

Targeted advertising: technical approaches and practical experiences

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Klaus Merkel
Institut für Rundfunktechnik

Targeted Advertising in operation today

Werbeprodukte Addressable TV



SwitchIn
XXL



SwitchIn
Freestyle



SwitchIn
Classic



Branded
RedButton



Targeted Advertising in operation today by major broadcasters in Germany:

- using ad banners
- allowing to start microsites of ad customers
- mainly using regional targeting

Focus of this presentation

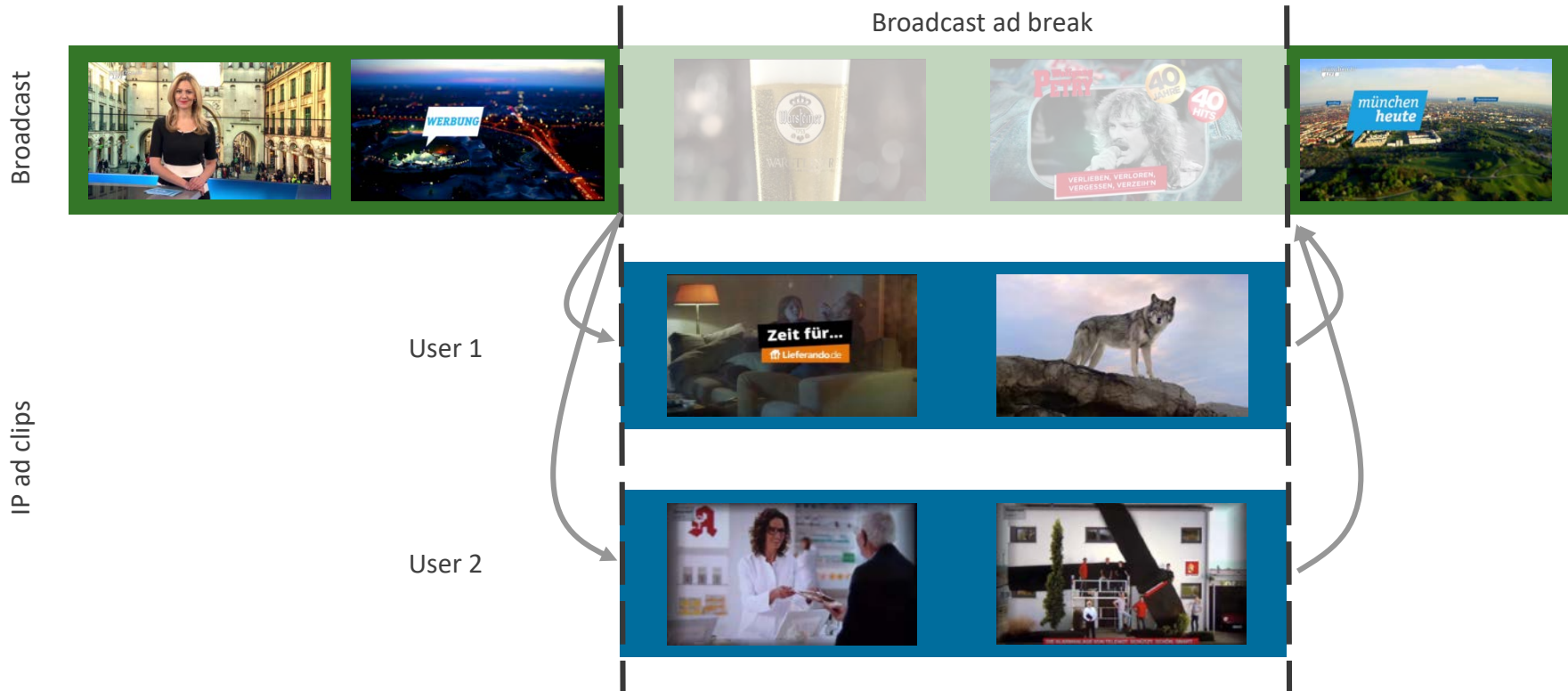
the focus of this presentation is:

- a specific form of targeted advertising:

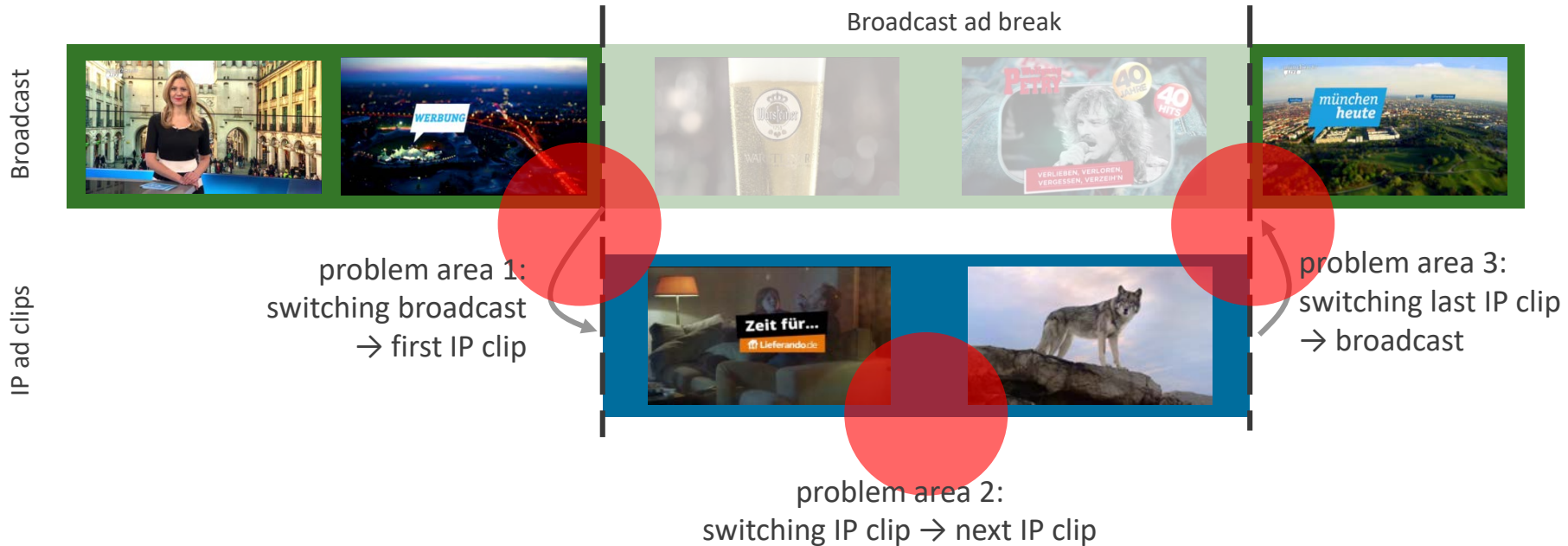
Spot replacement – the replacement of broadcast ad clips by individually targeted ad clips via IP

- no back end operation aspects
- no user data collection and ad logic aspects
- no reporting aspects
- but only frontend aspects on HbbTV devices

Principle of Spot Replacement



Problem areas in Spot Replacement



Even HbbTV 2 does NOT provide any truly frame accurate video switching
BUT: HbbTV standards provides a number of tools to address the problem areas

IRT activities in Spot Replacement

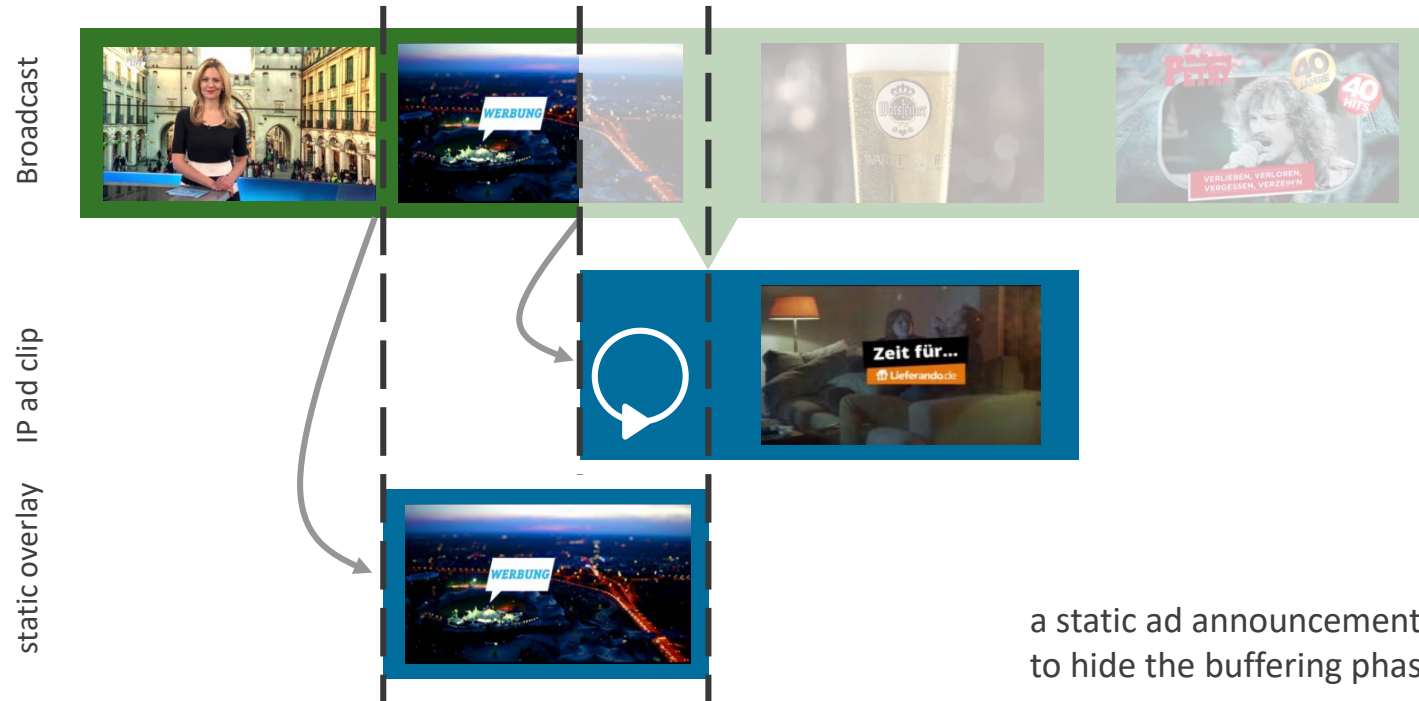
IRT activities in Spot Replacement:

- triggered by questions from commercial broadcasters and ad service providers
- 4 different cooperation partners in Germany since 2015 till today
- design and performance of tests for single technical HbbTV standard components
- development of prototypes and demos for Spot Replacement
- work based on HbbTV 1.5 and HbbTV 2 devices

Switching broadcast → first IP clip for HbbTV 1.5

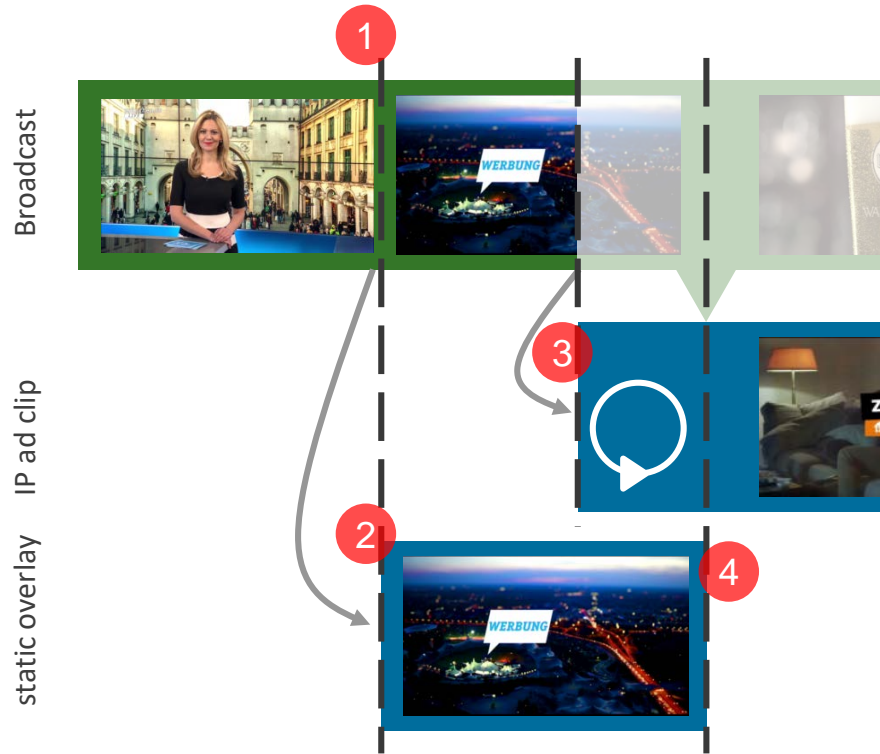


Switching broadcast → first IP clip for HbbTV 1.5



a static ad announcement overlay can be used to hide the buffering phase

Switching broadcast → first IP clip for HbbTV 1.5



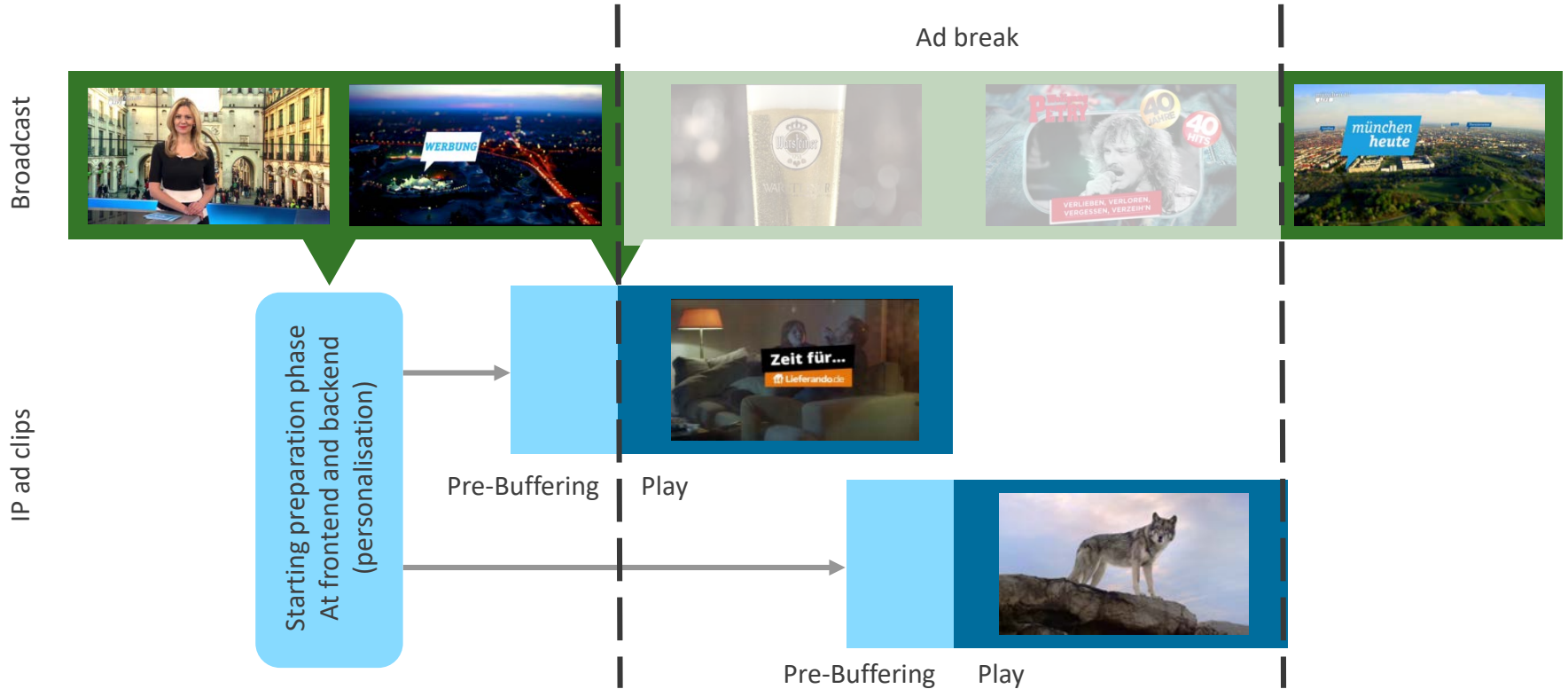
remaining timing details:

- 1 when will the stream event be passed to the app?
- 2 how long will it take to render the overlay?
- 3 when will the IP clip actually be played?
- 4 how long will it take to hide the overlay?

the really nasty point:

variations in delays in the range of 20 msec to 200 msec

Improving switching performance using HbbTV 2



Improving switching performance using HbbTV 2



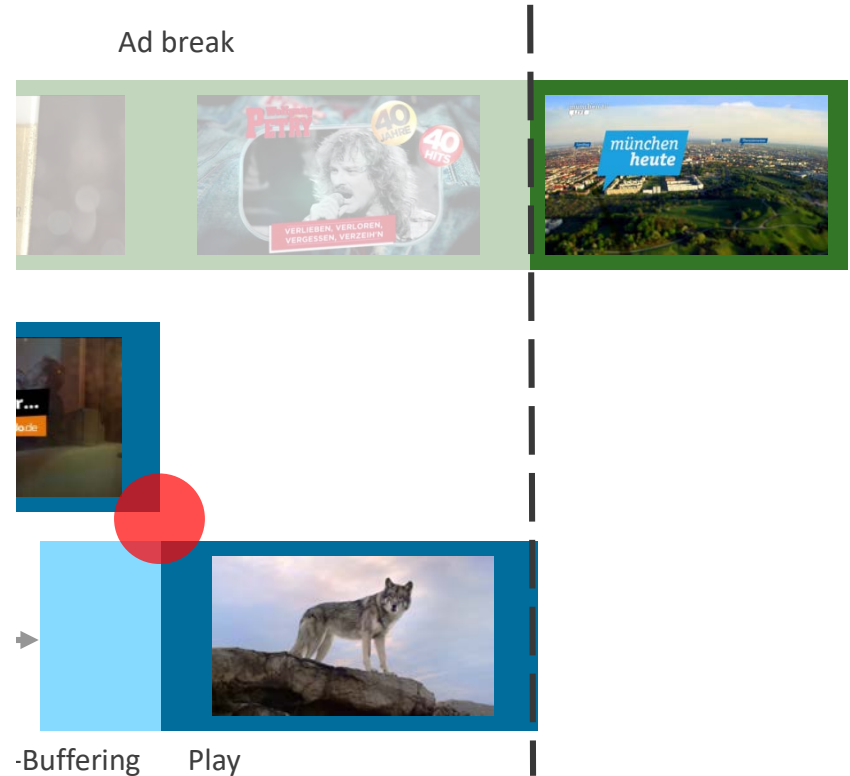
looking at the switching details:

HbbTV 2 says:

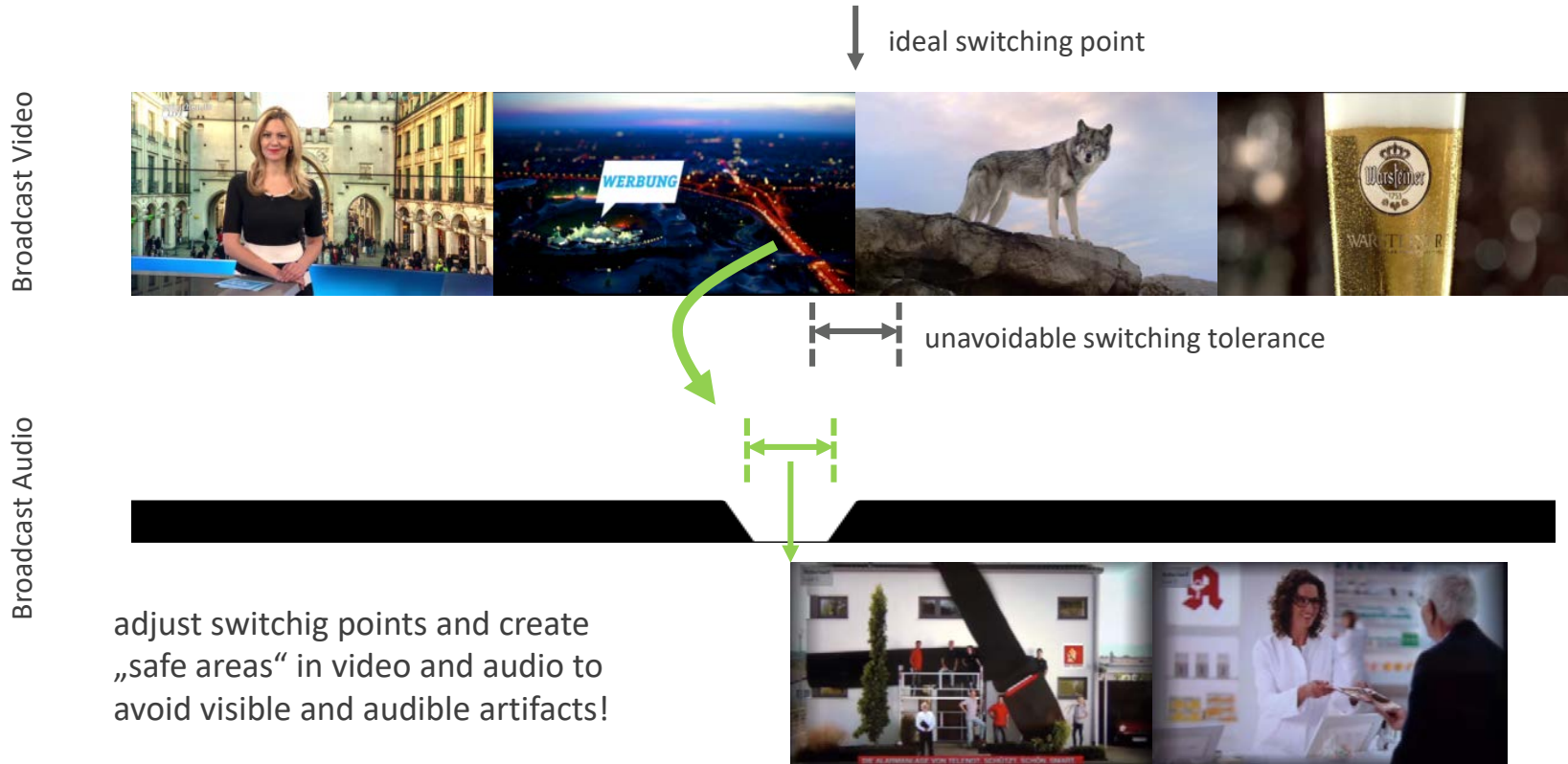
“The delay between the end of presentation of an HTML5 media element and starting presentation of another HTML5 media element shall be less than 250 ms if all of the following conditions are met ...”

[9.6.3 Transition behavior]

→ the variation between $0 \text{ sec} \leq t < 0,250 \text{ sec}$ per transition can sum up to $0 \text{ sec} \leq t < 2 \text{ sec}$ for 9 ad clips (and 8 transitions)



Make timing and broadcast more tolerant



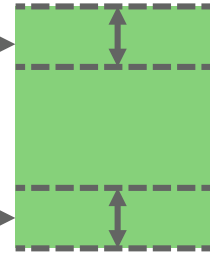
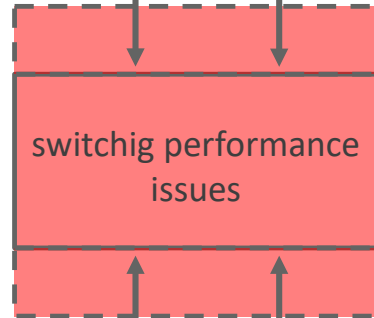
Can HbbTV be used today to do Spot Replacement?

using advanced tools of HbbTV 2
testing and whitelisting of devices
optimising app logic

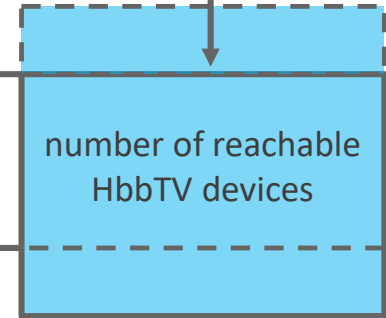
no general „yes“ or „no“:

- *HbbTV does NOT provide one compact solution, but*
- *provides a set of tools which can be used within an overall approach*
- *current usability depends on individual tolerances and market requirements*

optimising timing operation
creating „safe areas“ for switching
in broadcast audio/video



broadcaster
individual
tolerance
areas



time &
broadcaster HbbTV
engagement

Practical results achieved so far



Showcase dmexco Sept 2016
in cooperation with Smartclip

Work done at IRT:

- performance and timing tests of various HbbTV components on different devices
- workable prototypes for both HbbTV 1.5 and HbbTV 2 delivered to partners
- public demos at 6 trade shows up now – well received and creating good interest

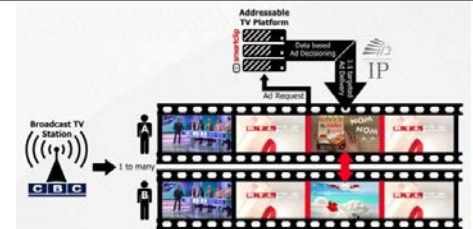
IRT Demo-Video:
<http://bit.ly/2wNFXdc>

IBC 2017 demo at IRT booth
(in parallel at DVB booth)



On-air trial by RTL/CBC/Smartclip:

- performed in August 2017 on German RTLplus channel
- 20' Ferrero spot was replaced by spot for different Ferrero product
- “HbbTV 2.0 is ... the next step towards customised television advertising “



Thank you for your attention!

Experts in audio-visual media

Klaus Merkel
Media Services and Applications



Floriansmuehlstraße 60
80939 Munich
Tel +49 89 323 99 – 225
FAX +49 89 323 99 – 351
www.irt.de
merkel@irt.de

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