



## STREP

**FP6-2005-IST-61-045410**

## MOBISERVE

### **New mobile services at big events using DVB-H broadcast and wireless networks**

#### **Deliverable 1.3: Feasibility result report (WP1.4)**

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## 1 Introduction

In this task, the technical implications of the different use cases on each element of the platform have been analysed, and an evaluation of associated costs is provided.

A dedicated focus on the implications on the following elements has been made on:

- Service platform (Thomson France),
- Terminals (Philips)
- Rich-media application (Streamezzo).
- Content (France Telecom)
- Application Framework (TU-BS)
- Head-end infrastructure (Thomson China)

For each use case, a synthetic report given the following indications is provided:

- Estimated R& D costs to implement modifications for each element,
- Estimated implication on the cost of the equipment (especially for the terminal)
- Recommendation regarding the architecture and implementation of the scenario in WP2 and other WP's.

## 2 Feasibility results

Each partner made its analysis and gives their feedbacks, which were also explained and discussed among partners.

For convenience of the reader, here is sum up the main results:

Signification of the recommendation:

- **Favourable:** means all partners are favourable to support this feature in the framework of the project.
- **Favourable P2/P3** (priority 2, priority 3): means that it is theoretically possible to support this feature but that there's no commitment to support it in the framework of the project; in generally, it is also needed to go deeper in the description of the use case.
- **Not favourable:** Partners will not support the feature (feature is either too complex or considered as out of scope of the project).

Use case Number	Use Cases	Description	Global Feedback from partners		
			Estimated implication on cost of the equipment (low, medium, high, unknown)	Estimated R&D cost (low, medium, high, unknown)	Recommendation to implement it (favourable, no opinion yet, not favourable)
No 1	Alerts from the events on the air.	Alert on noticeable events such as an interested tennis match might be reaching the end of match (match points) and offer the possibility to the user to switch directly to that channel. The alerts could be also grouped by interest. This kind of service could be subscribed.	low	medium	<b>favourable</b>
No 2	Zoom (Multi-Angle)	The TV program can be enjoyed from different angle such as focusing on the interested player.	medium/high: Multi-angle capability	high	<b>not favourable</b>

No 3	Polling	Collection of the end users' feedback (e.g. voting) or play (e.g. betting).	low	low	<b>favourable</b>
No 4	Time-Shifting (Smart Pause)	The ability to record the actual viewed program while switch to another activity such receiving a phone. As such, the user would not loose any piece of the viewed program.	medium/high: time-shifting capability	high for terminal low to medium for other modules	<b>favourable</b>
No 5	Program associated information	The TV program related information is broadcasted along with the associated TV program. For instance, the description about the teams participating to the football match. Inside this information, there may be some links (URL) which allows user to get further information on a specific interested issue like a player biography.	low	low for equipment... high for content	<b>favourable</b>
No 6	Program independent data	Broadcast of the program independent data such as weather, traffic	low	low	<b>favourable P2</b>
No 7	Stadiums Guide (with MAP)	To be guided on the way to go inside and outside the stadiums	Yes: Positioning capability (e.g. GPS)	medium	<b>not favourable</b>
No 8	Multi-Language	Multi-lingual for the TV program as well as the broadcasted information	low	medium	<b>favourable P2</b>
No 9	Selection of preferred commentators	While viewing a competition, one may have the possibility to choose the preferred commentators (sportscasters)	low	low	<b>favourable P2</b>

No 10	Online shopping (associated with program)	TV program triggered online shopping. That is, the goods are shown in the TV program, and the online shopping of those goods is suggested.	low	low for equipment... high for content	<b>favourable P2 (needs a web site)</b>
No 11	User feedback	User may want to express his/her opinion regarding the viewed programs or other suggestions.	low	medium	<b>favourable if same mechanism as use case 3</b>
No 12	Online Gaming	Game download via broadcast channel, local or online play and online ranking.	low	medium-high	<b>not favourable (risky)</b>
No 13	Multi payment modes	Different payment modes may be offered to the users, namely, by theme (for instance football or formula 1), pay-per-view, daily, weekly, monthly, etc.	low	medium-high	<b>not favourable</b>
No 14	Live program	Repurpose (retransmission) of the live TV program	low	low	<b>favourable P2</b>
No 15	Download (scheduled)	Any kind of data could be scheduled to be downloaded via the broadcast channel.	low	medium high	<b>favourable P2</b>
No 16	PVR	Based on the usage profile stored on both the mobile device and the home entertainment system, all relevant and potentially interesting services (Audio/Video and applications) can be stored in the PVR system.	medium/high: pvr capabilities	high	<b>favourable P2</b>
No 17	User profile and preference (user initiated)	User might be able to define his/her profile and preference.	low	medium	<b>favourable P2</b>

No 18	Automatically usage statistics data collection (system initiated)	The usage statistics such as which programs have been seen by whom, for how long, at what time, etc.	low	high	<b>not favourable</b>
No 19	Diary	Record one's own daily experiences: what did I see? What is my opinion? Etc.	low	high	<b>not favourable</b>
No 20	ESG	Electronic Service Guide	medium/high (IP Datacast Stack)	low medium	<b>favourable</b>
No 21	Rich Media enable ESG		(see above)	low high	<b>favourable</b>
No 22	Rich Media function support	AV control, Media library, VoD	low	medium high	<b>favourable</b>
No 23	Access to Internet thru Rich Media interface		low	low	<b>Favourable P2</b>
No 24	Overlay information of choice		low	high	<b>not favourable</b>
No 25	Top list recommendation	Based on the profile and the preference of the user.	low	medium high	<b>not favourable</b>
No 26	Content upload	User might want to upload content in order to let other people share his/her experience.	low	medium high	<b>not favourable</b>
No 27	3D scene analysis	A 3D model of the current game situation may be present to the user. By performing gestures with the pen on the touch screen, the user is able to rotate and zoom into the scene. Important details like offside (football game), defense assignment (basketball game) will be highlighted.	medium/high (3D analysis capabilities)	very high	<b>not favourable</b>

No 28	Breach-of-the-rule detection	The end-user device detects automatically potential breach-of-the-rule situations and highlights the scene and gives a comprehensive description. The user can compare the device decisions to those of the referee.	medium/high (3D analysis capabilities, breach of rule detection capabilities)	very high	<b>not favourable</b>
No 29	VOD	Video on Demand	medium/high (VOD)	medium	<b>favourable P2</b>
No 30	Intelligent ESG presentation	Channels of interested to a customer can be grouped together at the end-user device.	(see above)	medium	<b>favourable P2 (mixed between use case 21 and 25)</b>
No 31	Local (re)play	This means the possibility offered by the terminal to slow down the motion and freeze). It can be applied to both the live TV program and recorded one.	medium/high (PVR capabilities)	medium-high	<b>favourable</b>
No 32	Usual Mobile phone functions while watching TV	Still being able to use the usual mobile phone while enjoying the TV program.	medium/high (native phone function)	medium	<b>favourable</b>
No 33	Exciting spots (clips) available while watching the live TV program	For instance, during a basketball, the content provider cuts the interesting moments (clips), such as a nice shoot, along with the competition and notifies the user whenever these clips are available	medium/high (VOD)	high	<b>favourable P3</b>
No 34	Interactivity with the TV programs	Being able to influence the broadcasted program's progression, whether pre-recorded or live	medium	high	<b>favourable</b>

No 35	Emergency notification	Emergency events which are needed to be broadly announced to the public such terror, accident, earthquake, ...	low	medium	<b>favourable</b>
No 36	Relay from DVB-H to WiFi	-reception of DVB-h programs relayed by WIFI network - Seamless mobility from DVB-H to WIFI network for the same program	low	medium	<b>favourable</b>
No 37	High quality video transforming from Mobile to TV	The image/video on the mobile is sometimes unsuitable to be shown on the big screen due to the poor resolution and quality.	high	high	<b>favourable</b>
No 38	Content sharing in the community	Sharing your collection with those friends who have common interest.	low	high	<b>not favourable (same as 26)</b>
No 39	<i>Emergency notification (same as n35)</i>	<i>Emergency events which are needed to be broadly announced to the public such terror, accident, earthquake, ...</i>	<i>low</i>	<i>medium</i>	<i>favourable</i>
No 40	Indoor non-interruption	Seamless mobility to WiFi network when DVB-H signal is weak.	medium/high	high	<b>favourable P2</b>
No 41	Location dependent content	While the main program may still come from DVB-H, based on the location, what happened around could be also enjoyed such as more views on a match when you are at the stadium.	medium/high (positioning)	high	<b>favourable P2</b>

No 42	Location dependent application	At the airport, everything about your flight; in the shopping center, price comparison; in a coffee shop, selection of the programs best fit your disposal time and profile.	medium/high (positioning)	high	<b>not favourable (out of scope)</b>
No 43	Mobile TV to home computer	No conflict with your love ones provided that different programs can be shown simultaneously on different devices.	unknown	unknown	<b>not favourable (out of scope)</b>
No 44	Mobile TV to laptop at backyard	No hassle with messy cables and go wherever you want in your home	unknown	unknown	<b>not favourable (out of scope)</b>