EU policy and regulation of technical platform services to digital television

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Agenda
1. From analogue to digital television
2. Digital television platforms
3. Technical platform services
4. EU regulation of technical platform services
5. Example EPG
6. Conclusions

1. From analogue to digital television

Technological, business models & regulatory advancements

<table>
<thead>
<tr>
<th>Free to air broadcasting</th>
<th>Cable and satellite distribution</th>
<th>Digital video broadcasting (DVB), Internet delivery (IPTV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Few channels/spectrum scarcity</td>
<td>Multi-channel video</td>
<td>Return-channel (interactivity)</td>
</tr>
<tr>
<td>Advertisement &amp; license fee</td>
<td>Subscription fee</td>
<td>Targeted advertisement: pay-per-view</td>
</tr>
<tr>
<td>PSB or state television</td>
<td>Licensing &amp; content regulation</td>
<td>Interoperability &amp; access regulation</td>
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</tbody>
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2. Digital television platforms
Slovenian digital television market

- Digital terrestrial broadcasting: Analogue to digital switchover was completed in December 2010
- From 2009 to 2011, the share of digital television households practically tripled
- Total number of TV households: 693,000

<table>
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<th></th>
<th>Analogue (in % of TV HH)</th>
<th>Digital (in % of TV HH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable</td>
<td>36</td>
<td>5</td>
</tr>
<tr>
<td>Satellite</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Terrestrial</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>IPTV</td>
<td>-</td>
<td>39</td>
</tr>
</tbody>
</table>

Source: AGB Nielsen, 2011

Digital television platforms are often vertically integrated
Examples: Satellite pay-TV, retail cable TV, IPTV, Multiplex etc.

3. Technical platform services
Complex IT middleware responsible for

- **Interactivity**
  API (Application Programming Interface) is the software in which content and services are embedded and displayed

- **Authentication**
  CA (Conditional Access) systems authorize legitimate users (via smart card or set top box)

- **Navigation**
  ESG (Electronic Service Guide) to navigate and select content and services
3. Technical platform services
TV channels needs access to technical platform services to reach subscribers of a given television retail platform

Platform operator

Channel 1
Channel 2
Channel 3
Channel 4

API
CA
ESG

Users

- Access to content
- Choice of content, sources and services
- Navigation and finding
- Privacy issues
- Costs of access & switching

4. EU regulation of technical platform services
Technical platform services are covered by EU regulatory framework for electronic communications (2002)
Horizontally layered and technologically neutral approach:

Electronic Content
AVMS Directive and Member States' laws

Electronic communications services

Technical platform services
Networks used for radio and television broadcasting, and cable television networks
4. EU regulation of technical platform services

Justification of regulatory intervention

- General: Ensuring competition in electronic communication markets
- Specific to technical platform services for digital television:
  - Access Directive, Rec. 10: "Competition rules may not be sufficient to ensure cultural diversity and media pluralism in the area of digital television."
  - Framework Directive, Rec. 5: "The [regulatory] separation [...] does not prejudice the taking into account of the links existing between the regulation of transmission and the regulation of content, in particular in order to guarantee media pluralism and cultural diversity."

Concept of regulation (ex ante + ex post)

- Mandatory access to technical platform services for digital broadcasters
  - To fair, reasonable and non-discriminatory (FRND) terms
  - Accounting separation for operation for certain technical platform services
- Ensuring interoperability on digital interactive television services
  - Encouraging open standards for certain technical platform services
  - Competence to implement Community standard necessary to ensure interoperability
- Application of competition law
  - Prohibition of abuse of dominant position, for instance through refusal to deal, margin squeeze or discrimination

On Conditional Access (Art. 6 (1) Access Directive)

- Ex ante regulation of access to CA as outlined in Annex 1 (next slide)
- No need to conduct market analysis prior to imposing the mandatory access (f)
- But inverse mechanism insofar a review the conditions can be done after a that after a market analysis (after next slide).
- Withdrawal only to the extent that:
  - (a) accessibility for end-users to radio and television broadcasts and broadcasting channels and services [...] would not be adversely affected by such amendment or withdrawal, and
  - (b) the prospects for effective competition in the markets for:
    - (i) retail digital television and radio broadcasting services, and
    - (ii) conditional access systems and other associated facilities, would not be adversely affected.
4. EU regulation of technical platform services

(a) conditional access systems [...] are to have the necessary technical
capability for cost-effective transcontrol allowing the possibility for
full control by network operators at local or regional level of the
services using such conditional access systems;

(b) all operators of conditional access services [...] who provide access
services to digital television and radio services and whose access
services broadcasters depend on to reach any group of potential
viewers or listeners are to:
- offer to all broadcasters, on a fair, reasonable and non-discriminatory basis
  [...] technical services enabling the broadcasters’ digitally-transmitted
  services to be received by viewers or listeners authorised by means of
decoders administered by the service operators [...]
- keep separate financial accounts regarding their activity as conditional
  access providers.

4. EU regulation of technical platform services
On Conditional Access (Art. 6 (3) Access Directive)
Withdrawal only to the extent that

(a) accessibility for end-users to radio and television broadcasts and
broadcasting channels and services [...] would not be adversely
affected by such amendment or withdrawal, and

(b) the prospects for effective competition in the markets for:
   (i) retail digital television and radio broadcasting services, and
   (ii) conditional access systems and other associated facilities,
   would not be adversely affected.

4. EU regulation of technical platform services
On API and EPG
Mandatory Access (Art. 5 (1) (b) Access Directive)
Obligations can be imposed to the extent that is necessary to
ensure accessibility for end-users to digital radio and television
broadcasting services specified by the Member State, on operators
to provide access to [API and EPG] on fair, reasonable and non-
discriminatory terms.
4. EU regulation of technical platform services

API Interoperability (Framework Directive Art. 18 (1)):
In order to promote the free flow of information, media pluralism and cultural diversity, Member States shall encourage […] providers of digital interactive television services for distribution to the public in the Community on digital interactive television platforms, regardless of the transmission mode, to use an open API […].

Framework Directive Art. 17 (3)
Compulsory implementation of Community standards to the extent strictly necessary to ensure such interoperability and to improve freedom of choice for users. ()

1. Presently no intention to enforce Community standard for API

5. Example: EPG

Perspectives of:
- Platform operator
- Independent ESG
- Channels
- Consumers

- Objective criteria?
- Nationwide channels
- Full programmes
- Must-carry/PSB channels
- Audience market share
- Not revenue based
- Alphabetical order

- Unbiased preview & teaser
- Customizable
- Favorites
- PayTV & functions must be transparent
- Additional search function
- Privacy and data protection

Thematic sub-listings under objective criteria

Objective criteria for program listing
5. Example: EPG

Code of Practise on electronic programme guides
Licensing of electronic programme guide providers

EPG licensees are required:

a. to ensure that any agreement with broadcasters for the provision of an
   EPG service is made on fair, reasonable and non-discriminatory terms;

b. to publish and comply with an objectively justifiable method of allocating
   listings. This does not preclude different methods – for example,
   objectively justifiable methods could include ‘first come, first served’,
   alphabetical listings, and those based on audience shares;

c. to refrain from giving undue prominence in any listing or display to a
   channel to which they are connected [...];

d. to carry out periodic reviews of their listing policy and of channel listings
   made in accordance with that policy, in consultation with channel providers;

e. to ensure that viewers are able to access all television and radio services
   included in the EPG service on the same basis [...];

f. to ensure that free-to-air services are at least as accessible as pay TV
   services, and that reception does not require additional equipment or
   commercial agreements over and above those required for the acquisition
   of the receiving equipment; and

g. to refrain from imposing any condition in an agreement for EPG services
   between an EPG operator and a channel provider specifying exclusivity to
   one EPG for any service or feature, including the ability to brand services
   and access to interactivity.
6. Conclusions

- Technical platform services are bottlenecks in the digital television infrastructure (termination market analogy)
- Ex ante regulation:
  - Access to CA is mandated under the EU regulatory framework without requirement to conduct market analysis
  - Regulation of API and EPG can be implemented, no SMP required
- Guidance via soft law
- Outlook:

  In 2010, Ofcom mandated BSkyB to offer the most important sports channels - Sky Sports 1 and Sky Sports 2 - to retailers on other platforms.

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