



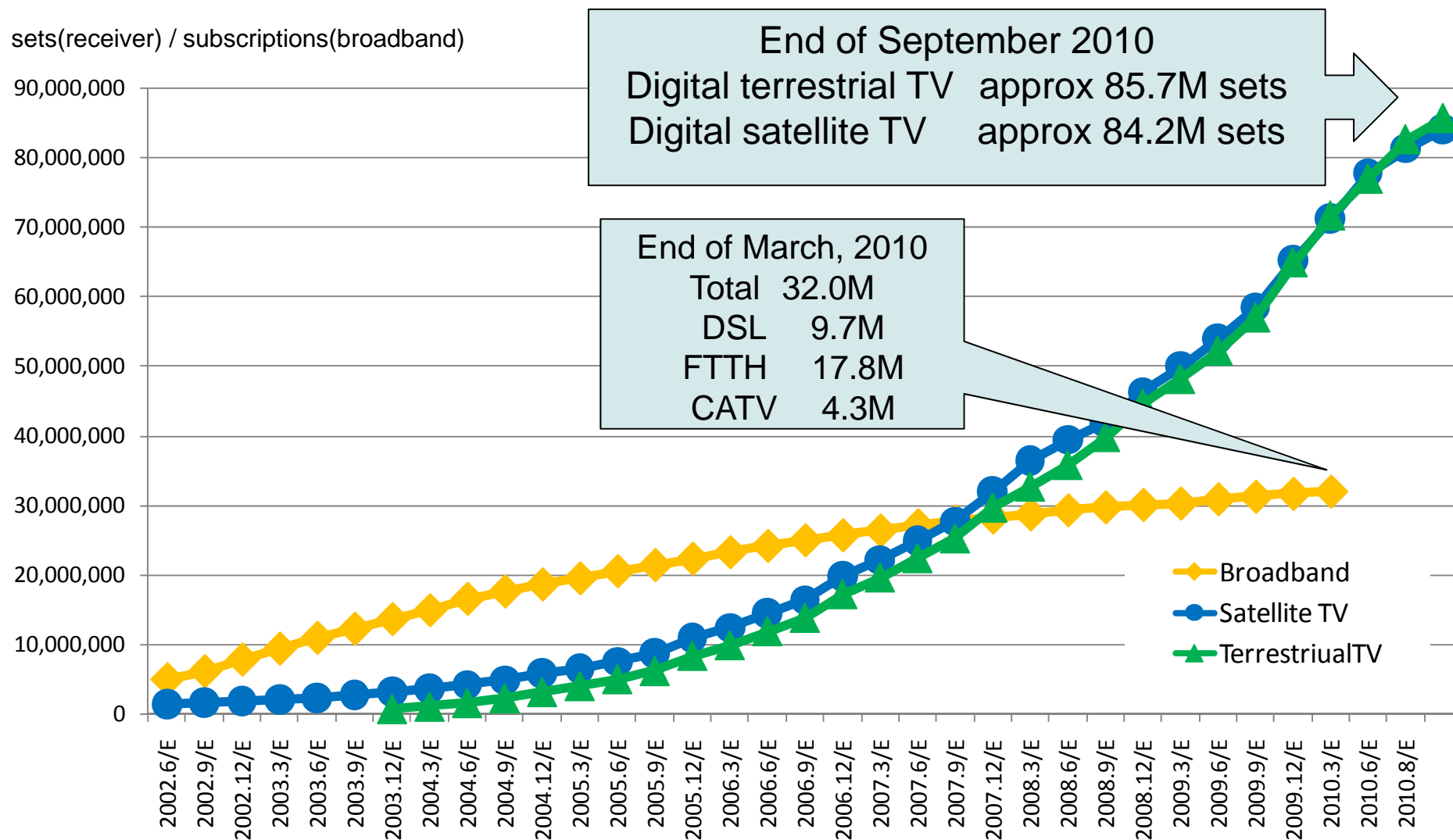
Toward the Construction of Hybridcast™

Kinji Matsumura
NHK Science and Technology Research Labs

Outline

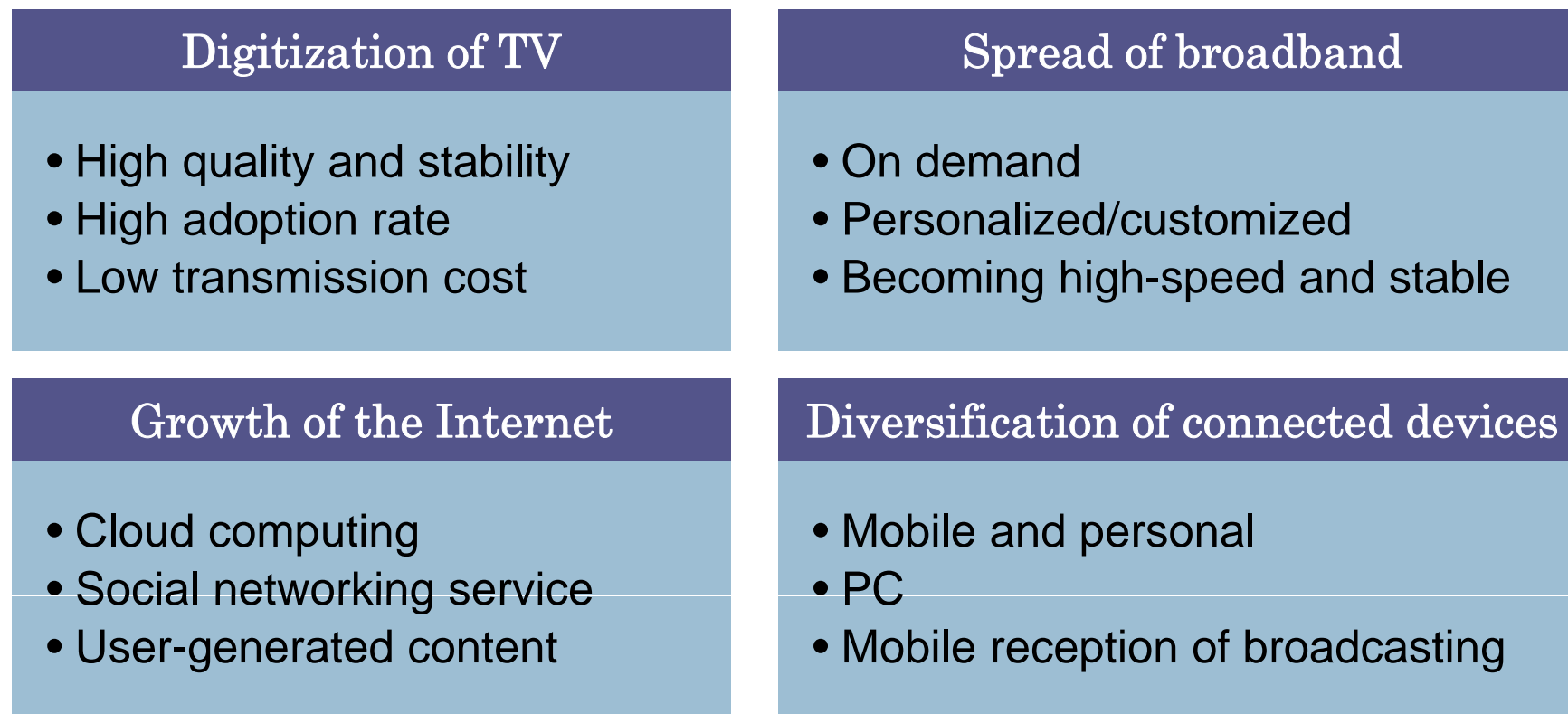
- Current situation in Japan
- Concept and objective of Hybridcast
- Demo - services and technologies
- System design

Spread of digital broadcast and broadband in Japan



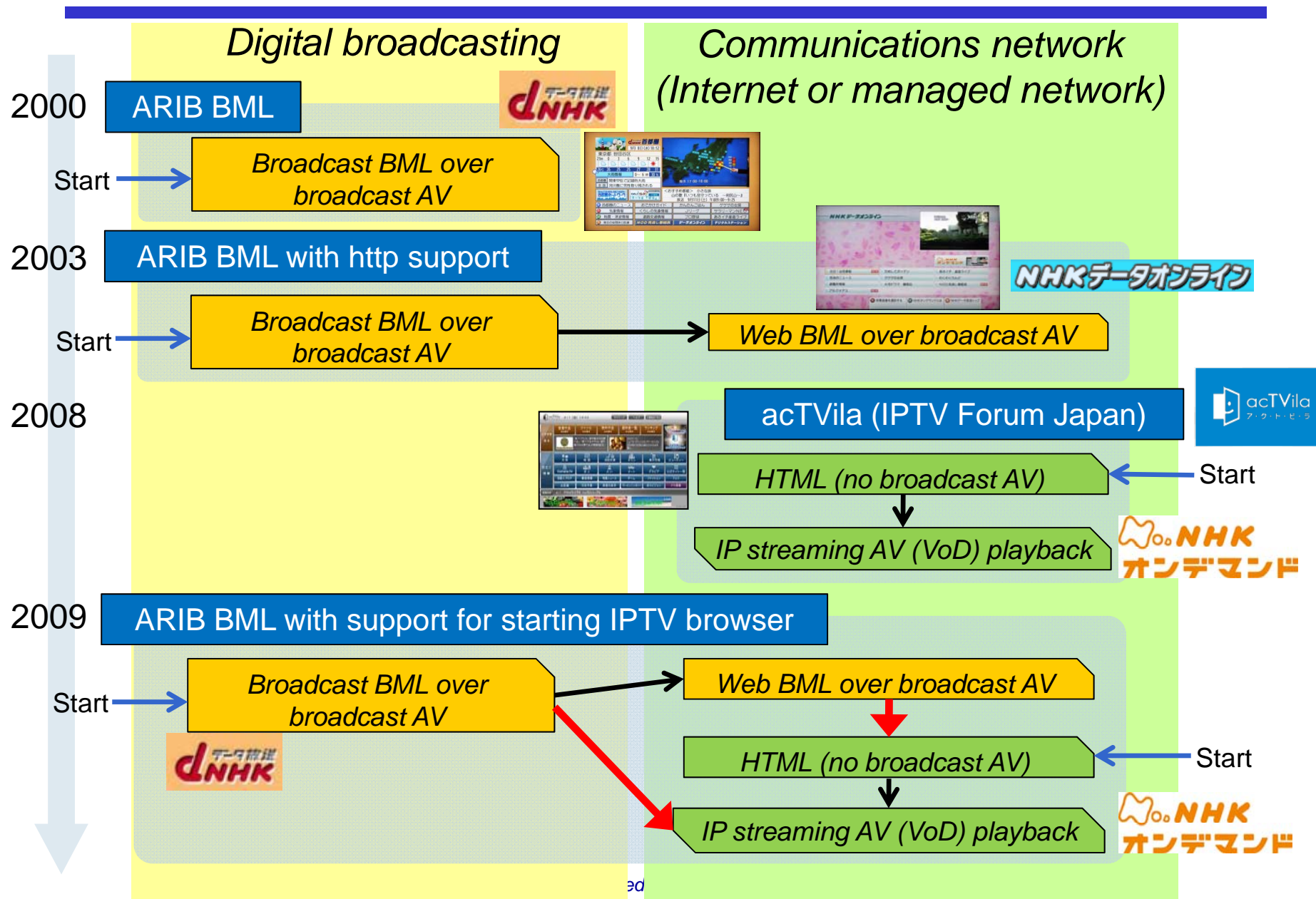
Broadband includes FTTH, ADSL, CATV, FWA and BWA (data from Government)

Situation surrounding broadcast and comm. services

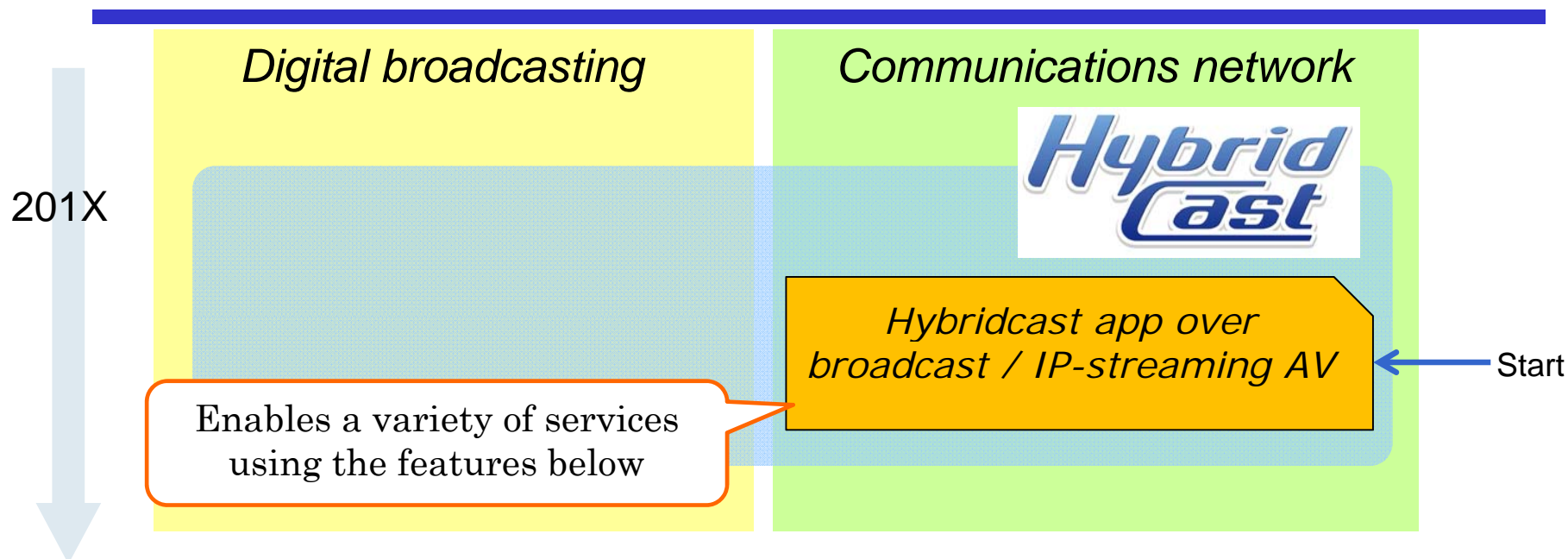


For the creation of new and attractive broadcasting services, making full use of these elements is important.

Evolution of interactive services in Japan



What comes next?

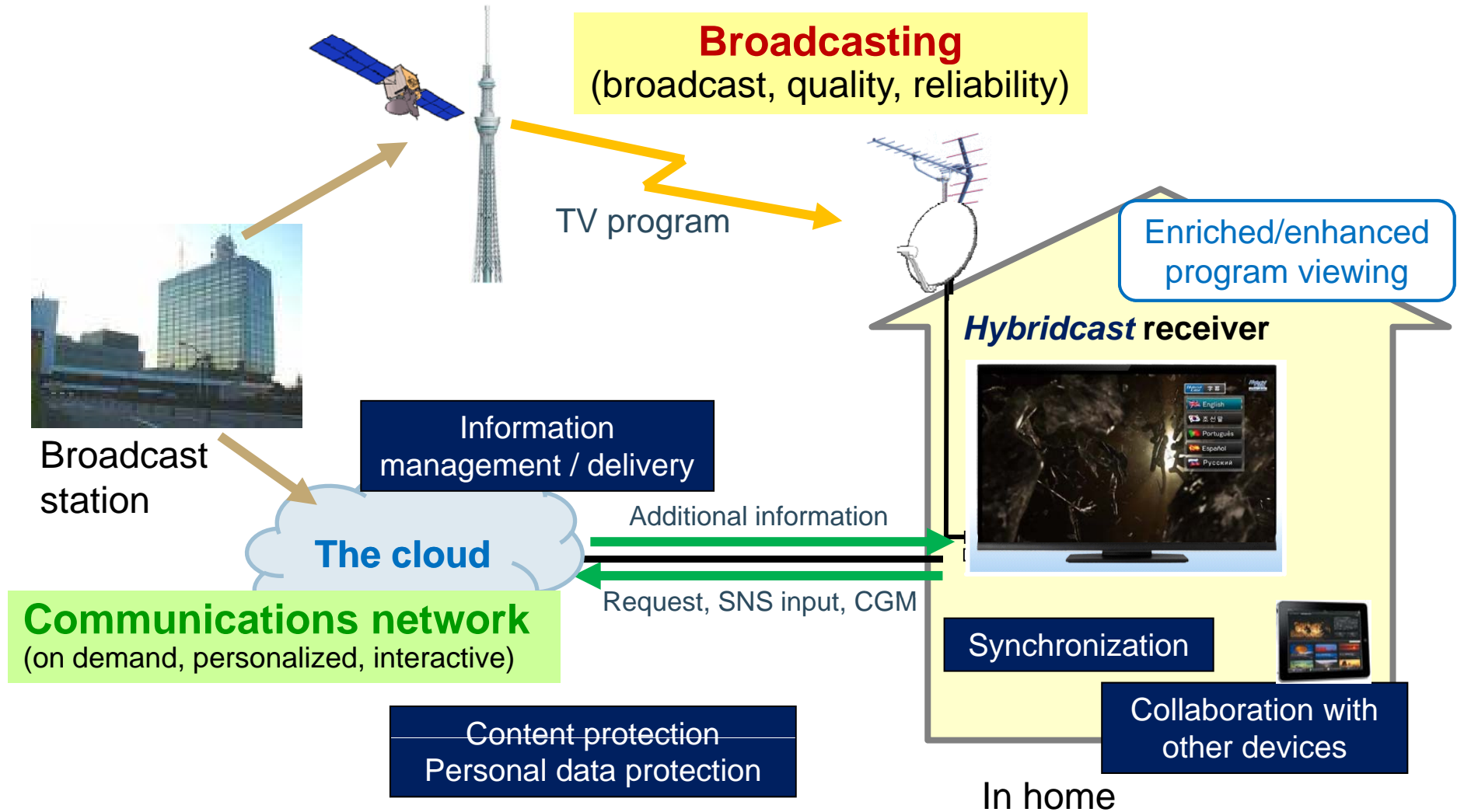


Required features for future services

- Tight combination of broadcast and broadband content
- Use of network services together with a broadcast content
 - Server-side processing (cloud computing)
 - Internet communities e.g. SNS, UGC, etc.
- Utilization of connected devices

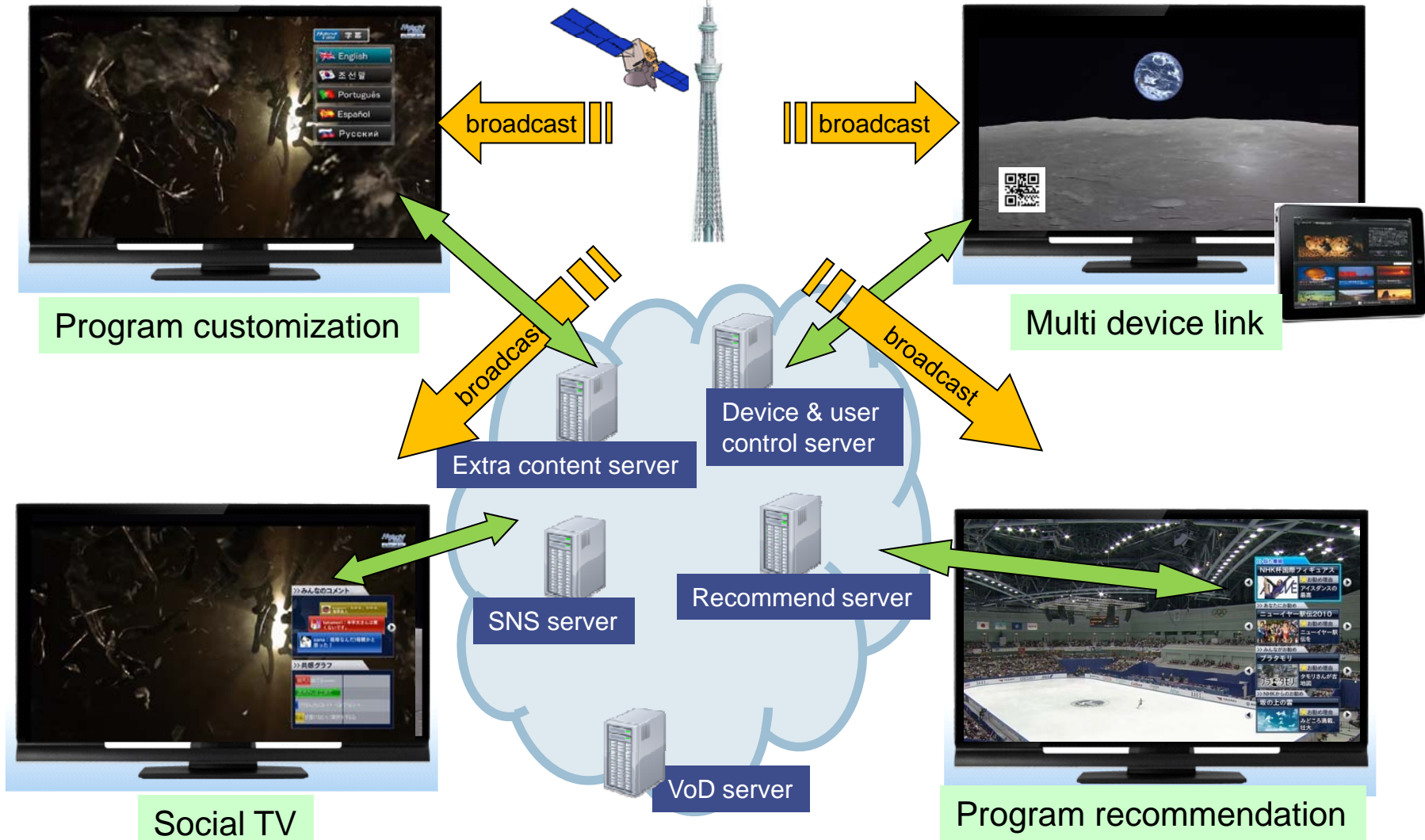
Concept

TV Centric broadcast and communication hybrid system



Services

Single broadcast program, multiple enhancing services



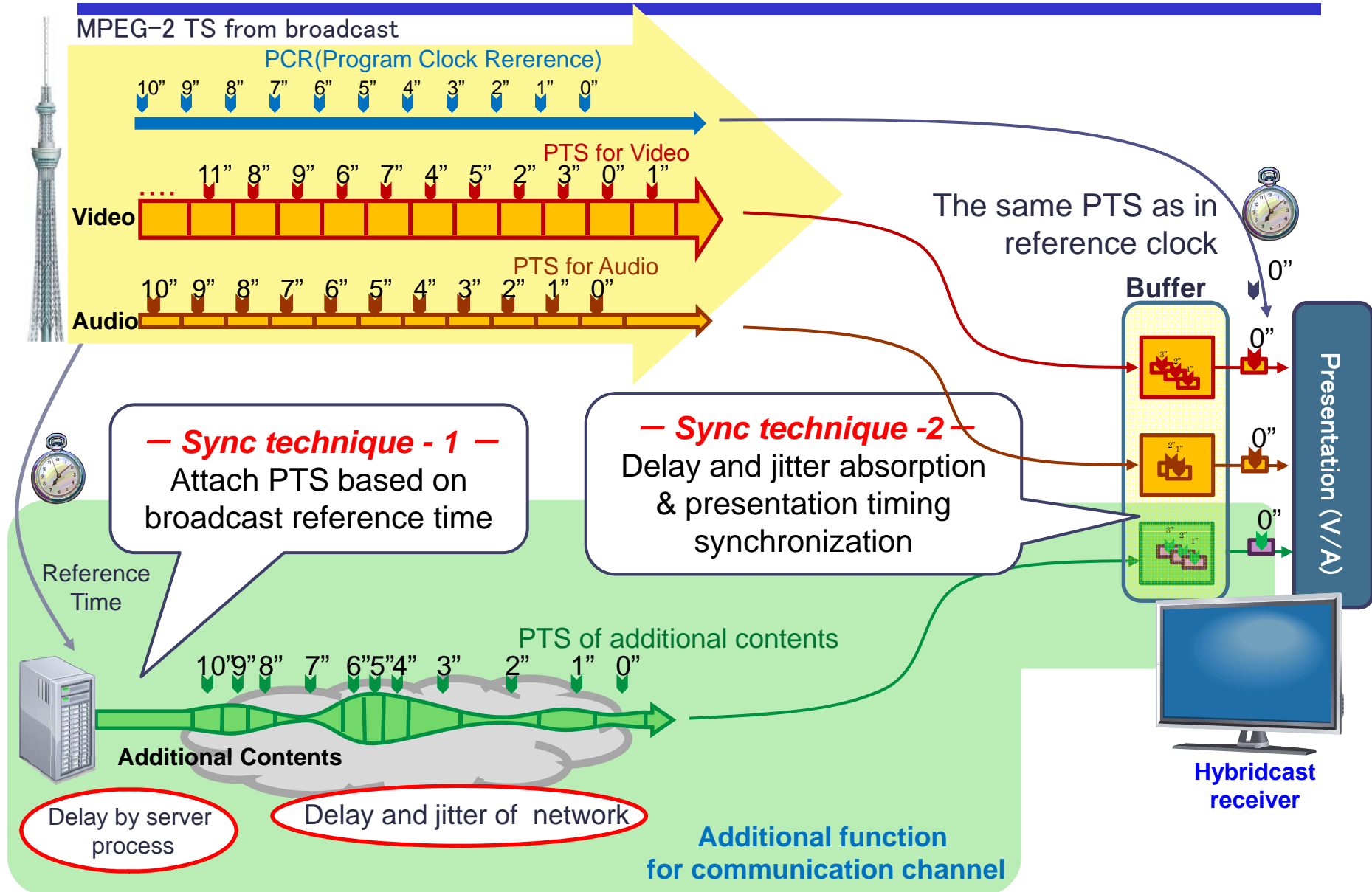
Demonstration

1. Program customization (media synchronization)
2. Social TV
3. Program recommendation
4. Multi device link

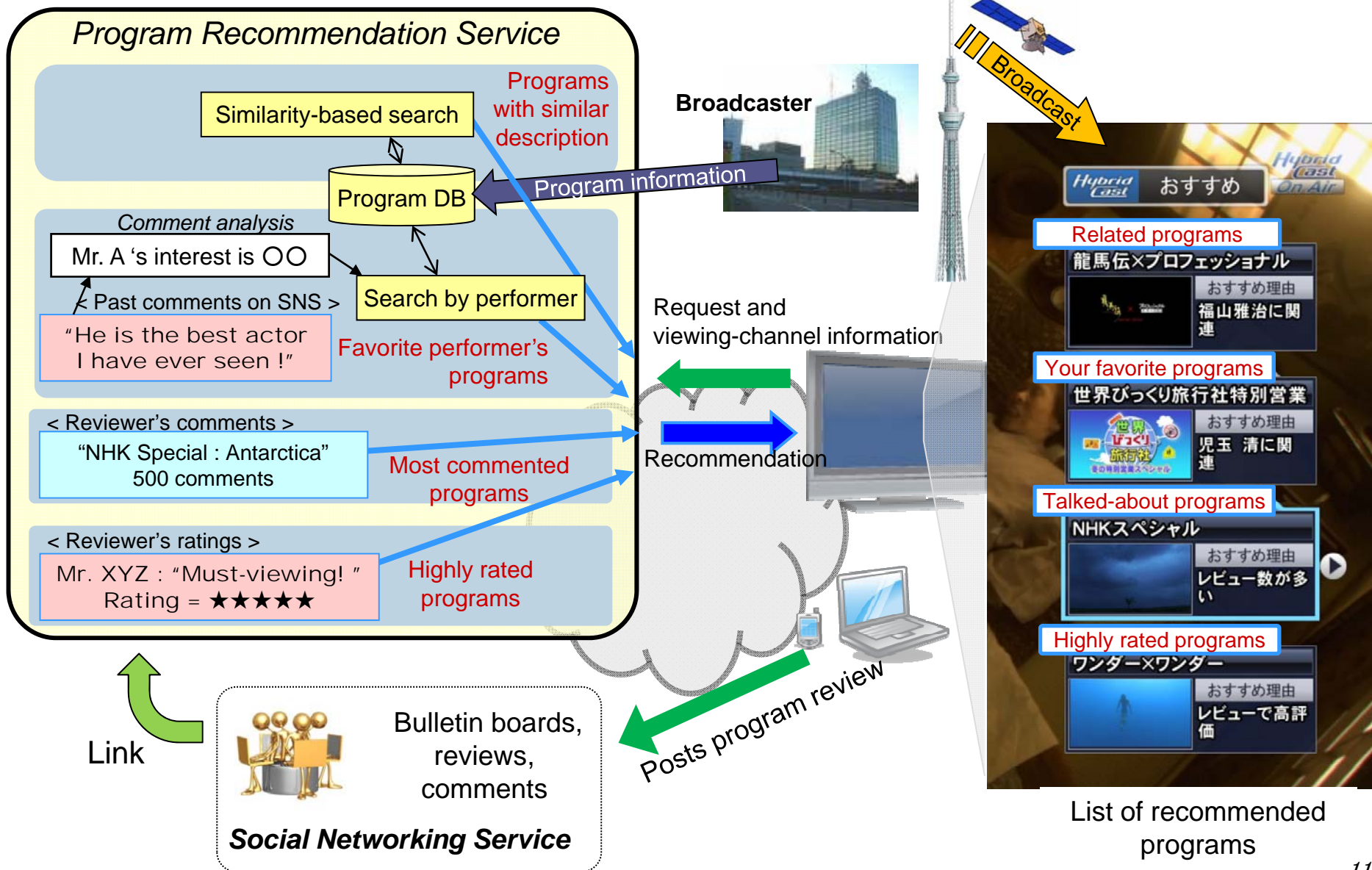


1. Program Customization Service

Synchronization mechanism

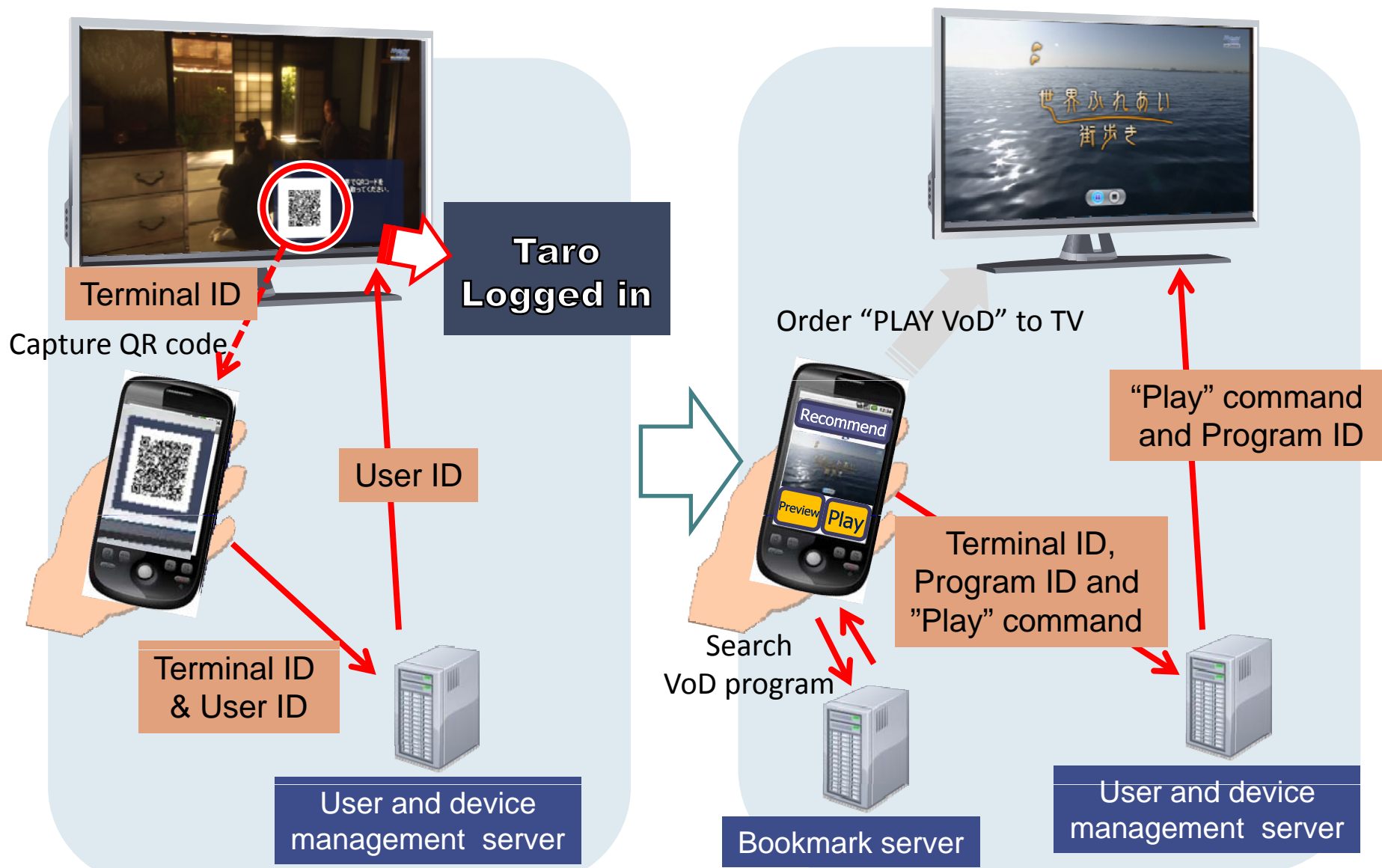


3. Program Recommendation Service

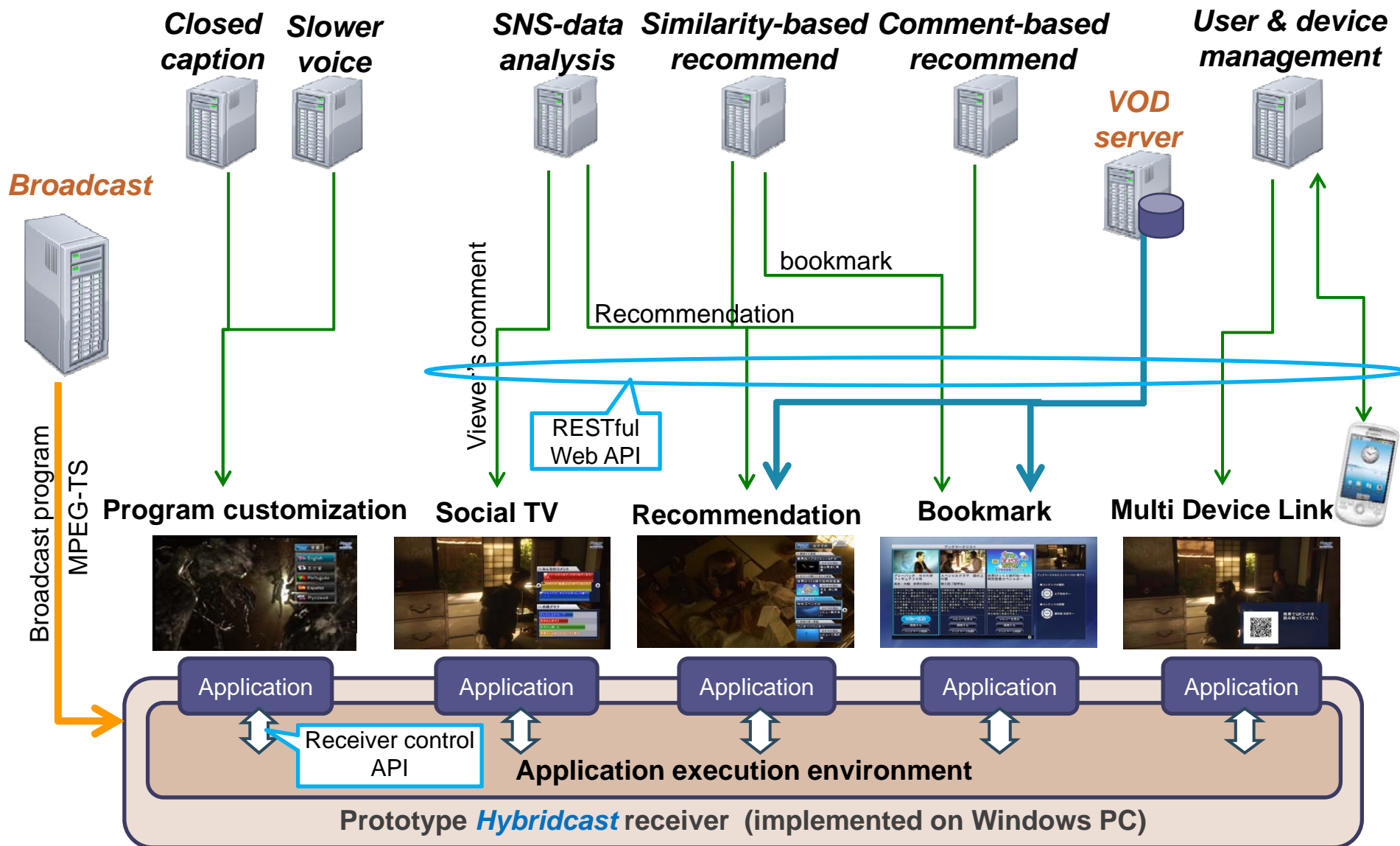


4. Multi Deice Link Service

Link TV with portable devices using 2D barcode

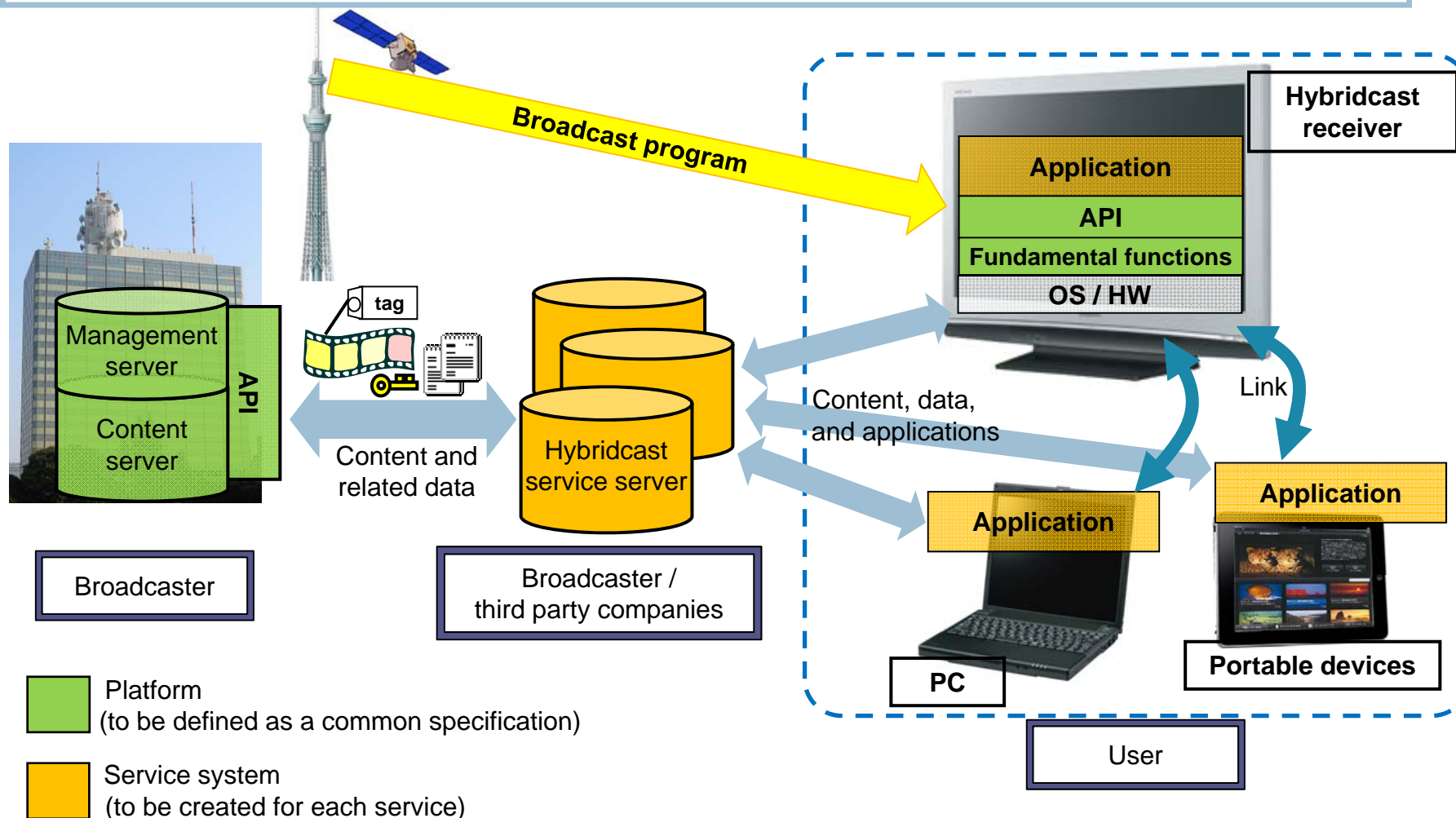


Prototype system (Exhibited at NHK Open House 2010)



Objective structure of *Hybridcast* system

Hybridcast = Platform + Service system
 = Broadcaster's server + Receivers with fundamental functions and control API
 + Service-specific servers + Applications for receiver and other devices



Conclusions

□ *Hybridcast*

- TV-centric service model
- Will offer a variety of ways to enjoy TV programs

□ Make full use of communications network

- Customization
- Incorporation of social networking
- Linking with other devices

□ Ongoing work

- Define system specifications
- Develop a prototype STB-type receiver



Thank you.

Demonstration at NHK STRL Open House 2010