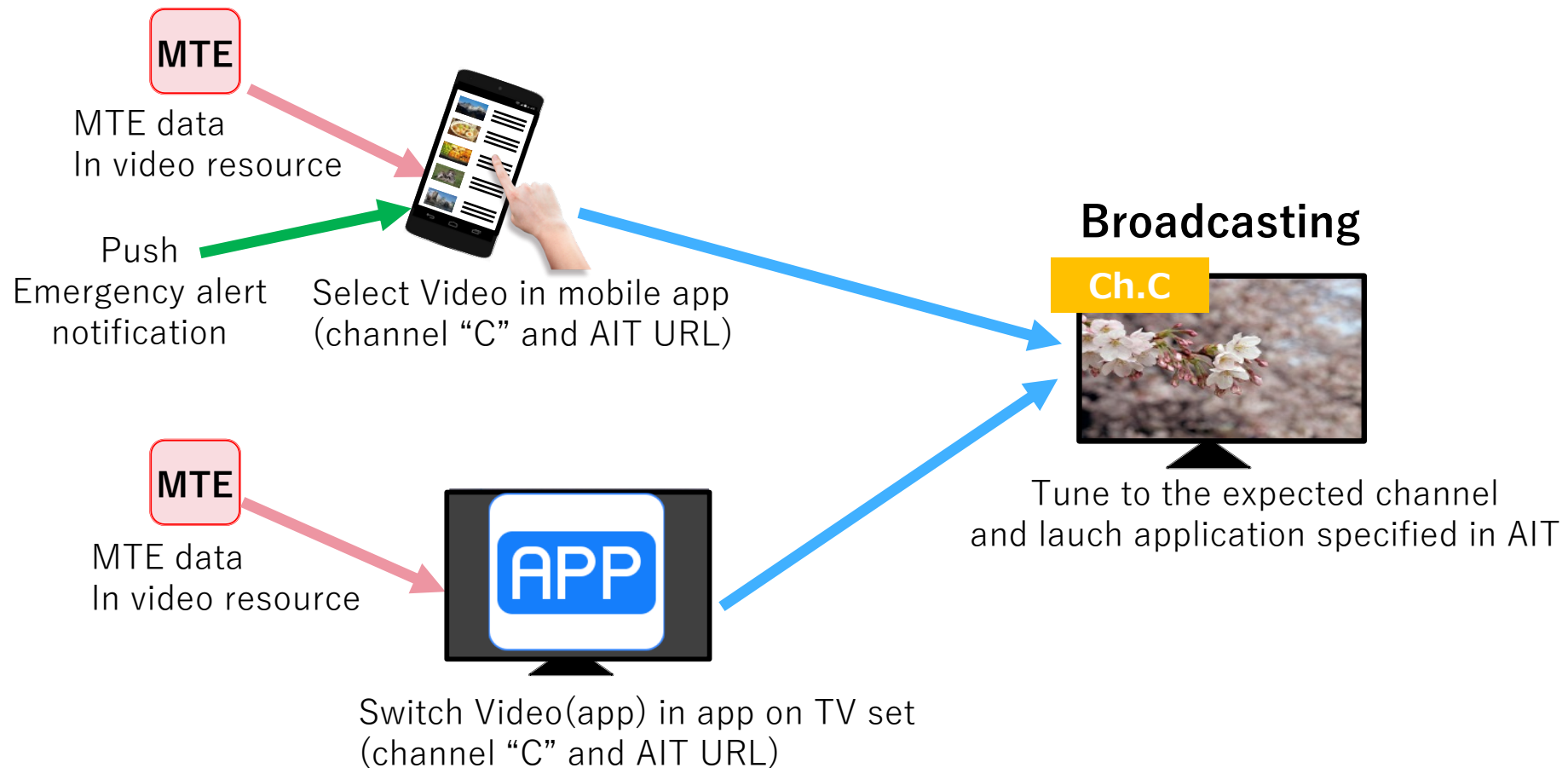
Pattern2

APP

Switch Video(app) in app on TV set
(channel "C" and AIT URL)

3

Media Timed Events with Hybridcast-Connect

◆ Broadcasters in Japan are interested in Media Timed Events

- Apps without broadcasting resources have no message to trigger to switch video from internet to broadcasting

MTE

MTE data
In video resource

Push
Emergency alert
notification

Select Video in mobile app
(channel "C" and AIT URL)

Broadcasting

Ch.C

MTE

MTE data
In video resource

APP

Switch Video(app) in app on TV set
(channel "C" and AIT URL)

Tune to the expected channel
and lauch application specified in AIT

Usecases of Media Timed Events

◆ Switch broadcasting service from OTT services triggerd by emergency-warning-message

◆ Superimpose time-dependent metadata, e.g. weather icon, event info

◆ New style of Ad insertion on broadcasting service

**MediaTimedEvents(timed metadata) play a role
to control application/service on TV sets**

MediaTimedEvents demos

- Demo implementations
  - Usecase(1)
    - Switch live news program on broadcasting service from OTT service by emergency-warning message
      - In-band pattern
  - Usecase(2)
    - Superimpose weather icon on the internet video
      - In-band pattern

Thank you very much

Demos have been

in this room